# Round 1

## 1NC

### 1NC

#### **The 1AC’s linking of energy production with national security creates a political impulse to secure – that makes unending resource wars inevitable**

Martens 11 (Emily, MA in Geography and Regional Studies – University of Miami, “The Discourses of Energy and Environmental Security in the Debate Over Offshore Oil Drilling Policy in Florida,” Open Access Theses, 5-10, http://scholarlyrepository.miami.edu/cgi/viewcontent.cgi?article=1253&context=oa\_theses)

The term energy security has become an engrained and seemingly unquestioned term within the contemporary political arena since earlier articulation under President Carter. The definition of the term seems to change according to shifting agendas and the socio-political zeitgeist, as evidenced in the previous historical narrative. In the United States energy security has encompassed a plethora of meanings that are the result of divergent understandings of the functioning of political and economic structures, as well as the social or ‘national’ significance of key energy resources, such as oil (Barton et al. 2004). From the consumer standpoint, oil (or in its refined form as gasoline), particularly cheap oil, is not simply the fuel for transportation and production, but also a signifier of the “American Way of Life”, a symbol of American exceptionalism and status within the global community (Huber 2009; Moran and Russell 2009). Traditionally, security has been conceptualized in terms of border protection, as well as the protection and promotion of ideologies and values both domestically and abroad. In reference to Foucault, Dalby alleges that there is a “political impulse to secure” through the invocation of “effective discourses of danger… contained within widely shared geopolitical imaginaries”, which serve to unify identities and justify State action (Dalby 2002: 146). Here it is a national identity contained within the discourse of energy security, and the popular rhetoric of “drill, baby, drill” that manages to **thwart environmental sustainability efforts**, thereby increasing incentives to expand domestic drilling sites. Resources have, historically, been at the heart of many quarrels, whereby certain types of natural resources available only in specific areas, **become essential ingredients for the productive process**. An adequate supply of these resources must be assured, and so the commercial tentacles of the productive unit must expand, until in some instances it draws upon supplies extracted from every corner of the planet. Inasmuch as every productive unit becomes dependent upon its sources of raw materials, every actual or potential denial of access to them represents a threat to the maintenance of that unit and to the well-being of its beneficiaries (Leiss 1994:156-157). Therefore, state security begins to encompass the productive process to ensure access to those resources which have become embedded within the daily functioning of the State’s commercial, social and political activities. The State security apparatus, therefore, must step in to protect and ensure sufficient access to oil as a means of ensuring its own survival and economic wellbeing (Barton et al. 2004; Muller-Kraener 2008; Ciuta 2010). The term security, therefore, “does not refer to an external, objective reality, but establishes a security situation by itself. It is the enunciation of the signifier which constitutes an (in)security condition…organiz[ing] social relations into security relations” for the purpose of protecting State interests (Dalby 2002: 12). The discourse of US energy security operates under the pretense of national security interests to ensure the protection and sufficient flow of key resources. Now whether an actually supply problem or political motives dictate the decision to create another offshore well is often difficult to determine. However, after the terrorist attacks of 9/11 the nationalistic, “Buy American” political sentiment increased drastically, with some gas stations claiming to sell only domestic, or “terrorist-free”, oil, thus creating an incentive to increase domestic 55 production in one of the few remaining spaces for extraction and production: the outer continental shelf (Huber 2009). In a senatorial hearing for the US Committee on Foreign Relations conducted in May 2009, Senator John Kerry concluded that the current US energy schema, which is heavily dependent upon oil, is unsustainable. The main complications include [1] the ‘transfer of American wealth to oil-exporting nations’, as a result of limited domestic supply; [2] a vulnerability to oil price shocks; [3] increased federal expenses created by an obligation of ‘our military to defend our energy supply in volatile regions around the world’; [4] the recent implications of ‘global terror, funded directly by our expenditures on oil; and [5] global climate change which is perpetuated by the burning of fossil fuels (Kerry 2009, May 12). Energy independence, accordingly, is supposed to secure the US from the aforementioned threats by creating a domestic energy supply capable of maintaining the infrastructure dependent upon a constant and cheap supply of energy resources. In addition the perceived threats under Carter’s initial articulation of energy security, Kerry adds the threats of oil-funded terrorism – as a reaction to the terrorist attacks on 9/11, where the known terrorists were citizens of Saudi Arabia, the largest oil producer in the world – and the environmental threat of global climate change. The addition of terrorist free oil to the energy security agenda brings energy security discourse into the present, by identifying a new and tangible threat. Since there had not been a significant energy crisis since the 1970s there seemed to be less urgency surrounding an energy security discourse that promoted energy independence. The establishment of the International Energy Agency by the Organization for Economic Cooperation and Development (OECD), managed to insulate member countries from 56 such a crisis by way of stockpiling oil resources to be used in an emergency and establishing procedures to follow in case there was a shortage in the oil supply. Due to a decrease in the threat posed by a major oil crisis such as that experienced in the 1970s, the position that oil imports constrained and threatened political and economic independence appears to have lost a bit of weight. Following the events of 9/11, however, the impetus to once again protect the nation from the threats posed by imported oil, which now include oil-funded terrorism, was on the table, and energy independence, which includes an expansion of offshore oil drilling, had a new reference point to play on fear and gain consent.

#### Causes global destruction

**Der Derian 98** (James, Professor of Political Science – University of Massachusetts, On Security, Ed. Lipschutz, p. 24-25)

No other concept in international relations packs the metaphysical punch, nor commands the disciplinary power of "security." In its name, peoples have alienated their fears, rights and powers to gods, emperors, and most recently, sovereign states, all to protect themselves from the vicissitudes of nature--as well as from other gods, emperors, and sovereign states. In its name, weapons of mass destruction have been developed which have transfigured national interest into a security dilemma based on a suicide pact. And, less often noted in international relations, in its name billions have been made and millions killed while scientific knowledge has been furthered and intellectual dissent muted. We have inherited an ontotheology of security, that is, an a priori  argument that proves the existence and necessity of only one form of security because there currently happens to be a widespread, metaphysical belief in it. Indeed, within the concept of security lurks the entire history of western metaphysics, which was best described by Derrida "as a series of substitutions of center for center" in a perpetual search for the "transcendental signified." Continues... [7](http://libcat1.cc.emory.edu:32888/20050307122932441313c0=www.ciaonet.org:80/book/lipschutz/lipschutz12.html#note7) In this case, Walt cites IR scholar Robert Keohane on the hazards of "reflectivism," to warn off anyone who by inclination or error might wander into the foreign camp: "As Robert Keohane has noted, until these writers `have delineated . . . a research program and shown . . . that it can illuminate important issues in world politics, they will remain on the margins of the field.' " [8](http://libcat1.cc.emory.edu:32888/20050307122932441313c0=www.ciaonet.org:80/book/lipschutz/lipschutz12.html" \l "note8) By the end of the essay, one is left with the suspicion that the rapid changes in world politics have triggered a "security crisis" in security studies that requires extensive theoretical damage control. What if we leave the desire for mastery to the insecure and instead imagine a new dialogue of security, not in the pursuit of a utopian end but in recognition of the world as it is, other than us ? What might such a dialogue sound like? Any attempt at an answer requires a genealogy: to understand the discursive power of the concept, to remember its forgotten meanings, to assess its economy of use in the present, to reinterpret--and possibly construct through the reinterpretation--a late modern security comfortable with a plurality of centers, multiple meanings, and fluid identities. The steps I take here in this direction are tentative and preliminary. I first undertake a brief history of the concept itself. Second, I present the "originary" form of security that has so dominated our conception of international relations, the Hobbesian episteme of realism. Third, I consider the impact of two major challenges to the Hobbesian episteme, that of Marx and Nietzsche. And finally, I suggest that Baudrillard provides the best, if most nullifying, analysis of security in late modernity. In short, I retell the story of realism as an historic encounter of fear and danger with power and order that produced four realist forms of security: epistemic, social, interpretive, and hyperreal. To preempt a predictable criticism, I wish to make it clear that I am not in search of an "alternative security." An easy defense is to invoke Heidegger, who declared that "questioning is the piety of thought." Foucault, however, gives the more powerful reason for a genealogy of security: I am not looking for an alternative; you can't find the solution of a problem in the solution of another problem raised at another moment by other people. You see, what I want to do is not the history of solutions, and that's the reason why I don't accept the word alternative. My point is not that everything is bad, but that everything is dangerous, then we always have something to do. The hope is that in the interpretation of the most pressing dangers of late modernity we might be able to construct a form of security based on the appreciation and articulation rather than the normalization or extirpation of difference. Nietzsche transvalues both Hobbes's and Marx's interpretations of security through a genealogy of modes of being. His method is not to uncover some deep meaning or value for security, but to destabilize the intolerable fictional identities of the past which have been created out of fear, and to affirm the creative differences which might yield new values for the future. Originating in the paradoxical relationship of a contingent life and a certain death, the history of security reads for Nietzsche as an abnegation, a resentment and, finally, a transcendence of this paradox. In brief, the history is one of individuals seeking an impossible security from the most radical "other" of life, the terror of death which, once generalized and nationalized, triggers a futile cycle of collective identities seeking security from alien others--who are seeking similarly impossible guarantees. It is a story of differences taking on the otherness of death, and identities calcifying into a fearful sameness.

#### The alternative is to reject dominant security discourse – no one policy solves every problem – good theory now drives better policies later

Bruce 96 (Robert, Associate Professor in Social Science – Curtin University and Graeme Cheeseman, Senior Lecturer – University of New South Wales, Discourses of Danger and Dread Frontiers, p. 5-9)

This goal is pursued in ways which are still unconventional in the intellectual milieu of international relations in Australia, even though they are gaining influence worldwide as traditional modes of theory and practice are rendered inadequate by global trends that defy comprehension, let alone policy. The inability to give meaning to global changes reflects partly the enclosed, elitist world of professional security analysts and bureaucratic experts, where entry is gained by learning and accepting to speak a particular, exclusionary language. The contributors to this book are familiar with the discourse, but accord no privileged place to its ‘knowledge form as reality’ in debates on defence and security. Indeed, they believe that debate will be furthered only through a long overdue critical re-evaluation of elite perspectives. Pluralistic, democratically-oriented perspectives on Australia’s identity are both required and essential if Australia’s thinking on defence and security is to be invigorated. This is not a conventional policy book; nor should it be, in the sense of offering policy-makers and their academic counterparts sets of neat alternative solutions, in familiar language and format, to problems they pose. This expectation is in itself a considerable part of the problem to be analysed. It is, however, a book about policy, one that questions how problems are framed by policy-makers. It challenges the proposition that irreducible bodies of real knowledge on defence and security exist independently of their ‘context in the world’, and it demonstrates how security policy is articulated authoritatively by the elite keepers of that knowledge, experts trained to recognize enduring, universal wisdom. All others, from this perspective, must accept such wisdom or remain outside the expert domain, tainted by their inability to comply with the ‘rightness’ of the official line. But it is precisely the official line, or at least its image of the world, that needs to be problematised. If the critic responds directly to the demand for policy alternatives, without addressing this image, he or she is tacitly endorsing it. Before engaging in the policy debate the critics need to reframe the basic terms of reference. This book, then, reflects and underlines the importance of Antonio Gramsci and Edward Said’s ‘critical intellectuals’.15 The demand, tacit or otherwise, that the policy-maker’s frame of reference be accepted as the only basis for discussion and analysis ignores a three thousand year old tradition commonly associated with Socrates and purportedly integral to the Western tradition of democratic dialogue. More immediately, it ignores post-seventeenth century democratic traditions which insist that a good society must have within it some way of critically assessing its knowledge and the decisions based upon that knowledge which impact upon citizens of such a society. This is a tradition with a slightly different connotation in contemporary liberal democracies which, during the Cold War, were proclaimed different and superior to the totalitarian enemy precisely because there were institutional checks and balances upon power. In short, one of the major differences between ‘open societies’ and their (closed) counterparts behind the Iron Curtain was that the former encouraged the critical testing of the knowledge and decisions of the powerful and assessing them against liberal democratic principles. The latter tolerated criticism only on rare and limited occasions. For some, this represented the triumph of rational-scientific methods of inquiry and techniques of falsification. For others, especially since positivism and rationalism have lost much of their allure, it meant that for society to become open and liberal, sectors of the population must be independent of the state and free to question its knowledge and power. Though we do not expect this position to be accepted by every reader, contributors to this book believe that critical dialogue is long overdue in Australia and needs to be listened to. For all its liberal democratic trappings, Australia’s security community continues to invoke closed monological narratives on defence and security. This book also questions the distinctions between policy practice and academic theory that inform conventional accounts of Australian security. One of its major concerns, particularly in chapters 1 and 2, is to illustrate how theory is integral to the practice of security analysis and policy prescription. The book also calls on policy-makers, academics and students of defence and security to think critically about what they are reading, writing and saying; to begin to ask, of their work and study, difficult and searching questions raised in other disciplines; to recognise, no matter how uncomfortable it feels, that what is involved in theory and practice is not the ability to identify a replacement for failed models, but a realisation that terms and concepts – state sovereignty, balance of power, security, and so on – are contested and problematic, and that the world is indeterminate, always becoming what is written about it. Critical analysis which shows how particular kinds of theoretical presumptions can effectively exclude vital areas of political life from analysis has direct practical implications for policy-makers, academics and citizens who face the daunting task of steering Australia through some potentially choppy international waters over the next few years. There is also much of interest in the chapters for those struggling to give meaning to a world where so much that has long been taken for granted now demands imaginative, incisive reappraisal. The contributors, too, have struggled to find meaning, often despairing at the terrible human costs of international violence. This is why readers will find no single, fully formed panacea for the world’s ills in general, or Australia’s security in particular. There are none. Every chapter, however, in its own way, offers something more than is found in orthodox literature, often by exposing ritualistic Cold War defence and security mind-sets that are dressed up as new thinking. Chapters 7 and 9, for example, present alternative ways of engaging in security and defence practice. Others (chapters 3, 4, 5, 6 and 8) seek to alert policy-makers, academics and students to alternative theoretical possibilities which might better serve an Australian community pursuing security and prosperity in an uncertain world. All chapters confront the policy community and its counterparts in the academy with a deep awareness of the intellectual and material constraints imposed by dominant traditions of realism, but they avoid dismissive and exclusionary terms which often in the past characterized exchanges between policy-makers and their critics. This is because, as noted earlier, attention needs to be paid to the words and the thought processes of those being criticized. A close reading of this kind draws attention to underlying assumptions, showing they need to be recognized and questioned. A sense of doubt (in place of confident certainty) is a necessary prelude to a genuine search for alternative policies. First comes an awareness of the need for new perspectives, then specific policies may follow. As Jim George argues in the following chapter, we need to look not so much at contending policies as they are made for us but at challenging ‘the discursive process which gives [favoured interpretations of “reality”] their meaning and which direct [Australia’s] policy/analytical/military responses’. This process is not restricted to the small, official defence and security establishment huddled around the US-Australian War Memorial in Canberra. It also encompasses much of Australia’s academic defence and security community located primarily though not exclusively within the Australian National University and the University College of the University of New South Wales. These discursive processes are examined in detail in subsequent chapters as authors attempt to make sense of a politics of exclusion and closure which exercises disciplinary power over Australia’s security community. They also question the discourse of ‘regional security’, ‘security cooperation’, ‘peacekeeping’ and ‘alliance politics’ that are central to Australia’s official and academic security agenda in the 1990s. This is seen as an important task especially when, as is revealed, the disciplines of International Relations and Strategic Studies are under challenge from critical and theoretical debates ranging across the social sciences and humanities; debates that are nowhere to be found in Australian defence and security studies. The chapters graphically illustrate how Australia’s public policies on defence and security are informed, underpinned and legitimised by a narrowly-based intellectual enterprise which draws strength from contested concepts of realism and liberalism, which in turn seek legitimacy through policy-making processes. Contributors ask whether Australia’s policy-makers and their academic advisors are unaware of broader intellectual debates, or resistant to them, or choose not to understand them, and why?

### 1NC

#### Interpretation – “Financial incentives” require disbursement of public funds – excludes indirect incentives and non-financial incentives

Webb 93 (Dr. Kernaghan, Associate Professor of Law and Business – Ryerson University's Ted Rogers School of Management, Adjunct Research Professor – School of Public Policy and Administration and Department of Law –Carleton University, “Thumbs, Fingers, and Pushing on String: Legal Accountability in the Use of Federal Financial Incentives,” Alta Law Review, 31 Alta L. Rev 501-535, Hein Online, p.505-6)

In this paper, "financial incentives" are taken to mean disbursements\*\* of public funds or contingent commitments to individuals and organizations, intended to encourage, support or induce certain behaviours in accordance with express public policy objectives. They take the form of grants, contributions, repayable contributions, loans, loan guarantees and insurance, subsidies, procurement contracts and tax expenditures."' Needless to say, the ability of government to achieve desired behaviour may vary with the type of incentive in use: up-front disbursements of funds (such as with contributions and procurement contracts) may put government in a better position to dictate the terms upon which assistance is provided than contingent disbursements such as loan guarantees and insurance. In some cases, the incentive aspects of the funding come from the conditions attached to use of the monies."' In others, the mere existence of a program providing financial assistance for a particular activity (**eg. low interest loans for a nuclear power plant**, or a pulp mill) may be taken as government approval of that activity, and in that sense, an incentive to encourage that type of activity has been created.2' Given the wide variety of incentive types, it will not be possible in a paper of this length to provide anything more than a cursory discussion of some of the main incentives used.2- And, needless to say, the comments made herein concerning accountability apply to differing degrees depending upon the type of incentive under consideration. By limiting the definition of financial incentives to initiatives where public funds are either disbursed or contingently committed, a large number of regulatory programs with incentive effects which exist, but in which no money is forthcoming,3 **are excluded** from direct examination in this paper. Such programs might be referred to as indirect incentives. Through elimination of indirect incentives from the scope of discussion, the definition of the incentive instrument becomes both more manageable and more particular. Nevertheless, it is possible that much of the approach taken here may be usefully applied to these types of indirect incentives as well.24 Also excluded from discussion here are social assistance programs such as welfare and ad hoc industry bailout initiatives because such programs are not designed primarily to encourage behaviours in furtherance of specific public policy objectives. In effect, these programs are assistance, but they are not incentives.

[\*\*Continues to footnote]

The word "disbursement." while admittedly lacking in elegance, is used to convey the wide spectrum of ways in which public funds can be conveyed, from loans to **loan guarantees, grants, contributions, allowances, deductions** and so on.

#### Violation – FIT’s are regulatory incentives, not financial

**Brady 4 -** A Thesis In The Department of Political Science Presented in Partial Fulfillment of the Requirements for the Degree of Master of Arts (Public Policy and Public Administration) at Concordia University Montreal, Quebec, Canada (Jonathan, “Wind Boom, Wind Bust: An Examination of the Conditions and Policies that Led to Gennany's Wind Industry and Canada's Lack Thereof,” December, <http://spectrum.library.concordia.ca/8274/1/MR20699.pdf>)

Government employed regulatory and financial incentives have played a salient role in this rapid growth of wind energy production. The most successful regulatory incentive in stimulating wind energy production and decreasing technology costs has been a form of regulatory pricing legislation known as feed-in tariffs or feed-in laws. The chief idea behind them is that national governments establish the price of the wind energy and allow the market to determine capacity and generation. More specifically, national governments oblige electric utility companies to enable wind-generating producers (i.e. owners and operators of wind turbines) to connect to the electric grid, and purchase any electricity generated by wind turbines at a fixed minimum share of the retail price of electricity - at least 85 percent? These prices and payments are guaranteed over a specific period of time - usually no less than five years. The costs of higher payments for wind energy are either covered by an additional per kilowatt-hour (kWh) charge on all consumers according to their level of use, or by a charge on those customers of utilities required to purchase wind generated electricity (EWEA 2004b; EWEA 2004c; Hvelplund 2002; Sawin 2004). Financial incentives such as tax credits and/or production subsidies have also been useful in sparking investment interest in the wind industry. These regulatory and financial incentives, in tandem or individually, represent national government's means of stimulating private sector investment into the wind industry. It has been the private sector's enthusiastic response to these incentives that have driven this remarkable wind boom (i.e. expansive growth in wind energy production and wind industry development) during the last decade.

### 1NC

#### The United States Congress should immediately establish a government-wide multiple staged-process Quadrennial Energy Review with a deadline for completion of each stage by February 1st of each year. The QER should include a top priority recommendation that the United States federal government should establish a feed-in tariff for the development of solar power.

#### We’ll clarify.

#### It solves --

#### CP causes implementation and avoids budget fights

DOE 11 (U.S. Department of Energy, “Report on the First Quadrennial Technology Review,” September, <http://energy.gov/sites/prod/files/ReportOnTheFirstQTR.pdf>, p. 126-7)

When PCAST recommended the DOE QTR, the most important recommendation was the development of a multi-agency QER led by the Executive Office of the President. That QER would forge a more coordinated and robust federal energy policy, engaging many agencies and departments across the Executive Branch (see Table 9). As envisioned by PCAST, a QER would provide a multiyear roadmap that lays out an integrated view of technology-neutral energy objectives and would put forward anticipated Executive actions, coordinated across multiple agencies. The emphasis of the QER would be on establishing government-wide goals, and **identifying the non-budgetary resources** needed for the invention, translation, adoption, and diffusion of energy technologies. Because responsibility for setting these goals goes well beyond the reach of the DOE, the QER would serve as a **mechanism for managing this crosscutting challenge**. In both its development and implementation, the QER would provide an effective tool for Administration-wide coherence. Recognizing the scale of the task, PCAST recommended that the QER be implemented in a staged process led by the Executive Office of the President that would provide some elements of a QER during each of the next four years drawing on the support of an Executive Secretariat, provided by the Secretary of Energy.

### 1NC

#### Immigration will pass now and it’s top of the docket

Helderman 1-25 Rosalind S. Helderman and David Nakamura, Wash Post, 1/25/13, “Senators nearing agreement on broad immigration reform proposal”, <http://www.washingtonpost.com/politics/senators-nearing-agreement-on-broad-immigration-reform-proposal/2013/01/25/950fb78a-6642-11e2-9e1b-07db1d2ccd5b_story.html>

A working group of senators from both parties is nearing agreement on broad principles for overhauling the nation’s immigration laws, representing the most substantive bipartisan effort toward comprehensive legislation in years. The six members have met quietly since the November election, most recently on Wednesday. Congressional aides stressed there is not yet final agreement, but they have eyed next Friday as a target date for a possible public announcement. The talks mark the most in-depth negotiations involving members of both parties since a similar effort broke down in 2010 without producing a bill. “We have basic agreement on many of the core principles,” Senate Majority Whip Richard J. Durbin (D-Ill.), a member of the group, said this week. “Now we have to draft it. It takes time.” “The group we’ve been meeting with — and it’s equal number of Democrats and Republicans — we’re real close,” added Sen. Charles E. Schumer (D-N.Y.), another member of the group. The accelerated pace signals that immigration reform is expected to be one of Congress’s highest priorities, and it comes as the White House prepares to launch its own public campaign on the issue. President Obama will travel to Las Vegas on Tuesday to speak about the need to “fix the broken immigration system this year,” the administration announced, an appearance in a state with a rapidly growing number of Hispanic voters, who overwhelmingly supported his reelection. Obama also met with members of the Congressional Hispanic Caucus on Friday, and aides said he vowed that immigration will be his “top priority.” “What has been absent in the time [since] he put principles forward is a willingness by Republicans to move forward with comprehensive immigration reform,” White House press secretary Jay Carney said Friday. “He hopes that dynamic has changed and there are indications what was once a bipartisan effort to push forward. . .will again be a bipartisan effort to do so.” Past efforts begun amid similarly high hopes have sputtered. But members of both parties increasingly see changes to the nation’s troubled immigration system as an area most likely to draw bipartisan agreement at a time when Congress is deeply divided on gun control, spending and taxes. The optimism is spurred by the sense that the political dynamics have shifted markedly since the last two significant bipartisan efforts failed. In 2007, a bill crafted in the Senate died after failing to win support of 60 members despite backing from then-president George W. Bush. Many Republicans, and some centrist Democrats, opposed that effort because it offered a path to citizenship for illegal immigrants. In 2010, extended negotiations between Schumer and Sen. Lindsey O. Graham (R-S.C.) broke down without producing legislation. Sen. John McCain (R-Ariz.), a veteran of the 2007 effort who is part of the current working group, said Republican attitudes have dramatically shifted since the party’s defeat at the polls in November. Obama won more than 70 percent of the vote among Latinos and Asians, and a growing number of GOP leaders believe action on immigration is necessary to expand the party’s appeal to minority groups. “Obviously, it’s had a very distinct impression,” said McCain, who lost his own bid for the White House in 2008. “It’s time to move forward on this.” But he added, “I don’t claim that it’s going to be easy.” Also included in the new Senate group are Schumer, who chairs the key Senate subcommittee where legislative action will begin; Graham; Robert Menendez (D-N.J.); and Marco Rubio (R-Fla.). Two others, Jeff Flake (R-Ariz.) and Michael F. Bennet (D-Colo.), have also been involved in some talks. Their timetable would aim for a bill to be written by March or April and potentially considered for final passage in the Senate as early as the summer. Proponents believe adoption in the GOP-held House would be made easier with a strong bipartisan vote in the Senate. The working group’s principles would address stricter border control, better employer verification of workers’ immigration status, new visas for temporary agriculture workers and expanding the number of visas available for skilled engineers. They would also include a call to help young people who were brought to the country illegally as children by their parents become citizens and to normalize the status of the nation’s 11 million illegal immigrants. But obstacles abound. For instance, Rubio has said he believes immigrants who came to the country illegally should be able to earn a work permit. But he has said they should be required to seek citizenship through existing avenues, and only after those who have come to the country legally. Democrats and immigration advocates fear that approach could result in wait-times stretching for decades, creating a class of permanent legal residents for whom the benefits of citizenship appear unattainable. They have pushed to create new pathways to citizenship specifically available to those who achieve legal residency as part a reform effort. It is not yet clear if the Senate group will endorse a mechanism allowing such people to eventually become citizens — something Obama is expected to champion. Schumer said it would be “relatively detailed,” but would not “get down into the weeds.” A source close to Rubio said he joined the group in December at the request of other members only after they agreed their effort would line up with his own principles for reform, which he outlined in an interview with the Wall Street Journal three weeks ago. His ideas have since been embraced by conservatives, including some longtime foes of providing legal status to those who have come to the country illegally. As a possible 2016 presidential contender widely trusted on the right, Rubio’s support could be key to moving the bipartisan effort. And while Rubio and other Republicans have said they would prefer to split up a comprehensive immigration proposal into smaller bills that would be voted on separately, the White House will pursue comprehensive legislation that seeks to reform the process in a single bill. “I doubt if there will be a macro, comprehensive bill,” said Sen. Johnny Isakson (R-Ga.), who supported the 2007 effort. “Anytime a bill’s more than 500 pages, people start getting suspicious. If it’s 2,000 pages, they go berserk.” But in an op-ed in the Wall Street Journal on Friday, Republican Jeb Bush, the former Florida governor, strongly supports a single comprehensive bill, writing that “Congress should avoid quick fixes.” Schumer said Friday that a single package will be key for passage. “We’ll not get it done in pieces,” he said. “Every time you do a piece, everyone says what about my piece and you get more people opposing it.” White House officials said they welcome the bipartisan Senate group’s deliberations and do not think it will conflict with the administration’s strategy. Some Democrats in the House, including Rep. Luis V. Gutierrez (D-Ill.), have cautioned that the White House could harm the bid for bipartisan support if it acts too aggressively by authoring its own legislative proposal. But advocates, who were disappointed that Obama did not follow through on comprehensive reform in his first term, said they expect the president to be out front on the issue. “The president needs to lead, and then the Republicans have a choice: Are they going to do what they did in the last term and just be obstructionists?” said Eliseo Medina, secretary-treasurer of the Service Employees International Union, which spent millions recruiting new Hispanic voters this year. “Well, that didn’t work too well in November. Do the Republicans want the president not to get the credit? The best way to share the credit is for them to step up and engage and act together with the president. But it’s their choice. ”

#### Plan kills capital --- massively unpopular.

**Dong 12**

[Baofeng, Department of Planning, Public Policy & Management, School of Architecture and Allied Arts, of the University of Oregon, June, <http://www.oregonrenewables.com/Publications/Dong_Thesis_Solar_FIT_Final.pdf>]

Though FIT programs have experienced significant growth and great success in Germany, solar PV deployment in the U.S. still faces tremendous political and economic barriers. Trial FIT programs have been started in several states, such as California, Florida, Oregon, Vermont, Washington, and Wisconsin (Couture and Cory 2009). As of 2009, Gainesville Regional Utilities (GRU) district was the only public utility district (PUD) in the United States that had a FIT program based on the cost of renewable energy (RE) generation (Couture and Cory 2009). There is no overarching federal policy that requires certain amounts of renewable energy deployment. Legislation that has aimed to pass permanent tax credit for renewable energy has failed in Congress, and renewal of federal investment tax credit and other incentives has faced significant opposition.

#### PC is key to immigration

Chris Weigant, Political writer, 1/23/13 [“Handicapping Obama's Second Term Agenda,” HuffPost, http://www.huffingtonpost.com/chris-weigant/obama-second-term\_b\_2537802.html]

The second big agenda item is immigration reform. President Obama holds virtually all the cards, politically, on this one. All Republicans who can read either demographics or polling numbers know full well that this may be their party's last chance not to go the way of the Whigs. Their support among Latinos is dismal, and even that's putting it politely. Some Republicans think they have come up with a perfect solution on how to defuse the issue, but they are going to be proven sadly mistaken in the end, I believe. The Republican plan will be announced by Senator Marco Rubio at some point, and it will seem to mirror the Democratic plan -- with one key difference. Republicans -- even the ones who know their party has to do something on the immigration problem -- are balking at including a "path to citizenship" for the 11 million undocumented immigrants who are already in America.¶ The Republicans are trying to have their cake and eat it too -- and it's not going to work. "Sure," they say, "we'll give some sort of papers to these folks, let them stay, and even let them work... but there's no need to give them the hope of ever becoming a full citizen." This just isn't going to be good enough, though. There are essentially two things citizens can do which green card holders cannot: serve on juries, and vote. The Republicans are not worried about tainted juries, in case that's not clear enough.¶ Republicans will bend over backwards in an effort to convince Latinos that their proposal will work out just fine for everyone. Latinos, however, aren't stupid. They know that being denied any path to citizenship equals an effort to minimize their voice on the national political stage. Which is why, as I said, Obama holds all the cards in this fight. Because this is the one issue in his agenda which Republicans also have a big vested interest in making happen. Obama and the Democrats will, I believe, hold firm on their insistence on a path to citizenship, and I think a comprehensive immigration bill will likely pass some time this year, perhaps before the summer congressional break. The path to citizenship it includes will be long, expensive and difficult (Republicans will insist on at least that), but it will be there.¶ On gun control, I think Obama will win a partial victory. On immigration, I think he will win an almost-total victory. On global warming, however, he's going to be disappointed. In fact, I doubt -- no matter how much "bully pulpiting" Obama does -- that any bill will even appear out of a committee in either house of Congress. This will be seen as Obama's "overreach" -- a bridge too far for the current political climate. Anyone expecting big legislative action on global warming is very likely going to be massively disappointed, to put it quite bluntly. In fact, Obama will signal this in the next few months, as he approves the Keystone XL pipeline -- much to the dismay of a lot of his supporters.¶ Of course, I could be wrong about any or all of these predictions. I have no special knowledge of how things will work out in Congress in the immediate future. I'm merely making educated guesses about what Obama will be able to achieve in at least the first few years of his second term. Obama has a lot of political capital right now, but that could easily change soon. The House Republicans seem almost demoralized right now, and Obama has successfully splintered them and called their bluff on two big issues already -- but they could regroup and decide to block everything the White House wants, and damn the political consequences. Unseen issues will pop up both on the domestic and foreign policy stages, as they always do. But, for now, this is my take on how the next few years are going to play out in Washington. Time will tell whether I've been too optimistic or too pessimistic on any or all of Obama's main agenda items. We'll just have to wait and see.

#### Immigration solves Mexican state collapse

Gittelson ‘9 (Citation: 23 Notre Dame J.L. Ethics & Pub. Pol'y 115 2009 THE CENTRISTS AGAINST THE IDEOLOGUES: WHAT ARE THE FALSEHOODS THAT DIVIDE AMERICANS ON THE ISSUE OF COMPREHENSIVE IMMIGRATION REFORM Robert Gittelson has been a garment manufacturer in the Los Angeles area for over twenty-five years. His wife, Patricia Gittelson, is an immigration attorney with offices in Van Nuys and Oxnard, California. Robert also works closely with Patricia on the administrative side of her immigration practice. Throughout his career, Mr. Gittelson has developed practical, first-hand experience in dealing with the immigration issues that are challenging our country today.

In the alternative, should we fail to pass CIR, and instead opt to deport or force attrition on these millions of economic refugees through an enforcement-only approach to our current undocumented immigrant difficulties, what would be the net result? Forgetting for now the devastating effect on our own economy, and the worldwide reproach and loss of moral authority that we would frankly deserve should we act so callously and thoughtlessly, there is another important political imperative to our passing CIR that affects our national security, and the security and political stability of our neighbors in our hemisphere. That is the very real threat of communism and/or socialism. First of all, the primary reason why millions of undocumented economic refugees migrated to the United States is because the economies of their home countries were unable to support them. They escaped extreme poverty and oppression, and risked literally everything they had, including their lives and their freedom, to come to this country to try to work hard and support themselves and their families. Deporting our illegal immigrant population back to primarily Latin America would boost the communist and socialist movements in that part of our hemisphere, and if the anti-immigrationists only understood that fact, they might rethink their "line in the sand" position on what they insist on calling 'amnesty. Communism thrives where hope is lost. The economies of Latin American nations are struggling to barely reach a level of meager subsistence for the population that has remained at home; Mexico, for example, has already lost 14% of their able-bodied workers to U.S. migration.3" Without the billions of dollars in remissions from these nations' expatriates working in the United States that go back to help support their remaining family members, the economies of many of these countries, most of whom are in fact our allies, would certainly collapse, or at least deteriorate to dangerously unstable levels. The addition of millions of unemployed and frustrated deported people who would go to the end of the theoretical unemployment lines of these already devastated economies would surely cause massive unrest and anti-American sentiment. The issue of Comprehensive Immigration Reform is not simply a domestic issue. In our modern global economy, everything that we do, as the leaders of that global economy, affects the entire world, and most especially our region of the world. If we were to naively initiate actions that would lead to the destabilization of the Mexican and many Central and South American governments, while at the same time causing serious harm to our own economy (but I digress ... ), it would most assuredly lead to disastrous economic and political consequences. By the way, I'm not simply theorizing here. In point of fact, over the past few years, eight countries in Latin America have elected leftist leaders. Just last year, Guatemala swore in their first leftist president in more than fifty years, Alvaro Colom.3" He joins a growing list. Additional countries besides Guatemala, Venezuela,32 and Nicaragua33 that have sworn in extreme left wing leaders in Latin America recently include Brazil,34 Argentina,3 5 Bolivia,36 Ecuador,37 and Uruguay.3s This phenomenon is not simply a coincidence; it is a trend. The political infrastructure of Mexico is under extreme pressure from the left.39 Do we really want a leftist movement on our southern border? If our political enemies such as the communists Chavez in Venezuela and Ortega in Nicaragua are calling the shots in Latin America, what kind of cooperation can we expect in our battle to secure our southern border?

#### Nuclear war

Bernd Debusmann, 9/1/2009, “Among top U.S. fears: A failed Mexican state”,http://www.nytimes.com/2009/01/09/world/americas/09iht-letter.1.19217792.html?\_r=1

WASHINGTON — What do Pakistan and Mexico have in common? They figure in the nightmares of U.S. military planners trying to peer into the future and identify the next big threats. The two countries are mentioned in the same breath in a just-published study by the United States Joint Forces Command, whose jobs include providing an annual look into the future to prevent the U.S. military from being caught off guard by unexpected developments. "In terms of worst-case scenarios for the Joint Force and indeed the world, two large and important states bear consideration for a rapid and sudden collapse: Pakistan and Mexico," says the study - called Joint Operating Environment 2008 - in a chapter on "weak and failing states." Such states, it says, usually pose chronic, long-term problems that can be managed over time. But the little-studied phenomenon of "rapid collapse," according to the study, "usually comes as a surprise, has a rapid onset, and poses acute problems." Think Yugoslavia and its disintegration in 1990 into a chaotic tangle of warring nationalities and bloodshed on a horrific scale. Nuclear-armed Pakistan, where Al Qaeda has established safe havens in the rugged regions bordering Afghanistan, is a regular feature in dire warnings. Thomas Fingar, who retired as the chief U.S. intelligence analyst in December, termed Pakistan "one of the single most challenging places on the planet."This is fairly routine language for Pakistan, but not for Mexico, which shares a 2,000-mile, or 3,200-kilometer, border with the United States. Mexico's mention beside Pakistan in a study by an organization as weighty as the Joint Forces Command, which controls almost all conventional forces based in the continental United States, speaks volumes about growing concern over what is happening south of the U.S. border. Vicious and widening violence pitting drug cartels against each other and against the Mexican state have left more than 8,000 Mexicans dead over the past two years. Kidnappings have become a routine part of Mexican daily life. Common crime is widespread. Pervasive corruption has hollowed out the state. In November, in a case that shocked even those (on both sides of the border) who consider corruption endemic in Mexico, the former drug czar Noé Ramírez was charged with accepting at least $450,000 a month in bribes from a drug cartel in exchange for information about police and anti-narcotics operations. A month later, a Mexican army major, Arturo González, was arrested on suspicion that he sold information about President Felipe Calderón's movements for $100,000 a month. González belonged to a special unit responsible for protecting the president. Depending on one's view, the arrests are successes in a publicly declared anticorruption drive or evidence of how deeply criminal mafias have penetrated the organs of the state. According to the Joint Forces study, a sudden collapse in Mexico is less likely than in Pakistan, "but the government, its politicians, police, and judicial infrastructure are all under sustained assault and pressure by criminal gangs and drug cartels. How that internal conflict turns out over the next several years will have a major impact on the stability of the Mexican state." It added: "Any descent by Mexico into chaos would demand an American response based on the serious implications for homeland security alone." What form such a response might take is anyone's guess, and the study does not spell it out, nor does it address the economic implications of its worst-case scenario. Mexico is the third biggest trade partner of the United States (after Canada and China) and its third-biggest supplier of oil (after Canada and Saudi Arabia). No such ties bind the United States and Pakistan. But the study sees a collapse there not only as more likely but as more catastrophic. It would bring "the likelihood of a sustained violent and bloody civil and sectarian war, an even bigger haven for violent extremists and the question of what would happen to its nuclear weapons. That 'perfect storm' of uncertainty alone might require the engagement of U.S. and coalition forces into a situation of immense complexity and danger." The study then warns of "the real possibility that nuclear weapons might be used." It is not clear where on the long list of actual and potential crises around the world Mexico and Pakistan will rank once Barack Obama takes office as U.S. president on Jan. 20. During the election campaign, Obama repeatedly criticized Pakistan for not cracking down hard enough on terrorists inside its borders. Since then a new Pakistani president has come to power. Not long after that, tensions between Pakistan and India, also a nuclear power, rose sharply after gunmen attacked two luxury hotels and other sites in Mumbai, India's commercial capital, and killed 163 people. India described the attack as a conspiracy hatched in Pakistan and carried out by Pakistanis. Closer to home, the U.S. economic crisis looks likely to slow down a $1.4 billion assistance program - including military equipment, training, technology - to help the Mexican government gain the upper hand over the drug cartels and re-establish control over what some have called "failed cities" along the border, places where shootouts, beheadings and kidnappings have become routine. It would take a very rosy outlook on the future to expect rapid progress.

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#### DOE will block natural gas exports – increased demand means exports hurt “public interest”

Ebinger et al 12 (Charles, Senior Fellow and Director of the Energy Security Initiative – Brookings, Kevin Massy, Assistant Director of the Energy Security Initiative – Brookings, and Govinda Avasarala, Senior Research Assistant in the Energy Security Initiative – Brookings, “Liquid Markets: Assessing the Case for U.S. Exports of Liquefied Natural Gas,” Brookings Institution, Policy Brief 12-01, http://www.brookings.edu/~/media/research/files/reports/2012/5/02%20lng%20exports%20ebinger/0502\_lng\_exports\_ebinger.pdf)

From the perspective of the U.S. federal government, the issue of implications is viewed in terms of “public interest.” Under existing legislation, exports of natural gas to countries with a free trade agreement (FTA) with the United States are, by law, deemed to be in the public interest and authorization is required to be given without modification or delay. Projects looking for authorization to export LNG to countries without an FTA, which account for roughly 96 percent of current global LNG demand, are required to be approved by the Secretary of Energy unless, after public hearing, the Department of Energy finds that such exports are not in the public interest. 80 Although the legal definition of “public interest” is not explicitly given in existing legislation, according to public statements by officials from the Department of Energy, “public interest” includes:

• Adequate domestic natural gas supply;

• Domestic demand for natural gas proposed for export; Economic impacts of exports (on GDP, consumers, and industry); • U.S. energy security; • Job creation; • U.S. balance of trade; • International considerations; • Environmental considerations; • Consistency with DoE’s policy of promoting market competition through free negotiation of trade 81 The first two of these criteria were addressed in Part I. The remainder focus on the various domestic and international implications of U.S. LNG exports. domestic implications The domestic implications of U.S. LNG exports include their impact on natural gas prices, natural gas price volatility, jobs and competitiveness, and on overall energy security. Price of domestic natural Gas The domestic price impact of natural gas exports will be a significant factor in determining whether or not the United States should export LNG. While it is generally acknowledged that a domestic price increase will result from largescale LNG exports, the size of the price increase is the subject of debate, with a number of studies suggesting a range of possible outcomes. The important considerations when analyzing the results and conclusions of the various existing studies are the assumptions and models that are used when making price forecasts. Below are the results and methodologies of five major pricing studies done by the EIA and three consultancies: Deloitte, ICF International, and Navigant Consulting, which published two studies. 2012 Energy information Administration study In January 2012, the EIA published a study entitled “Effect of Increased Natural Gas Exports on Domestic Energy Markets.” 82 The study, conducted at the request of the Office of Fossil Energy of the Department of Energy, analyzed four different export scenarios across four different resource base or economic assumptions to project price responses to LNG exports. In addition to a “baseline” scenario, where no LNG is exported, the EIA model considered four different export scenarios: • A low export/slow growth scenario, where 6 bcf/day of LNG is exported, phased in at a rate of 1 bcf/day per year; • A low export/rapid growth scenario, where 6 bcf/day of LNG is exported, phased in at a rate of 3 bcf/day per year; • A high export/slow growth scenario, where 12 bcf/day of LNG is exported, phased in at a rate of 1 bcf/day per year; • A high export/rapid growth scenario, where 12 bcf/day of LNG is exported, phased in at a rate of 3 bcf/day per year Given the uncertainty over the actual size of the shale gas resource base and the future growth of the U.S. economy, each of these scenarios (both “baseline” and export) were applied to four alternate background cases: • A reference case, based on the EIA’s 2011 Annual Energy Outlook; • A low-shale estimated ultimate recovery (EUR) case, in which shale gas production from new, undrilled wells is 50 percent below the reference case scenario; • A high-shale EUR case, in which shale gas production from new, undrilled wells is 50 percent higher than the reference case; • A high economic growth case, in which U.S. GDP grows at 3.2 percent as opposed to the 2.7 percent assumed in the reference case. Given the range of assumptions, the range of results was unsurprisingly wide. The results range from a 9.6 percent increase (from $3.56 to $3.90/ mcf) in domestic natural gas prices in 2025 due to exports (in the case of high shale gas recovery, low export volumes and a slow rate of export growth) to a 32.5 percent increase (in the case of low shale gas recovery, high export volumes and a high rate of export growth). The percentage premium for domestic natural gas prices in 2025 for each scenario relative to the baseline scenario price estimate is detailed in table 3. In addition to the price premium for exporting natural gas that exists in each case, the EIA study projected a short-term spike in natural gas prices as a result of LNG exports. As figure 7 below illustrates, in 2015, the first year that LNG exports occur, domestic natural gas prices rise rapidly until total export capacity is reached. In the “lowrapid” scenario prices peak in 2016, after the 6 bcf/day of export capacity is built over 2 years; in the “high-slow” scenario, natural gas prices peak in 2026, after the 12 bcf/day of export capacity is built over 12 years. The immediate jump in price becomes more pronounced in the scenarios where LNG export capacity increases quickly. In the “low-rapid” scenario, the price of natural gas peaks at nearly 18 percent above the baseline case; in the “high-rapid” scenario, natural gas prices peak at 36 percent above the baseline case. This price impact is exacerbated in the Low Shale EUR and High Macroeconomic Growth cases, as LNG exports further tighten domestic natural gas markets. In the most extreme example, the high-rapid scenario for exports in a Low Shale EUR case, the price for natural gas peaks at more than 50 percent than the baseline case. 83 There are two factors that should be considered when interpreting the results of this price impact study. The first is the assumption regarding the rate at which LNG could be exported. The results of EIA’s analysis represent an extreme scenario for LNG exports. In the existing LNG market, it is particularly unlikely that either the “low-rapid” or the “high-rapid” scenarios would materialize. The former assumption stipulates that the United States would export 6 bcf/day of LNG by 2016. Given that, at the time of writing, only one facility has been approved to export 2.2 bcf/day to nonFTA countries starting in 2015, it is unlikely that another three plants would be approved and built in such a short time frame. 84 The latter scenario, that the United States would be exporting 12 bcf/ day of LNG by 2018, suggests that in the next several years, the United States would grow from exporting negligible volumes of LNG to having roughly one-third of the global LNG export capacity. Not only would this supply growth outpace growth in global LNG demand, but this capacity addition would also have to compete with roughly 11 bcf/day of Australian-origin LNG that is expected to hit the market around the same time. 85 The second issue is the model’s assumptions for incremental investment in natural gas production as a result of increased export capacity. The spike in price depicted in figure 7 occurs because investment from gas producers lags additional demand. In the model, producers respond to, rather than anticipate, additional demand. For this reason, prices peak once the export capacity is filled, before steadily decreasing. In reality, the expectation of future demand would likely induce gas producers to invest in additional production before incremental demand occurs. As a result, the increase in prices would likely begin earlier and peak at a lower level than suggested by the model. deloitte study An earlier study released in November 2011 from the Deloitte Center for Energy Solutions highlighted the producer-response in its model. In addition to finding that LNG exports would produce a smaller increase in gas prices than the EIA report suggests, the Deloitte study points out that “producers can develop more reserves in anticipation of demand growth, such as LNG exports. There will be ample notice and time in advance of the exports to make supplies available.” 86 Using a dynamic model, in which production increased in anticipation of new demand, the Deloitte study found that 6 bcf/day of exports of LNG would result in, on average, a 1.7 percent increase (from $7.09 to $7.21/MMBtu) in the price of natural gas between 2016 and 2035. Further, the Deloitte study noted that there would be regional variations to the increase in natural gas prices resulting from LNG exports. As most of the proposed liquefaction terminals are expected to be on the Gulf Coast, the price of Henry Hub gas, which is the key benchmark for natural gas from the Gulf Coast, will increase by $0.22/ MMBtu by 2035 as a result of U.S. LNG exports. This is more than double the price increase projected in regions further away from the LNG export terminals. In New York and Illinois, natural gas prices are projected to increase by less than $0.10/MMBtu. This is particularly important in the Northeast, which historically experiences some of the highest natural gas prices in the country, but will benefit from the development and consumption of natural gas from the nearby Marcellus shale play. other studies Three other studies of note have analyzed the price impacts of U.S. LNG exports. In August 2010, Navigant Consulting found that 2 bcf/day of LNG exports would cause a price increase of between 7 and 7.9 percent from 2015 to 2035 relative to a scenario with no gas exports. ICF International found in August 2011 that 6 bcf/day of exports would result in an 11 percent ($0.64/MMBtu) increase in natural gas prices over the same period. 87 More recently, Navigant released another study that analyzed the impact of two separate export scenarios. The first scenario modeled the impact of 3.6 bcf/day of LNG exports from three terminals in North America: Sabine Pass in Louisiana, Kitimat in British Columbia, and Coos Bay in Oregon. The second scenario modeled the impact of 6.6 bcf/day of LNG exports from the three aforementioned export projects and 2 bcf/day of added exports from the Gulf Coast and 1 bcf/day from Maryland. 88 This Navigant study found that 6.6 bcf/day of LNG exports would result in a 6 percent ($0.35/MMBtu) increase in natural gas prices from 2015 to 2035. As with the EIA and Deloitte studies, the results of both Navigant and ICF’s studies must be analyzed in the context of their respective methodologies and assumptions. Navigant’s first study uses a more static supply model, which, unlike dynamic supply models, does not fully take account of the effect that higher prices have on spurring additional production. As a result, it takes a conservative estimate of supply growth potential. The report acknowledges that the price outcomes modeled in its analysis “establish the upper range of impacts that exports […] might have on natural gas prices.” 89 This study also did not factor in the reemergence of the industrial sector as a major consumer of natural gas following the shale gas “revolution.” The study assumes that natural gas consumption by the industrial sector will decline by 0.3% per year to 2035. By contrast, the EIA model assumes that industrial sector demand will increase by roughly 1% per year over the same period. 90 The ICF study factors in various levels of production response from an increase in price. Under its 6 bcf/day export scenario, the price impact ranges from a $0.52/ MMBtu increase in a more responsive drilling activity scenario to a $0.75/MMBtu increase in a less responsive drilling activity scenario. which study is right? Given that these studies forecast natural gas prices two decades into the future, it is difficult to determine which study is most accurate. (table 4 shows a comparison of the price impact forecasts of the various models.) However, policymakers would benefit from having a better understanding of the results that are generated from each report. This includes choosing the most relevant results from each report. For instance, following the release of the EIA study, many commentators were quick to highlight that natural gas prices could increase by more than 50 percent as a result of LNG exports. However, this ignored the assumptions behind this number: it was based on the price of natural gas in one year under the most extreme assumptions of exports and domestic resource base. A more comprehensive analysis should include an assessment of the average price impact from 2015 to 2035. When distinguishing between the various studies, policymakers should identify which assumptions most resemble the existing natural gas market and its likely direction, and which models are most reflective of the complex nature of domestic and global natural gas trade. Assuming realistic volumes of natural gas exports as well as a reasonable supply response by natural gas producers are important considerations. It is important to note that the supply curves in the various studies reflect different interpretations of the economics of marginal production. The Power sector and industrial sector Part I indicated that the power-generation and industrial sectors would account for most of the demand for newly available natural gas resources. As shown above, LNG exports are likely to increase domestic prices of natural gas, suggesting negative consequences for these two competing sectors. In their analyses, both Deloitte and EIA found that the majority—63 percent, according to both studies—of the exported natural gas will come from new production as opposed to displaced consumption from other sectors. By contrast, between 17 and 38 percent of supply of natural gas for export would be met by reduced demand, as higher prices pushes some domestic consumers to use less gas. In the power generation and industrial sectors, the price impacts of LNG exports are likely to have modest impacts. In the power sector, natural gas has historically been used as a back up to coal and nuclear base-load generation. For such gas used at the margin, the increase in electricity prices as a result of LNG exports would be limited by its competitiveness relative to other fuels: as soon as it becomes more expensive than the alternative for back up generation, power producers will substitute away from gas. 91 According to ICF International, a $0.64/MMBtu increase in the price of natural gas would result in an electricity price increase of between $1.66 and $4.97/megawatt-hour (MWh), depending on how often gas is used as the marginal fuel for electricity. Deloitte estimates that the price increase of electricity would not be more than $1.65/MWh. 92 EIA estimates that electricity price impacts will be marginal as well (between $1.40/MWh and $2.90/MWh) except in the “highrapid” export scenario. 93 The EIA Annual Energy Outlook 2011 estimates that, without exporting LNG, the average price of electricity (across all fuels) in 2035 will be $92/MWh. 94 In the longer term, natural gas is itself likely to be used for more base-load generation. The rapid increase in shale gas production, coupled with the retirements of as much as 50 gigawatts (GW) of coal-fired electricity due to plant age or inability to adhere to possibly forthcoming EPA regulations is likely to increase the demand for natural gas in the power sector. According to some analysts, the near-term demand caused by the retirements of the oldest and least efficient coal-fired power plants could result in an additional natural gas demand of 2 bcf/day. 95 Given the lack of environmentally and economically viable alternatives, a moderate increase in gas prices is unlikely to result in a large move away from natural gas, although increased costs will be transferred to customers. Natural gas consumption in the power sector has been considered economic at prices much higher than those resulting from LNG exports in even the highest price-impact projections. Even prior to the shale gas “revolution,” when natural gas prices were high, natural gas demand was increasing in the power sector. The EIA Annual Energy Outlook 2005— published in a year when average well head prices were over $7/MMBTU—projected that natural gas demand in the electricity sector would increase by 70 percent between 2003 and 2015. 96 Unlike the power sector, which continued to build natural-gas fired generation during a period of increasing gas prices, the industrial sector was negatively affected by growing natural gas import dependence, high gas prices, and gas price volatility. Between 2000 and 2005, the price of natural gas increased by 99 percent and LNG imports more than doubled. 97 By 2005, the ratio of the price of oil to the price of natural gas was approximately 6:1, just below the 7:1 oil-to-gas price ratio at which U.S. petrochemical and plastics producers are globally competitive. 98 That same year Alan Greenspan, then-Chairman of the Federal Reserve, noted that because of natural gas price increases “the North American gas-using industry [was] in a weakened competitive position.” 99 Since then the price of natural gas has collapsed. In 2011, the oil-to-natural gas price ratio was more than 24:1. In 2012 it has been even higher. The decline in natural gas prices has galvanized the industrial sector. A joint study by PwC and the National Association for Manufacturers, an industry trade group, found that the development of shale gas could save manufacturers as much as $11.6 billion per year in feedstock costs through 2025. 100 New investments in petrochemical and plastics producing facilities are occurring throughout the East and Southeast, largely predicated on the availability of inexpensive natural gas. Opponents of LNG exports contend that such investments would be deterred in the future as a result of increases in the price of natural gas. However, the evidence suggests that the competitive advantage of U.S. industrial producers relative to its competitors in Western Europe and Asia is not likely to be affected significantly by the projected increase in natural gas prices resulting from LNG exports. As European and many Asian petrochemical producers use oil-based products such as naphtha and fuel oil as feedstock, U.S. companies are more likely to enjoy a significant cost advantage over their overseas competitors. Even a one-third decline in the estimated price of crude oil in 2035 would result in an oil-to-gas ratio of 14:1. 101 There is also the potential for increased exports to help industrial consumers. Ethane, a liquid byproduct of natural gas production at several U.S. gas plays, is the primary feedstock of ethylene, a petrochemical product used to create a wide variety of products. According to a study by the American Chemistry Council, an industry trade body, a 25 percent increase in ethane production would yield a $32.8 billion increase in U.S. chemical production. By providing another market for cheap dry gas, LNG exports will encourage additional production of natural gas liquids (NGL) that are produced in association with dry gas. According to the EIA, ethane production increased by nearly 30 percent between 2009 and 2011 as natural gas production from shale started to grow substantially. Ethane production is now at an alltime high, with more than one million barrels per day of ethane being produced. 102 Increased gas production for exports results in increased production of such natural gas liquids, in which case exports can be seen as providing a benefit to the petrochemical industry. natural gas price volatility A major concern among domestic end users of natural gas is the possibility of an increase in natural gas price volatility resulting from an increase in U.S. LNG exports. As figure 8 demonstrates, the price volatility experienced during the 2000s was the highest the domestic gas market has experienced in the past three decades. The volatility of the natural gas market in the 2000s was largely caused by a tight supply-demand balance. Natural gas demand increased substantially as the U.S. economy grew and natural gas was viewed as environmentally preferable to coal for power generation. This increase in demand coincided with a reduction in domestic supply and an increased reliance on imports. The recent surge in U.S. natural gas production has resulted in less market volatility since 2010. According to EIA, the standard deviation of the price of natural gas (a general statistical indicator of volatility) between 2010 and 2011 was one-third what it was during the 2000s. 103 Potential exports of U.S. LNG concerns some domestic consumers for two principal reasons: greater volatility in domestic natural gas prices; and exposure of domestic natural gas prices to higher international prices resulting in a convergence between low U.S. prices and high international prices. There is an insufficient amount of data and quantitative research on the relationship between do mestic natural gas price volatility and LNG exports. However, certain characteristics of the LNG market are likely to limit volatility. LNG is bound by technical constraints: it must be liquefied and then transported on dedicated tankers before arriving at terminals where a regasification facility must be installed. Liquefaction facilities have capacity limits to how much gas they can turn into LNG. If they are operating at or close-to full capacity, such facilities will have a relatively constant demand for natural gas, therefore an international price or supply shock would have little impact on domestic gas prices. Moreover, unlike oil trading, in which an exporter—theoretically—sells each marginal barrel of production to the highest bidder in the global market, the capacity limit on LNG production and export means that LNG exporters have an infrastructure-limited demand for natural gas leaving the rest of the natural gas for domestic consumption. As most LNG infrastructure facilities are built on a project finance basis and underpinned by long-term contracts, this demand can be anticipated by the market years in advance, reducing the likelihood of volatility. The macroeconomy and jobs The macroeconomic and job implications of LNG exports depend on two principal factors: the gains from trade from exploiting pricing differentials and inefficiencies of the global market; and the employment implications of those gains, higher domestic natural gas prices, and greater domestic natural gas production. The Department of Energy has commissioned a study on both the macroeconomic and employment implications of U.S. LNG exports, which will be released later this year. This study will provide a qualitative assessment of the implications of LNG exports to the U.S. economy and employment. LNG exports are likely to be a net benefit to the U.S. economy, although probably not a significant contributor in terms of total U.S. GDP. Exports of U.S. natural gas will take advantage of the benefits of the existing producer’s surplus resulting from the pricing differentials between the natural gas markets in the United States, Europe, and Asia. Contractual terms will determine how this surplus is shared between U.S. sellers and foreign buyers. 104 The benefit of this trade will likely outweigh the cost to domestic consumers of the increase in the price of natural gas as most of the natural gas demanded by exports will come from new natural gas production as opposed to displacing existing production from domestic consumers. On the other hand, LNG exports from the United States are likely to put marginal upward pressure on the relative value of the U.S. dollar. In March 2012, Citigroup released a report on North American hydrocarbon production that included a model of the macroeconomic impact of U.S. oil and gas exports. The Citi analysis found that oil and gas exports would cause a nearly two percent decline in the current account deficit by 2020, but that the exchange rate implications would be modest. By 2020, the U.S. dollar would appreciate by between 1.6 and 5.4 percent. 105 The implications of LNG exports on job creation are similarly difficult to quantify. Other than temporary construction jobs created by the need to build liquefaction capacity, pipelines, and other ancillary infrastructure, the operation of the liquefaction facility will likely provide little permanent employment benefit. As outlined in the section on price impacts above, as much of the gas for export will come from new production, rather than the displacement of consumption in other sectors, the negative economic, and therefore jobrelated, effects on those sectors is likely to be limited. Beyond the labor required for additional gas production to satisfy LNG exports, the net impact of LNG exports is likely to be minimal. Further upstream, the job potential may be greater. By increasing domestic natural gas production, employment from additional oil and gas producers will increase, as will the demand for manufacturers of equipment for oil and gas production, gathering, and transportation. domestic energy security Aside from the price impact of potential U.S. LNG exports, a major concern among opponents is that such exports would diminish U.S. “energy security”; that exports would deny the United States of a strategically important resource. The extent to which such concerns are valid depends on several factors, including the size of the domestic resource base, and the liquidity and functionality of global trade. As Part I of this report notes, geological evidence suggests that the volumes of LNG export under consideration would not materially affect the availability of natural gas for the domestic market. Twenty years of LNG exports at the rate of 6 bcf/day, phased in over the course of 6 years, would increase demand by approximately 38 tcf. As presented in Part I, four existing estimates of total technically recoverable shale gas resources range from 687 tcf to 1,842 tcf; therefore, exporting 6 bcf/day of LNG over the course of twenty years would consume between 2 and 5.5 percent of total shale gas resources. While the estimates for shale gas reserves are uncertain, in a scenario where reserves are perceived to be lower than expected, domestic natural gas prices would increase and exports would almost immediately become uneconomic. In the long-term, it is possible that U.S. prices and international prices will converge to the point at which they settle at similar levels. In that case, the United States would have more than adequate import capacity (through bi-directional import/export facilities) to import gas when economic. A further gas-related consideration with regard to energy security is the effects of increased production of associated natural gas with the increasing volumes of U.S. unconventional oil. As the primary energy-security concern for the United States related to oil, the application of fracking and horizontal drilling in oil production is reducing U.S. oil import dependence, while simultaneously producing substantial volumes of natural gas, which, given the relative economics of oil and gas, is effectively delivered at zero (or, in the case of producers who have to invest in equipment to manage flaring and venting, negative) cost. To the extent that associated gas from unconventional oil production is used for LNG export, it can be seen as a consequence of—rather than a threat to—increased U.S. energy security. international implications The international implications of LNG exports from the United States can be divided into pricing, geopolitics, and environment. international Pricing As discussed in Part I, the global LNG market is informally separated into three markets: North America, the Atlantic Basin (mostly Europe), and the Pacific Basin (including Japan, South Korea, Taiwan, China, and India). These markets are separated because of important technical differences that impact the pricing structure for LNG in each market. The North American natural gas market is competitive and prices are traded in a transparent and open market. The Atlantic Basin is dominated by European LNG consumers such as the United Kingdom, Spain, France, and Italy, and is a hybrid of a competitive U.K. market that was liberalized in the mid-1990s and a Continental European market that is dominated by oil-linked, take-or-pay contracts. In recent years, the U.K. hub, the National Balancing Point (NBP), has traded at a premium to the U.S. hub, the Henry Hub. The Pacific Basin is a more rigid market that depends heavily on oilindexed contracts that are more expensive than those used in the Atlantic Basin. While they have no central trading hub, the Pacific Basin consumers such as Japan and South Korea (which is implementing its recently-signed free-trade agreement with the United States) currently import LNG based on a pricing formula known informally as the Japan Crude Cocktail, the average price of custom-cleared oil imports into Tokyo. Many Pacific Basin contracts have a built-in price floor and price ceiling depending on the price of oil. 106 Without exporting any natural gas, the U.S. shale gas “revolution” has already had a positive impact on the liquidity of global LNG markets. Many LNG cargoes that were previously destined for gas-thirsty U.S. markets were diverted and served spot demand in both the Atlantic and Pacific Basins. The increased availability of LNG cargoes has helped create a looser LNG market for other consumers (see figure 9). This in turn has helped apply downward pressure to the terms of oillinked contracts resulting in the renegotiation of some contracts, particularly in Europe. Increased availability of LNG cargoes also accelerated a recent trend of increasing reliance of consumers on spot LNG markets. In 2010 short-term and spot contracts represented 19 percent of the total LNG market, up from only a fraction one decade earlier. 107 In this case, increasing demand for spot cargoes indicates that consumers are taking advantage of spot prices that are lower than oilindexed rates. LNG exports will help to sustain market liquidity in what looks to be an increasingly tight LNG market beyond 2015 (see figure 10). Should LNG exports from the United States continue to be permitted, they will add to roughly 10 bcf/day of LNG that is expected to emerge from Australia between 2015 and 2020. Nevertheless, given the projected growth in demand for natural gas in China and India and assuming that some of Japan’s nuclear capacity remains offline, demand for natural gas will outpace the incremental supply. This makes U.S. LNG even more valuable on the international market. Although it will be important to global LNG markets, it is unlikely that the emergence of the United States as an exporter of LNG will change the existing pricing structure overnight. Not only is the market still largely dependent on long-term contracts, the overwhelming majority of new liquefaction capacity emerging in the next decade (largely from Australia) has already been contracted for at oil-indexed rates. 108 The incremental LNG volumes supplied by the United States at floating Henry Hub rates will be small in comparison. But while U.S. LNG will not have a transformational impact, by establishing an alternate lower price for LNG derived through a different market mechanism, U.S. exports may be central in catalyzing future changes in LNG contract structure. As previously mentioned, this impact is already be ing felt in Europe. A number of German utilities have either renegotiated contracts or are seeking arbitration with natural gas suppliers in Norway and Russia. The Atlantic Basin will be a more immediate beneficiary of U.S. LNG exports than the Pacific Basin as many European contracts allow for periodic revisions to the oil-price linkage. 109 In the Pacific Basin this contractual arrangement is not as common and most consumers are tied to their respective oil-linkage formulae for the duration of the contract. 110 Despite the increasing demand following the Fukushima nuclear accident, however, Japanese LNG consumers are actively pursuing new arrangements for LNG contracts. 111 There are other limits to the extent of the impact that U.S. LNG will have on global markets. It is unlikely that many of the LNG export facilities under consideration will reach final investment decision. Instead, it is more probable that U.S. natural gas prices will have rebounded sufficiently to the point that exports are not commercially viable beyond a certain threshold. (figure 11 illustrates the estimated costs of delivering LNG to Japan in 2020.) This threshold, expected by many experts to be roughly 6 bcf/day by 2025, is modest in comparison to the roughly 11 bcf/day of Australian LNG export projects that have reached final investment decision and are expected to be online by 2020. Also, the impact of U.S. LNG exports could be limited by a number of external factors that will have a larger bearing on the future of global LNG prices. For instance, a decision by the Japanese government to phase-out nuclear power would significantly tighten global LNG markets and probably displace any benefit provided by U.S. LNG exports. Conversely, successful and rapid development of China’s shale gas reserves would limit the demand of one of the world’s fastest-growing natural gas consumers. However, to the extent that U.S. LNG exports can help bring about a more globalized pricing structure, they will have economic and geopolitical consequences. Geopolitics A large increase in U.S. LNG exports would have the potential to increase U.S. foreign policy interests in both the Atlantic and Pacific basins. Unlike oil, natural gas has traditionally been an infrastructure-constrained business, giving geographical proximity and political relations between producers and consumers a high level of importance. Issues of “pipeline politics” have been most directly visible in Europe, which relies on Russia for around a third of its gas. Previous disputes between Moscow and Ukraine over pricing have led to major gas shortages in several E.U. countries in the winters (when demand is highest) of both 2006 and 2009. Further disagreements between Moscow and Kiev over the terms of the existing bilateral gas deal have the potential to escalate again, with negative consequences for E.U. consumers. The risk of high reliance on Russian gas has been a principal driver of European energy policy in recent decades. Among central and eastern European states, particularly those formerly aligned with the Soviet Union such as Poland, Hungary, and the Czech Republic, the issue of reliance on imports of Russian gas is a primary energy security concern and has inspired energy policies aimed at diversification of fuel sources for power generation. From the U.S. perspective such Russian influence in the affairs of these democratic nations is an impediment to efforts at political and economic reform. The market power of Gazprom, Russia’s state-owned gas monopoly, is evident in these countries. Although they are closer to Russia than other consumers of Russian gas in Western Europe, many countries in Eastern and Central Europe pay higher contract prices for their imports, as they are more reliant on Russian gas as a proportion of their energy mixes. In the larger economies of Western Europe, which consume most of Russia’s exports, there are efforts to diversify their supply of natural gas. The E.U. has formally acknowledged the need to put in place mechanisms to increase supply diversity. These include market liberalization approaches such as rules mandating third-party access to pipeline infrastructure (from which Gazprom is demanding exemption), and commitments to complete a single market for electricity and gas by 2014, and to ensure that no member country is isolated from electricity and gas grids by 2015. 112 Despite these formal efforts, there are several factors retarding the E.U.’s push for a unified effort to reduce dependence on Russian gas. National interest has been given a higher priority than collective, coordinated E.U. energy policy: the gas cutoffs in 2006 and 2009 probably contributed to the acceptance of the Nord Stream project, which carries gas from Russia into Germany. Germany’s decision to phase out its fleet of nuclear reactors by 2022 will result in far higher reliance on natural gas for the E.U.’s biggest economy. The environmental imperative to reduce carbon emissions—codified in the E.U.’s goal of essentially decarbonizing its power sector by the middle of century—mean that natural gas is being viewed by many as the short-to medium fuel of choice in power generation. Finally, the prospects for European countries to replicate the unconventional gas “revolution” that has resulted in a glut of natural gas in the United States look uncertain. Several countries, including France and the U.K., have encountered stiff public opposition to the techniques used in unconventional gas production, while those countries, such as Poland and Hungary, that have moved ahead with unconventional-gas exploration have generally seen disappointing early results. Collectively, these factors suggest that the prospects for reduced European reliance on Russian gas appear dim. The one factor that has been working to the advantage of advocates of greater European gas diversity has been the increased liquidity of the global LNG market, discussed above. Russia’s dominant position in the European gas market is being eroded by the increased availability of LNG. Qatar’s massive expansion in LNG production in 2008, coupled with the rise in unconventional gas production in the United States as well as a drop in global energy demand due to the global recession, produced a global LNG glut that saw many cargoes intended for the U.S. market diverted into Europe. As mentioned previously, with an abundant source of alternative supply, some European consumers, mainly Gazprom’s closest partners, were able to renegotiate their oil-linked, takeor-pay contracts with Gazprom. As figure 10 illustrates, however, in the wake of the Fukushima natural disaster and nuclear accident in Japan and a return to growth in most industrialized economies, the LNG market is projected to tighten considerably in the short-term, potentially returning market power to Russia. However, there is a second, structural change to the global gas market that may have more lasting effects to Russia’s market power in the European gas market. LNG is one of the fastest growing segments of the energy sector. The growth of the LNG market, both through long-term contract and spot-market sales, is likely to put increasing pressure on incumbent pipeline gas suppliers. A significant addition of U.S. LNG exports will accelerate this trend. In addition to adding to the size of the market, U.S. LNG contracts are likely to be determined on a “floating” basis, with sales terms tied to the price of a U.S. benchmark such as Henry Hub, eroding the power of providers of long-term oil linked contract suppliers such as Russia. While U.S. LNG will not be a direct tool of U.S. foreign policy—the destination of U.S. LNG will be determined according to the terms of individual contracts, the spot-price-determined demand, and the LNG traders that purchase such contracts—the addition of a large, market-based producer will indirectly serve to increase gas supply diversity in Europe, thereby providing European consumers with increased flexibility and market power. Increased LNG exports will provide similar assistance to strategic U.S. allies in the Pacific Basin. By adding supply volumes to the global LNG market, the U.S. will help Japan, Korea, India, and other import-dependent countries in South and East Asia to meet their energy needs. The desire on the part of Pacific Basin countries for the U.S. to become a gas supplier to the region has been underlined by the efforts of the Japanese government, which has attempted to secure a free-trade agreement waiver from the United States to allow exports. As with oil price-linked Russian gas contracts in Eu- rope, U.S. LNG exports linked to a floating Henry Hub benchmark, have the potential to weaken the market power of incumbent LNG providers to Asia, increasing the negotiating power of consumers and decreasing the price. As U.S. foreign policy undergoes a “pivot to Asia,” the ability of the U.S. to provide a degree of increased energy security and pricing relief to LNG importers in the region will be an important economic and strategic asset. Beyond the basin-specific considerations of U.S. LNG exports, they would provide a source of predictable natural gas supply that is relatively free from unexpected production or shipping disruption. With Qatar representing roughly one-third of the global LNG market, a blockade or military intervention in the Strait of Hormuz or a direct attack on Qatar’s liquefaction facilities by Iran would inflict chaos on world energy markets. While the United States government will be unable to physically divert LNG cargoes to specific markets or strategic allies that are most affected (gas allocation will be made by the market players), additional volumes of LNG on the world market will benefit all consumers. international Environmental implications Proposed LNG exports from the United States have encountered domestic opposition on environmental grounds. As outlined in Part I, natural gas production causes greenhouse gas emissions in the upstream production process through leakages, venting, and flaring. The greenhouse gas footprint of shale gas production has been the subject of vigorous debate, with some studies suggesting that methane from the production process leads to shale gas having a higher global warming impact than that of other hydrocarbons including coal. While the methodology underlying such studies has been widely criticized, there is no doubt that leakage and venting of natural gas is a serious negative environmental consequence of natural gas production and transportation: EPA has estimated that worldwide leakages and venting volumes were 3,353.5 bcf in 2010. 113 By contrast, some advocates of U.S. exports of LNG maintain that they have the potential to bring global environmental benefits if they are used to displace more carbon-intensive fuels. According to the IEA, natural gas in general has the potential to reduce carbon dioxide emissions by 740 million tonnes in 2035, nearly half of which could be achieved by the displacement of coal in China’s power-generation portfolio. Natural gas—in the form of LNG—also has the potential to displace more carbon-intensive fuels in other major energy users, including across the EU and in Japan, which is being forced to burn more coal and oil-based fuels to make up for the nuclear generation capacity lost in the wake of the Fukushima disaster. In addition to its relatively lower carbon-dioxide footprint, natural gas produces lower emissions of pollutants such as sulfur dioxide nitrogen oxide and other particulates than coal and oil. Natural gas—both in the form of LNG and compressed natural gas—is also being viewed as a potential replacement for oil in the vehicle transportation fleet, with large carbon dioxide abatement potential. 114 However, as discussed in Part I, even the United States with its low gas prices is unlikely to see any significant move toward natural gas vehicles in the absence of government policies; the prospects for such vehicles entering the European or Asian markets, where gas is several times as expensive, are remote. On the other hand, additional volumes of natural gas in the global power generation fleet may also have longer-term detrimental consequences for carbon emissions. According to the IEA, by backing out nuclear and renewable energy generation, natural gas could add 320Mt of carbon dioxide by 2035. 115 Whether U.S. LNG exports contribute to reduced carbon dioxide emissions through the displacement of coal fired power generation or to the crowding out of renewable and nuclear energy in the global energy mix is something of a moot point. According to the IEA, global power generation is projected to exceed 27,000 terawatt hours per year by 2020. 116 Even assuming U.S. exports of 6 bcf/day (on the upper end of the range of expectations), zero losses due to transportation, regasification, and transmission, and a high natural gas power plant efficiency level of 60 percent, such volumes would account for just over one percent of total global power generation. 117 Therefore, although the domestic environmental impacts associated with shale gas extraction may, pending the outcome of further study, prove to be a cause for concern with respect to greenhouse gas emissions, the potential for U.S. LNG exports to make a meaningful impact on global emissions through changes to the global power generation mix is negligible. T his paper has attempted to answer two questions: Are U.S. LNG exports feasible? If so, what are the implications of U.S. LNG exports? **For exports to be feasible, several demand and supply-related conditions need to be met**. On the supply side, adequate resources must be available and their production must be sustainable over the long-term. The regulatory and policy environment will need to accommodate natural gas production to ensure that the resources are developed. The capacity and infrastructure required to enable exports must also be in place. This includes the adequacy of the pipeline and storage network, the availability of shipping capacity, and the availability of equipment for production and qualified engineers. On the demand side, LNG exports will compete with two main other domestic end uses for natural gas: the power-generation sector, and the industrial and petrochemical sector. According to most projections, the U.S. electricity sector will see an increased demand for natural gas as it seeks to comply with policies and regulations aimed at reducing carbon-dioxide emissions and pollutants from the power-generation fleet. Cheaper natural gas in the industrial sector has the potential to lower the cost of petrochemical production and to improve the competitiveness of a range of refining and manufacturing operations. Advocates of natural gas usage in the transportation fleet – particularly in heavy-duty vehicles (HDVs) – see it as a way to decrease the country’s dependence on oil, although absent major policy support, this sector is unlikely to represent a significant source of gas demand. For increased U.S. LNG exports to be feasible, they will also need to be competitive with supplies from other sources. The major demand centers that would import U.S. LNG would be Pacific Basin consumers (Japan, South Korea, and Taiwan, and increasingly China and India), and Atlantic Basin consumers, mostly in Europe. The supply and demand balance in the Atlantic and Pacific Basins and, therefore the feasibility for natural gas exports from the United States, depend heavily on the uncertain outlook for international unconventional natural gas production. Recent assessments in countries such as China, India, Ukraine, and Poland indicate that each country has significant domestic shale gas reserves. If these reserves are developed effectively—which is likely to be difficult in the short-term due to a lack of infrastructure, physical capacity, and human capacity—many of these countries would dramatically decrease their import dependence, with negative implications for existing and newcomer LNG exporters. Detailed analysis of the foregoing factors suggests that the exportation of liquefied natural gas from the United States is logistically feasible. Based on current knowledge, the domestic U.S. natural gas resource base is large enough to accommodate the potential increased demand for natural gas from the electricity sector, the industrial sector, the residential and commercial sectors, the transportation sector, and exporters of LNG. Other obstacles to production, including infrastructure, investment, environmental concerns, and human capacity, are likely to be surmountable. Moreover, the current and projected supply and demand fundamentals of the international LNG market are conducive to competitive U.S.-sourced LNG. While LNG exports may be practically feasible, they will be subject to approval by policy makers if they are to happen. In making a determination on the advisability of exports, the federal government will focus on the likely implications of LNG exports: i.e. whether LNG exports are in the “public interest.” The extent of the domestic implications is largely dependent upon the price impact of exports on domestic natural gas prices. While it is clear that domestic natural gas prices will increase if natural gas is exported, most existing analyses indicate that the implications of this price increase are likely to be modest.

#### Plan decreases demand for natural gas

Wiser 5 (Ryan, PhD scientist at Lawrence Berkeley National Laboratory, “Easing the Natural Gas Crisis: Reducing Natural Gas Prices through Electricity Supply Diversification,” March 8, http://eetd.lbl.gov/ea/ems/reports/Senate-Testimony.pdf)

With the recent run-up in natural gas prices, and the expected continuation of volatile and high prices for at least the mid-term future, a growing number of voices are calling for increased diversification of electricity supplies. Such diversification holds the prospect of directly reducing our dependence on a fuel whose costs are highly uncertain, thereby hedging the risk of natural gas price volatility and escalation. In addition, as I will describe in a moment, by reducing natural gas demand, increased diversification away from gas-fired generation can indirectly suppress natural gas prices. Our report highlights the impact of increased deployment of renewable energy and energy efficiency on natural gas prices and consumer natural gas bills. A growing number of modeling studies conducted by government, non-profit, and private sector entities are showing that renewable energy and energy efficiency could significantly reduce natural gas prices and bills. Our report summarizes these recent modeling studies and reviews the reasonableness of their findings in light of economic theory and other analyses. (Though our report focuses on renewable energy and energy efficiency, other non-natural-gas resources would likely have a similar effect). We find that, by displacing natural-gas-fired electricity generation, increased levels of renewable energy and energy efficiency will reduce demand for natural gas and thus put downward pressure on gas prices. These price reductions hold the prospect of providing consumers with significant natural gas bill savings. In fact, although we did not analyze in detail the electricity price impacts reported in the studies, the studies often show that any predicted increase in the price of electricity caused by greater use of renewable energy or energy efficiency is largely or completely offset by the predicted natural gas price savings. We conclude that policies to encourage fuel diversification within the electricity sector should consider the potentially beneficial cross-sector impact of that diversification on natural gas prices and bills.

#### Natural gas demand is closely monitored – perception of the plan triggers the link

Burnes et al 12-7 (John, Lisa Epifani, Curt Moffatt, Janna Chesno, Partner – VanNess Feldman, “DOE Releases LNG Export Study and Requests Public Comment,” VanNess Feldman, 2012, http://www.vnf.com/news-alerts-778.html)

Exports of natural gas, including LNG, must be authorized by DOE’s Office of Fossil Energy. By statute, exports of LNG to FTA nations must be approved “without modification or delay”. By contrast, before approving an application to export LNG to non-FTA nations, DOE must determine that the export is and will remain in the “public interest”. DOE’s primary focus is upon the domestic need for the gas to be exported. In May 2011, DOE conditionally authorized Sabine Pass Liquefaction, LLC (Sabine Pass) to export LNG to non-FTA nations. The authorization was finalized in August 2012. This remains the only long-term DOE authorization to export LNG from the lower 48 states to non-FTA nations. In the Sabine Pass order, DOE determined that it had a continuing duty to protect the public interest, and announced that it would monitor gas supply/demand conditions in the United States and the world to ensure that the cumulative impacts of the exports authorized in the order and in future orders would not lead to a reduction in the supply of natural gas needed to meet essential domestic needs. DOE also provided notice that it would take any action in the future, including amending or even revoking export authorizations, as appropriate or necessary to protect the public interest.

#### kills Russia’s economy

Mead 12

Walter Russell Mead, April 25, 2012 (Professor of Foreign Affairs and Humanities at Bard College, Henry A. Kissinger senior fellow for U.S. foreign policy at the Council on Foreign Relations (CFR), and Editor-at-Large of The American Interest magazine), , The American Interest, North American Shale Gas Gives Russia Serious Headache, <http://blogs.the-american-interest.com/wrm/2012/04/25/north-american-shale-gas-gives-russia-serious-headache/>

North America’s shale gas boom is chipping away at the market for gas producers like Russia. What’s more, if the United States becomes a gas exporter, Russia’s customers (especially in Europe) could decide to cancel expensive contracts with Gazprom in favor of cheaper American natural gas. “If the US starts exporting LNG to Europe and Asia, it gives [customers there] an argument to renegotiate their prices with Gazprom and Qatar, and they will do it,” says Jean Abiteboul, head of Cheniere supply & marketing. Gazprom supplied 27 percent of Europe’s natural gas in 2011. While American gas is trading below $2 per MMBTU (million British thermal units), Gazprom’s prices are tied to crude oil markets, and its long-term contracts charge customers roughly $13 per MMBTU, says the *FT*. European customers would love to reduce their dependence on Gazprom and start to import American gas. Already Gazprom has had to make concessions to its three biggest customers, and others are increasingly dissatisfied with their contracts. Worse, from Russia’s point of view: evidence that western and central Europe contain substantial shale gas reserves of their own. Fracking is unpopular in thickly populated, eco-friendly Europe, but so are high gas prices. All this ought to give Russia serious heartburn. Eroding Gazprom’s dominance of the European energy market would be a major check on Russian economic growth and political influence.

**Goes nuclear and turns case**

**Filger 9** (Sheldon, Columnist and Founder – Global EconomicCrisis.com, “Russian Economy Faces Disasterous Free Fall Contraction”, <http://www.huffingtonpost.com/sheldon-filger/russian-economy-faces-dis_b_201147.html>)

In Russia, historically, economic health and political stability are intertwined to a degree that is rarely encountered in other major industrialized economies. It was the economic stagnation of the former Soviet Union that led to its political downfall. Similarly, Medvedev and Putin, both intimately acquainted with their nation's history, are unquestionably alarmed at the prospect that Russia's economic crisis will endanger the nation's political stability, achieved at great cost after years of chaos following the demise of the Soviet Union. Already, strikes and protests are occurring among rank and file workers facing unemployment or non-payment of their salaries. Recent polling demonstrates that the once supreme popularity ratings of Putin and Medvedev are eroding rapidly. Beyond the political elites are the financial oligarchs, who have been forced to deleverage, even unloading their yachts and executive jets in a desperate attempt to raise cash. Should the Russian economy deteriorate to the point where economic collapse is not out of the question, the impact will go far beyond the obvious accelerant such an outcome would be for the Global Economic Crisis. There is a geopolitical dimension that is even more relevant then the economic context. Despite its economic vulnerabilities and perceived decline from superpower status, Russia remains one of only two nations on earth with a nuclear arsenal of sufficient scope and capability to destroy the world as we know it. For that reason, it is not only President Medvedev and Prime Minister Putin who will be lying awake at nights over the prospect that a national economic crisis can transform itself into a virulent and destabilizing social and political upheaval. It just may be possible that U.S. President Barack Obama's national security team has already briefed him about the consequences of a major economic meltdown in Russia for the peace of the world. After all, the most recent national intelligence estimates put out by the U.S. intelligence community have already concluded that the Global Economic Crisis represents the greatest national security threat to the United States, due to its facilitating political instability in the world. During the years Boris Yeltsin ruled Russia, security forces responsible for guarding the nation's nuclear arsenal went without pay for months at a time, leading to fears that desperate personnel would illicitly sell nuclear weapons to terrorist organizations. If the current economic crisis in Russia were to deteriorate much further, how secure would the Russian nuclear arsenal remain? It may be that the financial impact of the Global Economic Crisis is its least dangerous consequence.

### Warming Advantage

#### Warming is irreversible

ANI 10 (“IPCC has underestimated climate-change impacts, say scientists”, 3-20, One India, http://news.oneindia.in/2010/03/20/ipcchas-underestimated-climate-change-impacts-sayscientis.html)

According to Charles H. Greene, Cornell professor of Earth and atmospheric science, "Even if all man-made greenhouse gas emissions were stopped tomorrow and carbon-dioxide levels stabilized at today's concentration, by the end of this century, the global average temperature would increase by about 4.3 degrees Fahrenheit, or about 2.4 degrees centigrade above pre-industrial levels, which is significantly above the level which scientists and policy makers agree is a threshold for dangerous climate change." "Of course, greenhouse gas emissions will not stop tomorrow, so the actual temperature increase will likely be significantly larger, resulting in potentially catastrophic impacts to society unless other steps are taken to reduce the Earth's temperature," he added. "Furthermore, while the oceans have slowed the amount of warming we would otherwise have seen for the level of greenhouse gases in the atmosphere, the ocean's thermal inertia will also slow the cooling we experience once we finally reduce our greenhouse gas emissions," he said. This means that the temperature rise we see this century will be largely irreversible for the next thousand years. "Reducing greenhouse gas emissions alone is unlikely to mitigate the risks of dangerous climate change," said Green.

#### No Impact – Long timeframe and adaptation solves

Robert O. Mendelsohn 9, the Edwin Weyerhaeuser Davis Professor, Yale School of Forestry and Environmental Studies, Yale University, June 2009, “Climate Change and Economic Growth,” online: http://www.growthcommission.org/storage/cgdev/documents/gcwp060web.pdf

The heart of the debate about climate change comes from a number of warnings from scientists and others that give the impression that human-induced climate change is an immediate threat to society (IPCC 2007a,b; Stern 2006). Millions of people might be vulnerable to health effects (IPCC 2007b), crop production might fall in the low latitudes (IPCC 2007b), water supplies might dwindle (IPCC 2007b), precipitation might fall in arid regions (IPCC 2007b), extreme events will grow exponentially (Stern 2006), and between 20–30 percent of species will risk extinction (IPCC 2007b). Even worse, there may be catastrophic events such as the melting of Greenland or Antarctic ice sheets causing severe sea level rise, which would inundate hundreds of millions of people (Dasgupta et al. 2009). Proponents argue there is no time to waste. Unless greenhouse gases are cut dramatically today, economic growth and well‐being may be at risk (Stern 2006).

These statements are largely alarmist and misleading. Although climate change is a serious problem that deserves attention, society’s immediate behavior has an extremely low probability of leading to catastrophic consequences. The science and economics of climate change is quite clear that emissions over the next few decades will lead to only mild consequences. The severe impacts predicted by alarmists require a century (or two in the case of Stern 2006) of no mitigation. Many of the predicted impacts assume there will be no or little adaptation. The net economic impacts from climate change over the next 50 years will be small regardless. Most of the more severe impacts will take more than a century or even a millennium to unfold and many of these “potential” impacts will never occur because people will adapt. It is not at all apparent that immediate and dramatic policies need to be developed to thwart long‐range climate risks. What is needed are long‐run balanced responses.

#### Turn – picking winners collapses the solar industry

Glover 9/13 -- European associate editor for the independent online magazine Energy Tribune (Peter, 2012, "Solar Eclipsed?" http://www.energytribune.com/articles.cfm/11672/Solar-Eclipsed)

The global solar power industry is in crisis. The industry blames widespread national subsidy cuts and over productivity; China, in particular, being widely vilified on the second count. However, the real cause of the solar industry’s malaise runs deeper, rooted, as it is, in the inescapable fact that, in terms of current technology, commercial scale solar energy remains a non-viable proposition. Wherever you look the solar power industry is mired in financial problems, all of which lead back to the (life support) of public subsidy, the impact of market-skewing regulations (creating the appearance of commercial viability) and, ultimately, protectionist trade wars (US and Europe v China). In economic good-times, three natural consequences of government-sponsored global industries that can be obfuscated by a network of feed-in tariffs, levies and other ‘green’ taxes to pay for them. But in leaner economic climes, the real cost of ‘free’ energy becomes all too clear. Germany’s solar industry has led the way in Europe. Until recently the country was the world leader in manufacturing solar cells. Half of the world’s total solar power generating capacity is installed in Germany. But, according to Klaus Dieter Maubach, Technology Chairman at the country’s power major EON, Germany’s solar industry is in a death spiral. Speaking to Focus magazine, Maubach states that “not a single company is in the black” and that the entire German solar industry “will disappear within five years”. His bleak prediction merely echoed the view of investment consultants Citigroup who warned in March that Germany’s subsidy cuts would “nearly kill Germany’s solar industry”. Widespread complaints of Chinese solar companies dumping cut price solar panels on the European market have merely added to the malaise. In early September, the European Commission announced a formal inquiry into this allegation that could well trigger a cut-throat solar trade war with China. But as Eon’s Maubach points out with regard to the international solar market, China itself is suffering from precisely the same market problems as all its competitors. While Beijing will attempt to stave off decline through government stimulus, it is only a question of time before the loss of European and US markets for cheap Chinese goods, including solar panels, causes an economic downturn there, too. In fact, the threat of a Europe v China solar ‘war’ is little more than a replay of last year’s dust up between the United States and China. In the wake of the infamous Solyndra scandal (which Solyndra execs blamed on cheap Chinese imports), the U.S. imposed savage protectionist anti-dumping tariffs. These ranged from 31 percent to as high as 250 percent on imported Chinese-made panels. No surprise then that the Chinese companies should turn their attention to key European markets to offload a product they are unable to sell domestically. The problems for U.S. solar cannot be laid at the door of Chinese competition alone. Once the massive infusion of government stimulus cash ran out and subsidies slowed in early 2011, U.S. solar companies had already begun filing for bankruptcy. And Solyndra wasn’t the only company desperate for more cash. One heavily-subsidized firm, First Solar, was even caught using the U.S. taxpayer loan guarantee to sell solar panels to itself. So are the Chinese really the chief villains of the global solar piece? Depends how you look at it. China’s over production only came about because Beijing’s economic stimulus for its solar industry led to explosive growth and, ultimately, unfettered over production. Given enormous government subsidies there was literally no incentive to slow production down. In the game of who could sustain massive public subsidy longest, cash-rich China clearly won. But the fact is that the sun looks to be setting on China’s solar industry, too. Beijing has also become aware it cannot go on subsidizing its solar and renewable industries. China is dumping its solar panels in a bid to at least redeem some of its costs. Meanwhile the dark clouds have gathered over China’s economy too with the solar sector there also now facing bankruptcy. Since 2005, Chinese solar companies saw heady growth receiving significant government support as a “strategic emerging industry”. But since 2010, the price of the key polysilicon wafers crucial to production has fallen by around 75 percent. In recent times, China’s big five firms have all reported disastrous trading losses. Worse still, according to the investment boys at Energy and Capital and others, China’s much-vaunted booming economy, already over-heating, is about to implode. Taken as a whole, government incentive schemes around the world have created a glut of suppliers that the capitalist free market would never have sanctioned. The eclipse of Europe’s solar industry is in truth down to simple economic realities hitting home as commercial scale solar power is simply too expensive a proposition to attract serious private sector investment and end massive public subsidies. In January, Spain’s economic crisis forced it to cut its renewable subsidy regime entirely. In April, a near-bankrupt Italian government estimated that its subsidy regime left it facing a $60 billion bill to photovoltaic generators over the next 20 years. In The Great British Solar Scam I wrote about how the UK’s bid to cuts its ludicrously generous solar subsidy regime saw it prevented from making subsidy cuts by a European court after the UK solar industry inevitably claimed widespread bankruptcies would result(1). What marks out both the entire renewable energy sector for economic decline above all else is the fact that it is effectively an expensive government-sponsored enterprise, not a child of the free and democratic marketplace. Consider again the elements colluding to produce the current crisis: the lifeline of public subsidy, energy levies and taxes and market-skewing regulation dove-tailing with incentivized over-capacity, protectionism and, ultimately, trade wars. All marks of an industry kept afloat by ideological fiat and not free market capitalism geared to meeting actual market need. To gain a final key perspective, a report by United Nations Environment Programme in June announced that global renewable energy investment generally reached $257 billion in 2011 rivalling the $302 billion invested in hydrocarbon power. Germany alone has committed over €100 billion in solar subsidies over the next 20 years – for a power that will produce a very small energy return. In total, renewable energy, of which solar is just a tiny fraction, makes up just 3 percent of our electricity. As the green utopian clouds obscuring the real cost of ‘free’ solar power clear, it’s easy to see why the industry is in eclipse.

#### Solar insufficient in solving warming

Post 12 -- BSME New Jersey Institute of Technology, MSME Rensselaer Polytechnic Institute, MBA, University of Connecticut. P.E. Connecticut. Consulting Engineer and Project Manager (Willem, 7/1/12, "Wind Energy CO2 Emissions Reductions are Overstated," http://theenergycollective.com/node/89476)

Solar energy is variable (during a day and during variable cloudiness) and intermittent; usually it is minimal in the morning, maximal at noon about 3-5 hours before the daily peak demand, minimal in the afternoon, minimal during foggy, overcast, snowy days, and zero at night. About 65-70 percent of the hours of a year solar energy is near zero, and it cannot be turned off, as in Southern Germany with about 1 million PV systems, when on sunny summer days solar energy surges to about 12,000 MW to 14,000 MW and has to be partially exported to France and the Czech Republic at fire sale prices, 5.5 euro cent/kWh or less, after having been subsidized at an average of about 50 euro cent/kWh. Example: German solar power is as little as 2% of rated capacity, or 340 MW, on cloudy days and when snow covers the panels. This means there are many hours during a year when no wind or solar energy is generated. Therefore, all conventional generator units will need to be kept in good operating condition, AND staffed 24/7/365, AND fueled to serve the daily demand when wind and solar energy is near zero. Without utility-scale energy storage, wind turbines and solar systems cannot replace any conventional units. All the units that would be needed WITHOUT the existence of wind turbines and solar systems, would also be needed WITH the existence of wind turbines and solar systems. Some of the conventional units would have less energy production with wind and solar energy on the grid, thereby adversely affecting their economics, due to increasingly inefficient start/stop, part-load and part-load-ramping operations, but without wind and solar energy on the grid, the energy production of almost all the conventional units would be needed to serve the daily demand. Building Wind Turbines Everywhere?: There are some (mostly wind turbine vendors, project developers, trade organizations, NRELs, financial types setting up LLC tax shelters for the top 1% of households, etc.) who say that building wind turbines everywhere there is wind, and connecting all of them with a national HVDC overlay grid into a super grid (similar to the US Interstate Highway System overlaying state and local roads), the variation and intermittency of wind energy in the diverse geographical areas will largely be canceling each other out so that the overall energy production will become increasingly steadier as more wind turbines are connected to the super grid, and that therefore there will be little need for balancing plants, and that there will always be wind energy somewhere no matter what the weather conditions in one or more geographical areas. Several National Renewable Energy Laboratories and other entities have made studies of this scheme, using mathematical modeling, as described in the EWITS and NEWITS reports. However, someone went one step further and combined the outputs of 5 widely dispersed geographical areas: - http://transmission.bpa.gov/Business/Operations/Wind/default.aspx Bonneville Power Administration, which serves 3.5 GW of installed capacity in the Pacific Northwest - The Australian Energy Market Operator, which serves 1.8 GW of installed capacity in New South Wales - The Independent Electricity System Operator, which serves 1.2 GW of installed capacity in Ontario - The Alberta Electric System Operator, which serves 0.8 GW of installed capacity in Alberta - http://www.eirgrid.com/operations/systemperformancedata/windgeneration/ EirGrid, which serves 1.4 GW of installed capacity in Ireland The result of the analysis is described in this article which concludes geographical dispersion of wind turbines does not reduce the variation and intermittency of wind energy. http://www.ethiopianreview.com/business/122605 A French energy systems analyst, Hubert Flocard, combined the wind energy outputs of several European nations. The results of his analysis yielded the same conclusion. http://www.dimwatt.eu/index.php/our-campaigns/keeping-the-lights-on/documents/108-ground-breaking-french-study-should-stop-further-expenses-on-the-so-called-super-grid Energy Cost Projections The US Energy Information Administration projects levelized production costs (national averages, excluding subsidies) of NEW plants coming on line in 2016 as follows (2009$) : Offshore wind $0.243/kWh, PV solar $0.211/kWh (higher in marginal solar areas, such as New England), Onshore wind $0.096/kWh (higher in marginal wind areas with greater capital and O&M costs, such as on ridge lines in New England), Conventional coal (base-loaded) $0.095/kWh, Advanced CCGT (base-loaded) $0.0631/kWh. http://www.energytransition.msu.edu/documents/ipu\_eia\_electricity\_generation\_estimates\_2011.pdf IS WIND ENERGY GOOD ENERGY POLICY? Within federal, state and local governments tens of thousands of people are busying themselves promoting renewables by with holding meetings and public hearings, preparing studies, writing reports, energy plans, laws, rules and regulations, monitoring projects for compliance, etc. Outside of government wind turbine vendors (Siemens, GE, Vestas, Iberdrola, etc,), project developers/owners, financiers managing tax shelters, trade organizations, etc., are busying themselves popularizing wind energy as saving the planet from global warming with PR campaigns that claim there would be significant reductions of fossil fuel consumption and CO2 reductions/kWh, that capital costs/MW would decrease, and that wind energy costs/kWh would be at grid parity in the near future. These claims have largely not been realized. Global Warming is a Given: A just-released report from EIA shows the actual world energy consumption data and projected consumption data for the 1990 to 2035 period. The report shows world energy consumption is estimated to increase from 505 quads in 2008 to 770 quads in 2035, a 52% increase. The biggest part of the increase is by (non-OECD nations + Asia). http://www.eia.gov/forecasts/ieo/world.cfm See spreadsheet associated with figure 12 World energy consumption by fuel (quadrillion Btu) Liquids: From 173.2 in 2010 to 225.1 in 2035; 30% more Natural gas: 116.7 to 174.7; 50% more Coal: 149.4 to 209.1; 49% more Nuclear: 27.6 to 51.2; 86% more Renewables: 55.2 to 109.5; 98% more Renewables fraction of total consumption: From 10.6% in 2010 to 15.2% in 2035 Fossil fraction of total consumption: 84.1% to 79.1% The significant increase in projected fossil fuel consumption during the next 24 years means global warming will continue unabated, because (non-OECD + ASIA) will have energy consumption growth far outpacing the energy consumption growth of the rest of the world; i.e., global warming is a given. The above indicates the enormous investments required to achieve the 2035 projected renewables energy production would have practically no benefit regarding global warming.

#### No impact, air pollution doesn’t kill

Schwartz, 03 - ADJUNCT SCHOLAR, COMPETITIVE ENTERPRISE INSTITUTE (Joel, “PARTICULATE AIR POLLUTION: WEIGHING THE RISKS,” April, <http://cei.org/pdf/3452.pdf>)

Nonetheless, both the Bush Administration and congressional Democrats have proposed sweeping new measures to further crack down on power plant emissions. The Administration’s Clear Skies Initiative and a more stringent Democratic alternative are largely justified by claims that current levels of particulate matter (PM) pose a serious public health threat. Supporters of these bills promise substantial benefits from additional PM reductions. Nevertheless, the benefit claims for PM reductions rest on a weak foundation. EPA based its new annual fine PM (PM2.5) standard on a study known as the American Cancer Society (ACS) study of PM and mortality, which assessed the association between the risk of death between 1982 and 1998 with PM2.5 levels in dozens of American cities. Although the ACS study reported an association between PM and mortality, some odd features of the ACS results suggest that PM is not the culprit. For example, according to the ACS results, PM increased mortality in men, but not women; in those with no more than a high school degree, but not those with at least some college education; in former- smokers, but not current- or never-smokers; and in those who said they were moderately active, but not those who said they were very active or sedentary. These odd variations in the relationship between PM2.5 and mortality seem biologically implausible. Even more surprising, the ACS study reported that higher PM2.5 levels were not associated with an increased risk of mortality due to respiratory disease; a surprising finding, given that PM would be expected to exert its effects through the respiratory system. EPA also ignored the results of another epidemiologic study that found no effect of PM2.5 on mortality in a cohort of veterans with high blood pressure, even though this relatively unhealthy cohort should have been more susceptible to the effects of pollution than the general population. The evidence therefore suggests that the existing annual standard for PM2.5 is unnecessarily stringent. Attaining the standard will be expensive, but is unlikely to improve public health.

### Econ Advantage

#### Eurozone crisis thumps the global economy

UN News Centre 1/17/13 ("Euro zone’s debt crisis and austerity policies continue to tamp down growth – UN report," http://www.un.org/apps/news/story.asp?NewsID=43941&Cr=economic&Cr1=desa#.UPyrnyfAfoI)

17 January 2013 – The debt crisis of the Euro zone, slowing external demand and high oil process continued to depress Europe, while austerity policies throughout the industrialized world will not keep the world economy from slipping back into recession, according to an annual UN report published today.¶ “The euro area is in recession and the Gross Domestic Product (GDP) of the region is expected to reach only 0.3 per cent growth in 2013, strengthening marginally to 1.4 per cent in 2014,” according to a press release announcing the World Economic Situation and Prospects 2013, produced by the UN Department of Economic and Social Development (DESA), the UN Conference for Trade and Development (UNCTAD) and UN regional commissions.¶ The report warns that Western Europe’s current economic policies do not address key short-term issues of restoring growth in the region or how to put the crisis countries on a more probable path to fiscal sustainability.¶ In fact, it says, the Euro zone is in a technical recession, with successive negative quarterly rates of GDP growth in the second and third quarter. With a further sharp drop estimated for the fourth quarter, GDP probably declined in total by 0.5 per cent in 2012.¶ At least five economies are now in recession, with very poor prospects going forward. Italy’s GDP is expected to decline by 2.4 per cent in 2012 and 0.3 per cent in 2013 and Spain’s by 1.6 per cent and 1.4 per cent, respectively. The other countries in recession are Cyprus, Greece and Portugal.¶ To remedy the problem, the report urges an end to what it calls counterproductive austerity programmes in industrialized countries.¶ “Given the looming uncertainties and downside risks … current policy stances seem to fall well short of what is needed to prevent the global economy from slipping into another recession,¶ “More forceful and concerted actions should be considered,” the report states in its introductory chapter.¶ It predicts that the global economy will grow at a rate of only 2.4 per cent in 2013 and 3.2 per cent in 2014 -- a significant downgrade from forecasts of half a year ago, and much less than it says is needed to overcome the jobs crisis that many countries are still facing.¶ Maintaining that weaknesses in the major developed economies are at the root of the slowdown, it warns that, with existing policies and growth trends, it may take at least another five years for Europe and the United States to make up for the job losses caused by the Great Recession of 2008-2009.¶ Europe in particular, it says, is trapped in a vicious cycle of high unemployment, financial sector fragility, heightened sovereign risks, fiscal austerity and low growth.

#### Economic decline doesn’t cause war

Tir 10 [Jaroslav Tir - Ph.D. in Political Science, University of Illinois at Urbana-Champaign and is an Associate Professor in the Department of International Affairs at the University of Georgia, “Territorial Diversion: Diversionary Theory of War and Territorial Conflict”, The Journal of Politics, 2010, Volume 72: 413-425)]

Empirical support for the economic growth rate is much weaker. The finding that poor economic performance is associated with a higher likelihood of territorial conflict initiation is significant only in Models 3–4.14 The weak results are not altogether surprising given the findings from prior literature. In accordance with the insignificant relationships of Models 1–2 and 5–6, Ostrom and Job (1986), for example, note that the likelihood that a U.S. President will use force is uncertain, as the bad economy might create incentives both to divert the public’s attention with a foreign adventure and to focus on solving the economic problem, thus reducing the inclination to act abroad. Similarly, Fordham (1998a, 1998b), DeRouen (1995), and Gowa (1998) find no relation between a poor economy and U.S. use of force. Furthermore, Leeds and Davis (1997) conclude that the conflict-initiating behavior of 18 industrialized democracies is unrelated to economic conditions as do Pickering and Kisangani (2005) and Russett and Oneal (2001) in global studies. In contrast and more in line with my findings of a significant relationship (in Models 3–4), Hess and Orphanides (1995), for example, argue that economic recessions are linked with forceful action by an incumbent U.S. president. Furthermore, Fordham’s (2002) revision of Gowa’s (1998) analysis shows some effect of a bad economy and DeRouen and Peake (2002) report that U.S. use of force diverts the public’s attention from a poor economy. Among cross-national studies, Oneal and Russett (1997) report that slow growth increases the incidence of militarized disputes, as does Russett (1990)—but only for the United States; slow growth does not affect the behavior of other countries. Kisangani and Pickering (2007) report some significant associations, but they are sensitive to model specification, while Tir and Jasinski (2008) find a clearer link between economic underperformance and increased attacks on domestic ethnic minorities. While none of these works has focused on territorial diversions, my own inconsistent findings for economic growth fit well with the mixed results reported in the literature.15 Hypothesis 1 thus receives strong support via the unpopularity variable but only weak support via the economic growth variable. These results suggest that embattled leaders are much more likely to respond with territorial diversions to direct signs of their unpopularity (e.g., strikes, protests, riots) than to general background conditions such as economic malaise. Presumably, protesters can be distracted via territorial diversions while fixing the economy would take a more concerted and prolonged policy effort. Bad economic conditions seem to motivate only the most serious, fatal territorial confrontations. This implies that leaders may be reserving the most high-profile and risky diversions for the times when they are the most desperate, that is when their power is threatened both by signs of discontent with their rule and by more systemic problems plaguing the country (i.e., an underperforming economy).

#### Economy’s resilient – can survive shocks

Bloomberg 12 (“Fed’s Plosser Says U.S. Economy Proving Resilient to Shocks,” 5-9, http://www.bloomberg.com/news/2012-05-09/fed-s-plosser-says-u-s-economy-proving-resilient-to-shocks.html)

Philadelphia Federal Reserve Bank President Charles Plosser said the U.S. economy has proven “remarkably resilient” to shocks that can damage growth, including surging oil prices and natural disasters. “The economy has now grown for 11 consecutive quarters,” Plosser said today according to remarks prepared for a speech at the Philadelphia Fed. “Growth is not robust. But growth in the past year has continued despite significant risks and external and internal headwinds.” Plosser, who did not discuss his economic outlook or the future for monetary policy, cited shocks to the economy last year, including the tsunami in Japan that disrupted global supply chains, Europe’s credit crisis that has damaged the continent’s banking system and political unrest in the Middle East and North Africa. “The U.S. economy has a history of being remarkably resilient,” said Plosser, who doesn’t have a vote on policy this year. “These shocks held GDP growth to less than 1 percent in the first half of 2011, and many analysts were concerned that the economy was heading toward a double dip. Yet, the economy proved resilient and growth picked up in the second half of the year.” Plosser spoke at a conference at the Philadelphia Fed titled, “Reinventing Older Communities: Building Resilient Cities.” Urban Resilience His regional bank’s research department is working on a project to measure the resilience of different cities, to learn more about the reasons that some urban areas suffer more than others in downturns, Plosser said. He mentioned one early finding of the study: Industrial diversity increases a city’s resilience. “I do want to caution you that resilient and vibrant communities are not just about government programs or directed industrial planning by community leaders,” Plosser said. “The economic strength of our country is deeply rooted in our market- based economy and the dynamism and resilience of its citizenry.”

#### Middle East war doesn’t escalate

Maloney 7 (Suzanne, Senior Fellow – Saban Center for Middle East Policy, Steve Cook, Fellow – Council on Foreign Relations, and Ray Takeyh, Fellow – Council for Foreign Relations, “Why the Iraq War Won’t Engulf the Mideast”, International Herald Tribune, 6-28, http://www.brookings.edu/views/op-ed/maloney20070629.htm)

Long before the Bush administration began selling "the surge" in Iraq as a way to avert a general war in the Middle East, observers both inside and outside the government were growing concerned about the potential for armed conflict among the regional powers. Underlying this anxiety was a scenario in which Iraq's sectarian and ethnic violence spills over into neighboring countries, producing conflicts between the major Arab states and Iran as well as Turkey and the Kurdistan Regional Government. These wars then destabilize the entire region well beyond the current conflict zone, involving heavyweights like Egypt. This is scary stuff indeed, but with the exception of the conflict between Turkey and the Kurds, the scenario is far from an accurate reflection of the way Middle Eastern leaders view the situation in Iraq and calculate their interests there. It is abundantly clear that major outside powers like Saudi Arabia, Iran and Turkey are heavily involved in Iraq. These countries have so much at stake in the future of Iraq that it is natural they would seek to influence political developments in the country. Yet, the Saudis, Iranians, Jordanians, Syrians, and others are very unlikely to go to war either to protect their own sect or ethnic group or to prevent one country from gaining the upper hand in Iraq. The reasons are fairly straightforward. First, Middle Eastern leaders, like politicians everywhere, are primarily interested in one thing: self-preservation. Committing forces to Iraq is an inherently risky proposition, which, if the conflict went badly, could threaten domestic political stability. Moreover, most Arab armies are geared toward regime protection rather than projecting power and thus have little capability for sending troops to Iraq. Second, there is cause for concern about the so-called blowback scenario in which jihadis returning from Iraq destabilize their home countries, plunging the region into conflict. Middle Eastern leaders are preparing for this possibility. Unlike in the 1990s, when Arab fighters in the Afghan jihad against the Soviet Union returned to Algeria, Egypt and Saudi Arabia and became a source of instability, Arab security services are being vigilant about who is coming in and going from their countries. In the last month, the Saudi government has arrested approximately 200 people suspected of ties with militants. Riyadh is also building a 700 kilometer wall along part of its frontier with Iraq in order to keep militants out of the kingdom. Finally, there is no precedent for Arab leaders to commit forces to conflicts in which they are not directly involved. The Iraqis and the Saudis did send small contingents to fight the Israelis in 1948 and 1967, but they were either ineffective or never made it. In the 1970s and 1980s, Arab countries other than Syria, which had a compelling interest in establishing its hegemony over Lebanon, never committed forces either to protect the Lebanese from the Israelis or from other Lebanese. The civil war in Lebanon was regarded as someone else's fight. Indeed, this is the way many leaders view the current situation in Iraq. To Cairo, Amman and Riyadh, the situation in Iraq is worrisome, but in the end it is an Iraqi and American fight. As far as Iranian mullahs are concerned, they have long preferred to press their interests through proxies as opposed to direct engagement. At a time when Tehran has access and influence over powerful Shiite militias, a massive cross-border incursion is both unlikely and unnecessary. So Iraqis will remain locked in a sectarian and ethnic struggle that outside powers may abet, but will remain within the borders of Iraq. The Middle East is a region both prone and accustomed to civil wars. But given its experience with ambiguous conflicts, the region has also developed an intuitive ability to contain its civil strife and prevent local conflicts from enveloping the entire Middle East.

## 2NC

### Impact Overview – 2NC

#### Russian econ decline outweighs – Econ decline causes political upheaval which causes loose nukes and preemption- that’s Filger

#### And- It’s most likely scenario for nuclear war and causes US draw in

Steven **David**, Professor of Political Science, Johns Hopkins University, “Saving America From the Coming Civil Wars,” FOREIGN AFFAIRS, v 78 n 1, Jan/Feb **1999**, LN.

Only three countries, in fact, meet both criteria: Mexico, Saudi Arabia, and Russia. Civil conflict in Mexico would produce waves of disorder that would spill into the United States, endangering the lives of hundreds of thousands of Americans, destroying a valuable export market, and sending a torrent of refugees northward. A rebellion in Saudi Arabia could destroy its ability to export oil, the oil on which the industrialized world depends. And internal war in Russia could devastate Europe and trigger the use of nuclear weapons. Of course, civil war in a cluster of other states could seriously harm American interests. These countries include Indonesia, Venezuela, the Philippines, Egypt, Turkey, Israel, and China. In none, however, are the stakes as high or the threat of war as imminent.

#### Plus it’s the Only existential risk

Nick **Bostrom** (PhD Philosophy – Oxford U) **2002** Existential Risks, http://www.nickbostrom.com/existential/risks.html)

A much greater existential risk emerged with the build-up of nuclear arsenals in the US and the USSR. An all-out nuclear war was a possibility with both a substantial probability and with consequences that *might* have been persistent enough to qualify as global and terminal. There was a real worry among those best acquainted with the information available at the time that a nuclear Armageddon would occur and that it might annihilate our species or permanently destroy human civilization.[4]  Russia and the US retain large nuclear arsenals that could be used in a future confrontation, either accidentally or deliberately. There is also a risk that other states may one day build up large nuclear arsenals. Note however that a smaller nuclear exchange, between India and Pakistan for instance, is not an existential risk, since it would not destroy or thwart humankind’s potential permanently. Such a war might however be a local terminal risk for the cities most likely to be targeted. Unfortunately, we shall see that nuclear Armageddon and comet or asteroid strikes are mere preludes to the existential risks that we will encounter in the 21st century.

### Exports Bad – Warming

#### Exports cause methane leaks – makes warming irreversible

**Romm 11** (Joe, Senior Fellow at American Progress, editor of Climate Progress, assistant secretary of energy for energy efficiency and renewable energy in 1997, Ph.D. in physics from MIT, “Natural Gas Bombshell: Switching From Coal to Gas Increases Warming for Decades, Has Minimal Benefit Even in 2100,” 9-9-11 <http://thinkprogress.org/climate/2011/09/09/315845/natural-gas-switching-from-coal-to-gas-increases-warming-for-decades/>)

A key finding of the NCAR study is: In summary, our results show that the substitution of gas for coal as an energy source results **in increased** rather than decreased **global warming** for many decades — out to the mid 22nd century for the 10% leakage case. This is in accord with Hayhoe et al. (2002) and with the less well established claims of Howarth et al. (2011) who base their analysis on Global Warming Potentials rather than direct modeling of the climate…. The most important result, however, in accord with the above authors, is that, unless leakage rates for new methane can be kept below 2%, substituting gas for coal is not an effective means for reducing the magnitude of future climate change. What is the leakage rate for methane? Well, as I’ve written, we don’t know exactly because the gas companies won’t release all of their data. We do know that total life-cycle leakage and fugitive emissions from extraction, production, transport, and consumption is higher for shale gas than conventional gas. The controversial — but peer-reviewed — paper by Cornell’s Robert Howarth, which I wrote about here, seeks to quantify the impact of the leakage from the **best available data**. It **concluded**: Natural gas is composed largely of methane, and 3.6% to 7.9% of the methane from shale-gas production escapes to the atmosphere in venting and leaks over the life-time of a well. These methane emissions are at least 30% more than and perhaps more than twice as great as those from conventional gas. The higher emissions from shale gas occur at the time wells are hydraulically fractured — as methane escapes from flow-back return fluids — and during drill out following the fracturing. Methane is a **powerful greenhouse gas**, with a global warming potential that is far greater than that of carbon dioxide, particularly over the time horizon of the first few decades following emission.

### Exports Bad – Turns Renewables/Modeling

#### Exports cause international adoption of natural gas – that crowds out renewables

Simmons 12 (Bradford, Editor-in-Chief, “The Editor's Monthly Memo: The Staggering Implications of the U.S. Natural Gas Market,” International Affairs Review, 8-12, http://www.iar-gwu.org/node/429)

At home, a cautious, yet supportive approach to LNG exports would have ancillary benefits as well. With coal plants retiring every year and the declining economic viability of nuclear power, natural gas is well positioned to vastly expand its 30 percent share of electricity production. While this will translate into lower utility bills for U.S. consumers, it also raises the specter of overreliance. If natural gas exceeds a 50 percent share of power generation, any source disruptions or sudden price fluctuations would have a calamitous economic impact. Furthermore, such cheap gas could potentially crowd out other promising sources of energy, such as renewables. Though natural gas fired plants produce roughly half the carbon of a coal plant and have contributed to an overall reduction in emissions in the United States, a recent International Energy Administration report reveals that a shift to gas generated electricity will not prove sufficient to significantly alter current climate change scenarios.

### Turns Econ

#### Upward price trend key to natural gas drilling – massive jobs benefit

**Dlouhy 12** (Jennifer A., report at Hearst Newspapers, Bachelor of Journalism, Journalism, Political Science at University of Missouri-Columbia, “Natural gas glut a dilemma for Obama,” FuelFix, 7-16-12, <http://fuelfix.com/blog/2012/07/16/natural-gas-glut-a-dilemma-for-obama/>)

Energy companies and analysts have argued that current U.S. natural gas prices are unsustainable. It closed Friday at $2.874 per million British thermal units in trading on the New York Mercantile Exchange. The opposing argument is that exports could cause prices to spike, sending electricity bills upward and jeopardizing a resurgence in domestic manufacturing tied to abundant, cheap natural gas. Manufacturers that use natural gas to fuel their plants and as a building block to make other products were hit hard over the past two decades by volatile swings in prices, which last peaked over $15 in 2005. Because any position risks alienating important constituencies – energy producers and manufacturers as well as voters – few elected officials are pushing the issue. ‘Safer for politicians’ “It’s a lot safer for politicians who don’t want to be on the wrong side to defer it,” said Kevin Book, an analyst with ClearView Energy Partners. Even key stakeholders in the debate are keeping low profiles. Several major energy industry groups have kept mostly quiet, possibly for fear of advocating an export strategy linked to higher prices. Many manufacturers, meanwhile, are wary of visibly opposing energy exports and being painted as free trade foes. Some companies also are torn because their foreign operations could benefit from an influx of cheaper U.S. natural gas. President Barack Obama and Republican challenger Mitt Romney also have avoided making big pronouncements. Democratic U.S. Rep. Gene Green, whose east Houston district includes several **chemical plants**, says the key is finding a threshold that keeps prices low enough for manufacturers and **high enough** to sustain production levels. “I don’t want our gas prices to get so outrageous as seven years ago, when the chemical industry was transferring jobs to other places,” said Green, who backs case-by-case approvals. “I don’t want to kill the good things we’re doing, but I also know we want to **keep those drillers working**.” Advances in drilling technology have allowed energy companies to extract natural gas from dense rock formations coast to coast and tap what analysts widely describe as a 100-year supply of the fossil fuel. A few congressional critics are pushing for a timeout. Rep. Ed Markey, D-Mass., has introduced legislation that would halt new natural gas exports until 2025. Markey argues that the domestic natural gas explosion gives the U.S. a major global advantage that would be squandered by exports. “This is our biggest game-changing moment in a generation,” he said. “Low-priced natural gas is driving an American manufacturing renaissance.” Linking U.S. natural gas production with global markets would hamper moves to power more cars and produce more electricity with the gas, Markey said. “Natural gas producers do not want low prices. They want a global natural gas market that maximizes consumer pain domestically in the same way the global oil market does,” Markey added. “That would be painful for American consumers and catastrophic for the fertilizer manufacturers, the chemical and plastic makers, and the steel manufacturers who are relying on low-priced natural gas.” Prices to rise? Many analysts contend natural gas prices are destined to rise even without more exports, as companies scale back production. Bob Ineson, the head of North American natural gas research for IHS CERA, said he anticipates U.S. natural gas prices will rise without exports and stabilize around $3.50 to $4. “The current price environment is **unsustainably low**,” he said, because in some areas, gas costs more to produce than its price. A bipartisan group of lawmakers from areas rich in natural gas drilling warned the Energy Department in a letter earlier this month that if prices **don’t rise**, it could jeopardize **domestic natural gas production** and all of the jobs and **economic activity** tied to it.

### Helium

**A. Low prices devastate future supply of gas**

**Shackouls 3** (Bobby S., Chair of the National Petroleum Council, “Balancing Natural Gas Policy,” September 2003, <http://www.npc.org/reports/dtg-final.pdf>)

Both the NGPA and PIFUA were repealed because they produced unintended consequences that distorted the market and created inefficiencies. The legacy of these experiments is that regulated prices will rarely work to keep markets balanced because they will invariably send the wrong price signals to producers and consumers, and result in supply shortages or surpluses. An initial regulatory act often leads to a series of regulatory acts to correct the adverse consequences of the previous actions. For example, the **low** controlled **prices** of the 1960s to 1970s decreased **exploration and drilling** activity to the point of causing a supply shortage. Instead of lifting price controls and allowing the free market forces to balance the market, the federal government instead set policy that would decrease demand to match the lower supplies. This action **reduced drilling a**ctivity, requiring an additional regulation to fix that problem.

**B. Shuts off global helium production**

**EIA 6** (Energy Information Administration, the official energy statistics agency of U.S. Government , “Natural Gas Processing: The Crucial Link Between Natural Gas Production and Its Transportation to Market” http://www.eia.gov/pub/oil\_gas/natural\_gas/feature\_articles/2006/ngprocess/ngprocess.pdf)

**The world’s supply of helium** **comes exclusively** **from natural gas production**. The single largest source of helium is the United States, which produces about **80 percent of the annual world production** of 3.0 billion cubic feet (Bcf). In 2003, U.S. production of helium was 2.4 Bcf, about two-thirds of which came from the Hugoton Basin in north Texas, Oklahoma, and Kansas (Figure 2). The rest mostly comes from the LaBarge field located in the Green River Basin in western Wyoming, with small amounts also produced in Utah and Colorado. According to the National Research Council, the consumption of helium in the United States doubled between 1985 and 1996, although its use has leveled off in recent years. It is used in such applications as magnetic resonance imaging, semiconductor processing, and in the pressurizing and purging of rocket engines by the National Aeronautics and Space Administration. Twenty-two natural gas treatment plants in the United States currently produce helium as a major byproduct of natural gas processing. Twenty of these plants, located in the Hugoton-Panhandle Basin, produce marketable helium which is sold in the open market when profitable, while transporting the remaining unrefined helium to the Federal Helium Reserve (FHR). The FHR was created in the 1950s in the Bush salt dome, underlying the Cliffside field, located near Amarillo, Texas. Sales of unrefined helium in the United Statesfor the most part, come from the FHR.

**C. Collapses US space exploration**

**CN 12** – Citation News, “Scientists' High-Pitched Response to Helium Shortage”, 3-22, http://www.cyberregs.com/webapps/Blog/post/Scientists-High-Pitched-Response-to-Helium-Shortage.aspx

**Helium** - the second lightest element in the universe with an atomic weight of 4.002602 - is an inert gas that can be cooled to temperatures of -270 Celsius without becoming a solid, **making it indispensible** in the operation of, among many things, superconducting magnets used in MRI scanners, telescopes and **particle accelerators** like the Large Hadron Collider. Helium also holds an important place in the defense industry. It also has some far less profound applications, which consume great quantities of the gas annually - applications such as party balloons and squeak-voice huffing. These latter applications have drawn the ire of researchers. This month, the Guardian reported that the UK's Rutherford Appleton Laboratory wasted three days and £90,000 (US$ 143,091), when, during an important experiment exploring the structure of matter, they could not obtain a supply of helium. Needless to say, the scientists were in a less-than-celebratory mood. "We put the stuff into party balloons and let them float off into the upper atmosphere, or we use it to make our voices go squeaky for a laugh. It is very, very stupid. It makes me really angry,” said Oleg Kiricheck, the research team leader. Cornell University Professor Robert Richardson is also concerned. He believes that, with our current reserves of helium, the price of the element severely discounts its real value. By his estimation, the price of a single party balloon should cost as much as $100. Richardson suggests increasing the price of helium by 20-50% to eliminate excessive waste. Although helium ranks next to hydrogen as the most abundant element in the universe, **here on earth it is a finite commodity**. The helium that is here is all we have! Helium is **collected during natural gas** and oil drilling. If the gas is not captured, it dissipates into earth's upper atmosphere and **is lost forever**. The same happens when a party balloon is released into the air, or when it self-deflates, because helium atoms are so small that they can easily move through the balloon's latex shell. Party balloons do not represent the only wasteful expenditures of helium. Macy's Thanksgiving Day parade typically uses 400 Mcf a year, although there have been recent attempts to recycle some of the helium used in the floats. NASA uses up to 75 MMcf annually to pressurize rocket tanks. The agency has made no attempt to recycle this huge amount of gas. Weather balloons also consume about 140 MMcf of helium per year. At the present rate of supply depletion, the United States will become an importer of helium from the Middle East and Russia within 10 years, and the world will run out of helium within 30 years. This would have major implications for **space travel and exploration**, scientific and nuclear research, medical advances and early detection of diseases. Possible solutions for this problem **should address supply**, not pricing. A drastic increase in the price of helium as a preservative measure would cause a huge spike in billing for medical procedures, such as MRIs, scientific research, and defense expenditures, as well as party balloons.

**D. Extinction inevitable without space**

**Carreau 2** (Mark, Winner – 2006 Space Communicator Award, MA in Journalism – Kansas State University, “Top Experts See Space Study As Key to Human Survival”, The Houston Chronicle, 10-19, Lexis)

With Apollo astronaut John Young leading the charge, top aerospace experts warned Friday that humanity's survival may depend on how boldly the world's space agencies venture into the final frontier. Only a spacefaring culture with the skills to travel among and settle planets can be assured of escaping a collision between Earth and a large asteroid or devastation from the eruption of a super volcano, they told the World Space Congress. "Space exploration is **the key to the future of the human race**," said Young, who strolled on the moon more than 30 years ago and now serves as the associate director of NASA's Johnson Space Center. "We should be running scared to go out into the solar system. We should be running fast." Scientists believe that an asteroid wiped out the dinosaurs more than 60 million years ago, and are gathering evidence of previously large collisions. "The civilization of Earth does not have quite as much protection as we would like to believe," said Leonid Gorshkov, an exploration strategist with RSC Energia, one of Russia's largest aerospace companies. "We should not place all of our eggs in one basket."

### U – Prices Rising (UGA/NU)

#### New demand for NG makes price spike inevitable

Moors 1-24 (Dr. Kent, internationally recognized expert in oil and natural gas policy, risk assessment, and emerging market economic development, “Betting on the Coming Boom in Natural Gas Prices,” Money Morning, 2013, http://moneymorning.com/2013/01/24/betting-on-the-coming-boom-in-natural-gas-prices/)

There is also something else happening this morning. Natural gas prices are moving up. There is still some way to go before these prices reach the $4 plus level (still the perceived breakeven point for a number of producers). Still, after testing the low $3 range earlier in the month, the temperatures in the East are certainly bringing gas back into perspective. Natural gas usage remains sensitive to temperatures and weather conditions during the winter. Last year's unusually warm temperatures depressed gas prices more than usual. That was because the amount of gas extractions was much above anticipated levels. The combination of lower demand and higher supply translated into a downward price pressures. But we are in a different environment for gas production than we were a few years ago. Until 2005, the assumption was that the U.S. would need to import more liquefied natural gas (LNG) to compensate for accelerating declines in conventional domestic production. LNG overcomes the primary problem faced by natural gas users. Available supply is traditionally limited to where pipelines are running. LNG, on the other hand, cools gas to a liquid, allowing it to be transported by tankers almost anywhere by water, regasified at an import terminal, and then injected into the local pipeline network. By the middle of last decade, estimates of how much domestic gas need would have to be imported via LNG were as much as 15% and as soon as 2020. But the ability to exploit unconventional deposits (shale and tight gas, coal bed methane) has dramatically changed the equation. The Rise of U.S. Export Terminals Companies are retrofitting current import terminals to export LNG from the U.S., using shale gas excess volume as the feeder stock. Of course, that also provides an additional source of revenue for producers and processors... and added potential for investors. From a current level of zero, global estimates are putting the American component in LNG trade at 9-12% as early as 2020. This will be starting in earnest next year (2014) and there are huge markets waiting in both Asia and Europe. Europe is a straight shot from East Coast (Cove Point, MD) and Gulf States (Sabine Pass) locations. However, the Asian market remains the main LNG consumer. There, the 2014 completion of a project to deepen and widen the Panama Canal will allow LNG tankers to use the shortcut and open Asia to U.S. LNG sales. But LNG is not the only or even the major demand spike underway for gas. It's what's happening elsewhere that will be the real boon for investors. Power Plant Retirements Swell The U.S. will be retiring at least 90 GW of electricity generation by 2020, with an additional 20-30 GW likely because of new non-carbon emission limits. The **vast majority of this is coal-fired and is being replaced by gas as the fuel of choice**. For each 10 GW replaced, 1.2 billion cubic feet of gas will be required daily. If only half of the expected capacity replacement occurs, the additional requirements would eliminate three times the current gas surplus in the market. The LNG and power needs will buttress the demand side regardless of what Mother Nature chooses to do this winter. There are also increasing usages in other areas: As replacement for crude oil as raw material for petrochemical production, fertilizer and all manner of plastics and components; In broad industrial uses from normal energy requirements to the development of new chemical and related lines (this industrial use likely to be the lack to kick in after a recession); and, In the expansion of LNG and compressed natural gas (CNG) as a vehicle fuel (already underway in heavy trucks). All of this has prompted upward revisions in what had been still weak gas pricing estimates. Most analysts are putting the target at about a dollar above current prices (currently this morning about $3.53 per 1,000 cubic feet, or million BTUs, the NYMEX futures contract unit). My estimate puts natural gas prices at around $4.65. However, just about everybody is looking at new utilizations for gas increasing the price to about $6 by as early as 2015 or 2016.

#### Prices will spike – predictive and qualified ev

Schwartzel 1-9 (Erich, Pittsburgh Post-Gazette, “U.S. report predicts rising natural gas prices in 2013-14,” 2013, http://www.post-gazette.com/stories/business/news/us-report-predicts-rising-natural-gas-prices-in-2013-14-669602/#ixzz2JUuPAG00)

Marcellus Shale drillers who have had to cut costs and disassemble rigs because of recent record-low natural gas prices should expect a reprieve over the next two years, according to the latest projections from the U.S. Energy Information Administration. The average price of natural gas is expected to increase by almost a dollar in 2013, hitting $3.74 per million British thermal units. That's a significant jump from the $2.75 average seen last year, when accelerated drilling created a glut in supply that caused prices to drop and made drilling in many places unprofitable. Increases are expected to continue into 2014, when prices are predicted to hit $3.90. The EIA report released Tuesday is the first look into 2014 for the domestic and international energy scene, and it includes projections that could affect gas and coal activity in Pennsylvania and surrounding states. Higher gas prices would send reverberations across multiple sectors, helping coal become competitive with natural gas again as an electricity source and allowing drillers to broaden their focus beyond shale formations that are rich in oil. In addition, the federal energy agency projects increased domestic oil production will break new records over the next couple of years and eventually lead to lower prices at the gasoline station. The report is the latest set of tea leaves for an industry that's been in flux: Enthusiasm for drilling was tempered in recent years by economic realities that made it risky for every rig to turn a profit. The low prices made natural gas an easy sell to large, industrial customers who consume a lot of energy, but slowed lease activity as companies waited for prices to rebound. If natural gas prices continue an upward trend toward $4 per mcf, companies that had drilled wells but weren't bringing the gas to market could decide it is worth hooking those wells up to pipelines and selling the gas, said Adam Sieminski, the EIA administrator. Natural gas consumption, meanwhile, is expected to be relatively flat in 2013, though the EIA forecasts an increase in its use to heat homes and offices over the next two years. Consumption in 2012 was low due to an unnaturally warm winter. Over the next several years, the EIA's projections call for a steady rise in natural gas prices, said Mr. Sieminski, "continuing to go up to $5 or $6 in the longer term."

#### Most studies underestimate demand – prices will go up

Squadron 1-12 (Bill, President – OurEnergyPolicy.Org, “Future Energy Consumption: Natural Gas Poised To Increase In Transportation?” Energy Collective, 2013, http://theenergycollective.com/billsquadron/169971/future-energy-consumption-natural-gas--transportation)

The recent projections for future energy consumption from Exxon Mobil’s report, “Outlook for Energy,” and the EIA’s “Annual Energy Outlook, 2013” essentially said the same thing concerning the potential for natural gas and its derivative methanol: Natural gas use now is only about 1 percent of the total fuel used in vehicles, and by 2040, it will only rise to 4 percent. This increase will take place in the trucking sector and liquefied natural gas (LNG). Owners of automobiles will not rush to natural gas, because of a lack of pumping stations and the low density of natural gas. Adam Sieminski, EIA administrator, said, “what really holds natural gas back is the infrastructure to refuel and how much energy you can put into a vehicle is limited.” However, both reports appear to underestimate the future demand for natural gas and methanol. For example, Exxon Mobil’s study does not reveal its assumptions concerning the price of gasoline versus natural gas. Both Exxon Mobil and EIA suggest that gasoline prices will peak in the next decade and begin to decline because of energy efficiency, CAFE standards and the increased use of alternative fuels, particularly powered by electricity. Neither explores in depth the impact of price differentials on efficiency. Yes, gasoline is denser and gets more miles per gallon gasoline equivalent (MPGe). But technology has reduced the differential and the price of gasoline remains comparatively high, which permits differences concerning density to be minimized considerably. Therefore, natural gas and its derivative methanol are likely to remain cheaper than gasoline and attract many cost conscious consumers.

### Non-FTA Impact – Australia 2NC

#### Exports to non-FTA countries are key – they’re the biggest buyers – jacks Russia and Australia economy

Chambers 1-14 (Matt, “LNG exports at risk as US stakes claim,” Australian, 2013, http://www.theaustralian.com.au/business/mining-energy/lng-exports-at-risk-as-us-stakes-claim/story-e6frg9df-1226553137492)

AUSTRALIA will be the biggest loser among liquefied natural gas exporters if US LNG production takes off in a **meaningful way**, with more exports displaced than any other nation because of the high costs of building new projects. The finding, in a Deloitte report commissioned by US LNG proponent Cheniere Energy, comes as global engineering contractor KBR -- a leader in West Australian projects -- says work on US LNG projects is starting to grow as work in Australia dwindles because of surging costs. If a substantial amount of US LNG is exported to Asia, it could displace the equivalent of one $20 billion project in Australia, the Deloitte report on the global impact of US LNG exports says. US exports, which are being made economic by a shale gas glut, would also weigh on LNG prices. "Australian LNG exports to Asia and Russian exports to Europe look particularly vulnerable, given their projected large volume of exports and high cost to markets they serve," the report, entitled Exporting the American Renaissance and released in the US last week, says. "The largest LNG source that is displaced is Australian LNG." KBR chief executive William Utt said price hikes in Australia meant opportunities for his company were falling. "I do have some concerns about how fast are they going to move forward on additional projects in Australia," Mr Utt told investors in the US on Friday. "Relative to a year ago, it has become much stronger for KBR in North America relative to international. We've seen significant growth on an absolute basis in North America and probably a little bit of diminution in the prospects we have internationally, largely with Africa, Australia." In Australia, the issue has been high costs, while in Africa the early stage of the industry is making things tough. "We think the market will continue to move forward and grow for LNG projects in both the US Gulf Coast and British Columbia," Mr Utt said. KBR worked on Chevron's Gorgon project and Woodside's Pluto project and has submitted a front end engineering and design (FEED) study for the Woodside-led Browse LNG project. The study and the KBR comments come after US major Chevron -- the biggest spender on Australian LNG -- last month took charge of a Canadian project, known as Kitimat, just after pushing back the timetable for an expansion of the Gorgon LNG project and adding $9bn to the expected cost of the now $52bn foundation project. The Deloitte study, without making forecasts of US LNG volumes, measures the effects that 47 million tonnes a year of US LNG would have on global trade. This is less than half the amount of export capacity on the drawing board in the US but is in line with estimates by energy giant Shell and represents exports from just four projects. If those US exports go to Asia, about 19 per cent of the volumes, or 9 million tonnes, would be made up of LNG that otherwise would have come from Australia, Deloitte says. The 9 million tonnes a year of potentially displaced Australian LNG production would be the same amount as the $US20bn Australia Pacific LNG project at Gladstone being built by Origin Energy and Conoco Phillips is aiming to produce. If the US exports go to Europe, that number would drop to about 4 million tonnes. The upper estimate is about 10 per cent of Australia's projected LNG exports. To date, only one US project has been given the right to sell LNG to nations that do not have free trade agreements with the US. There is debate about the number of projects that should be allowed to export to non-FTA countries, **which include the leading LNG buyers**. Opposition is coming from those who want to keep US domestic gas cheap to spur manufacturing.

#### That’s key to Australia’s economy

Energy Quest 9 (advisory firm focused on energy analysis strategy, "Australia’s Natural Gas Markets: Connecting with the World," http://www.aer.gov.au/sites/default/files/EnergyQuest%20essay%C3%A2%E2%82%AC%E2%80%9DAustralia's%20natural%20gas%20markets.pdf)

Australia is becoming a gas supplier of international significance on the back of its rapidly expanding resource base. It is now among the top 10 nations in terms of gas reserves and resources—with over 200 000 PJ—and in the next decade will likely become a major international producer. A significant driver has been gas price expectations. The Australian experience shows gas supply is highly price elastic. Rising price expectations are encouraging major investment in exploration and infrastructure. The development of LNG will potentially benefit Australia’s terms of trade, **economic growth** and employment. A significant benefit may be the **buffer** that LNG can provide against our declining oil production. Australia is relatively oil intensive by international standards. 24 Crude oil is Australia’s largest import, followed by refined petroleum products. 25 Australia’s self-sufficiency in oil and liquid fuels is 60 per cent and likely to decline further. This dependence exposes the economy to the risk of rising oil prices—something to which it has been relatively immune since the discovery of oil in the 1950s.

#### Australian economic collapse destroys ANZUS and relations with the U.S.

Lyon and Tow 3 (Rod, IR – U Queensland and William, Prof IR – U Queensland, The Future of the Australian-U.S. Security Relationship, http://www.strategicstudiesinstitute.army.mil/pdffiles/PUB50.pdf)

Some Australian officials also speak of Australia’s continuing impressive economic growth as an important determinant of a larger strategic role. As the Australian economy continues to show good growth figures over a long period, when many of the world’s major economies have been stagnant, it has offered Australian policymakers both a larger sense of Australia’s role in the world and the resources necessary to underpin an expanded role. The Australian intervention in East Timor in 1999 constituted a harbinger of that larger role; in the post-September 11 world an expansive policy of Australian global and regional engagement―in Afghanistan, Iraq, and the Solomon Islands―is even more evident.

[Continues…]

The Australian defense budget might still have some upside in it, but it must reflect the overall health of the Australian economy. Defense spending as a percentage of gross domestic product (GDP) is still low, in part because the defense increases outlined and approved in the 2000 White Paper have been affordable from GDP growth. But the government is cautious about any dramatic longterm increase in defense spending, uncertain of the actual level of public support during a decade when the nation’s “baby boomers” will be starting to move into retirement and impose higher costs on welfare budget items.

[Continues…]

Australia’s overall strategic policy direction bodes well for the future of ANZUS. Its shift from a concentric circles posture to one reflecting a more balanced approach between global and regional contingencies, many of which involve asymmetrical threats, is compatible with the U.S. force structure reorientation toward fighting more low intensity conflicts against hostile nonstate actors and occasional mid-to-high intensity conflicts against “rogue states” or other anti-Western forces.45 Australia’s new proactive defense identity in Southeast Asia and the South Pacific and, even more centrally, its willingness to participate in American-led military coalitions even without UN support, correlate directly with traditional American concerns about allied loyalty and defense burden-sharing. Latent policy hazards such as leadership disillusionment or economic pressures could yet create future ANZUS crises. Over the nearterm, however, such developments appear unlikely as the nature of currently emerging threats predicate closer rather than qualified security cooperation among the world’s developed states and as Australia endeavors to reconcile its international security objectives with finite resources and capabilities.

#### That sparks Asian wars

Downer 1 (Alexander, MP, Minister for Foreign Affairs. “The Australia-United States Alliance and East Asian Security,” Speech at the University of Sydney conference, 6-29)

I want to put to rest this evening a view we hear from time-to-time in the media and elsewhere which argues that the ANZUS Treaty and the alliance is no longer relevant to Australia's interests with the end of the Cold War, or that it somehow imposes unacceptable trade-offs in Australia's relations with the Asia Pacific region. Nothing could be further from the truth. Forging and maintaining strong relations with one country or region does not mean neglecting any other country or region.  To suggest that the depth and strength of our alliance with the US somehow weakens or compromises our ties with the Asia Pacific is nonsense. In fact, ANZUS was seen from the outset as a means of enhancing our ties with the region: Percy Spender, who pushed so strongly to conclude the ANZUS Treaty, did so with a clear and expressed conviction that Australia’s destiny was bound up with Asia.  He saw the Australia – US alliance as a linchpin for stability in the region. On the eve of his departure for the Colombo Conference in January 1950, Spender said that “Australia and the United States of America are the two countries which can, in co-operation one with the other, make the greatest contribution to stability and to democratic development of the countries of South-East Asia.”  This was 13 months before the crucial Canberra negotiations at which the fundamentals of ANZUS were hammered out.

#### Goes nuclear

Dibb 1 (Paul, Prof – Australian National University, Strategic Trends: Asia at a Crossroads, Naval War College Review, Winter, http://www.nwc.navy.mil/press/Review/2001/Winter/art2-w01.htm)

The areas of maximum danger and instability in the world today are in Asia, followed by the Middle East and parts of the former Soviet Union. The strategic situation in Asia is more uncertain and potentially threatening than anywhere in Europe. Unlike in Europe, it is possible to envisage war in Asia involving the major powers: remnants of Cold War ideological confrontation still exist across the Taiwan Straits and on the Korean Peninsula; India and Pakistan have nuclear weapons and ballistic missiles, and these two countries are more confrontational than at any time since the early 1970s; in Southeast Asia, Indonesia—which is the world’s fourth-largest country—faces a highly uncertain future that could lead to its breakup. The Asia-Pacific region spends more on defense (about $150 billion a year) than any other part of the world except the United States and Nato Europe. China and Japan are amongst the top four or five global military spenders. Asia also has more nuclear powers than any other region of the world. Asia’s security is at a crossroads: the region could go in the direction of peace and cooperation, or it could slide into confrontation and military conflict. There are positive tendencies, including the resurgence of economic growth and the spread of democracy, which would encourage an optimistic view. But there are a number of negative tendencies that must be of serious concern. There are deep-seated historical, territorial, ideological, and religious differences in Asia. Also, the region has no history of successful multilateral security cooperation or arms control. Such multilateral institutions as the Association of Southeast Asian Nations and the ASEAN Regional Forum have shown themselves to be ineffective when confronted with major crises.

### A2: Russia Econ Low Now

#### Growth now is a result of natural gas- plan causes a fiscal trainwreck

**Burke 12**

[Justin Managing Editor , Eurasia News, 3/1 “ Russia: Putinism and the Russian Economy”, [http://www.eurasianet.org/node/65070 //](http://www.eurasianet.org/node/65070%20/)]

During his tenure in power, Russia has experienced robust economic growth and benefited from a favorable balance of trade, enabling the Kremlin to amass cash reserves of just over $505 billion, according to Central Bank statistics. But trade-surplus figures provide only a partial picture of the Russian economy, creating an illusion of economic health. **Russian growth is overly dependent on the export of raw materials, especially** oil & gas, but also including minerals, precious metals and timber. During his first go-round as president, Putin spoke repeatedly of a need to transform Russia’s economy. In a May 2006 speech to the Federation Council, for example, he said his administration was already taking “concrete steps to change the structure of our economy, and turn it into an economy of [technological] innovation.” And on May 8, 2008, the day he stepped down from the presidency and returned to the post of prime minister, he announced the government’s “number one priority” was economic diversification via the “development of innovative industries.” If figures compiled by Russia’s Federal Service for State Statistics (FSSS) are to be believed, Putin’s quest to create a knowledge-based, high-tech economy has been a dismal failure. Import-export data for the past 12 years shows that Russia’s role in the global economy remains that of raw materials supplier, and that **the high price** of oil & natural gas **is** **all that stands in the way of Russia becoming a fiscal train wreck**. When it comes to the state budget, the stability of Russia’s finances is dependent on an increase in the cost of energy. The Kremlin thus stands to benefit economically from increased tension between the West and Iran. Prior to the global financial crisis, Russia could balance its books with an oil price of about $90 per barrel, former Russian Finance Minister Alexei Kudrin said last September. Now, according to the Finance Ministry, the Russian budget needs an oil price of $117 per barrel this year to remain in good shape.

### 2NC Irreversible

#### Extend warming’s irreversible – scientists and long term predictions – 4.3 degrees is inevitable, that assumes zero emissions – that’s ANI.

#### Strong consensus that it’s too late

Edwards 12 (Rich, PhD in Communication – Baylor University, “A Preliminary Analysis of the IPFF Resolution for 2012-2013,” http://www.bickelbrewer.com/pdf/IPPF\_Topic\_Primer\_2012\_13.pdf)

This position argues that it is already too late for mitigation efforts to meaningfully change the course of climate change. Matthew Baca, writing in the Summer 2010 issue of the New York University Journal of International Law and Politics, offers the following rationale for prioritizing adaptation: “Climate change is already occurring, and some of its effects will be felt before mitigation can have any impact. Even if emissions are stabilized relatively soon (an unlikely prospect), sea level rise and anthropogenic warming will likely continue for many years to come. While mitigation is critical to the welfare of later generations, . . . adaptation is critical to our generation” (Baca, 2010, pp. 1343-1344). Jacqueline Peel and Lee Godden, both professors of law at Melbourne Law School, conclude that prevention should now be regarded as impossible: “Although future warming and its likely effects may be reduced if an effective agreement on deep emissions cuts emerges from the current post-Kyoto negotiation process, it is becoming increasingly clear that climate change impacts cannot be entirely prevented. In this context, climate change mitigation, in the sense of ‘implementing policies to reduce [greenhouse gas] emissions and enhance sinks,’ will not be sufficient to avert serious environmental damage. Instead there is a need for adaptation ‘initiatives and measures to reduce the vulnerability of natural and human systems against actual or expected climate change effects’” (Peel & Godden, 2009, p. 37). Eric Klinenberg, professor of public policy at New York University, believes that the fight to stop global warming is already lost; attention must now turn to how we should deal with it: “The question is no longer what’s happening with the climate but what we can do about it. The macro challenge is inescapable: Dramatically reducing our carbon footprint and quickly reversing the environmental damage that we’ve already inflicted. Whether and how we do that is the problem of our time. But as the fossil-fuel industry and the politicians it bankrolls do everything in their power to slow that transition, the rest of us have no choice but to adapt. If the mercury is going to keep rising, we need to start protecting ourselves from its consequences” (Klinenberg, 2012). Kevin Anderson, a scientist at the Tyndal Centre for Climate Change Research at the School of Mechanical Aerospace and Civil Engineering, and Alice Bows of the University of Manchester’s Sustainable Consumption Institute, conclude that the battle to stop global warming is already lost: “The analysis within this paper offers a stark and unremitting assessment of the climate change challenge facing the global community. There is now little to no chance of maintaining the rise in global mean surface temperature at below 2°C, despite repeated high-level statements to the contrary” (Anderson & Bows, 2011, p. 41).

#### 6 degree warming’s inevitable

AP 9 (Associated Press, Six Degree Temperature Rise by 2100 is Inevitable: UNEP, September 24, <http://www.speedy-fit.co.uk/index2.php?option=com_content&do_pdf=1&id=168>)

Earth's temperature is likely to jump six degrees between now and the end of the century even if every country cuts greenhouse gas emissions as proposed, according to a United Nations update. Scientists looked at emission plans from 192 nations and calculated what would happen to global warming. The projections **take into account** 80 percent emission cuts from the U.S. and Europe by 2050, which are not sure things. The U.S. figure is based on a bill that passed the House of Representatives but is running into resistance in the Senate, where debate has been delayed by health care reform efforts. Carbon dioxide, mostly from the burning of fossil fuels such as coal and oil, is the main cause of global warming, trapping the sun's energy in the atmosphere. The world's average temperature has already risen 1.4 degrees since the 19th century. Much of projected rise in temperature is because of developing nations, which aren't talking much about cutting their emissions, scientists said at a United Nations press conference Thursday. China alone adds nearly 2 degrees to the projections. "We are headed toward very serious changes in our planet," said Achim Steiner, head of the U.N.'s environment program, which issued the update on Thursday. The review looked at some 400 peer-reviewed papers on climate over the last three years. Even if the developed world cuts its emissions by 80 percent and the developing world cuts theirs in half by 2050, as some experts propose, the world is still facing a 3-degree increase by the end of the century, said Robert Corell, a prominent U.S. climate scientist who helped oversee the update. Corell said the most likely agreement out of the international climate negotiations in Copenhagen in December still translates into a nearly 5-degree increase in world temperature by the end of the century. European leaders and the Obama White House have set a goal to limit warming to just a couple degrees. The U.N.'s environment program unveiled the update on peer-reviewed climate change science to tell diplomats how hot the planet is getting. The last big report from the Nobel Prize-winning Intergovernmental Panel on Climate Change came out more than two years ago and is based on science that is at least three to four years old, Steiner said. Global warming is speeding up, especially in the Arctic, and that means that some top-level science projections from 2007 are already out of date and overly optimistic. Corell, who headed an assessment of warming in the Arctic, said global warming "is accelerating in ways that we are not anticipating." Because Greenland and West Antarctic ice sheets are melting far faster than thought, it looks like the seas will rise twice as fast as projected just three years ago, Corell said. He said seas should rise about a foot every 20 to 25 years.

#### Low threshold—less than 2 degrees is sufficient to cause their impacts

Harvey 11 (Fiona, Environment Reporter – Guardian, 11/9, “World headed for irreversible climate change in five years, IEA warns,” <http://www.guardian.co.uk/environment/2011/nov/09/fossil-fuel-infrastructure-climate-change>)

Climate scientists estimate that global warming of 2C above pre-industrial levels marks the limit of safety, beyond which climate change becomes catastrophic and irreversible. Though such estimates are necessarily imprecise, warming of as little as 1.5C could cause dangerous rises in sea levels and a higher risk of extreme weather – the limit of 2C is now inscribed in international accords, including the partial agreement signed at Copenhagen in 2009, by which the biggest developed and developing countries for the first time agreed to curb their greenhouse gas output.

#### Even the IPCC agrees

ENS 12-17 (Environment News Service, “Leaked UN Report Predicts ‘Irreversible’ Climate Change,” 2012, http://ens-newswire.com/2012/12/17/leaked-un-report-predicts-irreversible-climate-change/)

A leaked early draft of the UN’s latest climate change study shows human activities to be responsible for climate warming that will take centuries to reverse, even if greenhouse gas emissions were to stop right now. “Many aspects of climate change will persist for centuries even if concentrations of greenhouse gases are stabilised. This represents a substantial multi-century commitment created by human activities today,” states the draft report by the UN’s Intergovernmental Panel on Climate Change. “For scenarios driven by carbon dioxide alone, global average temperature is projected to remain approximately constant for many centuries following a complete cessation of emissions,” the draft states. “Thus a large fraction of climate change is largely irreversible on human time scales, except if net anthropogenic greenhouse gas emissions were strongly negative over a sustained period.”

#### Too little, too late

Harris 9 (Richard, Science Reporter for National Public Radio, Peabody Award Winner, American Association for the Advancement of Science Journalism Award, “Global Warming Irreversible, Study Says,” January 26th, NPR, http://www.npr.org/templates/story/story.php?storyId=99888903)

Climate change is essentially irreversible, according to a sobering new scientific study. As carbon dioxide emissions continue to rise, the world will experience more and more long-term environmental disruption. The damage will persist even when, and if, emissions are brought under control, says study author Susan Solomon, who is among the world's top climate scientists. "We're used to thinking about pollution problems as things that we can fix," Solomon says. "Smog, we just cut back and everything will be better later. Or haze, you know, it'll go away pretty quickly." That's the case for some of the gases that contribute to climate change, such as methane and nitrous oxide. But as Solomon and colleagues suggest in a new study published in the Proceedings of the National Academy of Sciences, it is not true for the most abundant greenhouse gas: carbon dioxide. Turning off the carbon dioxide emissions won't stop global warming. "People have imagined that if we stopped emitting carbon dioxide that the climate would go back to normal in 100 years or 200 years. What we're showing here is that's not right. It's essentially an irreversible change that will last for more than a thousand years," Solomon says. This is because the oceans are currently soaking up a lot of the planet's excess heat — and a lot of the carbon dioxide put into the air. The carbon dioxide and heat will eventually start coming out of the ocean. And that will take place for many hundreds of years.

### GSU Ev

#### Their Hanson impact ev says it has be below 350 PPM to avoid the worst impacts

It¶ will be necessary to take actions that return CO2 to a level of at most 350 ppm

**the feed-in tariff has saved the emission of 79 million tonnes of carbon dioxide equivalent** (CO2e) **in 2008**

**let this frame the way that you read their ev**

### 2NC No XTC

#### No impact – most qualled, their ev is alarming to make money – prefer holistic studies – that’s Mendelson ev

#### Experts agree

Hsu 10 (Jeremy, Live Science Staff, July 19, pg. <http://www.livescience.com/culture/can-humans-survive-extinction-doomsday-100719.html>)

His views deviate sharply from those of most experts, who don't view climate change as the end for humans. Even the worst-case scenarios discussed by the Intergovernmental Panel on Climate Change don't foresee human extinction. "The scenarios that the mainstream climate community are advancing are not end-of-humanity, catastrophic scenarios," said Roger Pielke Jr., a climate policy analyst at the University of Colorado at Boulder. Humans have the technological tools to begin tackling climate change, if not quite enough yet to solve the problem, Pielke said. He added that doom-mongering did little to encourage people to take action. "My view of politics is that the long-term, high-risk scenarios are really difficult to use to motivate short-term, incremental action," Pielke explained. "The rhetoric of fear and alarm that some people tend toward is counterproductive." Searching for solutions One technological solution to climate change already exists through carbon capture and storage, according to Wallace Broecker, a geochemist and renowned climate scientist at Columbia University's Lamont-Doherty Earth Observatory in New York City. But Broecker remained skeptical that governments or industry would commit the resources needed to slow the rise of carbon dioxide (CO2) levels, and predicted that more drastic geoengineering might become necessary to stabilize the planet. "The rise in CO2 isn't going to kill many people, and it's not going to kill humanity," Broecker said. "But it's going to change the entire wild ecology of the planet, melt a lot of ice, acidify the ocean, change the availability of water and change crop yields, so we're essentially doing an experiment whose result remains uncertain."

### 2NC No Econ War

No more wars from economic collapse

#### AND - even if wars occur, they won’t escalate.

Bennett & Nordstrom 2k [Department of Political Science Professors @ Penn state U, D. Scott and Timothy, “Foreign Policy Substitutability and Internal Economic problems in Enduring Rivalries” Journal of Conflict Resolution, Feb., p33-61]

When engaging in diversionary actions in response to economic problems, leaders will be most interested in a cheap, quick victory that gives them the benefit of a rally effect without suffering the long-term costs (in both economic and popularity terms) of an extended confrontation or war. This makes weak states particularly inviting targets for diversionary action since they may be less likely to respond than strong states and because any response they make will be less costly to the initiator. Following Blainey (1973), a state facing poor economic conditions may in fact be the target of an attack rather than the initiator. This may be even more likely in the context of a rivalry because rival states are likely to be looking for any advantage over their rivals. Leaders may hope to catch an economically challenged rival looking inward in response to a slowing economy. Following the strategic application of diversionary conflict theory and states’ desire to engage in only cheap conflicts for diversionary purposes, states should avoid conflict initiation against target states experiencing economic problems.

#### 93 examples are on our side

Miller 2k [Morris Miller, Winter 2K. economist and adjunct professor in the University of Ottawa’s Faculty of Administration and former Executive Director and Senior Economist at the World Bank. Interdisciplinary Science Reviews, 25.4]

The question may be reformulated. Do wars spring from a popular reaction to a sudden economic crisis that exacerbates poverty and growing disparities in wealth and incomes? Perhaps one could argue, as some scholars do, that it is some dramatic event or sequence of such events leading to the exacerbation of poverty that, in turn, leads to this deplorable denouement. This exogenous factor might act as a catalyst for a violent reaction on the part of the people or on the part of the political leadership who would then possibly be tempted to seek a diversion by finding or, if need be, fabricating an enemy and setting in train the process leading to war. According to a study undertaken by Minxin Pei and Ariel Adesnik of the Carnegie Endowment for International Peace, there would not appear to be any merit in this hypothesis. After studying ninety-three episodes of economic crisis in twenty-two countries in Latin America and Asia in the years since the Second World War they concluded that:19 Much of the conventional wisdom about the political impact of economic crises may be wrong ... The severity of economic crisis - as measured in terms of inflation and negative growth - bore no relationship to the collapse of regimes ... (or, in democratic states, rarely) to an outbreak of violence ... In the cases of dictatorships and semidemocracies, the ruling elites responded to crises by increasing repression (thereby using one form of violence to abort another).

## 1NR

Politics

# Round 4

## 1NC

### 1NC

#### **The 1AC’s linking of energy production with national security creates a political impulse to secure – that makes unending resource wars inevitable**

Martens 11 (Emily, MA in Geography and Regional Studies – University of Miami, “The Discourses of Energy and Environmental Security in the Debate Over Offshore Oil Drilling Policy in Florida,” Open Access Theses, 5-10, http://scholarlyrepository.miami.edu/cgi/viewcontent.cgi?article=1253&context=oa\_theses)

The term energy security has become an engrained and seemingly unquestioned term within the contemporary political arena since earlier articulation under President Carter. The definition of the term seems to change according to shifting agendas and the socio-political zeitgeist, as evidenced in the previous historical narrative. In the United States energy security has encompassed a plethora of meanings that are the result of divergent understandings of the functioning of political and economic structures, as well as the social or ‘national’ significance of key energy resources, such as oil (Barton et al. 2004). From the consumer standpoint, oil (or in its refined form as gasoline), particularly cheap oil, is not simply the fuel for transportation and production, but also a signifier of the “American Way of Life”, a symbol of American exceptionalism and status within the global community (Huber 2009; Moran and Russell 2009). Traditionally, security has been conceptualized in terms of border protection, as well as the protection and promotion of ideologies and values both domestically and abroad. In reference to Foucault, Dalby alleges that there is a “political impulse to secure” through the invocation of “effective discourses of danger… contained within widely shared geopolitical imaginaries”, which serve to unify identities and justify State action (Dalby 2002: 146). Here it is a national identity contained within the discourse of energy security, and the popular rhetoric of “drill, baby, drill” that manages to **thwart environmental sustainability efforts**, thereby increasing incentives to expand domestic drilling sites. Resources have, historically, been at the heart of many quarrels, whereby certain types of natural resources available only in specific areas, **become essential ingredients for the productive process**. An adequate supply of these resources must be assured, and so the commercial tentacles of the productive unit must expand, until in some instances it draws upon supplies extracted from every corner of the planet. Inasmuch as every productive unit becomes dependent upon its sources of raw materials, every actual or potential denial of access to them represents a threat to the maintenance of that unit and to the well-being of its beneficiaries (Leiss 1994:156-157). Therefore, state security begins to encompass the productive process to ensure access to those resources which have become embedded within the daily functioning of the State’s commercial, social and political activities. The State security apparatus, therefore, must step in to protect and ensure sufficient access to oil as a means of ensuring its own survival and economic wellbeing (Barton et al. 2004; Muller-Kraener 2008; Ciuta 2010). The term security, therefore, “does not refer to an external, objective reality, but establishes a security situation by itself. It is the enunciation of the signifier which constitutes an (in)security condition…organiz[ing] social relations into security relations” for the purpose of protecting State interests (Dalby 2002: 12). The discourse of US energy security operates under the pretense of national security interests to ensure the protection and sufficient flow of key resources. Now whether an actually supply problem or political motives dictate the decision to create another offshore well is often difficult to determine. However, after the terrorist attacks of 9/11 the nationalistic, “Buy American” political sentiment increased drastically, with some gas stations claiming to sell only domestic, or “terrorist-free”, oil, thus creating an incentive to increase domestic 55 production in one of the few remaining spaces for extraction and production: the outer continental shelf (Huber 2009). In a senatorial hearing for the US Committee on Foreign Relations conducted in May 2009, Senator John Kerry concluded that the current US energy schema, which is heavily dependent upon oil, is unsustainable. The main complications include [1] the ‘transfer of American wealth to oil-exporting nations’, as a result of limited domestic supply; [2] a vulnerability to oil price shocks; [3] increased federal expenses created by an obligation of ‘our military to defend our energy supply in volatile regions around the world’; [4] the recent implications of ‘global terror, funded directly by our expenditures on oil; and [5] global climate change which is perpetuated by the burning of fossil fuels (Kerry 2009, May 12). Energy independence, accordingly, is supposed to secure the US from the aforementioned threats by creating a domestic energy supply capable of maintaining the infrastructure dependent upon a constant and cheap supply of energy resources. In addition the perceived threats under Carter’s initial articulation of energy security, Kerry adds the threats of oil-funded terrorism – as a reaction to the terrorist attacks on 9/11, where the known terrorists were citizens of Saudi Arabia, the largest oil producer in the world – and the environmental threat of global climate change. The addition of terrorist free oil to the energy security agenda brings energy security discourse into the present, by identifying a new and tangible threat. Since there had not been a significant energy crisis since the 1970s there seemed to be less urgency surrounding an energy security discourse that promoted energy independence. The establishment of the International Energy Agency by the Organization for Economic Cooperation and Development (OECD), managed to insulate member countries from 56 such a crisis by way of stockpiling oil resources to be used in an emergency and establishing procedures to follow in case there was a shortage in the oil supply. Due to a decrease in the threat posed by a major oil crisis such as that experienced in the 1970s, the position that oil imports constrained and threatened political and economic independence appears to have lost a bit of weight. Following the events of 9/11, however, the impetus to once again protect the nation from the threats posed by imported oil, which now include oil-funded terrorism, was on the table, and energy independence, which includes an expansion of offshore oil drilling, had a new reference point to play on fear and gain consent.

#### Causes global destruction

**Der Derian 98** (James, Professor of Political Science – University of Massachusetts, On Security, Ed. Lipschutz, p. 24-25)

No other concept in international relations packs the metaphysical punch, nor commands the disciplinary power of "security." In its name, peoples have alienated their fears, rights and powers to gods, emperors, and most recently, sovereign states, all to protect themselves from the vicissitudes of nature--as well as from other gods, emperors, and sovereign states. In its name, weapons of mass destruction have been developed which have transfigured national interest into a security dilemma based on a suicide pact. And, less often noted in international relations, in its name billions have been made and millions killed while scientific knowledge has been furthered and intellectual dissent muted. We have inherited an ontotheology of security, that is, an a priori  argument that proves the existence and necessity of only one form of security because there currently happens to be a widespread, metaphysical belief in it. Indeed, within the concept of security lurks the entire history of western metaphysics, which was best described by Derrida "as a series of substitutions of center for center" in a perpetual search for the "transcendental signified." Continues... [7](http://libcat1.cc.emory.edu:32888/20050307122932441313c0=www.ciaonet.org:80/book/lipschutz/lipschutz12.html#note7) In this case, Walt cites IR scholar Robert Keohane on the hazards of "reflectivism," to warn off anyone who by inclination or error might wander into the foreign camp: "As Robert Keohane has noted, until these writers `have delineated . . . a research program and shown . . . that it can illuminate important issues in world politics, they will remain on the margins of the field.' " [8](http://libcat1.cc.emory.edu:32888/20050307122932441313c0=www.ciaonet.org:80/book/lipschutz/lipschutz12.html" \l "note8) By the end of the essay, one is left with the suspicion that the rapid changes in world politics have triggered a "security crisis" in security studies that requires extensive theoretical damage control. What if we leave the desire for mastery to the insecure and instead imagine a new dialogue of security, not in the pursuit of a utopian end but in recognition of the world as it is, other than us ? What might such a dialogue sound like? Any attempt at an answer requires a genealogy: to understand the discursive power of the concept, to remember its forgotten meanings, to assess its economy of use in the present, to reinterpret--and possibly construct through the reinterpretation--a late modern security comfortable with a plurality of centers, multiple meanings, and fluid identities. The steps I take here in this direction are tentative and preliminary. I first undertake a brief history of the concept itself. Second, I present the "originary" form of security that has so dominated our conception of international relations, the Hobbesian episteme of realism. Third, I consider the impact of two major challenges to the Hobbesian episteme, that of Marx and Nietzsche. And finally, I suggest that Baudrillard provides the best, if most nullifying, analysis of security in late modernity. In short, I retell the story of realism as an historic encounter of fear and danger with power and order that produced four realist forms of security: epistemic, social, interpretive, and hyperreal. To preempt a predictable criticism, I wish to make it clear that I am not in search of an "alternative security." An easy defense is to invoke Heidegger, who declared that "questioning is the piety of thought." Foucault, however, gives the more powerful reason for a genealogy of security: I am not looking for an alternative; you can't find the solution of a problem in the solution of another problem raised at another moment by other people. You see, what I want to do is not the history of solutions, and that's the reason why I don't accept the word alternative. My point is not that everything is bad, but that everything is dangerous, then we always have something to do. The hope is that in the interpretation of the most pressing dangers of late modernity we might be able to construct a form of security based on the appreciation and articulation rather than the normalization or extirpation of difference. Nietzsche transvalues both Hobbes's and Marx's interpretations of security through a genealogy of modes of being. His method is not to uncover some deep meaning or value for security, but to destabilize the intolerable fictional identities of the past which have been created out of fear, and to affirm the creative differences which might yield new values for the future. Originating in the paradoxical relationship of a contingent life and a certain death, the history of security reads for Nietzsche as an abnegation, a resentment and, finally, a transcendence of this paradox. In brief, the history is one of individuals seeking an impossible security from the most radical "other" of life, the terror of death which, once generalized and nationalized, triggers a futile cycle of collective identities seeking security from alien others--who are seeking similarly impossible guarantees. It is a story of differences taking on the otherness of death, and identities calcifying into a fearful sameness.

#### The alternative is to reject dominant security discourse – no one policy solves every problem – good theory now drives better policies later

Bruce 96 (Robert, Associate Professor in Social Science – Curtin University and Graeme Cheeseman, Senior Lecturer – University of New South Wales, Discourses of Danger and Dread Frontiers, p. 5-9)

This goal is pursued in ways which are still unconventional in the intellectual milieu of international relations in Australia, even though they are gaining influence worldwide as traditional modes of theory and practice are rendered inadequate by global trends that defy comprehension, let alone policy. The inability to give meaning to global changes reflects partly the enclosed, elitist world of professional security analysts and bureaucratic experts, where entry is gained by learning and accepting to speak a particular, exclusionary language. The contributors to this book are familiar with the discourse, but accord no privileged place to its ‘knowledge form as reality’ in debates on defence and security. Indeed, they believe that debate will be furthered only through a long overdue critical re-evaluation of elite perspectives. Pluralistic, democratically-oriented perspectives on Australia’s identity are both required and essential if Australia’s thinking on defence and security is to be invigorated. This is not a conventional policy book; nor should it be, in the sense of offering policy-makers and their academic counterparts sets of neat alternative solutions, in familiar language and format, to problems they pose. This expectation is in itself a considerable part of the problem to be analysed. It is, however, a book about policy, one that questions how problems are framed by policy-makers. It challenges the proposition that irreducible bodies of real knowledge on defence and security exist independently of their ‘context in the world’, and it demonstrates how security policy is articulated authoritatively by the elite keepers of that knowledge, experts trained to recognize enduring, universal wisdom. All others, from this perspective, must accept such wisdom or remain outside the expert domain, tainted by their inability to comply with the ‘rightness’ of the official line. But it is precisely the official line, or at least its image of the world, that needs to be problematised. If the critic responds directly to the demand for policy alternatives, without addressing this image, he or she is tacitly endorsing it. Before engaging in the policy debate the critics need to reframe the basic terms of reference. This book, then, reflects and underlines the importance of Antonio Gramsci and Edward Said’s ‘critical intellectuals’.15 The demand, tacit or otherwise, that the policy-maker’s frame of reference be accepted as the only basis for discussion and analysis ignores a three thousand year old tradition commonly associated with Socrates and purportedly integral to the Western tradition of democratic dialogue. More immediately, it ignores post-seventeenth century democratic traditions which insist that a good society must have within it some way of critically assessing its knowledge and the decisions based upon that knowledge which impact upon citizens of such a society. This is a tradition with a slightly different connotation in contemporary liberal democracies which, during the Cold War, were proclaimed different and superior to the totalitarian enemy precisely because there were institutional checks and balances upon power. In short, one of the major differences between ‘open societies’ and their (closed) counterparts behind the Iron Curtain was that the former encouraged the critical testing of the knowledge and decisions of the powerful and assessing them against liberal democratic principles. The latter tolerated criticism only on rare and limited occasions. For some, this represented the triumph of rational-scientific methods of inquiry and techniques of falsification. For others, especially since positivism and rationalism have lost much of their allure, it meant that for society to become open and liberal, sectors of the population must be independent of the state and free to question its knowledge and power. Though we do not expect this position to be accepted by every reader, contributors to this book believe that critical dialogue is long overdue in Australia and needs to be listened to. For all its liberal democratic trappings, Australia’s security community continues to invoke closed monological narratives on defence and security. This book also questions the distinctions between policy practice and academic theory that inform conventional accounts of Australian security. One of its major concerns, particularly in chapters 1 and 2, is to illustrate how theory is integral to the practice of security analysis and policy prescription. The book also calls on policy-makers, academics and students of defence and security to think critically about what they are reading, writing and saying; to begin to ask, of their work and study, difficult and searching questions raised in other disciplines; to recognise, no matter how uncomfortable it feels, that what is involved in theory and practice is not the ability to identify a replacement for failed models, but a realisation that terms and concepts – state sovereignty, balance of power, security, and so on – are contested and problematic, and that the world is indeterminate, always becoming what is written about it. Critical analysis which shows how particular kinds of theoretical presumptions can effectively exclude vital areas of political life from analysis has direct practical implications for policy-makers, academics and citizens who face the daunting task of steering Australia through some potentially choppy international waters over the next few years. There is also much of interest in the chapters for those struggling to give meaning to a world where so much that has long been taken for granted now demands imaginative, incisive reappraisal. The contributors, too, have struggled to find meaning, often despairing at the terrible human costs of international violence. This is why readers will find no single, fully formed panacea for the world’s ills in general, or Australia’s security in particular. There are none. Every chapter, however, in its own way, offers something more than is found in orthodox literature, often by exposing ritualistic Cold War defence and security mind-sets that are dressed up as new thinking. Chapters 7 and 9, for example, present alternative ways of engaging in security and defence practice. Others (chapters 3, 4, 5, 6 and 8) seek to alert policy-makers, academics and students to alternative theoretical possibilities which might better serve an Australian community pursuing security and prosperity in an uncertain world. All chapters confront the policy community and its counterparts in the academy with a deep awareness of the intellectual and material constraints imposed by dominant traditions of realism, but they avoid dismissive and exclusionary terms which often in the past characterized exchanges between policy-makers and their critics. This is because, as noted earlier, attention needs to be paid to the words and the thought processes of those being criticized. A close reading of this kind draws attention to underlying assumptions, showing they need to be recognized and questioned. A sense of doubt (in place of confident certainty) is a necessary prelude to a genuine search for alternative policies. First comes an awareness of the need for new perspectives, then specific policies may follow. As Jim George argues in the following chapter, we need to look not so much at contending policies as they are made for us but at challenging ‘the discursive process which gives [favoured interpretations of “reality”] their meaning and which direct [Australia’s] policy/analytical/military responses’. This process is not restricted to the small, official defence and security establishment huddled around the US-Australian War Memorial in Canberra. It also encompasses much of Australia’s academic defence and security community located primarily though not exclusively within the Australian National University and the University College of the University of New South Wales. These discursive processes are examined in detail in subsequent chapters as authors attempt to make sense of a politics of exclusion and closure which exercises disciplinary power over Australia’s security community. They also question the discourse of ‘regional security’, ‘security cooperation’, ‘peacekeeping’ and ‘alliance politics’ that are central to Australia’s official and academic security agenda in the 1990s. This is seen as an important task especially when, as is revealed, the disciplines of International Relations and Strategic Studies are under challenge from critical and theoretical debates ranging across the social sciences and humanities; debates that are nowhere to be found in Australian defence and security studies. The chapters graphically illustrate how Australia’s public policies on defence and security are informed, underpinned and legitimised by a narrowly-based intellectual enterprise which draws strength from contested concepts of realism and liberalism, which in turn seek legitimacy through policy-making processes. Contributors ask whether Australia’s policy-makers and their academic advisors are unaware of broader intellectual debates, or resistant to them, or choose not to understand them, and why?

### 1NC

#### DOE will block natural gas exports – increased demand means exports hurt “public interest”

Ebinger et al 12 (Charles, Senior Fellow and Director of the Energy Security Initiative – Brookings, Kevin Massy, Assistant Director of the Energy Security Initiative – Brookings, and Govinda Avasarala, Senior Research Assistant in the Energy Security Initiative – Brookings, “Liquid Markets: Assessing the Case for U.S. Exports of Liquefied Natural Gas,” Brookings Institution, Policy Brief 12-01, http://www.brookings.edu/~/media/research/files/reports/2012/5/02%20lng%20exports%20ebinger/0502\_lng\_exports\_ebinger.pdf)

From the perspective of the U.S. federal government, the issue of implications is viewed in terms of “public interest.” Under existing legislation, exports of natural gas to countries with a free trade agreement (FTA) with the United States are, by law, deemed to be in the public interest and authorization is required to be given without modification or delay. Projects looking for authorization to export LNG to countries without an FTA, which account for roughly 96 percent of current global LNG demand, are required to be approved by the Secretary of Energy unless, after public hearing, the Department of Energy finds that such exports are not in the public interest. 80 Although the legal definition of “public interest” is not explicitly given in existing legislation, according to public statements by officials from the Department of Energy, “public interest” includes:

• Adequate domestic natural gas supply;

• Domestic demand for natural gas proposed for export; Economic impacts of exports (on GDP, consumers, and industry); • U.S. energy security; • Job creation; • U.S. balance of trade; • International considerations; • Environmental considerations; • Consistency with DoE’s policy of promoting market competition through free negotiation of trade 81 The first two of these criteria were addressed in Part I. The remainder focus on the various domestic and international implications of U.S. LNG exports. domestic implications The domestic implications of U.S. LNG exports include their impact on natural gas prices, natural gas price volatility, jobs and competitiveness, and on overall energy security. Price of domestic natural Gas The domestic price impact of natural gas exports will be a significant factor in determining whether or not the United States should export LNG. While it is generally acknowledged that a domestic price increase will result from largescale LNG exports, the size of the price increase is the subject of debate, with a number of studies suggesting a range of possible outcomes. The important considerations when analyzing the results and conclusions of the various existing studies are the assumptions and models that are used when making price forecasts. Below are the results and methodologies of five major pricing studies done by the EIA and three consultancies: Deloitte, ICF International, and Navigant Consulting, which published two studies. 2012 Energy information Administration study In January 2012, the EIA published a study entitled “Effect of Increased Natural Gas Exports on Domestic Energy Markets.” 82 The study, conducted at the request of the Office of Fossil Energy of the Department of Energy, analyzed four different export scenarios across four different resource base or economic assumptions to project price responses to LNG exports. In addition to a “baseline” scenario, where no LNG is exported, the EIA model considered four different export scenarios: • A low export/slow growth scenario, where 6 bcf/day of LNG is exported, phased in at a rate of 1 bcf/day per year; • A low export/rapid growth scenario, where 6 bcf/day of LNG is exported, phased in at a rate of 3 bcf/day per year; • A high export/slow growth scenario, where 12 bcf/day of LNG is exported, phased in at a rate of 1 bcf/day per year; • A high export/rapid growth scenario, where 12 bcf/day of LNG is exported, phased in at a rate of 3 bcf/day per year Given the uncertainty over the actual size of the shale gas resource base and the future growth of the U.S. economy, each of these scenarios (both “baseline” and export) were applied to four alternate background cases: • A reference case, based on the EIA’s 2011 Annual Energy Outlook; • A low-shale estimated ultimate recovery (EUR) case, in which shale gas production from new, undrilled wells is 50 percent below the reference case scenario; • A high-shale EUR case, in which shale gas production from new, undrilled wells is 50 percent higher than the reference case; • A high economic growth case, in which U.S. GDP grows at 3.2 percent as opposed to the 2.7 percent assumed in the reference case. Given the range of assumptions, the range of results was unsurprisingly wide. The results range from a 9.6 percent increase (from $3.56 to $3.90/ mcf) in domestic natural gas prices in 2025 due to exports (in the case of high shale gas recovery, low export volumes and a slow rate of export growth) to a 32.5 percent increase (in the case of low shale gas recovery, high export volumes and a high rate of export growth). The percentage premium for domestic natural gas prices in 2025 for each scenario relative to the baseline scenario price estimate is detailed in table 3. In addition to the price premium for exporting natural gas that exists in each case, the EIA study projected a short-term spike in natural gas prices as a result of LNG exports. As figure 7 below illustrates, in 2015, the first year that LNG exports occur, domestic natural gas prices rise rapidly until total export capacity is reached. In the “lowrapid” scenario prices peak in 2016, after the 6 bcf/day of export capacity is built over 2 years; in the “high-slow” scenario, natural gas prices peak in 2026, after the 12 bcf/day of export capacity is built over 12 years. The immediate jump in price becomes more pronounced in the scenarios where LNG export capacity increases quickly. In the “low-rapid” scenario, the price of natural gas peaks at nearly 18 percent above the baseline case; in the “high-rapid” scenario, natural gas prices peak at 36 percent above the baseline case. This price impact is exacerbated in the Low Shale EUR and High Macroeconomic Growth cases, as LNG exports further tighten domestic natural gas markets. In the most extreme example, the high-rapid scenario for exports in a Low Shale EUR case, the price for natural gas peaks at more than 50 percent than the baseline case. 83 There are two factors that should be considered when interpreting the results of this price impact study. The first is the assumption regarding the rate at which LNG could be exported. The results of EIA’s analysis represent an extreme scenario for LNG exports. In the existing LNG market, it is particularly unlikely that either the “low-rapid” or the “high-rapid” scenarios would materialize. The former assumption stipulates that the United States would export 6 bcf/day of LNG by 2016. Given that, at the time of writing, only one facility has been approved to export 2.2 bcf/day to nonFTA countries starting in 2015, it is unlikely that another three plants would be approved and built in such a short time frame. 84 The latter scenario, that the United States would be exporting 12 bcf/ day of LNG by 2018, suggests that in the next several years, the United States would grow from exporting negligible volumes of LNG to having roughly one-third of the global LNG export capacity. Not only would this supply growth outpace growth in global LNG demand, but this capacity addition would also have to compete with roughly 11 bcf/day of Australian-origin LNG that is expected to hit the market around the same time. 85 The second issue is the model’s assumptions for incremental investment in natural gas production as a result of increased export capacity. The spike in price depicted in figure 7 occurs because investment from gas producers lags additional demand. In the model, producers respond to, rather than anticipate, additional demand. For this reason, prices peak once the export capacity is filled, before steadily decreasing. In reality, the expectation of future demand would likely induce gas producers to invest in additional production before incremental demand occurs. As a result, the increase in prices would likely begin earlier and peak at a lower level than suggested by the model. deloitte study An earlier study released in November 2011 from the Deloitte Center for Energy Solutions highlighted the producer-response in its model. In addition to finding that LNG exports would produce a smaller increase in gas prices than the EIA report suggests, the Deloitte study points out that “producers can develop more reserves in anticipation of demand growth, such as LNG exports. There will be ample notice and time in advance of the exports to make supplies available.” 86 Using a dynamic model, in which production increased in anticipation of new demand, the Deloitte study found that 6 bcf/day of exports of LNG would result in, on average, a 1.7 percent increase (from $7.09 to $7.21/MMBtu) in the price of natural gas between 2016 and 2035. Further, the Deloitte study noted that there would be regional variations to the increase in natural gas prices resulting from LNG exports. As most of the proposed liquefaction terminals are expected to be on the Gulf Coast, the price of Henry Hub gas, which is the key benchmark for natural gas from the Gulf Coast, will increase by $0.22/ MMBtu by 2035 as a result of U.S. LNG exports. This is more than double the price increase projected in regions further away from the LNG export terminals. In New York and Illinois, natural gas prices are projected to increase by less than $0.10/MMBtu. This is particularly important in the Northeast, which historically experiences some of the highest natural gas prices in the country, but will benefit from the development and consumption of natural gas from the nearby Marcellus shale play. other studies Three other studies of note have analyzed the price impacts of U.S. LNG exports. In August 2010, Navigant Consulting found that 2 bcf/day of LNG exports would cause a price increase of between 7 and 7.9 percent from 2015 to 2035 relative to a scenario with no gas exports. ICF International found in August 2011 that 6 bcf/day of exports would result in an 11 percent ($0.64/MMBtu) increase in natural gas prices over the same period. 87 More recently, Navigant released another study that analyzed the impact of two separate export scenarios. The first scenario modeled the impact of 3.6 bcf/day of LNG exports from three terminals in North America: Sabine Pass in Louisiana, Kitimat in British Columbia, and Coos Bay in Oregon. The second scenario modeled the impact of 6.6 bcf/day of LNG exports from the three aforementioned export projects and 2 bcf/day of added exports from the Gulf Coast and 1 bcf/day from Maryland. 88 This Navigant study found that 6.6 bcf/day of LNG exports would result in a 6 percent ($0.35/MMBtu) increase in natural gas prices from 2015 to 2035. As with the EIA and Deloitte studies, the results of both Navigant and ICF’s studies must be analyzed in the context of their respective methodologies and assumptions. Navigant’s first study uses a more static supply model, which, unlike dynamic supply models, does not fully take account of the effect that higher prices have on spurring additional production. As a result, it takes a conservative estimate of supply growth potential. The report acknowledges that the price outcomes modeled in its analysis “establish the upper range of impacts that exports […] might have on natural gas prices.” 89 This study also did not factor in the reemergence of the industrial sector as a major consumer of natural gas following the shale gas “revolution.” The study assumes that natural gas consumption by the industrial sector will decline by 0.3% per year to 2035. By contrast, the EIA model assumes that industrial sector demand will increase by roughly 1% per year over the same period. 90 The ICF study factors in various levels of production response from an increase in price. Under its 6 bcf/day export scenario, the price impact ranges from a $0.52/ MMBtu increase in a more responsive drilling activity scenario to a $0.75/MMBtu increase in a less responsive drilling activity scenario. which study is right? Given that these studies forecast natural gas prices two decades into the future, it is difficult to determine which study is most accurate. (table 4 shows a comparison of the price impact forecasts of the various models.) However, policymakers would benefit from having a better understanding of the results that are generated from each report. This includes choosing the most relevant results from each report. For instance, following the release of the EIA study, many commentators were quick to highlight that natural gas prices could increase by more than 50 percent as a result of LNG exports. However, this ignored the assumptions behind this number: it was based on the price of natural gas in one year under the most extreme assumptions of exports and domestic resource base. A more comprehensive analysis should include an assessment of the average price impact from 2015 to 2035. When distinguishing between the various studies, policymakers should identify which assumptions most resemble the existing natural gas market and its likely direction, and which models are most reflective of the complex nature of domestic and global natural gas trade. Assuming realistic volumes of natural gas exports as well as a reasonable supply response by natural gas producers are important considerations. It is important to note that the supply curves in the various studies reflect different interpretations of the economics of marginal production. The Power sector and industrial sector Part I indicated that the power-generation and industrial sectors would account for most of the demand for newly available natural gas resources. As shown above, LNG exports are likely to increase domestic prices of natural gas, suggesting negative consequences for these two competing sectors. In their analyses, both Deloitte and EIA found that the majority—63 percent, according to both studies—of the exported natural gas will come from new production as opposed to displaced consumption from other sectors. By contrast, between 17 and 38 percent of supply of natural gas for export would be met by reduced demand, as higher prices pushes some domestic consumers to use less gas. In the power generation and industrial sectors, the price impacts of LNG exports are likely to have modest impacts. In the power sector, natural gas has historically been used as a back up to coal and nuclear base-load generation. For such gas used at the margin, the increase in electricity prices as a result of LNG exports would be limited by its competitiveness relative to other fuels: as soon as it becomes more expensive than the alternative for back up generation, power producers will substitute away from gas. 91 According to ICF International, a $0.64/MMBtu increase in the price of natural gas would result in an electricity price increase of between $1.66 and $4.97/megawatt-hour (MWh), depending on how often gas is used as the marginal fuel for electricity. Deloitte estimates that the price increase of electricity would not be more than $1.65/MWh. 92 EIA estimates that electricity price impacts will be marginal as well (between $1.40/MWh and $2.90/MWh) except in the “highrapid” export scenario. 93 The EIA Annual Energy Outlook 2011 estimates that, without exporting LNG, the average price of electricity (across all fuels) in 2035 will be $92/MWh. 94 In the longer term, natural gas is itself likely to be used for more base-load generation. The rapid increase in shale gas production, coupled with the retirements of as much as 50 gigawatts (GW) of coal-fired electricity due to plant age or inability to adhere to possibly forthcoming EPA regulations is likely to increase the demand for natural gas in the power sector. According to some analysts, the near-term demand caused by the retirements of the oldest and least efficient coal-fired power plants could result in an additional natural gas demand of 2 bcf/day. 95 Given the lack of environmentally and economically viable alternatives, a moderate increase in gas prices is unlikely to result in a large move away from natural gas, although increased costs will be transferred to customers. Natural gas consumption in the power sector has been considered economic at prices much higher than those resulting from LNG exports in even the highest price-impact projections. Even prior to the shale gas “revolution,” when natural gas prices were high, natural gas demand was increasing in the power sector. The EIA Annual Energy Outlook 2005— published in a year when average well head prices were over $7/MMBTU—projected that natural gas demand in the electricity sector would increase by 70 percent between 2003 and 2015. 96 Unlike the power sector, which continued to build natural-gas fired generation during a period of increasing gas prices, the industrial sector was negatively affected by growing natural gas import dependence, high gas prices, and gas price volatility. Between 2000 and 2005, the price of natural gas increased by 99 percent and LNG imports more than doubled. 97 By 2005, the ratio of the price of oil to the price of natural gas was approximately 6:1, just below the 7:1 oil-to-gas price ratio at which U.S. petrochemical and plastics producers are globally competitive. 98 That same year Alan Greenspan, then-Chairman of the Federal Reserve, noted that because of natural gas price increases “the North American gas-using industry [was] in a weakened competitive position.” 99 Since then the price of natural gas has collapsed. In 2011, the oil-to-natural gas price ratio was more than 24:1. In 2012 it has been even higher. The decline in natural gas prices has galvanized the industrial sector. A joint study by PwC and the National Association for Manufacturers, an industry trade group, found that the development of shale gas could save manufacturers as much as $11.6 billion per year in feedstock costs through 2025. 100 New investments in petrochemical and plastics producing facilities are occurring throughout the East and Southeast, largely predicated on the availability of inexpensive natural gas. Opponents of LNG exports contend that such investments would be deterred in the future as a result of increases in the price of natural gas. However, the evidence suggests that the competitive advantage of U.S. industrial producers relative to its competitors in Western Europe and Asia is not likely to be affected significantly by the projected increase in natural gas prices resulting from LNG exports. As European and many Asian petrochemical producers use oil-based products such as naphtha and fuel oil as feedstock, U.S. companies are more likely to enjoy a significant cost advantage over their overseas competitors. Even a one-third decline in the estimated price of crude oil in 2035 would result in an oil-to-gas ratio of 14:1. 101 There is also the potential for increased exports to help industrial consumers. Ethane, a liquid byproduct of natural gas production at several U.S. gas plays, is the primary feedstock of ethylene, a petrochemical product used to create a wide variety of products. According to a study by the American Chemistry Council, an industry trade body, a 25 percent increase in ethane production would yield a $32.8 billion increase in U.S. chemical production. By providing another market for cheap dry gas, LNG exports will encourage additional production of natural gas liquids (NGL) that are produced in association with dry gas. According to the EIA, ethane production increased by nearly 30 percent between 2009 and 2011 as natural gas production from shale started to grow substantially. Ethane production is now at an alltime high, with more than one million barrels per day of ethane being produced. 102 Increased gas production for exports results in increased production of such natural gas liquids, in which case exports can be seen as providing a benefit to the petrochemical industry. natural gas price volatility A major concern among domestic end users of natural gas is the possibility of an increase in natural gas price volatility resulting from an increase in U.S. LNG exports. As figure 8 demonstrates, the price volatility experienced during the 2000s was the highest the domestic gas market has experienced in the past three decades. The volatility of the natural gas market in the 2000s was largely caused by a tight supply-demand balance. Natural gas demand increased substantially as the U.S. economy grew and natural gas was viewed as environmentally preferable to coal for power generation. This increase in demand coincided with a reduction in domestic supply and an increased reliance on imports. The recent surge in U.S. natural gas production has resulted in less market volatility since 2010. According to EIA, the standard deviation of the price of natural gas (a general statistical indicator of volatility) between 2010 and 2011 was one-third what it was during the 2000s. 103 Potential exports of U.S. LNG concerns some domestic consumers for two principal reasons: greater volatility in domestic natural gas prices; and exposure of domestic natural gas prices to higher international prices resulting in a convergence between low U.S. prices and high international prices. There is an insufficient amount of data and quantitative research on the relationship between do mestic natural gas price volatility and LNG exports. However, certain characteristics of the LNG market are likely to limit volatility. LNG is bound by technical constraints: it must be liquefied and then transported on dedicated tankers before arriving at terminals where a regasification facility must be installed. Liquefaction facilities have capacity limits to how much gas they can turn into LNG. If they are operating at or close-to full capacity, such facilities will have a relatively constant demand for natural gas, therefore an international price or supply shock would have little impact on domestic gas prices. Moreover, unlike oil trading, in which an exporter—theoretically—sells each marginal barrel of production to the highest bidder in the global market, the capacity limit on LNG production and export means that LNG exporters have an infrastructure-limited demand for natural gas leaving the rest of the natural gas for domestic consumption. As most LNG infrastructure facilities are built on a project finance basis and underpinned by long-term contracts, this demand can be anticipated by the market years in advance, reducing the likelihood of volatility. The macroeconomy and jobs The macroeconomic and job implications of LNG exports depend on two principal factors: the gains from trade from exploiting pricing differentials and inefficiencies of the global market; and the employment implications of those gains, higher domestic natural gas prices, and greater domestic natural gas production. The Department of Energy has commissioned a study on both the macroeconomic and employment implications of U.S. LNG exports, which will be released later this year. This study will provide a qualitative assessment of the implications of LNG exports to the U.S. economy and employment. LNG exports are likely to be a net benefit to the U.S. economy, although probably not a significant contributor in terms of total U.S. GDP. Exports of U.S. natural gas will take advantage of the benefits of the existing producer’s surplus resulting from the pricing differentials between the natural gas markets in the United States, Europe, and Asia. Contractual terms will determine how this surplus is shared between U.S. sellers and foreign buyers. 104 The benefit of this trade will likely outweigh the cost to domestic consumers of the increase in the price of natural gas as most of the natural gas demanded by exports will come from new natural gas production as opposed to displacing existing production from domestic consumers. On the other hand, LNG exports from the United States are likely to put marginal upward pressure on the relative value of the U.S. dollar. In March 2012, Citigroup released a report on North American hydrocarbon production that included a model of the macroeconomic impact of U.S. oil and gas exports. The Citi analysis found that oil and gas exports would cause a nearly two percent decline in the current account deficit by 2020, but that the exchange rate implications would be modest. By 2020, the U.S. dollar would appreciate by between 1.6 and 5.4 percent. 105 The implications of LNG exports on job creation are similarly difficult to quantify. Other than temporary construction jobs created by the need to build liquefaction capacity, pipelines, and other ancillary infrastructure, the operation of the liquefaction facility will likely provide little permanent employment benefit. As outlined in the section on price impacts above, as much of the gas for export will come from new production, rather than the displacement of consumption in other sectors, the negative economic, and therefore jobrelated, effects on those sectors is likely to be limited. Beyond the labor required for additional gas production to satisfy LNG exports, the net impact of LNG exports is likely to be minimal. Further upstream, the job potential may be greater. By increasing domestic natural gas production, employment from additional oil and gas producers will increase, as will the demand for manufacturers of equipment for oil and gas production, gathering, and transportation. domestic energy security Aside from the price impact of potential U.S. LNG exports, a major concern among opponents is that such exports would diminish U.S. “energy security”; that exports would deny the United States of a strategically important resource. The extent to which such concerns are **valid** depends on several factors, including the size of the domestic resource base, and the liquidity and functionality of global trade. As Part I of this report notes, geological evidence suggests that the volumes of LNG export under consideration would not materially affect the availability of natural gas for the domestic market. Twenty years of LNG exports at the rate of 6 bcf/day, phased in over the course of 6 years, would increase demand by approximately 38 tcf. As presented in Part I, four existing estimates of total technically recoverable shale gas resources range from 687 tcf to 1,842 tcf; therefore, exporting 6 bcf/day of LNG over the course of twenty years would consume between 2 and 5.5 percent of total shale gas resources. While the estimates for **shale gas reserves are uncertain**, in a scenario where reserves are perceived to be lower than expected, domestic natural gas prices would increase and exports would almost immediately become uneconomic. In the long-term, it is possible that U.S. prices and international prices will converge to the point at which they settle at similar levels. In that case, the United States would have more than adequate import capacity (through bi-directional import/export facilities) to import gas when economic. A further gas-related consideration with regard to energy security is the effects of increased production of associated natural gas with the increasing volumes of U.S. unconventional oil. As the primary energy-security concern for the United States related to oil, the application of fracking and horizontal drilling in oil production is reducing U.S. oil import dependence, while simultaneously producing substantial volumes of natural gas, which, given the relative economics of oil and gas, is effectively delivered at zero (or, in the case of producers who have to invest in equipment to manage flaring and venting, negative) cost. To the extent that associated gas from unconventional oil production is used for LNG export, it can be seen as a consequence of—rather than a threat to—increased U.S. energy security. international implications The international implications of LNG exports from the United States can be divided into pricing, geopolitics, and environment. international Pricing As discussed in Part I, the global LNG market is informally separated into three markets: North America, the Atlantic Basin (mostly Europe), and the Pacific Basin (including Japan, South Korea, Taiwan, China, and India). These markets are separated because of important technical differences that impact the pricing structure for LNG in each market. The North American natural gas market is competitive and prices are traded in a transparent and open market. The Atlantic Basin is dominated by European LNG consumers such as the United Kingdom, Spain, France, and Italy, and is a hybrid of a competitive U.K. market that was liberalized in the mid-1990s and a Continental European market that is dominated by oil-linked, take-or-pay contracts. In recent years, the U.K. hub, the National Balancing Point (NBP), has traded at a premium to the U.S. hub, the Henry Hub. The Pacific Basin is a more rigid market that depends heavily on oilindexed contracts that are more expensive than those used in the Atlantic Basin. While they have no central trading hub, the Pacific Basin consumers such as Japan and South Korea (which is implementing its recently-signed free-trade agreement with the United States) currently import LNG based on a pricing formula known informally as the Japan Crude Cocktail, the average price of custom-cleared oil imports into Tokyo. Many Pacific Basin contracts have a built-in price floor and price ceiling depending on the price of oil. 106 Without exporting any natural gas, the U.S. shale gas “revolution” has already had a positive impact on the liquidity of global LNG markets. Many LNG cargoes that were previously destined for gas-thirsty U.S. markets were diverted and served spot demand in both the Atlantic and Pacific Basins. The increased availability of LNG cargoes has helped create a looser LNG market for other consumers (see figure 9). This in turn has helped apply downward pressure to the terms of oillinked contracts resulting in the renegotiation of some contracts, particularly in Europe. Increased availability of LNG cargoes also accelerated a recent trend of increasing reliance of consumers on spot LNG markets. In 2010 short-term and spot contracts represented 19 percent of the total LNG market, up from only a fraction one decade earlier. 107 In this case, increasing demand for spot cargoes indicates that consumers are taking advantage of spot prices that are lower than oilindexed rates. LNG exports will help to sustain market liquidity in what looks to be an increasingly tight LNG market beyond 2015 (see figure 10). Should LNG exports from the United States continue to be permitted, they will add to roughly 10 bcf/day of LNG that is expected to emerge from Australia between 2015 and 2020. Nevertheless, given the projected growth in demand for natural gas in China and India and assuming that some of Japan’s nuclear capacity remains offline, demand for natural gas will outpace the incremental supply. This makes U.S. LNG even more valuable on the international market. Although it will be important to global LNG markets, it is unlikely that the emergence of the United States as an exporter of LNG will change the existing pricing structure overnight. Not only is the market still largely dependent on long-term contracts, the overwhelming majority of new liquefaction capacity emerging in the next decade (largely from Australia) has already been contracted for at oil-indexed rates. 108 The incremental LNG volumes supplied by the United States at floating Henry Hub rates will be small in comparison. But while U.S. LNG will not have a transformational impact, by establishing an alternate lower price for LNG derived through a different market mechanism, U.S. exports may be central in catalyzing future changes in LNG contract structure. As previously mentioned, this impact is already be ing felt in Europe. A number of German utilities have either renegotiated contracts or are seeking arbitration with natural gas suppliers in Norway and Russia. The Atlantic Basin will be a more immediate beneficiary of U.S. LNG exports than the Pacific Basin as many European contracts allow for periodic revisions to the oil-price linkage. 109 In the Pacific Basin this contractual arrangement is not as common and most consumers are tied to their respective oil-linkage formulae for the duration of the contract. 110 Despite the increasing demand following the Fukushima nuclear accident, however, Japanese LNG consumers are actively pursuing new arrangements for LNG contracts. 111 There are other limits to the extent of the impact that U.S. LNG will have on global markets. It is unlikely that many of the LNG export facilities under consideration will reach final investment decision. Instead, it is more probable that U.S. natural gas prices will have rebounded sufficiently to the point that exports are not commercially viable beyond a certain threshold. (figure 11 illustrates the estimated costs of delivering LNG to Japan in 2020.) This threshold, expected by many experts to be roughly 6 bcf/day by 2025, is modest in comparison to the roughly 11 bcf/day of Australian LNG export projects that have reached final investment decision and are expected to be online by 2020. Also, the impact of U.S. LNG exports could be limited by a number of external factors that will have a larger bearing on the future of global LNG prices. For instance, a decision by the Japanese government to phase-out nuclear power would significantly tighten global LNG markets and probably displace any benefit provided by U.S. LNG exports. Conversely, successful and rapid development of China’s shale gas reserves would limit the demand of one of the world’s fastest-growing natural gas consumers. However, to the extent that U.S. LNG exports can help bring about a more globalized pricing structure, they will have economic and geopolitical consequences. Geopolitics A large increase in U.S. LNG exports would have the potential to increase U.S. foreign policy interests in both the Atlantic and Pacific basins. Unlike oil, natural gas has traditionally been an infrastructure-constrained business, giving geographical proximity and political relations between producers and consumers a high level of importance. Issues of “pipeline politics” have been most directly visible in Europe, which relies on Russia for around a third of its gas. Previous disputes between Moscow and Ukraine over pricing have led to major gas shortages in several E.U. countries in the winters (when demand is highest) of both 2006 and 2009. Further disagreements between Moscow and Kiev over the terms of the existing bilateral gas deal have the potential to escalate again, with negative consequences for E.U. consumers. The risk of high reliance on Russian gas has been a principal driver of European energy policy in recent decades. Among central and eastern European states, particularly those formerly aligned with the Soviet Union such as Poland, Hungary, and the Czech Republic, the issue of reliance on imports of Russian gas is a primary energy security concern and has inspired energy policies aimed at diversification of fuel sources for power generation. From the U.S. perspective such Russian influence in the affairs of these democratic nations is an impediment to efforts at political and economic reform. The market power of Gazprom, Russia’s state-owned gas monopoly, is evident in these countries. Although they are closer to Russia than other consumers of Russian gas in Western Europe, many countries in Eastern and Central Europe pay higher contract prices for their imports, as they are more reliant on Russian gas as a proportion of their energy mixes. In the larger economies of Western Europe, which consume most of Russia’s exports, there are efforts to diversify their supply of natural gas. The E.U. has formally acknowledged the need to put in place mechanisms to increase supply diversity. These include market liberalization approaches such as rules mandating third-party access to pipeline infrastructure (from which Gazprom is demanding exemption), and commitments to complete a single market for electricity and gas by 2014, and to ensure that no member country is isolated from electricity and gas grids by 2015. 112 Despite these formal efforts, there are several factors retarding the E.U.’s push for a unified effort to reduce dependence on Russian gas. National interest has been given a higher priority than collective, coordinated E.U. energy policy: the gas cutoffs in 2006 and 2009 probably contributed to the acceptance of the Nord Stream project, which carries gas from Russia into Germany. Germany’s decision to phase out its fleet of nuclear reactors by 2022 will result in far higher reliance on natural gas for the E.U.’s biggest economy. The environmental imperative to reduce carbon emissions—codified in the E.U.’s goal of essentially decarbonizing its power sector by the middle of century—mean that natural gas is being viewed by many as the short-to medium fuel of choice in power generation. Finally, the prospects for European countries to replicate the unconventional gas “revolution” that has resulted in a glut of natural gas in the United States look uncertain. Several countries, including France and the U.K., have encountered stiff public opposition to the techniques used in unconventional gas production, while those countries, such as Poland and Hungary, that have moved ahead with unconventional-gas exploration have generally seen disappointing early results. Collectively, these factors suggest that the prospects for reduced European reliance on Russian gas appear dim. The one factor that has been working to the advantage of advocates of greater European gas diversity has been the increased liquidity of the global LNG market, discussed above. Russia’s dominant position in the European gas market is being eroded by the increased availability of LNG. Qatar’s massive expansion in LNG production in 2008, coupled with the rise in unconventional gas production in the United States as well as a drop in global energy demand due to the global recession, produced a global LNG glut that saw many cargoes intended for the U.S. market diverted into Europe. As mentioned previously, with an abundant source of alternative supply, some European consumers, mainly Gazprom’s closest partners, were able to renegotiate their oil-linked, takeor-pay contracts with Gazprom. As figure 10 illustrates, however, in the wake of the Fukushima natural disaster and nuclear accident in Japan and a return to growth in most industrialized economies, the LNG market is projected to tighten considerably in the short-term, potentially returning market power to Russia. However, there is a second, structural change to the global gas market that may have more lasting effects to Russia’s market power in the European gas market. LNG is one of the fastest growing segments of the energy sector. The growth of the LNG market, both through long-term contract and spot-market sales, is likely to put increasing pressure on incumbent pipeline gas suppliers. A significant addition of U.S. LNG exports will accelerate this trend. In addition to adding to the size of the market, U.S. LNG contracts are likely to be determined on a “floating” basis, with sales terms tied to the price of a U.S. benchmark such as Henry Hub, eroding the power of providers of long-term oil linked contract suppliers such as Russia. While U.S. LNG will not be a direct tool of U.S. foreign policy—the destination of U.S. LNG will be determined according to the terms of individual contracts, the spot-price-determined demand, and the LNG traders that purchase such contracts—the addition of a large, market-based producer will indirectly serve to increase gas supply diversity in Europe, thereby providing European consumers with increased flexibility and market power. Increased LNG exports will provide similar assistance to strategic U.S. allies in the Pacific Basin. By adding supply volumes to the global LNG market, the U.S. will help Japan, Korea, India, and other import-dependent countries in South and East Asia to meet their energy needs. The desire on the part of Pacific Basin countries for the U.S. to become a gas supplier to the region has been underlined by the efforts of the Japanese government, which has attempted to secure a free-trade agreement waiver from the United States to allow exports. As with oil price-linked Russian gas contracts in Eu- rope, U.S. LNG exports linked to a floating Henry Hub benchmark, have the potential to weaken the market power of incumbent LNG providers to Asia, increasing the negotiating power of consumers and decreasing the price. As U.S. foreign policy undergoes a “pivot to Asia,” the ability of the U.S. to provide a degree of increased energy security and pricing relief to LNG importers in the region will be an important economic and strategic asset. Beyond the basin-specific considerations of U.S. LNG exports, they would provide a source of predictable natural gas supply that is relatively free from unexpected production or shipping disruption. With Qatar representing roughly one-third of the global LNG market, a blockade or military intervention in the Strait of Hormuz or a direct attack on Qatar’s liquefaction facilities by Iran would inflict chaos on world energy markets. While the United States government will be unable to physically divert LNG cargoes to specific markets or strategic allies that are most affected (gas allocation will be made by the market players), additional volumes of LNG on the world market will benefit all consumers. international Environmental implications Proposed LNG exports from the United States have encountered domestic opposition on environmental grounds. As outlined in Part I, natural gas production causes greenhouse gas emissions in the upstream production process through leakages, venting, and flaring. The greenhouse gas footprint of shale gas production has been the subject of vigorous debate, with some studies suggesting that methane from the production process leads to shale gas having a higher global warming impact than that of other hydrocarbons including coal. While the methodology underlying such studies has been widely criticized, there is no doubt that leakage and venting of natural gas is a serious negative environmental consequence of natural gas production and transportation: EPA has estimated that worldwide leakages and venting volumes were 3,353.5 bcf in 2010. 113 By contrast, some advocates of U.S. exports of LNG maintain that they have the potential to bring global environmental benefits if they are used to displace more carbon-intensive fuels. According to the IEA, natural gas in general has the potential to reduce carbon dioxide emissions by 740 million tonnes in 2035, nearly half of which could be achieved by the displacement of coal in China’s power-generation portfolio. Natural gas—in the form of LNG—also has the potential to displace more carbon-intensive fuels in other major energy users, including across the EU and in Japan, which is being forced to burn more coal and oil-based fuels to make up for the nuclear generation capacity lost in the wake of the Fukushima disaster. In addition to its relatively lower carbon-dioxide footprint, natural gas produces lower emissions of pollutants such as sulfur dioxide nitrogen oxide and other particulates than coal and oil. Natural gas—both in the form of LNG and compressed natural gas—is also being viewed as a potential replacement for oil in the vehicle transportation fleet, with large carbon dioxide abatement potential. 114 However, as discussed in Part I, even the United States with its low gas prices is unlikely to see any significant move toward natural gas vehicles in the absence of government policies; the prospects for such vehicles entering the European or Asian markets, where gas is several times as expensive, are remote. On the other hand, additional volumes of natural gas in the global power generation fleet may also have longer-term detrimental consequences for carbon emissions. According to the IEA, by backing out nuclear and renewable energy generation, natural gas could add 320Mt of carbon dioxide by 2035. 115 Whether U.S. LNG exports contribute to reduced carbon dioxide emissions through the displacement of coal fired power generation or to the crowding out of renewable and nuclear energy in the global energy mix is something of a moot point. According to the IEA, global power generation is projected to exceed 27,000 terawatt hours per year by 2020. 116 Even assuming U.S. exports of 6 bcf/day (on the upper end of the range of expectations), zero losses due to transportation, regasification, and transmission, and a high natural gas power plant efficiency level of 60 percent, such volumes would account for just over one percent of total global power generation. 117 Therefore, although the domestic environmental impacts associated with shale gas extraction may, pending the outcome of further study, prove to be a cause for concern with respect to greenhouse gas emissions, the potential for U.S. LNG exports to make a meaningful impact on global emissions through changes to the global power generation mix is negligible. T his paper has attempted to answer two questions: Are U.S. LNG exports feasible? If so, what are the implications of U.S. LNG exports? **For exports to be feasible, several demand and supply-related conditions need to be met**. On the supply side, adequate resources must be available and their production must be sustainable over the long-term. The regulatory and policy environment will need to accommodate natural gas production to ensure that the resources are developed. The capacity and infrastructure required to enable exports must also be in place. This includes the adequacy of the pipeline and storage network, the availability of shipping capacity, and the availability of equipment for production and qualified engineers. On the demand side, LNG exports will compete with two main other domestic end uses for natural gas: the power-generation sector, and the industrial and petrochemical sector. According to most projections, the U.S. electricity sector will see an increased demand for natural gas as it seeks to comply with policies and regulations aimed at reducing carbon-dioxide emissions and pollutants from the power-generation fleet. Cheaper natural gas in the industrial sector has the potential to lower the cost of petrochemical production and to improve the competitiveness of a range of refining and manufacturing operations. Advocates of natural gas usage in the transportation fleet – particularly in heavy-duty vehicles (HDVs) – see it as a way to decrease the country’s dependence on oil, although absent major policy support, this sector is unlikely to represent a significant source of gas demand. For increased U.S. LNG exports to be feasible, they will also need to be competitive with supplies from other sources. The major demand centers that would import U.S. LNG would be Pacific Basin consumers (Japan, South Korea, and Taiwan, and increasingly China and India), and Atlantic Basin consumers, mostly in Europe. The supply and demand balance in the Atlantic and Pacific Basins and, therefore the feasibility for natural gas exports from the United States, depend heavily on the uncertain outlook for international unconventional natural gas production. Recent assessments in countries such as China, India, Ukraine, and Poland indicate that each country has significant domestic shale gas reserves. If these reserves are developed effectively—which is likely to be difficult in the short-term due to a lack of infrastructure, physical capacity, and human capacity—many of these countries would dramatically decrease their import dependence, with negative implications for existing and newcomer LNG exporters. Detailed analysis of the foregoing factors suggests that the exportation of liquefied natural gas from the United States is logistically feasible. Based on current knowledge, the domestic U.S. natural gas resource base is large enough to accommodate the potential increased demand for natural gas from the electricity sector, the industrial sector, the residential and commercial sectors, the transportation sector, and exporters of LNG. Other obstacles to production, including infrastructure, investment, environmental concerns, and human capacity, are likely to be surmountable. Moreover, the current and projected supply and demand fundamentals of the international LNG market are conducive to competitive U.S.-sourced LNG. While LNG exports may be practically feasible, they will be subject to approval by policy makers if they are to happen. In making a determination on the advisability of exports, the federal government will focus on the likely implications of LNG exports: i.e. whether LNG exports are in the “public interest.” The extent of the domestic implications is largely dependent upon the price impact of exports on domestic natural gas prices. While it is clear that domestic natural gas prices will increase if natural gas is exported, most existing analyses indicate that the implications of this price increase are likely to be modest.

#### Nuclear power puts downward pressure on natural gas prices – that makes exports politically viable

Perry 12 (Mark J., Scholar – AEI, Professor of Economics and Finance – University of Michigan, “Natural gas and nuclear power need to share the lead in power generation for the future,” American Enterprise Institute, 9-26, http://www.aei.org/article/natural-gas-and-nuclear-power-need-to-share-the-lead-in-power-generation-for-the-future/)

Recent advances in drilling technologies have unleashed a boom in domestic natural gas production. The United States may have more than 100 years' worth of gas reserves, and perhaps much more, including large untapped resources in Michigan. Policy makers are increasingly looking to natural gas as the locomotive of economic growth. A striking example is the increasing use of gas in electricity production. For the last several years, natural gas has accounted for more than 80% of new electric generating capacity in the United States. It now provides 32% of total electricity generation, up from 25% just two years ago, and its share could reach 50% by 2030. Natural gas, of course, has many virtues as a fuel. Its carbon content is less than half that of coal and it emits no mercury or other toxic particulates. But natural gas is needed for **much more than electricity generation**. In addition to residential and commercial heating, gas accounts for the bulk of the fuel used by the petrochemical industry. Manufacturing relies on the availability of cheap gas, and its use in transportation is increasing. Additionally, gas producers are **gearing up to export some of the gas to markets in Europe and Asia**, where gas costs up to five times more than it does in the United States. A dozen or more U.S. companies have applied for licenses to export liquefied natural gas from terminals, mainly on the Gulf of Mexico. Because of its multiple uses and rising popularity, the demand for natural gas is starting to increase, and its price could rise significantly. That is a real possibility, and would be consistent with its long history of price volatility. If we hope to maintain the security of our energy supply, we will need to expand the use of other energy sources, including nuclear power, which is also environmentally attractive and affordable. Although the capital cost of building a nuclear plant is high, the average price of nuclear-generated electricity is **lower than** power produced from **natural gas**. In 2011, the production cost of nuclear power was 2.19 cents per kilowatt-hour, compared to 4.51 cents for natural gas and 3.23 cents for coal. Today about 20% of America’s electricity comes from nuclear power. But demand for electricity is growing steadily and that trend will continue in the future. Without building new nuclear plants, pressure will build to use even more natural gas for electricity generation, making less available for manufacturing and transportation.

#### Natural gas demand is closely monitored – perception of the plan triggers the link

Burnes et al 12-7 (John, Lisa Epifani, Curt Moffatt, Janna Chesno, Partner – VanNess Feldman, “DOE Releases LNG Export Study and Requests Public Comment,” VanNess Feldman, 2012, http://www.vnf.com/news-alerts-778.html)

Exports of natural gas, including LNG, must be authorized by DOE’s Office of Fossil Energy. By statute, exports of LNG to FTA nations must be approved “without modification or delay”. By contrast, before approving an application to export LNG to non-FTA nations, DOE must determine that the export is and will remain in the “public interest”. DOE’s primary focus is upon the domestic need for the gas to be exported. In May 2011, DOE conditionally authorized Sabine Pass Liquefaction, LLC (Sabine Pass) to export LNG to non-FTA nations. The authorization was finalized in August 2012. This remains the only long-term DOE authorization to export LNG from the lower 48 states to non-FTA nations. In the Sabine Pass order, DOE determined that it had a continuing duty to protect the public interest, and announced that it would monitor gas supply/demand conditions in the United States and the world to ensure that the cumulative impacts of the exports authorized in the order and in future orders would not lead to a reduction in the supply of natural gas needed to meet essential domestic needs. DOE also provided notice that it would take any action in the future, including amending or even revoking export authorizations, as appropriate or necessary to protect the public interest.

#### Plan kills Russia’s economy

Mead 12

Walter Russell Mead, April 25, 2012 (Professor of Foreign Affairs and Humanities at Bard College, Henry A. Kissinger senior fellow for U.S. foreign policy at the Council on Foreign Relations (CFR), and Editor-at-Large of The American Interest magazine), , The American Interest, North American Shale Gas Gives Russia Serious Headache, <http://blogs.the-american-interest.com/wrm/2012/04/25/north-american-shale-gas-gives-russia-serious-headache/>

North America’s shale gas boom is chipping away at the market for gas producers like Russia. What’s more, if the United States becomes a gas exporter, Russia’s customers (especially in Europe) could decide to cancel expensive contracts with Gazprom in favor of cheaper American natural gas. “If the US starts exporting LNG to Europe and Asia, it gives [customers there] an argument to renegotiate their prices with Gazprom and Qatar, and they will do it,” says Jean Abiteboul, head of Cheniere supply & marketing. Gazprom supplied 27 percent of Europe’s natural gas in 2011. While American gas is trading below $2 per MMBTU (million British thermal units), Gazprom’s prices are tied to crude oil markets, and its long-term contracts charge customers roughly $13 per MMBTU, says the *FT*. European customers would love to reduce their dependence on Gazprom and start to import American gas. Already Gazprom has had to make concessions to its three biggest customers, and others are increasingly dissatisfied with their contracts. Worse, from Russia’s point of view: evidence that western and central Europe contain substantial shale gas reserves of their own. Fracking is unpopular in thickly populated, eco-friendly Europe, but so are high gas prices. All this ought to give Russia serious heartburn. Eroding Gazprom’s dominance of the European energy market would be a major check on Russian economic growth and political influence.

**Goes nuclear and turns case**

**Filger 9** (Sheldon, Columnist and Founder – Global EconomicCrisis.com, “Russian Economy Faces Disasterous Free Fall Contraction”, <http://www.huffingtonpost.com/sheldon-filger/russian-economy-faces-dis_b_201147.html>)

In Russia, historically, economic health and political stability are intertwined to a degree that is rarely encountered in other major industrialized economies. It was the economic stagnation of the former Soviet Union that led to its political downfall. Similarly, Medvedev and Putin, both intimately acquainted with their nation's history, are unquestionably alarmed at the prospect that Russia's economic crisis will endanger the nation's political stability, achieved at great cost after years of chaos following the demise of the Soviet Union. Already, strikes and protests are occurring among rank and file workers facing unemployment or non-payment of their salaries. Recent polling demonstrates that the once supreme popularity ratings of Putin and Medvedev are eroding rapidly. Beyond the political elites are the financial oligarchs, who have been forced to deleverage, even unloading their yachts and executive jets in a desperate attempt to raise cash. Should the Russian economy deteriorate to the point where economic collapse is not out of the question, the impact will go far beyond the obvious accelerant such an outcome would be for the Global Economic Crisis. There is a geopolitical dimension that is even more relevant then the economic context. Despite its economic vulnerabilities and perceived decline from superpower status, Russia remains one of only two nations on earth with a nuclear arsenal of sufficient scope and capability to destroy the world as we know it. For that reason, it is not only President Medvedev and Prime Minister Putin who will be lying awake at nights over the prospect that a national economic crisis can transform itself into a virulent and destabilizing social and political upheaval. It just may be possible that U.S. President Barack Obama's national security team has already briefed him about the consequences of a major economic meltdown in Russia for the peace of the world. After all, the most recent national intelligence estimates put out by the U.S. intelligence community have already concluded that the Global Economic Crisis represents the greatest national security threat to the United States, due to its facilitating political instability in the world. During the years Boris Yeltsin ruled Russia, security forces responsible for guarding the nation's nuclear arsenal went without pay for months at a time, leading to fears that desperate personnel would illicitly sell nuclear weapons to terrorist organizations. If the current economic crisis in Russia were to deteriorate much further, how secure would the Russian nuclear arsenal remain? It may be that the financial impact of the Global Economic Crisis is its least dangerous consequence.

### 1NC

#### The United States Congress should immediately establish a government-wide multiple staged-process Quadrennial Energy Review with a deadline for completion of each stage by February 1st of each year. The QER should include a top priority recommendation that the United States federal government should substantially increase the available funding for the nuclear loan guarantee program.

#### We’ll clarify.

#### It solves --

#### CP causes implementation and avoids budget fights

DOE 11 (U.S. Department of Energy, “Report on the First Quadrennial Technology Review,” September, <http://energy.gov/sites/prod/files/ReportOnTheFirstQTR.pdf>, p. 126-7)

When PCAST recommended the DOE QTR, the most important recommendation was the development of a multi-agency QER led by the Executive Office of the President. That QER would forge a more coordinated and robust federal energy policy, engaging many agencies and departments across the Executive Branch (see Table 9). As envisioned by PCAST, a QER would provide a multiyear roadmap that lays out an integrated view of technology-neutral energy objectives and would put forward anticipated Executive actions, coordinated across multiple agencies. The emphasis of the QER would be on establishing government-wide goals, and **identifying the non-budgetary resources** needed for the invention, translation, adoption, and diffusion of energy technologies. Because responsibility for setting these goals goes well beyond the reach of the DOE, the QER would serve as a **mechanism for managing this crosscutting challenge**. In both its development and implementation, the QER would provide an effective tool for Administration-wide coherence. Recognizing the scale of the task, PCAST recommended that the QER be implemented in a staged process led by the Executive Office of the President that would provide some elements of a QER during each of the next four years drawing on the support of an Executive Secretariat, provided by the Secretary of Energy.

### 1NC

#### Immigration will pass now and it’s top of the docket

Helderman 1-25 Rosalind S. Helderman and David Nakamura, Wash Post, 1/25/13, “Senators nearing agreement on broad immigration reform proposal”, <http://www.washingtonpost.com/politics/senators-nearing-agreement-on-broad-immigration-reform-proposal/2013/01/25/950fb78a-6642-11e2-9e1b-07db1d2ccd5b_story.html>

A working group of senators from both parties is nearing agreement on broad principles for overhauling the nation’s immigration laws, representing the most substantive bipartisan effort toward comprehensive legislation in years. The six members have met quietly since the November election, most recently on Wednesday. Congressional aides stressed there is not yet final agreement, but they have eyed next Friday as a target date for a possible public announcement. The talks mark the most in-depth negotiations involving members of both parties since a similar effort broke down in 2010 without producing a bill. “We have basic agreement on many of the core principles,” Senate Majority Whip Richard J. Durbin (D-Ill.), a member of the group, said this week. “Now we have to draft it. It takes time.” “The group we’ve been meeting with — and it’s equal number of Democrats and Republicans — we’re real close,” added Sen. Charles E. Schumer (D-N.Y.), another member of the group. The accelerated pace signals that immigration reform is expected to be one of Congress’s highest priorities, and it comes as the White House prepares to launch its own public campaign on the issue. President Obama will travel to Las Vegas on Tuesday to speak about the need to “fix the broken immigration system this year,” the administration announced, an appearance in a state with a rapidly growing number of Hispanic voters, who overwhelmingly supported his reelection. Obama also met with members of the Congressional Hispanic Caucus on Friday, and aides said he vowed that immigration will be his “top priority.” “What has been absent in the time [since] he put principles forward is a willingness by Republicans to move forward with comprehensive immigration reform,” White House press secretary Jay Carney said Friday. “He hopes that dynamic has changed and there are indications what was once a bipartisan effort to push forward. . .will again be a bipartisan effort to do so.” Past efforts begun amid similarly high hopes have sputtered. But members of both parties increasingly see changes to the nation’s troubled immigration system as an area most likely to draw bipartisan agreement at a time when Congress is deeply divided on gun control, spending and taxes. The optimism is spurred by the sense that the political dynamics have shifted markedly since the last two significant bipartisan efforts failed. In 2007, a bill crafted in the Senate died after failing to win support of 60 members despite backing from then-president George W. Bush. Many Republicans, and some centrist Democrats, opposed that effort because it offered a path to citizenship for illegal immigrants. In 2010, extended negotiations between Schumer and Sen. Lindsey O. Graham (R-S.C.) broke down without producing legislation. Sen. John McCain (R-Ariz.), a veteran of the 2007 effort who is part of the current working group, said Republican attitudes have dramatically shifted since the party’s defeat at the polls in November. Obama won more than 70 percent of the vote among Latinos and Asians, and a growing number of GOP leaders believe action on immigration is necessary to expand the party’s appeal to minority groups. “Obviously, it’s had a very distinct impression,” said McCain, who lost his own bid for the White House in 2008. “It’s time to move forward on this.” But he added, “I don’t claim that it’s going to be easy.” Also included in the new Senate group are Schumer, who chairs the key Senate subcommittee where legislative action will begin; Graham; Robert Menendez (D-N.J.); and Marco Rubio (R-Fla.). Two others, Jeff Flake (R-Ariz.) and Michael F. Bennet (D-Colo.), have also been involved in some talks. Their timetable would aim for a bill to be written by March or April and potentially considered for final passage in the Senate as early as the summer. Proponents believe adoption in the GOP-held House would be made easier with a strong bipartisan vote in the Senate. The working group’s principles would address stricter border control, better employer verification of workers’ immigration status, new visas for temporary agriculture workers and expanding the number of visas available for skilled engineers. They would also include a call to help young people who were brought to the country illegally as children by their parents become citizens and to normalize the status of the nation’s 11 million illegal immigrants. But obstacles abound. For instance, Rubio has said he believes immigrants who came to the country illegally should be able to earn a work permit. But he has said they should be required to seek citizenship through existing avenues, and only after those who have come to the country legally. Democrats and immigration advocates fear that approach could result in wait-times stretching for decades, creating a class of permanent legal residents for whom the benefits of citizenship appear unattainable. They have pushed to create new pathways to citizenship specifically available to those who achieve legal residency as part a reform effort. It is not yet clear if the Senate group will endorse a mechanism allowing such people to eventually become citizens — something Obama is expected to champion. Schumer said it would be “relatively detailed,” but would not “get down into the weeds.” A source close to Rubio said he joined the group in December at the request of other members only after they agreed their effort would line up with his own principles for reform, which he outlined in an interview with the Wall Street Journal three weeks ago. His ideas have since been embraced by conservatives, including some longtime foes of providing legal status to those who have come to the country illegally. As a possible 2016 presidential contender widely trusted on the right, Rubio’s support could be key to moving the bipartisan effort. And while Rubio and other Republicans have said they would prefer to split up a comprehensive immigration proposal into smaller bills that would be voted on separately, the White House will pursue comprehensive legislation that seeks to reform the process in a single bill. “I doubt if there will be a macro, comprehensive bill,” said Sen. Johnny Isakson (R-Ga.), who supported the 2007 effort. “Anytime a bill’s more than 500 pages, people start getting suspicious. If it’s 2,000 pages, they go berserk.” But in an op-ed in the Wall Street Journal on Friday, Republican Jeb Bush, the former Florida governor, strongly supports a single comprehensive bill, writing that “Congress should avoid quick fixes.” Schumer said Friday that a single package will be key for passage. “We’ll not get it done in pieces,” he said. “Every time you do a piece, everyone says what about my piece and you get more people opposing it.” White House officials said they welcome the bipartisan Senate group’s deliberations and do not think it will conflict with the administration’s strategy. Some Democrats in the House, including Rep. Luis V. Gutierrez (D-Ill.), have cautioned that the White House could harm the bid for bipartisan support if it acts too aggressively by authoring its own legislative proposal. But advocates, who were disappointed that Obama did not follow through on comprehensive reform in his first term, said they expect the president to be out front on the issue. “The president needs to lead, and then the Republicans have a choice: Are they going to do what they did in the last term and just be obstructionists?” said Eliseo Medina, secretary-treasurer of the Service Employees International Union, which spent millions recruiting new Hispanic voters this year. “Well, that didn’t work too well in November. Do the Republicans want the president not to get the credit? The best way to share the credit is for them to step up and engage and act together with the president. But it’s their choice. ”

#### Nuclear loan guarantees kills PC- even if they like nuclear, they hate loan guarantees

Hopf 12 (Jim Hopf, Jim Hopf is a senior nuclear engineer with more than 20 years of experience in shielding and criticality analysis and design for spent fuel dry storage and transportation systems. He has been involved in nuclear advocacy for 10+ years, and is a member of the ANS Public Information Committee. He is a regular contributor to the ANS Nuclear Cafe. Post-election outlook for nuclear energy, <http://ansnuclearcafe.org/category/u-s-congress/>, November 21, 2012)

In my September post at the ANS Nuclear Cafe, I discussed the Democratic and Republican party platforms, along with their potential impacts on nuclear energy. With the 2012 U.S. elections now behind us, this post provides a post-election follow up, and discusses the impacts of the election results on nuclear’s prospects over the near- to mid-term. With the reelection of Barrack Obama, and minor gains by Democrats in the House and Senate, the election results portend a continuation of the status quo, for the most part. Impacts of the election in various areas that may impact nuclear’s prospects are discussed in the sections below. Yucca Mountain I’ve always taken great issue with the Obama administration’s actions on Yucca mountain, and maintain that, at a minimum, the Nuclear Regulatory Commission licensing process should be finished, even if a political decision is made to not pursue the project. It is clear to most observers that the NRC technical staff (which had completed its review) was about to conclude that the repository met all the technical requirements, before the process was terminated near the finish line, for political reasons. The public has a right to know that Yucca would have met all the requirements, and that yes indeed there is a viable, acceptable technical solution to the nuclear waste problem. With the reelection of Obama and with (Democrat) Harry Reid remaining as Senate majority leader, the current status quo on Yucca Mountain will remain. Reid will continue to block funding for completion of NRC licensing, and the (Obama/Reid-appointed) NRC chair will likely cooperate with the effort to stop the process. As was the case before the election, whether the NRC will complete the licensing process will be primarily determined by the courts. Yucca Mountain is one area where a Romney administration may have been more helpful to nuclear, but it’s not clear whether there would have been any meaningful difference. Romney was also making anti-Yucca statements (such as “states should have the right to decide if they want the repository”) during the campaign. Republicans winning the Senate would have made a far larger difference, as Reid would have lost the Majority Leader position, which is essential to his ability to block Yucca. On the other hand, if the president is not interested in changing the situation, even that may have not made much difference. It seems that completion of the licensing process (the best we can hope for in the near term) is up to the courts at this point, and would have remained so regardless of who won the election. Also unclear is whether the lack of progress on the waste issue is having a significant effect on how much nuclear power there will be over the near-to-mid term. I’ve grown to believe that it is not as critical an issue as I formerly thought. Fukushima–related upgrades and regulations Whereas the anticipated regulations and required plant upgrades that will result from NRC’s response to Fukushima will add costs for existing nuclear plants (and to a small extent, new plants), it is unlikely that the outcome of the election would have had any significant impacts on those regulations. No parties or candidates have made any significant statements on the NRC’s actions in this area. Nuclear plant loan guarantees The Obama administration had supported increasing the nuclear loan guarantee volume by a factor of several (to over $100 billion) but could not get it through Congress. On the other hand, the Obama administration has been dragging its feet in actually approving any loan guarantees, even for the Vogtle and Summer plants. With the current budget situation, any increase in loan volume is unlikely. It is unlikely, however, that Romney or the Republicans would have been better in the area of nuclear loan guarantees. Although the Republicans are ostensibly pro-nuclear, many in the Republican Party are opposed to loan guarantees for any energy projects.

#### PC is key to immigration

Chris Weigant, Political writer, 1/23/13 [“Handicapping Obama's Second Term Agenda,” HuffPost, http://www.huffingtonpost.com/chris-weigant/obama-second-term\_b\_2537802.html]

The second big agenda item is immigration reform. President Obama holds virtually all the cards, politically, on this one. All Republicans who can read either demographics or polling numbers know full well that this may be their party's last chance not to go the way of the Whigs. Their support among Latinos is dismal, and even that's putting it politely. Some Republicans think they have come up with a perfect solution on how to defuse the issue, but they are going to be proven sadly mistaken in the end, I believe. The Republican plan will be announced by Senator Marco Rubio at some point, and it will seem to mirror the Democratic plan -- with one key difference. Republicans -- even the ones who know their party has to do something on the immigration problem -- are balking at including a "path to citizenship" for the 11 million undocumented immigrants who are already in America.¶ The Republicans are trying to have their cake and eat it too -- and it's not going to work. "Sure," they say, "we'll give some sort of papers to these folks, let them stay, and even let them work... but there's no need to give them the hope of ever becoming a full citizen." This just isn't going to be good enough, though. There are essentially two things citizens can do which green card holders cannot: serve on juries, and vote. The Republicans are not worried about tainted juries, in case that's not clear enough.¶ Republicans will bend over backwards in an effort to convince Latinos that their proposal will work out just fine for everyone. Latinos, however, aren't stupid. They know that being denied any path to citizenship equals an effort to minimize their voice on the national political stage. Which is why, as I said, Obama holds all the cards in this fight. Because this is the one issue in his agenda which Republicans also have a big vested interest in making happen. Obama and the Democrats will, I believe, hold firm on their insistence on a path to citizenship, and I think a comprehensive immigration bill will likely pass some time this year, perhaps before the summer congressional break. The path to citizenship it includes will be long, expensive and difficult (Republicans will insist on at least that), but it will be there.¶ On gun control, I think Obama will win a partial victory. On immigration, I think he will win an almost-total victory. On global warming, however, he's going to be disappointed. In fact, I doubt -- no matter how much "bully pulpiting" Obama does -- that any bill will even appear out of a committee in either house of Congress. This will be seen as Obama's "overreach" -- a bridge too far for the current political climate. Anyone expecting big legislative action on global warming is very likely going to be massively disappointed, to put it quite bluntly. In fact, Obama will signal this in the next few months, as he approves the Keystone XL pipeline -- much to the dismay of a lot of his supporters.¶ Of course, I could be wrong about any or all of these predictions. I have no special knowledge of how things will work out in Congress in the immediate future. I'm merely making educated guesses about what Obama will be able to achieve in at least the first few years of his second term. Obama has a lot of political capital right now, but that could easily change soon. The House Republicans seem almost demoralized right now, and Obama has successfully splintered them and called their bluff on two big issues already -- but they could regroup and decide to block everything the White House wants, and damn the political consequences. Unseen issues will pop up both on the domestic and foreign policy stages, as they always do. But, for now, this is my take on how the next few years are going to play out in Washington. Time will tell whether I've been too optimistic or too pessimistic on any or all of Obama's main agenda items. We'll just have to wait and see.

#### Immigration reform prevents a shortage in the aerospace industry.

**Thompson 9** (David, President – American Institute of Aeronautics and Astronautics, and Dr. Richard Aubrecht, Vice President of Strategy and Technology – Moog, Inc., “The Aerospace Workforce”, Federal News Service, 12-10, Lexis)

And finally, despite our best efforts to increase the domestic supply of well-qualified aerospace engineers and scientists, it is AIAA's view that that alone will not be sufficient to fully address the problems that our country is going to face over the next decade or so. And so we further advocate a reexamination of immigration laws and visa levels so that we can more effectively attract from around the world the best and brightest young people that want to come to our country and build their lives and careers here to strengthen our aerospace sector and the nation as a whole. In addition, within this general framework, AIAA and a number of other engineering societies across a variety of fields have advocated the pursuit of policies specifically focused on emphasizing the two middle initials in the STEM acronym, namely technology and engineering. I think we are farther behind in those areas or we risk falling farther behind in those areas than we perhaps do in the bracketing letters of science and math. All are important, but as we look out over the next decade, the challenges in engineering and technology may even be worse -- more severe than the challenges in the basic sciences and math. REP. EDWARDS: Thank you. And I'm sure we could go on but my time has expired, Madame Chairwoman. REP. GIFFORDS: Dr. Aubrecht, did you want to add -- (inaudible)? MR. AUBRECHT: Yes. Just to come back to the point that you made there in terms of immigration policy, we employ about 9,000 people in 26 countries around the world. We're headquartered in Buffalo, and that's where the center of our aerospace business is, but we've taken this technology into all kinds of other fields, and a number of cases where we'd like to bring people in from outside the U.S. and we just simply have a terrible time trying to get visas for these people to come in. So I don't think we're going to be able to meet the needs from a technological staffing standpoint unless you open up the immigration. People from all over the world would just love to come to the U.S. and work on these programs. This is where it's happening. But they just can't get the visas.

#### That collapses the aerospace sector --- tanks air power/

**Thompson 9** (David, President – American Institute of Aeronautics and Astronautics, “The Aerospace Workforce”, Federal News Service, 12-10, Lexis)

Aerospace systems are of considerable importance to U.S. national security, economic prosperity, technological vitality, and global leadership. Aeronautical and space systems protect our citizens, armed forces, and allies abroad. They connect the farthest corners of the world with safe and efficient air transportation and satellite communications, and they monitor the Earth, explore the solar system, and study the wider universe. The U.S. aerospace sector also contributes in major ways to America's economic output and high- technology employment. Aerospace research and development and manufacturing companies generated approximately $240 billion in sales in 2008, or nearly 1.75 percent of our country's gross national product. They currently employ about 650,000 people throughout our country. U.S. government agencies and departments engaged in aerospace research and operations add another 125,000 employees to the sector's workforce, bringing the total to over 775,000 people. Included in this number are more than 200,000 engineers and scientists -- one of the largest concentrations of technical brainpower on Earth. However, the U.S. aerospace workforce is now facing the most serious demographic challenge in his 100-year history. Simply put, today, many more older, experienced professionals are retiring from or otherwise leaving our industrial and governmental aerospace workforce than early career professionals are entering it. This imbalance is expected to become even more severe over the next five years as the final members of the Apollo-era generation of engineers and scientists complete 40- or 45-year careers and transition to well-deserved retirements. In fact, around 50 percent of the current aerospace workforce will be eligible for retirement within just the next five years. Meanwhile, the supply of younger aerospace engineers and scientists entering the industry is woefully insufficient to replace the mounting wave of retirements and other departures that we see in the near future. In part, this is the result of broader technical career trends as engineering and science graduates from our country's universities continue a multi-decade decline, even as the demand for their knowledge and skills in aerospace and other industries keeps increasing. Today, only about 15 percent of U.S. students earn their first college degree in engineering or science, well behind the 40 or 50 percent levels seen in many European and Asian countries. Due to the dual-use nature of aerospace technology and the limited supply of visas available to highly-qualified non-U.S. citizens, our industry's ability to hire the best and brightest graduates from overseas is also severely constrained. As a result, unless effective action is taken to reverse current trends, the U.S. aerospace sector is expected to experience a dramatic decrease in its technical workforce over the next decade. Your second question concerns the implications of a cutback in human spaceflight programs. AIAA's view on this is as follows. While U.S. human spaceflight programs directly employ somewhat less than 10 percent of our country's aerospace workers, its influence on attracting and motivating tomorrow's aerospace professionals is much greater than its immediate employment contribution. For nearly 50 years the excitement and challenge of human spaceflight have been tremendously important factors in the decisions of generations of young people to prepare for and to pursue careers in the aerospace sector. This remains true today, as indicated by hundreds of testimonies AIAA members have recorded over the past two years, a few of which I'll show in brief video interviews at the end of my statement. Further evidence of the catalytic role of human space missions is found in a recent study conducted earlier this year by MIT which found that 40 percent of current aerospace engineering undergraduates cited human space programs as the main reason they chose this field of study. Therefore, I think it can be predicted with high confidence that a major cutback in U.S. human space programs would be substantially detrimental to the future of the aerospace workforce. Such a cutback would put even greater stress on an already weakened strategic sector of our domestic high-technology workforce. Your final question centers on other issues that should be considered as decisions are made on the funding and direction for NASA, particularly in the human spaceflight area. In conclusion, AIAA offers the following suggestions in this regard. Beyond the previously noted critical influence on the future supply of aerospace professionals, administration and congressional leaders should also consider the collateral damage to the space industrial base if human space programs were substantially curtailed. Due to low annual production rates and highly-specialized product requirements, the domestic supply chain for space systems is relatively fragile. Many second- and third-tier suppliers in particular operate at marginal volumes today, so even a small reduction in their business could force some critical suppliers to exit this sector. Human space programs represent around 20 percent of the $47 billion in total U.S. space and missile systems sales from 2008. Accordingly, a major cutback in human space spending could have large and highly adverse ripple effects throughout commercial, defense, and scientific space programs as well, potentially triggering a series of disruptive changes in the common industrial supply base that our entire space sector relies on.

#### Nuclear war.

**Tellis 98** (Ashley, Senior Political Scientist – RAND, “Sources of Conflict in the 21st Century”, http://www.rand. org/publications/MR/MR897/MR897.chap3.pdf)

This subsection attempts to synthesize some of the key operational implications distilled from the analyses relating to the rise of Asia and the potential for conflict in each of its constituent regions. The first key implication derived from the analysis of trends in Asia suggests that American air and space power will continue to remain critical for conventional and unconventional deterrence in Asia. This argument is justified by the fact that several subregions of the continent still harbor the potential for full-scale conventional war. This potential is most conspicuous on the Korean peninsula and, to a lesser degree, in South Asia, the Persian Gulf, and the South China Sea. In some of these areas, such as Korea and the Persian Gulf, the United States has clear treaty obligations and, therefore, has preplanned the use of air power should contingencies arise. U.S. Air Force assets could also be called upon for operations in some of these other areas. In almost all these cases, U.S. air power would be at the forefront of an American politico-military response because (a) of the vast distances on the Asian continent; (b) the diverse range of operational platforms available to the U.S. Air Force, a capability unmatched by any other country or service; (c) the possible unavailability of naval assets in close proximity, particularly in the context of surprise contingencies; and (d) the heavy payload that can be carried by U.S. Air Force platforms. These platforms can exploit speed, reach, and high operating tempos to sustain continual operations until the political objectives are secured. The entire range of warfighting capability—fighters, bombers, electronic warfare (EW), suppression of enemy air defense (SEAD), combat support platforms such as AWACS and J-STARS, and tankers—are relevant in the Asia-Pacific region, because many of the regional contingencies will involve armed operations against large, fairly modern, conventional forces, most of which are built around large land armies, as is the case in Korea, China-Taiwan, India-Pakistan, and the Persian Gulf. In addition to conventional combat, the demands of unconventional deterrence will increasingly confront the U.S. Air Force in Asia. The Korean peninsula, China, and the Indian subcontinent are already arenas of WMD proliferation. While emergent nuclear capabilities continue to receive the most public attention, chemical and biological warfare threats will progressively become future problems. The delivery systems in the region are increasing in range and diversity. China already targets the continental United States with ballistic missiles. North Korea can threaten northeast Asia with existing Scud-class theater ballistic missiles. India will acquire the capability to produce ICBM-class delivery vehicles, and both China and India will acquire long-range cruise missiles during the time frames examined in this report.

### Solvency

#### Financial incentives lock in inefficiency – kills competition

Loris, 11 – analyst at The Heritage Foundation (Nick, May. “Stop Picking Energy Winners and Losers with the Tax Code.” http://[www.heritage.org/research/commentary/2011/05/stop-picking-energy-winners-and-losers-with-the-tax-code](http://www.heritage.org/research/commentary/2011/05/stop-picking-energy-winners-and-losers-with-the-tax-code))

First, special tax credits for cherry-picked technologies artificially reduce the price for consumers. This makes them seem far more competitive than they actually are. Rather than increase competition, the artificial market distortion gives these technologies an unfair price advantage over other technologies. The more concentrated the subsidy or preferential treatment, the worse the policy is because the crowding-out effect for other technologies is larger. If subsidized technologies are market viable, then the tax break merely offsets private-sector costs for investments that would have been made either way. This creates industry complacency and perpetuates economic inefficiency by disconnecting market success from production costs. Furthermore, when the government becomes involved in the decision-making process, it increases the business incentive to send lobbyists to Capitol Hill to make their pitch why their industry needs those tax credits. Industries will plead that they need five years of tax credits then they’ll be good to go on their own. Five years later, they’re asking for five more years. These specific carve outs reduce the incentive for producers to be cost competitive with technologies that do not rely on help from the government.

#### **Natural gas blocks investment**

Domenici and Miller 12 (Pete, Senator – New Mexico, and Dr. Warren F., Co-Chair – Nuclear Initiative; Former Assistant Secretary for Nuclear Energy – Department of Energy, “Maintaining U.S. Leadership in Global Nuclear Energy Markets,” Bipartisan Policy Center, July, http://bipartisanpolicy.org/sites/default/files/Leadership%20in%20Nuclear%20Energy%20Markets.pdf)

Prospects for new reactor construction in the United States have constricted significantly in recent years. In the years following passage of EPACT05, 18 utilities applied for combined construction and operating licenses (COLs) to build a total of 28 reactors. 2 In addition, DOE received 19 applications for loan guarantees to support financing for 21 proposed reactors. A combination of factors—including downward revisions to electricity demand projections, difficulty executing the EPACT05 loan guarantee program as intended, and drastically reduced natural gas prices—has put all but two projects on hold. While these projects, comprising four reactors, have received NRC licenses and are currently under construction in Georgia and South Carolina, these plants still face financial, regulatory, and construction challenges. 3 And, though natural gas prices have historically been quite volatile, the ability to tap large shale gas reserves will likely keep natural gas prices sufficiently low to make financing additional new reactor construction very difficult for at least the next decade, if not longer.

#### Loan guarantees don’t solve – costs too high

**Slocum, 12** – director of Public Citizen’s Energy Program, expert in issues dealing with regulation and deregulation of energy markets, the impact of mergers and lax regulations over electricity, petroleum, and natural gas, and federal energy legislation (Tyson, 2/3. “We Can't Afford to Expand Nuclear Power.” http://www.usnews.com/debate-club/should-nuclear-power-be-expanded/we-cant-afford-to-expand-nuclear-power)

In recent years, industry-driven legislative efforts—most notably the sweep of incentives for nuclear power in the 2005 Energy Policy Act—have been implemented to jump-start the nuclear industry, but even that mountain of money and regulatory rollbacks can't do the impossible: build a nuclear power plant affordably, safely, or timely and find a solution to the thousands of tons of highly radioactive waste. From loan guarantees to charging ratepayers up front for the cost of construction, to liability protections from Fukushima-style accidents, the industry has been unable to bring a new reactor online. Why? Because even with all this taxpayer help, it's still too costly. Photovoltaic solar this year will break the dollar-per-watt barrier, ushering in a rooftop revolution of cheap, clean, and consumer-owned energy. In addition to turning our buildings into power stations, investing in making our structures more energy-efficient remains the most cost-effective energy investment. Energy-efficiency programs can displace 23 percent of projected demand and provide a huge return for consumers. Charging taxpayers billions of dollars to bring a new reactor online wipes out any incentives to invest in these programs and suppresses local renewable projects that could bring green jobs and advance U.S. leadership in clean energy technology.

#### They’re factually wrong about loan guarantees – investors still have to pay upfront costs – deters investment

Gale et al 9 (Kelley Michael, Finance Department Chair – Latham & Watkins, “Financing the Nuclear Renaissance: The Benefits and Potential Pitfalls of Federal & State Government Subsidies and the Future of Nuclear Power in California,” Energy Law Journal, Vol. 30, p. 497-552, http://www.felj.org/docs/elj302/19gale-crowell-and-peace.pdf)

Much has been written on the DOE‘s loan guarantee program under the EPAct 2005, particularly in light of the changes to that program for renewable projects under the American Recovery and Reinvestment Act of 2009, and as such we will not cover its ―nuts and bolts‖ in great detail. But generally speaking, the federal loan guarantee program applicable to nuclear projects authorizes the DOE to make guarantees of debt service under construction loans for up to eighty percent of the construction costs of new nuclear projects that will (1) avoid or reduce air pollutants and emissions of greenhouse gases, and (2) employ new or significantly improved technology to do so. 61 Several requirements must be met before the DOE can enter into a loan guarantee agreement. First, either an appropriation for the cost of the guarantee must have been made or the DOE must receive full payment for the cost of the guarantee from the developer. 62 Because no money has been appropriated to cover these costs and the DOE has stated it does not intend to seek appropriations to pay these costs for any nuclear projects, 63 it appears that project developers may be responsible for pre-paying the full costs of the loan guarantees, 64 unless the Bingaman legislation discussed below is passed as proposed or similar legislation is enacted. Two components currently make up the cost of the guarantee. The first part is an ―Administrative Cost‖: the DOE must receive fees sufficient to cover applicable administrative expenses for the loan guarantee including the costs of evaluating applications, negotiating and closing loan guarantees, and monitoring the progress of projects. 65 These administrative expenses passed on to the developer include an application fee of $800,000, a facility fee of one half of one percent of the amount guaranteed by the loan guarantee, and a maintenance fee of $200,000–$400,000 per year. 66 Second, the DOE must receive a ―Subsidy Cost‖ for the loan guarantee, which is defined as the net present value of the government‘s expected liability from issuing the guarantee. 67 The Subsidy Cost must be estimated by a developer in an application, but cannot be officially determined until the time the loan guarantee agreement is signed. 68 The administrative costs associated with the program have been criticized as overly burdensome, 69 and the Subsidy Cost remains unquantifiable but decisively enormous. In fact, Standard & Poor‘s recently estimated that the Subsidy Cost for a typical nuclear reactor could be as high as several hundred million dollars. 70 The lack of clarity around how to quantify these costs up front and, as discussed below, the position of the DOE that the Subsidy Cost is not an eligible project cost under the loan guarantee program, make it difficult for developers to arrange investment or interim financing to get them through the development process. 71 Additionally, before entering a loan guarantee, the DOE must determine that (1) ―there is reasonable prospect of repayment of the principal and interest on [the guaranteed debt] by the borrower,‖ (2) the amount guaranteed by the government under the loan guarantee, when combined with other available financing sources, is sufficient to carry out the nuclear construction project, and (3) the DOE possesses a first lien on the assets of the project and other assets pledged as security and its security interest in the project is not subordinate to any other financing for the project. 72 Finally, the loan guarantee obligation must bear interest at a rate determined by the Secretary to be reasonable, taking into account the range of interest rates prevailing in the private sector for similar Federal government guaranteed obligations of comparable risk and the term of the guarantee cannot exceed the lesser of thirty years or ninety percent of the useful life of the nuclear reactor. 73 These requirements create uncertainties for developers and financiers seeking to understand how the program will work to support the financing of a new nuclear power plant. For instance, it is unclear how government approval of interest rates will work in the context of a deal with multiple debt instruments that each may have different pricing. Setting interest rates in these types of deals is an iterative process of modeling interest rates and testing markets. Further, it is unclear how interest rates will be compared. To our knowledge, there are no ―similar Federal government guaranteed obligations of comparable risk‖ to debt issued for the construction of a nuclear power project. 74

### China

#### No nuclear leadership for China – no safety or transparency

The Guardian 9-21-12 ("Should China be involved in the UK's nuclear energy infrastructure?", http://www.guardian.co.uk/environment/blog/2012/sep/21/nuclearpower-energy)

In Tibet, the Chinese nuclear industry is engaged in a determined effort to secure uranium deposits located in Amdo, where leaching and open pit extraction are reported to have resulted in significant environmental contamination. Regulation of safety oversight mechanisms is relatively weak in the Chinese nuclear industry, and according to a recent Nuclear Materials Security Index report, China ranks 29th among the group of 32 nuclear nations in terms of nuclear security and materials transparency. Although it's to be hoped that greater corporate social responsibility and sensitivity to vulnerable industrial communities is evolving in both Russia and China, it's still troubling to reflect on their respective human rights situations, documented by Amnesty International.

#### Japan won’t proliferate --- deeply embedded in Japanese culture and society

Kamiya ‘9– professor of international relations at the National Defense Academy of Japan (Matake Kamiya, “Realistic Proactivism: Japanese Attitudes Toward Global Zero,” ISN, September 2009, http://www.isn.ethz.ch/isn/Digital-Library/Publications/Detail/?ots591=cab359a3-9328-19cc-a1d2-8023e646b22c&lng=en&id=106532)

The Japanese share a deep-seated aversion to nuclear arms, a feeling that transcends differences in political ideology and beliefs. An almost instinctive dread of, and hatred for, nuclear weapons widely held across the spectrum of Japanese society is both one of the most fundamental roots of Japan’s non-nuclear stance and an **extremely powerful deterrent against Japanese nuclear proliferation.** The origin of such strong anti-nuclear attitudes lies in Japan’s tragic experience as the only nation ever to suffer a nuclear attack. The two bombs dropped on Japan in August 1945 killed about 140,000 in Hiroshima and about 70,000 in Nagasaki. In the years that followed, tens of thousands more died from so-called atomic bomb disease—various illnesses caused by exposure to radiation. Even today, many Japanese suffer the after-effects of this exposure. Naturally, Hiroshima and Nagasaki have greatly influenced post-war Japanese culture. Over the past half-century, countless books, nursery tales, television and radio programs, movies, comic books, animated features and other forms of communication about the bombs have exposed later generations to the horrors of nuclear war.§§§ Another factor often overlooked by outsiders, but no less important in shaping Japanese antinuclear sentiment than Hiroshima and Nagasaki, was the harm done to Japanese fishermen by US nuclear testing in the South Pacific in March 1954. The radioactive fallout from the first US hydrogen bomb test on Bikini Atoll severely contaminated the Fukuryu-maru No. 5, a Japanese tuna-fishing boat known as the Lucky Dragon outside Japan, and its crew of 23, even though the boat was located 35 kilometers from the danger zone declared by the United States at the time of the explosion. The entire crew suffered from atomic bomb disease; one crew member died, and the rest were hospitalized for more than a year. The Japanese were both horrified and outraged to see that their compatriots were victims of nuclear weapons yet again, particularly because the tragedy occurred in peacetime.125 The Fukuryu-maru incident left a deep and lasting impression among the Japanese population that one could become a victim of nuclear weapons anywhere or anytime. Shortly afterward, the first nation-wide grassroots movement against nuclear weapons sprang up in Japan and, by the end of 1954, more than 20 million Japanese had signed the Suginami Appeal for the Prohibition of Atomic and Hydrogen Bombs.126 In April 1954, both houses of Japan’s Diet unanimously passed resolutions that called for the prohibition of nuclear weapons and international control of nuclear energy. **Japan’s non-nuclear policy has consistently reflected this profound hatred for nuclear weapons, which has been deeply embedded in post-war Japanese culture and society.**

#### No US-China war – economics

Shor 12 (Francis, Professor of History – Wayne State, “Declining US Hegemony and Rising Chinese Power: A Formula for Conflict?”, Perspectives on Global Development and Technology, 11(1), pp. 157-167)

While the United States no longer dominates the global economy as it did during the first two decades after WWII, it still is the leading economic power in the world. However, over the last few decades China, with all its internal contradictions, has made enormous leaps until it now occupies the number two spot. In fact, the IMF recently projected that the Chinese economy would become the world's largest in 2016. In manufacturing China has displaced the US in so many areas, including becoming the number one producer of steel and exporter of four-fifths of all of the textile products in the world and two-thirds of the world's copy machines, DVD players, and microwaves ovens. Yet, a significant portion of this manufacturing is still owned by foreign companies, including U.S. firms like General Motors. [5] On the other hand, China is also the largest holder of U.S. foreign reserves, e.g. treasury bonds. This may be one of the reasons mitigating full-blown conflict with the U.S. now, since China has such a large stake in the U.S. economy, both as a holder of bonds and as the leading exporter of goods to the U.S. Nonetheless, "the U.S. has blocked several large scale Chinese investments and buyouts of oil companies, technology firms, and other enterprises." [6] In effect, there are still clear nation-centric responses to China's rising economic power, especially as an expression of the U.S. governing elite's ideological commitment to national security.

#### No war – China abides by international law and keeps a low profile

Haixia 12 (Qi, Lecturer at Department of International Relations – Tsinghua University, “Football Game Rather Than Boxing Match: China–US Intensifying Rivalry Does not Amount to Cold War,” Chinese Journal of International Politics, 5(2), Summer, p. 105-127, http://cjip.oxfordjournals.org/content/5/2/105.full)

Keeping Low Profile China's strategy of keeping low profile constitutes the political foundation of the superficial friendship between the United States and China. After 1989, in the face of sanctions and blockades from the West, Deng Xiaoping told Chinese policy makers: ‘In short, my views about the international situation can be summed up in three sentences. First, we should observe the situation coolly. Second, we should hold our ground. Third, we should act camly. Don’t be impatient; it is no good to be impatient. We should be calm, calm and again calm, and quietly immerse ourselves in practical work to accomplish something – something for China.’48 Deng Xiaoping's counterstrategy was later summed up as ‘keeping a low profile’. It was in 1995 that then Chinese Foreign Minister Qian Qichen first introduced this principle of Chinese policy to the world.49 In 1998, President Jiang Zemin summarized the policy as ‘observe calmly, cope with affairs calmly, never seek leadership, hide brightness and cherish obscurity, get some things done.’50 The white paper on China's Peaceful Development issued in 2011 notes that, ‘As a responsible member of the international community, China abides by international law and the generally recognized principles governing international relations, and eagerly fulfills its international responsibility. China has actively participated in reforming international systems, formulating international rules and addressing global issues. It supports the development of other developing countries, and works to safeguard world peace and stability.’51

#### They're moving towards a resolution

Gidvani 12 -- 2008 graduate of The University of Iowa College of Law and currently practices law in Las Vegas, Nevada (ND, 2/22, "The Peaceful Resolution of Kashmir: A United Nations Led Effort for Successful International Mediation and a Permanent Resolution to the India-Pakistan Conflict," TRANSNATIONAL LAW & CONTEMPORARY PROBLEMS, Vol. 18:721, http://www.muntr.org/v4/wp-content/uploads/2012/02/The\_Peaceful.pdf)

However, the removal of President Musharraf from power in a landslide election on September 6, 2008 marks the beginning of Asif Ali Zardari’s second rise to power and a new era of Pakistani leadership. 166 At the time of this Note’s writing, Zardari has yet to state his official policy toward India and resolving the Kashmir conflict, but Haider Mullick, War on Terror political analyst, is optimistic.167 Mullick argues that the interdependence of the two nations will be enough to continue the march toward a peaceful resolution, replacing Pakistan’s old policy of “flexing military muscle.”168 The current trend and commitment toward a peaceful resolution reasonably indicates that a successful resolution can be reached sooner rather than later.

### Econ

#### Eurozone crisis thumps the global economy

UN News Centre 1/17/13 ("Euro zone’s debt crisis and austerity policies continue to tamp down growth – UN report," http://www.un.org/apps/news/story.asp?NewsID=43941&Cr=economic&Cr1=desa#.UPyrnyfAfoI)

17 January 2013 – The debt crisis of the Euro zone, slowing external demand and high oil process continued to depress Europe, while austerity policies throughout the industrialized world will not keep the world economy from slipping back into recession, according to an annual UN report published today.¶ “The euro area is in recession and the Gross Domestic Product (GDP) of the region is expected to reach only 0.3 per cent growth in 2013, strengthening marginally to 1.4 per cent in 2014,” according to a press release announcing the World Economic Situation and Prospects 2013, produced by the UN Department of Economic and Social Development (DESA), the UN Conference for Trade and Development (UNCTAD) and UN regional commissions.¶ The report warns that Western Europe’s current economic policies do not address key short-term issues of restoring growth in the region or how to put the crisis countries on a more probable path to fiscal sustainability.¶ In fact, it says, the Euro zone is in a technical recession, with successive negative quarterly rates of GDP growth in the second and third quarter. With a further sharp drop estimated for the fourth quarter, GDP probably declined in total by 0.5 per cent in 2012.¶ At least five economies are now in recession, with very poor prospects going forward. Italy’s GDP is expected to decline by 2.4 per cent in 2012 and 0.3 per cent in 2013 and Spain’s by 1.6 per cent and 1.4 per cent, respectively. The other countries in recession are Cyprus, Greece and Portugal.¶ To remedy the problem, the report urges an end to what it calls counterproductive austerity programmes in industrialized countries.¶ “Given the looming uncertainties and downside risks … current policy stances seem to fall well short of what is needed to prevent the global economy from slipping into another recession,¶ “More forceful and concerted actions should be considered,” the report states in its introductory chapter.¶ It predicts that the global economy will grow at a rate of only 2.4 per cent in 2013 and 3.2 per cent in 2014 -- a significant downgrade from forecasts of half a year ago, and much less than it says is needed to overcome the jobs crisis that many countries are still facing.¶ Maintaining that weaknesses in the major developed economies are at the root of the slowdown, it warns that, with existing policies and growth trends, it may take at least another five years for Europe and the United States to make up for the job losses caused by the Great Recession of 2008-2009.¶ Europe in particular, it says, is trapped in a vicious cycle of high unemployment, financial sector fragility, heightened sovereign risks, fiscal austerity and low growth.

#### Economic decline doesn’t cause war

Tir 10 [Jaroslav Tir - Ph.D. in Political Science, University of Illinois at Urbana-Champaign and is an Associate Professor in the Department of International Affairs at the University of Georgia, “Territorial Diversion: Diversionary Theory of War and Territorial Conflict”, The Journal of Politics, 2010, Volume 72: 413-425)]

Empirical support for the economic growth rate is much weaker. The finding that poor economic performance is associated with a higher likelihood of territorial conflict initiation is significant only in Models 3–4.14 The weak results are not altogether surprising given the findings from prior literature. In accordance with the insignificant relationships of Models 1–2 and 5–6, Ostrom and Job (1986), for example, note that the likelihood that a U.S. President will use force is uncertain, as the bad economy might create incentives both to divert the public’s attention with a foreign adventure and to focus on solving the economic problem, thus reducing the inclination to act abroad. Similarly, Fordham (1998a, 1998b), DeRouen (1995), and Gowa (1998) find no relation between a poor economy and U.S. use of force. Furthermore, Leeds and Davis (1997) conclude that the conflict-initiating behavior of 18 industrialized democracies is unrelated to economic conditions as do Pickering and Kisangani (2005) and Russett and Oneal (2001) in global studies. In contrast and more in line with my findings of a significant relationship (in Models 3–4), Hess and Orphanides (1995), for example, argue that economic recessions are linked with forceful action by an incumbent U.S. president. Furthermore, Fordham’s (2002) revision of Gowa’s (1998) analysis shows some effect of a bad economy and DeRouen and Peake (2002) report that U.S. use of force diverts the public’s attention from a poor economy. Among cross-national studies, Oneal and Russett (1997) report that slow growth increases the incidence of militarized disputes, as does Russett (1990)—but only for the United States; slow growth does not affect the behavior of other countries. Kisangani and Pickering (2007) report some significant associations, but they are sensitive to model specification, while Tir and Jasinski (2008) find a clearer link between economic underperformance and increased attacks on domestic ethnic minorities. While none of these works has focused on territorial diversions, my own inconsistent findings for economic growth fit well with the mixed results reported in the literature.15 Hypothesis 1 thus receives strong support via the unpopularity variable but only weak support via the economic growth variable. These results suggest that embattled leaders are much more likely to respond with territorial diversions to direct signs of their unpopularity (e.g., strikes, protests, riots) than to general background conditions such as economic malaise. Presumably, protesters can be distracted via territorial diversions while fixing the economy would take a more concerted and prolonged policy effort. Bad economic conditions seem to motivate only the most serious, fatal territorial confrontations. This implies that leaders may be reserving the most high-profile and risky diversions for the times when they are the most desperate, that is when their power is threatened both by signs of discontent with their rule and by more systemic problems plaguing the country (i.e., an underperforming economy).

#### Economy’s resilient – can survive shocks

Bloomberg 12 (“Fed’s Plosser Says U.S. Economy Proving Resilient to Shocks,” 5-9, http://www.bloomberg.com/news/2012-05-09/fed-s-plosser-says-u-s-economy-proving-resilient-to-shocks.html)

Philadelphia Federal Reserve Bank President Charles Plosser said the U.S. economy has proven “remarkably resilient” to shocks that can damage growth, including surging oil prices and natural disasters. “The economy has now grown for 11 consecutive quarters,” Plosser said today according to remarks prepared for a speech at the Philadelphia Fed. “Growth is not robust. But growth in the past year has continued despite significant risks and external and internal headwinds.” Plosser, who did not discuss his economic outlook or the future for monetary policy, cited shocks to the economy last year, including the tsunami in Japan that disrupted global supply chains, Europe’s credit crisis that has damaged the continent’s banking system and political unrest in the Middle East and North Africa. “The U.S. economy has a history of being remarkably resilient,” said Plosser, who doesn’t have a vote on policy this year. “These shocks held GDP growth to less than 1 percent in the first half of 2011, and many analysts were concerned that the economy was heading toward a double dip. Yet, the economy proved resilient and growth picked up in the second half of the year.” Plosser spoke at a conference at the Philadelphia Fed titled, “Reinventing Older Communities: Building Resilient Cities.” Urban Resilience His regional bank’s research department is working on a project to measure the resilience of different cities, to learn more about the reasons that some urban areas suffer more than others in downturns, Plosser said. He mentioned one early finding of the study: Industrial diversity increases a city’s resilience. “I do want to caution you that resilient and vibrant communities are not just about government programs or directed industrial planning by community leaders,” Plosser said. “The economic strength of our country is deeply rooted in our market- based economy and the dynamism and resilience of its citizenry.”

### Asteroid Mining

**No REM internal – No embargo, market work-arounds**

**Tamny 12** (John Tamny, Forbes Staff, China's "Rare Earths", and the Hypocrisy of the Obama Administration, 3-25-12, http://www.forbes.com/sites/johntamny/2012/03/25/chinas-rare-earths-and-the-hyprocrisy-of-the-obama-administration/2/)

The above is important considering what Sternberg also alerted readers to in his recent Journal op-ed. Sternberg observed that Beijing doesn’t have much control over **rare-earths** producers in China, and to prove his point he noted that roughly **40%** of exports to Japan “weren’t registered with Chinese customs authorities.” Translated, rare earths from China are one way or the other exiting the country, and once they do we, along with everyone else, **have access** to them at whatever the prevailing market price may be. Just as every oil producing country on earth could “embargo” the U.S. with zero impact on our access to their oil (we’d simply buy it from those they’re not embargoing), so long as rare earths are exiting China, U.S. producers will be able to purchase them in the marketplace in the same way they buy other commodities. Barring a decision by Beijing that forces Chinese producers to hoard rare earths, we’ll be able to buy them. All this raises a question centering on what if the Chinese government chooses to do the unlikely, and restricts all rare earths exports? If so, it’s none of our business. Just as we wouldn’t want the Chinese demanding from us “American oil”, we shouldn’t presume to tell them what to sell to American producers. Of course the scenario just mentioned is as mentioned, **highly unlikely**. For one, it’s hard to imagine that a still desperately poor country would turn its back on the dollars it would gain if it were to hoard commodities heavily demanded by market participants. Second, markets have for centuries proven expert at **working around** shortages of most anything. Assuming the Chinese choose to halt or severely restrict rare earths exports, it’s a fair bet that **alternatives** will soon find their way to those in need.

#### No war over rare earths---geopolitical tensions drive new production that solves

Jonathan Wood 11, Senior Global Issues Analyst at Control-Risks, 2011, “Risk Map 2011,” online: http://www.control-risks.com/webcasts/studio/riskmap\_2011/uk/pdf/riskmap\_report\_2011\_LR.pdf

As these examples suggest, access to rare earths is becoming a geopolitical issue in its own right: any export restrictions, price hikes or other disruptions threaten to become sources of bilateral or multilateral tension and fuel simmering trade conflicts. Yet the strategic elevation of rare-earth elements – as well as scarce and concentrated minerals such as lithium, cobalt and coltan – will also drive new exploration worldwide as countries look to diversify and stabilise supply. Germany, for example, has called for Europe to explore and develop prospective resources in Eastern Europe and Central Asia, partly to pip China to the post. Higher prices have also encouraged Australia, vietnam, Malaysia, Canada, brazil and India to develop projects. Greenland even overturned a longstanding ban on uranium mining in 2010 to permit access to a rare-earth deposit. In the coming year, we anticipate new opportunities for miners of rare earths and other unique minerals, which could provide a boon to several mineral-rich countries and help tame geopolitical concerns.

#### **No resource wars – prefer statistical evidence**

Pinker 11 (Steven, Harvard College Professor and Johnstone Family Professor in the Department of Psychology – Harvard University, “The Better Angels of Our Nature: Why Violence Has Declined,” Google Books)

Once again it seems to me that the appropriate response is "maybe, but maybe not." Though climate change can cause plenty of misery and deserves to be mitigated for that reason alone, it will not necessarily lead to armed conflict. The political scientists who track war and peace, such as Halvard Buhaug, Idean Salehyan, Ole Theisen, and Nils Gleditsch, are skeptical of the popular idea that people fight wars over scarce resources. Hunger and resource shortages are tragically common in sub-Saharn countries such as Malawi, Zambia, and Tanzania, but wars involving them are not. Hurricanes, floods, droughts, and tsunamis (such as the disastrous one in the Indian Ocean in 2004) do not generally lead to armed conflict. The American dust bowl in the 1930s, to take another example, caused plenty of deprivation but no civil war. And while temperatures have been rising steadily in Africa during the past fifteen years, civil wars and war deaths have been falling. Pressures on access to land and water can certainly cause local skirmishes, but a genuine war requires that hostile forces be organized and armed, and that depends more on the influence of bad governments, closed economies, and militant ideologies than on the sheer availability of land and water. Certainly any connection to terrorism is in the imagination of the terror warriors: terrorists tend to be underemployed lower-middle-class men, not subsistence farmers. As for genocide, the Sudanese government finds it convenient to blame violence in Darfur on desertification, distracting the world from its own role in tolerating or encouraging the ethnic cleansing. In a regression analysis on armed conflicts from 1980 to 1992, Theisen found that conflict was more likely if a country was poor, populous, politically unstable, and abundant in oil, but not if it had suffered from droughts, water shortages, or mild land degradation. (Severe land degradation did have a small effect.) Reviewing analyses that examined a large number (N) of countries rather than cherry-picking one or two, he concluded, "those who foresee doom, because of the relationship between resource scarcity and violent internal conflict, have very little support in the large-N literature." Salehyan adds that relatively inexpensive advances in water use and agriculture practices in the developing world can yield massive increases in productivity with a constant or even shrinking amount of land, and that better governance can mitigate the human costs of environmental damage, as it does in developed democracies. Since the state of the environment is at most one ingredient in a mixture that depends far more on political and social organization, resource wars are far from inevitable, even in a climate-changed world.

#### Microgravity exposure causes muscle atrophy and bone deterioration- must develop artificial gravity.

Potember, Bryden, and Shapiro 2001(Dr. Richard S., Dr. Wayne A., and Dr. Jay R., Researchers for the Applied Physics Laboratory at Johns Hopkins University, “Analysis of bone metabolism biomarkers and countermeasures using time of flight mass spectrometry,”) hss

Exposure to reduced gravity during space travel profoundly alters the loads placed on bone and muscle. Astronauts lose muscle mass and strength while in space. Exercise countermeasures are so important that other activities may not be given enough time. The data from humans in space indicates a very rapid atrophy of skeletal muscle. After 5- day flights, mean cross-sectional areas of muscle fibers were 11 and 24% smaller in type I and II fibers. These changes occurred even though countermeasures were undertaken by astronauts. There is a need to measure pharmacological, hormonal and growth factor biomarkers and to develop in-depth knowledge of molecular mechanisms for complex interplay between muscle atrophy and bone demineralization. We are evaluating the technical feasibility for evaluating the following biomarkers by TOF-MS: growth hormone, insulin-like growth factors (IGF-I), glucocorticoids: cortisol (which may play a central role in the early stages of muscle atrophy), and 3-methylhistidine (breakdown product of muscle proteins). Exposure to microgravity rapidly leads to osteopenia due to increased bone resorption and decreased bone formation. Studies with Skylab and Russian crews demonstrated 1.0-1.6%/month mean losses of bone mass from the spine, femur, neck, and pelvis, increasing the risk of fracture. Also of concern is the lack of evidence that bone loss is fully reversible on return to earth. Progress in developing effective countermeasures to demineralization depends on increased understanding of how the complex biochemical systems that modulate bone turnover response to pharmacological and stress-induced interventions.

## 2NC

### Impact Overview – 2NC

#### Russian econ decline outweighs – Econ decline causes political upheaval which causes loose nukes and preemption- that’s Filger

#### And- It’s most likely scenario for nuclear war and causes US draw in

Steven **David**, Professor of Political Science, Johns Hopkins University, “Saving America From the Coming Civil Wars,” FOREIGN AFFAIRS, v 78 n 1, Jan/Feb **1999**, LN.

Only three countries, in fact, meet both criteria: Mexico, Saudi Arabia, and Russia. Civil conflict in Mexico would produce waves of disorder that would spill into the United States, endangering the lives of hundreds of thousands of Americans, destroying a valuable export market, and sending a torrent of refugees northward. A rebellion in Saudi Arabia could destroy its ability to export oil, the oil on which the industrialized world depends. And internal war in Russia could devastate Europe and trigger the use of nuclear weapons. Of course, civil war in a cluster of other states could seriously harm American interests. These countries include Indonesia, Venezuela, the Philippines, Egypt, Turkey, Israel, and China. In none, however, are the stakes as high or the threat of war as imminent.

#### Plus it’s the Only existential risk

Nick **Bostrom** (PhD Philosophy – Oxford U) **2002** Existential Risks, http://www.nickbostrom.com/existential/risks.html)

A much greater existential risk emerged with the build-up of nuclear arsenals in the US and the USSR. An all-out nuclear war was a possibility with both a substantial probability and with consequences that *might* have been persistent enough to qualify as global and terminal. There was a real worry among those best acquainted with the information available at the time that a nuclear Armageddon would occur and that it might annihilate our species or permanently destroy human civilization.[4]  Russia and the US retain large nuclear arsenals that could be used in a future confrontation, either accidentally or deliberately. There is also a risk that other states may one day build up large nuclear arsenals. Note however that a smaller nuclear exchange, between India and Pakistan for instance, is not an existential risk, since it would not destroy or thwart humankind’s potential permanently. Such a war might however be a local terminal risk for the cities most likely to be targeted. Unfortunately, we shall see that nuclear Armageddon and comet or asteroid strikes are mere preludes to the existential risks that we will encounter in the 21st century.

### Turns Heg

#### Russian Instability Turns heg

**Baran et al, 2007** (Zeyno, Senior Fellow and Director of the Center for Eurasian Studies at the Hudson Institute, “U.S-Russia Relations: Is Conflict Inevitable?”, Hudson Institute Symposium on U.S.-Russia Relations, www.hudson.org/files/pdf\_upload/Russia-Web%20(2).pdf)

The West needs a stable Russia in order to maintain the global balance of power against China. In the event of Russia’s disintegration, her resources will go to China, not the West. The West cannot stop Russia’s slide into a systemic crisis, and can only help get out of it once it has begun. This is a challenge for the future. Currently, the West needs a “Cold War” only with Russia’s new masters, not with the Russian people. Russians are protesting against the politics of the Russian bureaucracy, and their protest should not be re-directed at the bureaucracy’s strategic partners in the West. If the West understands and accepts this, it needs to learn to acknowledge Russians’ rights to patriotism and to a normal level of freedom—not as a religious symbol, but as the only path to prosperity and justice. Russian “democrats” and “liberals” have forgotten these demands and rights, and therefore the terms “dem - o crat” and “liberal” are cursed in Russia. Official propaganda uses this to divert Russian citizens from asserting their interests and rights to fighting the West. The West needs to explain to Russia that these rights have been destroyed not by rivalry with the West, but solely by the avarice of the new Russian leaders. It is true that in the future, the issue of global competition will arise. Currently, however, there is only one key problem—corruption (including, of course, corruption in the interests of the West) and a lack of bureaucratic integrity. After Russia experiences a systemic crisis the West must be able to say to Russians; “You see? We are for democracy, but not for “democrats,” for law, but not for lawyers, for prosperity, but not for prospering oligarchs.” All of these are things that the West could not say after the 1990s. Russia will be useful to the West if the West can side with Russia against China and global Islam in foreign policy and with the Russian people against the Russian bureaucracy in domestic policy. If the West attempts to transform Russia according to its own conceptualization of the correct societal order, or simply to seize Russian raw materials, intellect, and money, it will destroy Russia and pay dearly for the relatively small gain. As a consequence of doing so, the West will experience large-scale, global systemic problems.

### Turns Econ

#### Russian economic downturn will disrupt the world economy

**Cooper 08**

(William, Congressional Research Service Specialist in International Trade and Finance Foreign Affairs, Defense, and Trade Division, “Russia’s Economic Performance and Policies and Their Implications for the United States,” May 30, <http://www.fas.org/sgp/crs/row/RL34512.pdf>)

The greater importance of Russia’s economic policies and prospects to the United States lie in their indirect effect on the overall economic and political environment in which the United States and Russia operate. From this perspective, Russia’s continuing economic stability and growth can be considered positive for the United States. Because financial markets are interrelated, chaos in even some of the smaller economies can cause uncertainty throughout the rest of the world. Such was the case during Russia’s financial meltdown in 1998. Promotion of economic stability in Russia has been a basis for U.S. support for Russia’s membership in international economic organizations, including the International Monetary Fund (IMF), the World Bank, and the World Trade Organization (WTO). As a major oil producer and exporter, Russia influences world oil prices that affect U.S. consumers.

### Exports Bad – Turns Renewables/Modeling

#### Exports cause international adoption of natural gas – that crowds out renewables

Simmons 12 (Bradford, Editor-in-Chief, “The Editor's Monthly Memo: The Staggering Implications of the U.S. Natural Gas Market,” International Affairs Review, 8-12, http://www.iar-gwu.org/node/429)

At home, a cautious, yet supportive approach to LNG exports would have ancillary benefits as well. With coal plants retiring every year and the declining economic viability of nuclear power, natural gas is well positioned to vastly expand its 30 percent share of electricity production. While this will translate into lower utility bills for U.S. consumers, it also raises the specter of overreliance. If natural gas exceeds a 50 percent share of power generation, any source disruptions or sudden price fluctuations would have a calamitous economic impact. Furthermore, such cheap gas could potentially crowd out other promising sources of energy, such as renewables. Though natural gas fired plants produce roughly half the carbon of a coal plant and have contributed to an overall reduction in emissions in the United States, a recent International Energy Administration report reveals that a shift to gas generated electricity will not prove sufficient to significantly alter current climate change scenarios.

### A2: Demand Down

**Fukushima dooms global expansion – Japan and Germany will cause a global shift away from nuclear**

**Mez, 12** – senior Associate Professor at the Department of Political and Social Sciences, Freie Universität Berlin, and managing director of the Environmental Policy Research Centre (Lutz, "Nuclear energy–Any solution for sustainability and climate protection?” Energy Policy. ScienceDirect.)

The total meltdown in March 2011 of three units of the Fukushima Daiichi Nuclear Power Station placed international energy policy at a crossroads and will have a **paradigm-shifting** impact on the future of nuclear energy. We have seen that planned global expansion of nuclear energy remains considerably slower than its own targets and expectations. The reasons why a renaissance of nuclear power has not materialized include not only lack of industrial and production capacities and shortages of technical experts in the nuclear power industry, but above all constantly rising costs for the construction of nuclear power plants and associated financing problems. The assertion that nuclear power plants help combat climate change also turns out to be spurious upon examining the life cycle of nuclear power plants. In weighing the pros and cons, it must always be kept in mind that military and civil use of nuclear power are intrinsically linked to one another like Siamese twins. This is why the danger of proliferation and vulnerability to terrorist attacks has taken on a greater importance as an argument against civilian nuclear energy in democratic societies. The global renaissance of nuclear energy hailed for decades has failed to materialise and following the nuclear disaster in Japan it has become even more unlikely that nuclear energy will play an important role in global energy production over the long term. On the contrary: since Fukushima there have been more or less clear signs of rethinking on the parts of governments in a number of countries—including Germany, Switzerland, Belgium, China and now even Japan—indicating that they are considering accelerating fundamental changes in energy policy. Especially the phase-out of nuclear power chosen by the influential EU member state Germany could have an impact on Europe as a whole, as EU Energy Commissioner Oettinger expects: the nuclear disaster in Japan faces us with the challenge of deciding “how Europe is to secure its energy needs in the foreseeable future without nuclear power”. Other countries like Russia, the Czech Republic or France, on the other hand, have announced that they intend to carry on expanding nuclear power. This raises the question as to what impact the events in Japan will have on civil use of atomic power and the future energy matrix over the medium term. Because Japan and Germany—the third and fourth largest economies in the world—have decided to phase out nuclear energy and increasingly base future growth on renewable energies and energy efficiency, this inevitably poses a question to the rest of the world: If Japan and Germany don't need nuclear power, why does anyone?

#### Best ev concludes neg – Russia’s the leading supplier to Europe

Voice of Russia 1-16 (Providing Europe with Caspian gas is impractical, http://english.ruvr.ru/2013\_01\_16/Providing-Europe-with-Caspian-gas-is-impractical/)

“Kazakhstan is practically never considered to be a supplier of gas to Europe. Azerbaijan has some prospects of increasing the supplies but they are restricted. As for Turkmenistan, all its gas goes to China so far. There are also plans of increasing deliveries to Iran. Europe is likely to be more interested in liquefied natural gas now. And naturally, it will never decline deliveries of Russian gas.” Caspian suppliers of natural gas to Europe could miss their target. The reason is not so much competition on the part of Russia as a trivial shortage of money for developing gas fields, modernizing the old pipes and making new ones and buying gas from partners to fill the pipelines. This is compulsory because even Azerbaijan’s own reserves could be insufficient. Valery Nesterov describes all possible versions of filling the Azerbaijani pipeline. “Azerbaijan could get some gas from Turkmenistan and Kazakhstan. However, there are some problems associated with building a pipeline under the Caspian Sea. They are more likely to think about exporting liquefied gas but those are very expensive projects.” In this situation BP was entrusted with developing Azeri-Chirag-Guneshli, the Azerbaijani sector of a complex of Caspian oil fields. The Brits promised the moon and the stars at first, meaning enormous volumes of oil and gas. However, it turned out later that the reserves were not so large after all. BP alleged technical problems and Azerbaijan accused the international company of incompetence, complaining about the underpayment of $8bln. But however strong the competition of Caspian gas with Russian deliveries could be, the European demand will exceed the offer of all suppliers on the market. Independent gas analyst Dmitry Lutiagin feels optimistic. “The Russian policy and that of the Caspian region countries do not cross over. Russian gas goes to Europe and finds its consumers there. It is true that we are reducing the deliveries but this is caused by the consequences of the economic crisis. As for gas volumes that European countries could consume, they in any case exceed the potential volumes that Russia and the Caspian region countries taken together could provide.” We can be sure that the gas reserves are large enough to satisfy everyone, both Russia and its potential competitors from the Caspian region. Hopefully, the gas prices do not fall. They have remained on a good and stable level over a few years.

### A2: Aggression

**1. Economic decline is the largest internal link to Russian aggression.**

**Peters 8** (Ralph, Retired United States Army Lieutenant Colonel and Degree in International Relations from St. Mary’s University, *Bankrupt Rogues: Beware Failing Foes*, NY Post, November 29th, http://www.nypost.com/p/news/opinion/opedcolumnists/item\_Sq6rxuaQjf2dV655mfdh9M)

FEELING gleeful at the misfortunes of others is an ugly-but-common human characteristic. The world delighted in our crashing economy, then we got our own back as Euro-bankers and Russian billionaires proved at least as greedy as our own money-thugs. Of all the pleasures to be found in the pain of others, though, none seems more justified than smugness over the panic in Moscow, Caracas and Tehran as oil prices plummet. We may need to be careful what we wish for. Successful states may generate trouble, but failures produce catastrophes: Nazi Germany erupted from the bankrupt Weimar Republic; Soviet Communism's economic disasters swelled the Gulag; a feckless state with unpaid armies enabled Mao's rise. Economic competition killed a million Tutsis in Rwanda. The deadliest conflict of our time, the multi-sided civil war in Congo, exploded into the power vacuum left by a bankrupt government. A resource-starved Japan attacked Pearl Harbor. The crucial point: The more a state has to lose, the less likely it is to risk losing it. "Dizzy with success," Russia's Vladimir Putin may have dismembered Georgia, but Russian tanks stopped short of Tbilisi as he calculated exactly how much he could get away with. But now, while our retirement plans have suffered a setback, Russia's stock market has crashed to a fifth of its value last May. Foreign investment has begun to shun Russia as though the ship of state has plague aboard. The murk of Russia's economy is ultimately impenetrable, but analysts take Moscow's word that it entered this crisis with over $500 billion in foreign-exchange reserves. At least $200 billion of that is now gone, while Russian markets still hemorrhage. And the price of oil - Russia's lifeblood - has fallen by nearly two-thirds. If oil climbs to $70 a barrel, the Russian economy may eke by. But the Kremlin can kiss off its military-modernization plans. Urgent infrastructure upgrades won't happen, either. And the population trapped outside the few garish city centers will continue to live lives that are nasty, brutish and short - on a good day. Should oil prices and shares keep tumbling, Russia will slip into polni bardak mode - politely translated as "resembling a dockside brothel on the skids." And that assumes that other aspects of the economy hold up - a fragile hope, given Russia's overleveraged concentration of wealth, fudged numbers and state lawlessness. Should we rejoice if the ruble continues to drop? Perhaps. But what incentive would Czar Vladimir have to halt his tanks short of Kiev, if his economy were a basket case shunned by the rest of the world? Leaders with failures in their laps like the distraction wars provide. (If religion is the opium of the people, nationalism is their methamphetamine.) The least we might expect would be an increased willingness on Moscow's part to sell advanced weapons to fellow rogue regimes. Of course, those rogues would need money to pay for the weapons (or for nuclear secrets sold by grasping officials). A positive side of the global downturn is that mischief-makers such as Iran and Venezuela are going to have a great deal less money with which to annoy civilization.

**2. Russia will pursue a moderate foreign policy now.**

**Mankoff 10** (Jeffrey, Adjunct fellow for Russia studies at the Council on Foreign Relations, Associate director of International Security Studies at Yale University, John M. Olin national security fellow at the Olin Institute for Strategic Studies – Harvard University, Henry Chauncey fellow in grand strategy – Yale University, Fellow at Moscow State University, *The Russian Economic Crisis*, Council Special Report, Number 53, April 2010, Accessed Online @ the Council on Foreign Relations)

By exposing structural deficiencies in the Russian economy and high- lighting the limits of its post-1998 resurgence, the crisis forced officials to pull back from sweeping claims about Russia’s imminent return to great-power status and focus attention on problems closer to home. Such foreign policy caution might not endure in the face of another commodity price–driven boom. Yet given the modest economic prognoses for the coming year, Russia’s foreign policy is likely to remain cautious for the near future. A period of foreign policy restraint in Moscow gives the West a window of opportunity to encourage both fundamental economic reform in Russia and greater integration with the global economy. If successful, such integration would diminish the likelihood that a recovered Russia would again pursue regional domination and autarky as the basis for a revisionist foreign policy. The inability of Russian industries to compete globally has long forced them to focus on meeting domestic demand, which has plummeted in the course of the crisis. Yet because of their inability to modernize on their own, Russian companies have increasingly turned to partners in Europe (especially Germany, France, and Italy) for high technology. In the context of the crisis and President Barack Obama’s promise to “reset” relations with Moscow, Russia has also appeared more receptive to political overtures from the United States and the European Union (EU), for instance on sanctions against Iran, strategic arms cuts, and the war in Afghanistan. Even so, renewed (albeit limited) growth and uncertainty about who will lead Russia after Medvedev’s first term expires in 2012 create concern for the future.

### U – No Exports – A2: Some Exports Now

#### Current exports are limited to 4 million which doesn’t affect the market

Dlouhy 1-28 (Jennifer A., covers energy policy and other issues for The Houston Chronicle, “Shell, El Paso Pipeline Partners plan LNG export facility,” Fuel Fix, 2013, http://fuelfix.com/blog/2013/01/28/shell-kinder-morgan-to-build-lng-export-facility/)

Shell and El Paso Pipeline Partners on Monday announced plans to jointly build a plant for exporting natural gas, marking the latest venture aiming to take advantage of high Asian and European prices for the fossil fuel. Under the deal, Shell will team up with El Paso’s Southern Liquefaction Company to convert the existing Elba Island LNG import terminal near Savannah, Ga., so it can also liquefy and export the fossil fuel. “This announcement underscores how the abundance of natural gas in the U.S. is changing the energy landscape,” said Shell Oil Co. President Marvin Odum in a statement. “With a measured, phased approach, exports of cleaner-burning natural gas can help meet the world’s rising energy needs while also giving a boost to the U.S. economy.” But the companies’ plans **depend on the approval of regulators at the Energy Department**, which is tasked with reviewing more than a dozen applications to export 22.6 billion cubic feet of natural gas per day to countries that do not have a free trade agreement with the United States. Southern, which is a Kinder Morgan company and a unit of El Paso Pipeline Partners, already has won the Energy Department’s approval to export up to 4 million metric tons of natural gas annually from the Elba Island terminal over the next quarter century to nations that have free-trade agreements with the U.S. But the natural gas market in those countries is **relatively small**, especially compared with the potential to sell natural gas to consumers in Japan, Thailand and other nations hungry for an alternative to nuclear power. That’s why Southern and Shell also are seeking a license to export up to 0.5 billion cubic feet per day to countries that don’t have free-trade accords with the U.S. The Elba Island LNG terminal, built in 1978, still is importing some natural gas, which is offloaded from tankers as a liquid and regassified at the Savannah, Ga., facility. But a glut of domestic natural gas, harvested using horizontal drilling and hydraulic fracturing, has upended the market for the fossil fuel. Depending on approvals from the Federal Energy Regulatory Commission and other agencies, construction could begin on new liquefaction facilities at the plant by 2015 and it could be ready to launch exports “a few years” later, said El Paso spokesman Richard Wheatley Wheatley said the company has applied for FERC review of the project, which would be divided over two phases, with the first eventually enabling exports of up to 210 million cubic feet per day of natural gas. Wheatley declined to comment on the cost of the new facility, which is set to be detailed in regulatory filings with the SEC later this week. Once the deal is finalized, El Paso Pipeline Partners is set to own 51 percent of the new entity created with Shell and will operate the export facility. Shell would own the remaining 49 percent and claim all of the facility’s liquefaction capacity. Although the Energy Department has already approved one LNG export license, for Houston-based Cheniere Energy, analysts generally do not expect any more decisions on pending permit applications until the second half of this year. First, the Energy Department will finish reviewing a study released in December that concluded the U.S. could claim up to $47 billion in new economic activity even if exports were unchecked. Some LNG export foes, including Sen. Ron Wyden, D-Ore., have called on the Energy Department to redo the report, saying it unfairly relied on old data about domestic natural gas demand. The Energy Department has signaled it will consider LNG export license applications individually, probably on a first-come, first-served basis. Southern’s August application puts it 11th on the long list of companies vying for licenses. Still, there is a chance **the Energy Department will reshuffle the order**.

#### Exports will happen, just a question of how much – squo exports are limited

Kennedy 1-25 (Will, U.S. to Cap LNG Exports to Boost Economy, Shell’s Voser Says, Bloomber, 2013, http://www.bloomberg.com/news/2013-01-25/u-s-will-cap-lng-shipments-to-boost-economy-shell-s-voser-says.html)

The U.S. won’t rival Qatar and Australia as the world’s largest liquefied natural gas exporter as it keeps fuel at home to drive an industrial renaissance, Royal Dutch Shell Plc (RDSA) Chief Executive Officer Peter Voser said. The U.S. may export 50 metric million tons a year of LNG by the end of the decade, or about 10 percent of the projected world market, Voser said today in a Bloomberg TV interview in Davos, Switzerland. That’s below the 120 million tons a year he said is predicted by some forecasters and less than Qatar’s current annual production of 77 million tons. Australia is projected to pass Qatar by the end of the decade. 6:51 “Exports will happen,” said Voser, 54, whose company is the world’s largest LNG supplier. “But I hope that the U.S. will actually keep most of the gas back because it will help them to industrialize parts of the U.S. more.”

### A2: Not Competitive

#### US exports are competitive – increased international demand and lower prices

Krauss 1-4 (Clifford, Houston Correspondent – NYT, “Exports of American Natural Gas May Fall Short of High Hopes,” New York Times, 2013, http://www.nytimes.com/2013/01/05/business/energy-environment/exports-of-us-gas-may-fall-short-of-high-hopes.html?\_r=1&)

The plans for a gas export boom are based on the theory that cheap American gas will remain cheap for decades while Asian and European gas supplies remain tight and expensive. Global demand for natural gas is expected to expand for decades as nations seek a replacement for coal, nuclear energy and increasingly expensive oil, energy specialists say. If the American terminals could be built tomorrow, they would have a perfect market opportunity. The production glut in the United States has reduced natural gas prices in this country by more than two-thirds since 2008. Gas prices in most other places around the world are much higher because they are linked to oil, which has remained comparatively expensive. Gas prices in the United States are around $3.30 per thousand cubic feet, compared with $10 to $11 in Europe and over $15 in Asia.

### 2NC Picking Winners Bad

#### The aff distorts the market – drives capital away from competitive projects and killing incentives to innovate

Spencer, 9 – Research Fellow in Nuclear Energy in the Thomas A. Roe Institute for Economic Policy Studies @ The Heritage Foundation (Jack, 2/6. “The Problem with Increasing Energy Loan Guarantees.” <http://www.heritage.org/Research/EnergyandEnvironment/wm2277.cfm>)

And that is the problem with loan guarantees: They distort normal market forces and encourage government dependence.¶ One problem with the larger national economic debate is the notion that money--or, more accurately, savings or capital--does not grow on trees. It comes from real people who have saved and invested and exists in finite amounts. By subsidizing a portion of the actual cost of a project through a loan guarantee, the government is actually distorting the allocation of resources by directing capital away from a more competitive project.¶ This signals to industry (be it nuclear, wind, clean coal, natural gas, or anything else) that it does not have to be competitive. It reduces incentives to manage risk and be independent, innovative, and efficient. The end result will be a new nuclear industry that is built for the short run and not sustainable.¶ While a loan guarantee may be good for the near-term interests of the individual guarantee recipient, it is not good for consumers, taxpayers, or long-term competitiveness.

### \* XT – Loan Guarantees Suck – Costs

Costs – slocum

Factually wrong – gale ev

#### More reasons –

#### A) Doesn’t cover upfront costs – uncertainty is inevitable

Gale et al 9 (Kelley Michael, Finance Department Chair – Latham & Watkins, “Financing the Nuclear Renaissance: The Benefits and Potential Pitfalls of Federal & State Government Subsidies and the Future of Nuclear Power in California,” Energy Law Journal, Vol. 30, p. 497-552, http://www.felj.org/docs/elj302/19gale-crowell-and-peace.pdf)

a. Narrow Scope of Eligible Project Costs The loan guarantee covers up to eighty percent of the eligible ―project costs.‖ The DOE has determined under its Final Rule regarding ―Loan Guarantees for Projects that Employ Innovative Technologies‖ (Final Rule) that ―eligible project costs‖ do not include ―Administrative Costs‖ and the ―Subsidy Cost.‖ 80 By excluding the costs of the guarantee, the federal government has limited the portion of the capital budget for a new nuclear project that can be financed through federally guaranteed debt. The potential substantial nature of the Subsidy Cost and the recognition by DOE in the Final Rule that ―[i]t is impossible to tell at this point what the Credit Subsidy Cost will be for any particular project‖ make it difficult for developers and financial advisors to model a plan for pursuing development of a new nuclear project. 81 Although the proposed Bingaman legislation attempts to address concerns regarding the costs of the loan guarantees by providing the DOE Secretary the authority to adjust the amount of the fees as ―necessary to promote…eligible projects‖ and provides for a refund of seventy-five percent of the amount of fees collected if there is no financial close on an application, 82 there could be an undefined but potentially massive financial obligation that may require up-front payment for the project to move forward from development to construction, twenty-five percent of which would be lost even if an applicant never reached a close on its application. In addition, because the DOE has not set an equity threshold requirement for these projects, but has stated that the debt to equity ratio will be considered in determining whether to provide a loan guarantee, it is not clear whether the amount of Administrative Costs and Subsidy Costs will be counted against the amount of equity determined to have been funded into a project. 83 This ambiguity makes it impossible for a developer to know with certainty in advance what its equity commitment will be, because any costs excluded from eligible project costs under the loan guarantees will need to be equity financed. Figure 1, above, depicts the equity contribution of a parent company in light of the overall financing structure of a nuclear power project. Further, DOE rules are unclear as to how administrative costs and other predevelopment expenses in respect of entitlement processes and other approvals at state and local levels will be treated under the loan guarantee program. These costs will vary substantially depending on the location of a project. In states with complex regulatory regimes, these costs can be massive and extend over many years. If these costs are excluded from eligible project costs under the loan guarantee program, nuclear power development in states with more complicated regulatory frameworks and litigation tools for project opponents will be at a decided disadvantage. The DOE has suggested, against concerns raised by certain financial institutions, that default and post petition interest, reimbursement of letter of credit drawings, prepayment premiums, payments under hedge agreements, and indemnification payments are not eligible for the loan guarantee program. 84 Gaps in guaranteed coverage leave lenders without recourse to the United States government to recover all ―obligations‖ under the loan facility. For example, typically in large loans, the cost of certain qualified interest rate hedges are included with the ―obligations‖ under the loan facility, and are secured pari passu with those obligations. 85 If payments in respect of an interest rate cap on a DOE guaranteed loan cannot be included with the guaranteed obligations, the cost of the hedge, if at all obtainable, will dramatically increase for the sponsor. The DOE should reconsider the ways in which obligations are lumped together for securitization and priority of payment purposes and model the trade offs between the presumed exposure to the DOE of adding the above mentioned costs to the guaranteed obligations versus the added costs and complexity that excluding such costs will add to the financing matrix. Otherwise, the DOE loan guarantee must be viewed as covering less than eighty percent of the costs of new nuclear construction projects nominally purported to be covered.

### Loan Guarantees Fail – A2: Lower Costs

#### Loan guarantees fail to lower construction costs

**Brumfiel 7** (Geoff, Senior News Reporter for Nature Business, "Powerful incentives", Nature, Vol 448, August 16 2007, Academic Search Complete)

Safety net The guarantees would provide a major boost for plant construction, says Marilyn Kray, vicepresident for project development at Exelon, a utility based in Chicago, Illinois, and the largest nuclear generator in the nation. They would reassure lenders, and allow utilities to borrow at lower rates. Given the enormous capital costs, he says, “a single interest percentage point is quite significant.” “It would be a very useful incentive to have,” agrees Dimitri Nikas, an energy analyst with Standard & Poor’s, a financial services company in New York. But it might still fail to drive down the costs of construction to a competitive level. The expert labour and technology needed to build such plants is expensive, as is the meticulous regulatory process. The bottom line, Nikas says, is that the incentives may get one or two plants built — but they won’t herald a building boom in nuclear power stations.

### Their ev

#### A) They lower interest rates and startup costs -- JUST SAYS IT MAKES IT CHEAPER READ THEIR EV WITH A FINE TOOTH COMB

Byron et al, 07

(Barbara Bryon, senior nuclear policy advisor at the Energy Commission, Lorraine White, program manager, and B. B. Blevins, Executive Director, “Nuclear Power in California: 2007 Status Report”, October, pdf) NL  
Loan Guarantee Program Title XVII of the EPAct authorizes DOE to administer a loan guarantee program for commercial projects that "avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases and employ new or significantly improved technologies as compared to technologies in service in the United States at the time the guarantee is issued" (EPAct 2005b). Eligible technologies include renewable energy systems, advanced fossil energy technology, hydrogen fuel cell technology, advanced nuclear power facilities, carbon capture and sequestration practices and technologies, efficient electrical generation, transmission, and distribution technologies, efficient end-use energy technologies, production facilities for fuel efficient vehicles, pollution control equipment, and refineries.120 120 The loan guarantee program could substantially affect the economics of new nuclear projects. Loan guarantees may enable lenders to offer loans at lower interest rates since the loan guarantee ensures the lender will be reimbursed in case of default. Also, loan guarantees shift some of the project risk to the guarantor, which may allow some projects to use a larger share of debt financing, rather than equity. (The average cost of capital for a project can be reduced by substituting debt for equity up to a certain point.) EIA examined the potential effects of DOE’s loan guarantee program on the economics of nuclear power projects. EIA found that DOE’s loan guarantee program could reduce the levelized cost of generation for a nuclear power project by 25 percent (EIA 2007, p.50). Similarly, Constellation Energy estimated that the combined incentives provided through EPAct to new nuclear power plants could reduce the required market clearing price from as much as $80 per MWh to a low of $37 per MWh. According to Constellation Energy, if a new nuclear power plant must earn $80 per MWh to be built, no new plants will be built (Constellation 2007, p.48). In May 2007 DOE issued proposed policies and procedures for the EPAct loan guarantee program (DOE 2007n, p.27471). Under the proposed policies, eligible loan guarantees will be limited to 90 percent of the total face value of any single debt instrument and 80 percent of the total project cost.121 In addition, applicants must have a significant financial commitment to the project and are dissuaded from seeking multiple forms of federal financial assistance. “Nonetheless, the receipt of other forms of assistance will not disqualify a project from being eligible for a DOE loan guarantee, and DOE furthermore recognizes that in some situations--such as, for example, with respect to the first new nuclear generating facilities…multiple forms of federal assistance to the same project could advance important national energy policy priorities” (DOE 2007n, p.27476). The proposed policies also set forth the fees that will be required of applicants. The fees address two types of costs: subsidy costs, which represent the federal government’s expected liability from issuing loan guarantees (due to expected loan defaults), and administrative costs, which include costs to review applications and administer the loans (DOE 2007n, p.27475). The U.S. Government Accountability Office (GAO) warned that estimating the subsidy cost “could be difficult because the program targets innovative energy technologies, and loan performance could depend heavily on future economic conditions, including energy prices, which are hard to predict accurately” (GAO 2007, p.3). DOE did not specify in its proposed policies how it plans to calculate the subsidy cost. In joint comments on DOE’s proposed policies, six major financial institutions stressed the importance of this program: “We believe many new nuclear construction projects will have difficulty accessing the capital markets during construction and initial operation without the support of a federal government loan guarantee.”122 Similarly, Joe Turnage of Constellation Generation Group, a company looking to deploy new reactors as a merchant generator, has stated, “the issue of federal loan guarantees is critical. We're a green light right now, full speed ahead. But should we not get those rules right it'll turn to yellow to red” (Energy Commission 2007f, p.281).

### No Leadership Now

#### ---No Chinese nuclear leadership:

#### A. Too bureaucratic – they rely on the designs of other countries

**Yi-Chong 12** (Xi, Professor in the School of Governance and International Relations,Griffith University in Australia, March, "Nuclear Power in China: How It Really Works", http://www.globalasia.org/V7N1\_Spring\_2012/Xu\_Yi-chong.html)

One important component for safe nuclear development is to guarantee that “technologies incorporated in the design and construction of a nuclear installation are proven by experience or qualified by testing or analysis,” according to the Convention on Nuclear Safety. Reactor designs have improved significantly since the Three Mile Island accident in 1979, moving from what is known as Generation I+ to Generation II to II+ (with passive safety features) and to Generation III, represented by the Westinghouse AP1000 and Areva EPR1000+ designs. The nuclear industry and safety authorities around the world have been trying to build redundant safety systems and multiple barriers to protect against a large release of radiation into the environment. But in China, the safety of reactor designs has little to do with the design, per se. It has everything to do with how a particular design is selected and adopted. China has so far adopted a variety of technologies — PWR (pressurized water reactors) from the US, France and Russia, PHWR (pressurized heavy water reactors) from Canada and Chinese-adapted-PWRs, which range from G-II to G-II+. It also has a fast-breeder reactor (FBR) that was connected to the power grid in 2011 and an experimental high-temperature gas-cooled reactor module (HTGR) to be constructed in Shandong. Among 27 reactors now under construction, 18 of them are CPR1000 reactors — a model based on the initial French M300, which itself was developed after adopting the Westinghouse PWR; three China Nuclear Power (CNP) series reactors developed by and large indigenously by CNNC; four are AP1000s and two are EPR1000s. This means six out of 27 reactors are Generation III, while the rest remain G-II or G-II+. So far, the selection of reactor designs has been heavily influenced by politics, with inconsistent policies and bureaucratic bickering often behind the debate over the selection and licensing of reactor designs, rather than consideration of the technical merits of each model. China introduced the Russian VVER, a pressurized water reactor, not long after the Chernobyl disaster because Russia was isolated after 1989 and needed allies to do business with. Political pressures from France and Guangdong led to the adoption of the Areva EPR without proper international bidding.

#### B No human capital

**Yi-Chong 12** (Xi, Professor in the School of Governance and International Relations,Griffith University in Australia, March, "Nuclear Power in China: How It Really Works", http://www.globalasia.org/V7N1\_Spring\_2012/Xu\_Yi-chong.html)

Human Capital: Where to Find the Staff China is facing a major dilemma in finding the skilled human resources needed for safe nuclear expansion. To accomplish its goals, China needs to train labor to build the plants to a proper standard, educate engineers in plant design, train operators to run the many plants it has planned and staff its regulatory agencies with qualified nuclear engineers and other experts. All nuclear companies operating in China, local as well as foreign, know that finding a qualified labor force is their most difficult challenge.

### Exports Alt Cause 2NC

#### Hard to get an export license, it’s a bureaucratic mess and there is political opposition to exporting nuclear power – that’s NEI

#### Even if our tech is superior, export restrictions make that meaningless

NEI 12 (Nuclear Energy Institute, “Improved Policies for Commercial Nuclear Trade Will Create American Jobs,” June, http://www.nei.org/resourcesandstats/documentlibrary/newplants/policybrief/improved-policies-for-commercial-nuclear-trade-will-create-american-jobs)

While U.S. firms offer some of the most innovative and safest nuclear energy technologies, they are hampered by cumbersome trade regulations, lack of coordination among the federal agencies involved, an inefficient export licensing process, limited options for financing nuclear exports and the absence of an international liability regime. These companies face intense competition from suppliers in nations with less restrictive policies and substantial government subsidies for their nuclear industries. To facilitate a greater U.S. role in the global commercial nuclear market, government support must be integrated into a seamless mechanism that includes coordination of nuclear trade policy, creation of bilateral agreements, export control reform and enhanced export financing. It also is vital that the United States pursue the international adoption of effective civil nuclear liability regimes.

### Exports – Their Ev

#### Russia, China, and India are massively developing their commercial nuclear infrastructures—absent the plan, US capabilities will be surpassed

Wallace & Williams, 4/17

(Michael, Michael Wallace comes to CSIS from Constellation Energy, where he served as vice chairman and COO. During his nine years at Constellation Energy, he led many company business activities, including the formation and operation of two joint ventures with EDF related to nuclear energy. Prior to joining Constellation Energy, he was cofounder and managing director of Barrington Energy Partners, LLC, a strategic consulting firm specializing in energy industry transactions and advisory services. Before joining Barrington Energy, he had more than 25 years of senior executive and utility operations experience. He holds a B.S. in electrical engineering from Marquette University and an M.B.A. from the University of Chicago, with a specialization in finance. He also served as a naval officer in the U.S. Navy nuclear submarine force. Mr. Wallace is a member of the National Infrastructure Advisory Council (NIAC), which advises the president on matters related to homeland security. He is also a member of the Nuclear Sector Coordinating Council under the Department of Homeland Security’s National Infrastructure Protection Plan and a member of Business Executives for National Security (BENS), the Naval Historical Foundation Advisory Council, and the Marquette University College of Engineering National Advisory Council; Sarah, April 17, 2012; http://csis.org/publication/nuclear-energy-america-preventing-its-early-demise)

Meanwhile, China, India, Russia, and other countries are looking to significantly expand their nuclear energy commitments. By 2016, China could have 50 nuclear power plants in operation, compared with only 14 in 2011. India could add 8 new plants and Russia 10 in the same time frame. These trends are expected to accelerate out to 2030, by which time China, India, and Russia could account for nearly 40 percent of global nuclear generating capacity. Meanwhile, several smaller nations, mostly in Asia and the Middle East, are planning to get into the nuclear energy business for the first time. In all, as many as 15 new nations could have this technology within the next two decades. Meanwhile, America’s share of global nuclear generation is expected to shrink, from about 25 percent today to about 14 percent in 2030, and—if current trends continue—to less than 10 percent by mid-century. With the center of gravity for global nuclear investment shifting to a new set of players, the United States and the international community face a difficult set of challenges: stemming the spread of nuclear weapons-usable materials and know-how; preventing further catastrophic nuclear accidents; providing for safe, long-term nuclear waste management; and protecting U.S. energy security and economic competitiveness. In this context, federal action to reverse the American nuclear industry’s impending decline is a national security imperative. The United States cannot afford to become irrelevant in a new nuclear age. Our nation’s commercial nuclear industry, its military nuclear capabilities, and its strong regulatory institutions can be seen as three legs of a stool. All three legs are needed to support America’s future prosperity and security and to shape an international environment that is conducive to our long-term interests. Three specific aspects of U.S. leadership are particularly important. First, managing the national and global security risks associated with the spread of nuclear technology to countries that don’t necessarily share the same perspective on issues of nonproliferation and nuclear security or may lack the resources to implement effective safeguards in this area. An approach that relies on influence and involvement through a viable domestic industry is likely to be more effective and less expensive than trying to contain these risks militarily. Second, setting global norms and standards for safety, security, operations, and emergency response. As the world learned with past nuclear accidents and more recently with Fukushima, a major accident anywhere can have lasting repercussions everywhere. As with nonproliferation and security, America’s ability to exert leadership and influence in this area is directly linked to the strength of our domestic industry and our active involvement in the global nuclear enterprise. A strong domestic civilian industry and regulatory structure have immediate national security significance in that they help support the nuclear capabilities of the U.S. Navy, national laboratories, weapons complex, and research institutions. Third, in the past, the U.S. government could exert influence by striking export agreements with countries whose regulatory and legal frameworks reflected and were consistent with our own nonproliferation standards and commitments. At the same time, our nation set the global standard for effective, independent safety regulation (in the form of the Nuclear Regulatory Commission), led international efforts to reduce proliferation risks (through the 1970 NPT Treaty aand other initiatives), and provided a model for industry self-regulation. The results were not perfect, but America’s institutional support for global nonproliferation goals and the regulatory behaviors it modeled clearly helped shape the way nuclear technology was adopted and used elsewhere around the world. This influence seems certain to wane if the United States is no longer a major supplier or user of nuclear technology. With existing nonproliferation and safety and security regimes looking increasingly inadequate in this rapidly changing global nuclear landscape, American leadership and leverage is more important and more central to our national security interests than ever. To maintain its leadership role in the development, design, and operation of a growing global nuclear energy infrastructure, the next administration, whether Democrat or Republican, must recognize the invaluable role played by the commercial U.S. nuclear industry and take action to prevent its early demise.

#### Absent the plan, China will surpass the US as the hegemon in Asia

Cullinane, 11

(Scott, graduate student at the Institute of World Politics in Washington, D.C, “[America Falling Behind: The Strategic Dimensions of Chinese Commercial Nuclear Energy](http://www.ensec.org/index.php?option=com_content&view=article&id=319:america-falling-behind-the-strategic-dimensions-of-chinese-commercial-nuclear-energy&catid=118:content&Itemid=376) “, September 28, <http://www.ensec.org/index.php?view=article&catid=118%3Acontent&id=319%3Aamerica-falling-behind-the-strategic-dimensions-of-chinese-commercial-nuclear-energy&tmpl=component&print=1&page=&option=com_content&Itemid=376>) NL

The American nuclear industry entered the 1960s in a strong position, yet over the past 30 years other countries have closed the development gap with America. The implications of this change go beyond economics or prestige to include national security. These changes would be less threatening if friendly allies were the ones moving forward with developing a nuclear export industry;however, the quick advancement of the PRC in nuclear energy changes the strategic calculus for America . The shifting strategic landscape While America’s nuclear industry has languished, current changes in the world’s strategic layout no longer allow America the option of maintaining the status quo without being surpassed. The drive for research, development, and scientific progress that grew out of the Cold War propelled America forward, but those priorities have long since been downgraded by the US government. The economic development of formerly impoverished countries means that the US cannot assume continued dominance by default. The rapidly industrializing PRC is seeking its own place among the major powers of the world and is vying for hegemony in Asia; nuclear power is an example of their larger efforts to marshal their scientific and economic forces as instruments of national power. The rise of China is a phrase that connotes images of a backwards country getting rich off of exporting cheap goods at great social and environmental costs. Yet, this understanding of the PRC has lead many in the United States to underestimate China’s capabilities. The Communist Party of China (CPC) has undertaken a comprehensive long-term strategy to transition from a weak state that lags behind the West to a country that is a peer-competitor to the United States. Nuclear technology provides a clear example of this. In 1978, General Secretary Deng Xiaoping began to move China out of the destructive Mao era with his policies of 'reform and opening.' As part of these changes during the 1980s, the CPC began a concerted and ongoing effort to modernize the PRC and acquire advanced technology including nuclear technology from abroad. This effort was named Program 863 and included both legal methods and espionage. By doing this, the PRC has managed to rapidly catch up to the West on some fronts. In order to eventually surpass the West in scientific development the PRC launched the follow-on Program 973 to build the foundations of basic scientific research within China to meet the nation’s major strategic needs. These steps have brought China to the cusp of the next stage of technological development, a stage known as “[indigenous innovation](http://www.973.gov.cn/English/Index.aspx).” In 2006 the PRC published their science and technology plan out to 2020 and defined indigenous innovation as enhancing original innovation, integrated innovation, and re-innovation based on assimilation and absorption of imported technology in order improve national innovation capability. The Chinese seek to internalize and understand technological developments from around the world so that they can copy the equipment and use it as a point to build off in their own research. This is a step beyond merely copying and reverse engineering a piece of technology. The PRC sees this process of absorbing foreign technology coupled with indigenous innovation as a way of leapfrogging forward in development to gain the upper hand over the West. The PRC’s official statement on energy policy lists nuclear power as one of their target fields. When viewed within this context, the full range of implications from China’s development of nuclear technology becomes evident. The PRC is now competing with the United States in the areas of innovation and high-technology, two fields that have driven American power since World War Two. China’s economic appeal is no longer merely the fact that it has cheap labor, but is expanding its economic power in a purposeful way that directly challenges America’s position in the world. The CPC uses the market to their advantage to attract nuclear technology and intellectual capital to China. The PRC has incentivized the process and encouraged new domestic nuclear power plant construction with the goal of having 20 nuclear power plants operational by 2020. The Chinese Ministry of Electrical Power has described PRC policy to reach this goal as encouraging joint investment between State Owned Corporations and foreign companies. 13 reactors are already operating in China, 25 more are under construction and even more reactors are in the planning stages. In line with this economic policy, China has bought nuclear reactors from Westinghouse and Areva and is cooperating with a Russian company to build nuclear power plants in Taiwan. By stipulating that Chinese companies and personnel be involved in the construction process, China is building up its own domestic capabilities and expects to become self-sufficient. China’s State Nuclear Power Technology Corporation has partnered with Westinghouse to build a new and larger reactor based on the existing Westinghouse AP 1000 reactor. This will give the PRC a reactor design of its own to then export. If the CPC is able to combine their control over raw materials, growing technical know-how, and manufacturing base, China will not only be a powerful economy, but be able to leverage this power to service its foreign policy goals as well. Even though the PRC is still working to master third generation technology, their scientists are already working on what they think will be the nuclear reactor of the future. China is developing Fourth Generation Fast Neutron Reactors and wants to have one operational by 2030. Additionally, a Chinese nuclear development company has announced its intentions to build the “world’s first high-temperature, gas-cooled reactor” in Shandong province which offers to possibility of a reactor that is nearly meltdown proof. A design, which if proved successful, could potentially redefine the commercial nuclear energy trade.

### 2NC US Econ Resilient

#### Bloomberg ev is newer – empirics prove

#### Prefer our authors – their evidence is biased by economic Stockholm syndrome

Dornbrook, 10 – Reporter for the Kansas City Business Journal, \*\*Citing Brian Wesbury – Chief Economist for First Trust Advisors and Author (James, "Economist: Ongoing rebound gives reason for optimism", January 8th 2010, May 21st 2010, http://kansascity.bizjournals.com/kansascity/stories/2010/01/04/daily46.html)

People should start being more optimistic about the economy because it probably will continue rebounding in 2010, said Brian Wesbury, chief economist for First Trust Advisors LP. Wesbury was the keynote speaker at the Association for Corporate Growth Kansas City’s annual economic forecast meeting Friday morning at the Kansas City Marriott Downtown. Wesbury was also the keynote speaker for last year’s event, and many members agreed that his predictions for 2009 were accurate. Wesbury, author of “It’s Not as Bad as You Think,” told the crowd that too many people are suffering from a sort of economic Stockholm Syndrome, where they have fallen in love with pessimism. It’s because we just experienced the first real panic in the economy since 1907, Wesbury said, and it altered the psyche of people to the point where they expect bad things to constantly happen. But economic data show that the economy bottomed out in March 2009 and that recovery is under way, he said.

### Cant Solve – Their ev

#### The economy is growing but is still extremely weak—numerous holes make collapse likely

Madland, yesterday

(David, Senior Fellow at the Center for American Progress., "Job Growth Is Too Fragile for Additional Austerity", 1/4, [www.americanprogress.org/issues/economy/news/2013/01/04/48983/job-growth-is-too-fragile-for-additional-austerity/](http://www.americanprogress.org/issues/economy/news/2013/01/04/48983/job-growth-is-too-fragile-for-additional-austerity/)) NL

As today’s jobs report makes clear, the economy continues to head in the right direction—though not fast enough, meaning it still faces a number of risks. Given the deep jobs hole the Great Recession put us in, the pace of the recovery is far too slow. While the economy has added more than 5.3 million private-sector jobs since February 2010, more than 12 million people still remain unemployed. Thirty-nine percent of the unemployed have been looking for a job for 27 weeks or more, which is essentially unchanged from November 2012. Similarly, the number of people working part time but who would prefer to work full time, as well as the number of “discouraged workers” in the economy—those who would like to work but have given up looking for employment in frustration—changed little. In a further sign of the fragility of the recovery, average hourly wages of all private-sector workers are not keeping pace with inflation and in fact declined nearly 2 percent in real terms in the year through December 2012. Wage declines indicate that the jobs being created tend to be found in low-wage, insecure parts of the economy—such as the retail sector, the leisure and hospitality industry, and in home health care and nursing homes—where pay, benefits, and protections are low and turnover is high. [Research](http://www.nelp.org/index.php/content/content_about_us/tracking_the_recovery_after_the_great_recession) from the National Employment Law Project shows that low-wage jobs made up 21 percent of all job losses during the recession, but made up nearly 60 percent of job gains during the recovery, while middle-class jobs accounted for 60 percent of jobs lost in the recession but only 22 percent of new jobs in the recovery. At the current three-month job-growth pace seen in today’s jobs data, the U.S. economy will not recover to “full employment”—the level of employment when the economy is running at full potential—for more than two decades. While the employment growth trend remains well above the pace of the 2000s business cycle—at which speed we would never recover to the prerecession employment rate of 5 percent—employment in the United States would not recover to full employment until late this decade even under the rapid jobs-growth pace of the 1990s economic boom. In short, the economy is moving in the right direction but at too slow a rate. Moreover, the economy remains quite vulnerable to negative shocks. Analysts estimate that the recent deal to avoid the so-called fiscal cliff will [reduce GDP](https://markets.jpmorgan.com/research/EmailPubServlet?action=open&hashcode=-t9asbjb&doc=GPS-1017556-0.html) growth by 1 percentage point, in large part because the deal allowed the payroll tax cut to expire—meaning most Americans’ paychecks will be slightly smaller, leading them to be more cautious about spending money and boosting the economy. As a result, [expectations](http://www.bloomberg.com/news/2012-09-13/fed-officials-upgrade-economic-growth-outlook-in-2013-2014.html) for GDP growth this year are in the 2 percent to 3 percent range—a rate that is not great but is good enough so that unemployment is likely to continue to slowly decline. While our economy is strong enough to withstand this level of austerity, any additional short-term austerity—as could happen in the next few months when Congress debates whether to postpone the “sequester” and increase the country’s debt limit—would likely reduce economic growth to such a level that job growth slows to a crawl.

#### Jobs are long term

#### Jobs-- New Nuclear Power Plants Create up to 500,000 jobs

Weaver, 09

(Lynn Edward, Lynn Edward Weaver is President Emeritus of Florida Institute of Technology, <http://www.theledger.com/article/20090128/COLUMNISTS/901280304?p=2&tc=pg>)

Is there any doubt that the construction of nuclear power plants would benefit our economy? A new study done for the American Council on Global Nuclear Competitiveness determined that the construction and operation of nuclear plants and facilities to provide fuel for the reactors would generate 500,000 jobs. The planned four new nuclear plants in Florida alone would bring 29,300 jobs, with wages estimated at $2.8 billion, according to the study by Oxford Economics. With the heavy loss of jobs in the current downturn, nuclear power is one of the few bright spots in the economy. Reactor designers and manufacturers are expanding their facilities as well as their payrolls in anticipation of new business. Nuclear job growth has already begun in North Carolina, Tennessee and Pennsylvania and is expected to spread to other states, mainly in the Southeast. So far utilities have filed for licenses to build up to 26 nuclear plants, calculating they will need to be the cornerstone of efforts to achieve energy independence and to reduce greenhouse-gas emissions. Ultimately, the study forecasts construction of 52 new reactors, one new spent-fuel recycling facility and four uranium enrichment plants, resulting in total economic benefits of $61.5 billion. The new nuclear plants are expected to save $49 billion in imported oil and natural gas, while avoiding the atmospheric emission of 400 million tons of carbon dioxide, the principal greenhouse gas linked to climate change. Judging by public opinion polls, there are indications that Americans are awakening to the multiple benefits from nuclear power's revival - well-paid jobs, economic growth, energy independence and a cleaner environment. Seventy-four percent of Americans now favor the use of nuclear power, up from 63 percent in April, according to a poll by Bisconti Research. Nearly 70 percent agree that the United States "should definitely build new nuclear power plants in the future." According to the jobs study, 268,000 jobs nationally would be created during the reactor construction period, with an additional 136,000 jobs during construction of the recycling and uranium enrichment facilities. Operation of the new reactors and fuel facilities would bring another 96,000 jobs. "These are high-tech, high-value-added jobs that reflect high spending on research and development and fixed investment: jobs that the U.S. economy can ill afford to lose," the study says. Florida ranks among the top beneficiaries from the construction of new nuclear plants. The number of jobs created would be greater in just three other states - South Carolina, Texas and Illinois. South Carolina is expected to be the site of a nuclear recycling facility. At the heart of the nuclear renaissance is an unprecedented challenge. The U.S. electricity industry must invest up to $2 trillion in new power generation and transmission system’s to meet an expected 25 percent increase in power demand by 2030. And it must achieve this while reducing greenhouse-gas emissions. Nuclear power accounts for 72 percent of the carbon-free energy produced in the United States and it's a clean energy source that must play a major role in meeting our energy needs.

### 2NC No Econ War

No more wars

#### AND - even if wars occur, they won’t escalate.

Bennett & Nordstrom 2k [Department of Political Science Professors @ Penn state U, D. Scott and Timothy, “Foreign Policy Substitutability and Internal Economic problems in Enduring Rivalries” Journal of Conflict Resolution, Feb., p33-61]

When engaging in diversionary actions in response to economic problems, leaders will be most interested in a cheap, quick victory that gives them the benefit of a rally effect without suffering the long-term costs (in both economic and popularity terms) of an extended confrontation or war. This makes weak states particularly inviting targets for diversionary action since they may be less likely to respond than strong states and because any response they make will be less costly to the initiator. Following Blainey (1973), a state facing poor economic conditions may in fact be the target of an attack rather than the initiator. This may be even more likely in the context of a rivalry because rival states are likely to be looking for any advantage over their rivals. Leaders may hope to catch an economically challenged rival looking inward in response to a slowing economy. Following the strategic application of diversionary conflict theory and states’ desire to engage in only cheap conflicts for diversionary purposes, states should avoid conflict initiation against target states experiencing economic problems.

#### 93 examples are on our side

Miller 2k [Morris Miller, Winter 2K. economist and adjunct professor in the University of Ottawa’s Faculty of Administration and former Executive Director and Senior Economist at the World Bank. Interdisciplinary Science Reviews, 25.4]

The question may be reformulated. Do wars spring from a popular reaction to a sudden economic crisis that exacerbates poverty and growing disparities in wealth and incomes? Perhaps one could argue, as some scholars do, that it is some dramatic event or sequence of such events leading to the exacerbation of poverty that, in turn, leads to this deplorable denouement. This exogenous factor might act as a catalyst for a violent reaction on the part of the people or on the part of the political leadership who would then possibly be tempted to seek a diversion by finding or, if need be, fabricating an enemy and setting in train the process leading to war. According to a study undertaken by Minxin Pei and Ariel Adesnik of the Carnegie Endowment for International Peace, there would not appear to be any merit in this hypothesis. After studying ninety-three episodes of economic crisis in twenty-two countries in Latin America and Asia in the years since the Second World War they concluded that:19 Much of the conventional wisdom about the political impact of economic crises may be wrong ... The severity of economic crisis - as measured in terms of inflation and negative growth - bore no relationship to the collapse of regimes ... (or, in democratic states, rarely) to an outbreak of violence ... In the cases of dictatorships and semidemocracies, the ruling elites responded to crises by increasing repression (thereby using one form of violence to abort another).

#### Their chain of causation is backwards

Ferguson 6 (Niall, prof. of history, Foreign Affairs, “The Next War of the World”, lexis)

Nor can economic crises explain the bloodshed. What may be the most familiar causal chain in modern historiography links the Great Depression to the rise of fascism and the outbreak of World War II. But that simple story leaves too much out. Nazi Germany started the war in Europe only after its economy had recovered. Not all the countries affected by the Great Depression were taken over by fascist regimes, nor did all such regimes start wars of aggression. In fact, no general relationship between economics and conflict is discernible for the century as a whole. Some wars came after periods of growth, others were the causes rather than the consequences of economic catastrophe, and some severe economic crises were not followed by wars.

## 1NR

Politics

### Agency

#### Obama is Velcro – he will always get the blame.

Nicholas and Hook, 7-30-2010 (Peter and Janet, Tribune Washington Bureau, “Obama the Velcro President,” LA Times, http://articles.latimes.com/2010/jul/30/nation/la-na-velcro-presidency-20100730)

If Ronald Reagan was the classic Teflon president, Barack Obama is made of Velcro. Through two terms, Reagan eluded much of the responsibility for recession and foreign policy scandal. In less than two years, Obama has become ensnared in blame. Hoping to better insulate Obama, White House aides have sought to give other Cabinet officials a higher profile and additional public exposure. They are also crafting new ways to explain the president's policies to a skeptical public. But Obama remains the colossus of his administration — to a point where trouble anywhere in the world is often his to solve. The president is on the hook to repair the Gulf Coast oil spill disaster, stabilize Afghanistan, help fix Greece's ailing economy and do right by Shirley Sherrod, the Agriculture Department official fired as a result of a misleading fragment of videotape. What's not sticking to Obama is a legislative track record that his recent predecessors might envy. Political dividends from passage of a healthcare overhaul or a financial regulatory bill have been fleeting. Instead, voters are measuring his presidency by a more immediate yardstick: Is he creating enough jobs? So far the verdict is no, and that has taken a toll on Obama's approval ratings. Only 46% approve of Obama's job performance, compared with 47% who disapprove, according to Gallup's daily tracking poll. "I think the accomplishments are very significant, but I think most people would look at this and say, 'What was the plan for jobs?' " said Sen. Byron L. Dorgan (D-N.D.). "The agenda he's pushed here has been a very important agenda, but it hasn't translated into dinner table conversations." Reagan was able to glide past controversies with his popularity largely intact. He maintained his affable persona as a small-government advocate while seeming above the fray in his own administration. Reagan was untarnished by such calamities as the 1983 terrorist bombing of the Marines stationed in Beirut and scandals involving members of his administration. In the 1986 Iran-Contra affair, most of the blame fell on lieutenants. Obama lately has tried to rip off the Velcro veneer. In a revealing moment during the oil spill crisis, he reminded Americans that his powers aren't "limitless." He told residents in Grand Isle, La., that he is a flesh-and-blood president, not a comic-book superhero able to dive to the bottom of the sea and plug the hole. "I can't suck it up with a straw," he said. But as a candidate in 2008, he set sky-high expectations about what he could achieve and what government could accomplish. Clinching the Democratic nomination two years ago, Obama described the moment as an epic breakthrough when "we began to provide care for the sick and good jobs to the jobless" and "when the rise of the oceans began to slow and our planet began to heal." Those towering goals remain a long way off. And most people would have preferred to see Obama focus more narrowly on the "good jobs" part of the promise. A recent Gallup poll showed that 53% of the population rated unemployment and the economy as the nation's most important problem. By contrast, only 7% cited healthcare — a single-minded focus of the White House for a full year. At every turn, Obama makes the argument that he has improved lives in concrete ways. Without the steps he took, he says, the economy would be in worse shape and more people would be out of work. There's evidence to support that. Two economists, Mark Zandi and Alan Blinder, reported recently that without the stimulus and other measures, gross domestic product would be about 6.5% lower. Yet, Americans aren't apt to cheer when something bad doesn't materialize. Unemployment has been rising — from 7.7% when Obama took office, to 9.5%. Last month, more than 2 million homes in the U.S. were in various stages of foreclosure — up from 1.7 million when Obama was sworn in. "Folks just aren't in a mood to hand out gold stars when unemployment is hovering around 10%," said Paul Begala, a Democratic pundit. Insulating the president from bad news has proved impossible. Other White Houses have tried doing so with more success. Reagan's Cabinet officials often took the blame, shielding the boss. But the Obama administration is about one man. Obama is the White House's chief spokesman, policy pitchman, fundraiser and negotiator. No Cabinet secretary has emerged as an adequate surrogate. Treasury Secretary Timothy F. Geithner is seen as a tepid public speaker; Energy Secretary Steven Chu is prone to long, wonky digressions and has rarely gone before the cameras during an oil spill crisis that he is working to end. So, more falls to Obama, reinforcing the Velcro effect: Everything sticks to him. He has opined on virtually everything in the hundreds of public statements he has made: nuclear arms treaties, basketball star LeBron James' career plans; Chelsea Clinton's wedding.

### Link

#### Nuclear loans cost capital – caught in the Solyndra cross-fire

NYT, 11 (New York Times, “Will Solyndra Scandal Spill Over to Scald Nuclear Loan Guarantees?”, October 7, http://www.nytimes.com/gwire/2011/10/07/07greenwire-will-solyndra-scandal-spill-over-to-scald-nucle-3933.html?pagewanted=all)

The implosion of government-backed solar firm Solyndra has handed Republicans both the tools for a slow-burn inquiry that keeps the White House on the defensive and a ready-made target for ideological barbs at federal loan guarantee programs. But beneath the bombast of GOP pleas to stop government from "picking winners and losers" is near-party unity in favor of nuclear loan guarantees, and even a support base for keeping the Department of Energy in the renewable-power business. As a result, the Obama administration's sharpest critics on Solyndra must walk a fine line when it comes to the future of a program created by a Republican-controlled Congress and White House. Watching with interest, the nuclear industry is growing concerned that broad shots at DOE loan guarantees could catch them in the cross fire, despite key differences between the program's treatment of their sector versus renewables.

#### Plan costs capital – enrages Obama’s base

Maize, 10 (Kennedy, “Copenhagen: The Case for Climate Adaptation”, Managing Power, March 1, http://www.managingpowermag.com/opinion\_and\_commentary/Copenhagen-The-Case-for-Climate-Adaptation\_227.html)

Energy legislation is dead for 2010, except for possible subsidies for nuclear power, clean coal, and offshore drilling, designed to appeal to Republicans. But that reach across the partisan divide likely will enrage Obama’s base among liberals and environmentalists. The predictable outcome: more gridlock and name-calling. No action. These are salutary developments for the U.S. and the world. As Ronald Reagan was wont to say, “Stand there, don’t just do something.” This is particularly true as some of the alleged science behind the UN’s Intergovernmental Panel on Climate Change 2007 report turns out to be bogus. Claims of glacial retreat in India and the Andes are based on entirely unreliable sources. The same is true about hand-wringing on devastation of Amazon rainforests and the social impact of sea level rises, particularly in Bangladesh. The latest scientific developments—and it is good that the mainstream media is actually beginning to examine the IPPC’s claims with some skepticism—don’t mean that global warming is not real. They mean that the IPCC’s assessments are unreliable. The science may unravel further as it gets greater scrutiny. We don’t know what to believe. Attempts at global international collaboration, as in Kyoto and Copenhagen, were doomed to depravation by roving bands of governmental pirates, seeking economic rents. The operative word was “extortion.” Copenhagen reminded me of the International Law of the Sea Treaty negotiations over seabed mining, which I covered in the mid-1970s. The impetus for the negotiations was to provide a way to regulate deep seabed minerals mining. The talks deteriorated into attempts by poor countries to extort money from rich countries in the name of “fairness.” After decades of diplomacy and negotiations, the U.S. ultimately refused to become a party to the treaty. Ironically, seabed minerals mining (Hoovering up manganese nodules from the ocean floor) has never come to pass. The same sort of political game pitting rich nations against poor occurred in Copenhagen. The result: nothing of substance from the negotiations in a frigid Denmark. The U.S. government wasn’t alone in getting stalled in the Copenhagen gridlock. The Europeans, particularly Germany, banked on an economic agreement fostering a carbon trading market benefiting German bankers. Given the complex global politics, that wasn’t likely; the German agenda was kaputt gegangen even before the international meeting began. The U.S., Germany, and the other European nations knew when they landed their luxury jets in Copenhagen that no real deal was in the works. So they floated the fake notion of a “political” agreement, an agreement to agree in the future. That fell apart. Instead, there was no agreement except on civil disagreement. Advocates of aggressive international governmental regulatory approaches to climate change are wringing their hands and whining about failed opportunities. The Euros knew that what they were attempting—a draconian global climate control regime that favored them—was unlikely. The U.S. knew nothing would come of Copenhagen. Now the spin brigades are marching. In a commentary in The Energy Daily, Anne Lauvergeon of Areva and Jim Rogers of Duke Energy argued: “The fact that representatives from so many countries and organizations were willing to meet in Copenhagen is clear proof of their willingness and desire to work together.” That argument, of course, is baloney. The nations and organizations were willing to party together. Work together? Forget it. Rich nations that gave at least lip service in Copenhagen to what they argue is the potential catastrophic impact of climate warming—that includes the Obama administration—are trying to cobble together new multinational approaches to global warming. That approach is doomed. It rests on the notion that nations will yield their own interests on behalf of a distant, and not-well-understood, global goal. What to do? The answer to global warming, if it is real, isn’t global. It’s local. Given the long time frame of potential global warming effects, local adaptation appears to be the least-cost and most efficient approach. A lot of the modes of adaptation, such as using energy and water better, make sense regardless of the state of the climate. Analysts Ted Nordhaus and Michael Shellenberger, writing in Foreign Policy magazine in January (“The End of Magical Climate Thinking”) observed that the Obama administration’s approach to global warming adopted a fundamentally regulatory paradigm. “Obama was following two decades of magical thinking among both greens and liberal Democrats about energy technology,” they wrote. “In this view, energy efficiency pays for itself, solar and wind power are already nearly cost competitive with fossil fuels, and both can quickly and cheaply reduce emissions. This Pollyanna view of fossil fuel alternatives and efficiency, which makes going green seem cheap and easy—little more than the cost of ‘a postage stamp a day’—has provided the justification for green-policy advocacy that has overwhelmingly focused on pollution regulations and carbon pricing while ignoring serious investment in energy research and development.” Given the long time frame of potential global warming effects, local adaptation, including honest, industry-driven R&D (as distinguished from the junk science that recent revelations have disclosed when it comes to warming science and much Department of Energy R&D), appears to be a preferable, practical approach to global climate issues. Research the issues. Adapt at home. Watch the global issues take care of themselves. There is no case for precipitous action, despite the overwrought claims of many environmentalists. I don’t want to mislead anybody here about my views. I don’t regard global warming, if it is occurring, as necessarily a bad thing. While warming evangelists have been screeching about the calamities that will flow from a warmer world, they have dramatically overhyped the threat. There will be winners and losers from a warmer world, if that is in the climate cards. It’s a difficult, probably impossible, math to balance the climate account. Will the net be positive or negative for the world we live in? Nobody knows, or can know. My suspicion is that a warmer world is desirable, and the costs of trying to forestall that far exceed the potential benefits. Admittedly, that’s pure speculation. But we know that the climate changes, and has changed significantly for as far back as we can measure. There was a “Medieval Warm Period” and a modern “Ice Age.” Beyond that, we just don’t know the order or the direction of the changes. So it makes sense to move cautiously, hedge bets, employ rigorous science, and adapt where possible. What does this mean for managers in the power business? I suspect there will be less urgency in coming years to develop carbon dioxide emissions control strategies that can’t meet real-world economic criteria. If warming is real, and if there can be no global approach to combating it, then it makes sense (and it always did) to look at low-cost local options. That’s adaptation. To me, that suggests more gas generation, along with longer-term development of coal gasification as an economic alternative to conventional pulverized coal technology. New nukes, and improved existing nuclear plants, are very useful adaptive strategies, but not silver bullets. New nukes are way too expensive today. The Obama administration’s proposal to double or triple loan guarantee subsidies for nukes could move the industry forward and overcome Wall Street reluctance to finance new plants. But that’s far from certain. Nor is it certain that Congress will go along with the big bump for nuclear loan guarantees. Obama is courting Republicans with this proposal but risks losing a substantial portion of his Democratic base of support.

# Round 6

## 1NC

### 1NC

#### A. Interpretation – debate is a game that requires the aff to have a defense of increased energy production for one or more of the following: crude oil, natural gas, coal, nuclear, wind, or solar.

#### Energy PRODUCTION means the extraction or capture of energy from natural resources – that’s distinct from consumption

DOCC 8 (Australian Government’s Department of Climate Change, “National Greenhouse and Energy Reporting Guidelines,” http://www.climatechange.gov.au/government/initiatives/~/media/publications/greenhouse-report/nger-reporting-guidelines.ashx)

Energy Production

‘Energy production’ is defined in r. 2.23:

Production of energy, in relation to a facility, means any one of the following:

a. the extraction or capture of energy from natural sources for final consumption by or from the operation of the facility or for use other than in operation of the facility; 11

b. the manufacture of energy by the conversion of energy from one form to another form for final consumption by

or from the operation of the facility or for use other than in the operation of the facility.

#### B. They don’t meet – they claim unique advantages based off endorsing the steady state

#### C. Reasons to prefer:

#### Debate games open up dialogue which fosters information processing – they open up infinite frameworks making the game impossible

Haghoj 8 – PhD, affiliated with Danish Research Centre on Education and Advanced Media Materials, asst prof @ the Institute of Education at the University of Bristol (Thorkild, 2008, "PLAYFUL KNOWLEDGE: An Explorative Study of Educational Gaming," PhD dissertation @ Institute of Literature, Media and Cultural Studies, University of Southern Denmark, http://static.sdu.dk/mediafiles/Files/Information\_til/Studerende\_ved\_SDU/Din\_uddannelse/phd\_hum/afhandlinger/2009/ThorkilHanghoej.pdf)

Debate games are often based on pre-designed scenarios that include descriptions of issues to be debated, educational goals, game goals, roles, rules, time frames etc. In this way, debate games differ from textbooks and everyday classroom instruction as debate scenarios allow teachers and students to actively imagine, interact and communicate within a domain-specific game space. However, instead of mystifying debate games as a “magic circle” (Huizinga, 1950), I will try to overcome the epistemological dichotomy between “gaming” and “teaching” that tends to dominate discussions of educational games. In short, educational gaming is a form of teaching. As mentioned, education and games represent two different semiotic domains that both embody the three faces of knowledge: assertions, modes of representation and social forms of organisation (Gee, 2003; Barth, 2002; cf. chapter 2). In order to understand the interplay between these different domains and their interrelated knowledge forms, I will draw attention to a central assumption in Bakhtin’s dialogical philosophy. According to Bakhtin, all forms of communication and culture are subject to centripetal and centrifugal forces (Bakhtin, 1981). A centripetal force is the drive to impose one version of the truth, while a centrifugal force involves a range of possible truths and interpretations. This means that any form of expression involves a duality of centripetal and centrifugal forces: “Every concrete utterance of a speaking subject serves as a point where centrifugal as well as centripetal forces are brought to bear” (Bakhtin, 1981: 272). If we take teaching as an example, it is always affected by centripetal and centrifugal forces in the on-going negotiation of “truths” between teachers and students. In the words of Bakhtin: “Truth is not born nor is it to be found inside the head of an individual person, it is born between people collectively searching for truth, in the process of their dialogic interaction” (Bakhtin, 1984a: 110). Similarly, the dialogical space of debate games also embodies centrifugal and centripetal forces. Thus, the election scenario of The Power Game involves centripetal elements that are mainly determined by the rules and outcomes of the game, i.e. the election is based on a limited time frame and a fixed voting procedure. Similarly, the open-ended goals, roles and resources represent centrifugal elements and create virtually endless possibilities for researching, preparing, 51 presenting, debating and evaluating a variety of key political issues. Consequently, the actual process of enacting a game scenario involves a complex negotiation between these centrifugal/centripetal forces that are inextricably linked with the teachers and students’ game activities. In this way, the enactment of The Power Game is a form of teaching that combines different pedagogical practices (i.e. group work, web quests, student presentations) and learning resources (i.e. websites, handouts, spoken language) within the interpretive frame of the election scenario. Obviously, tensions may arise if there is too much divergence between educational goals and game goals. This means that game facilitation requires a balance between focusing too narrowly on the rules or “facts” of a game (centripetal orientation) and a focusing too broadly on the contingent possibilities and interpretations of the game scenario (centrifugal orientation). For Bakhtin, the duality of centripetal/centrifugal forces often manifests itself as a dynamic between “monological” and “dialogical” forms of discourse. Bakhtin illustrates this point with the monological discourse of the Socrates/Plato dialogues in which the teacher never learns anything new from the students, despite Socrates’ ideological claims to the contrary (Bakhtin, 1984a). Thus, discourse becomes monologised when “someone who knows and possesses the truth instructs someone who is ignorant of it and in error”, where “a thought is either affirmed or repudiated” by the authority of the teacher (Bakhtin, 1984a: 81). In contrast to this, dialogical pedagogy fosters inclusive learning environments that are able to expand upon students’ existing knowledge and collaborative construction of “truths” (Dysthe, 1996). At this point, I should clarify that Bakhtin’s term “dialogic” is both a descriptive term (all utterances are per definition dialogic as they address other utterances as parts of a chain of communication) and a normative term as dialogue is an ideal to be worked for against the forces of “monologism” (Lillis, 2003: 197-8). In this project, I am mainly interested in describing the dialogical space of debate games. At the same time, I agree with Wegerif that “one of the goals of education, perhaps the most important goal, should be dialogue as an end in itself” (Wegerif, 2006: 61).

#### The opening of infinite frameworks destroys stasis – agreement on the topic as the starting point for debate creates a platform of argumentative stability that is the crucial foundation for deliberation and makes debate meaningful

O’Donnell 4 (Dr. Tim, Director of Debate – Mary Washington U., “And the Twain Shall Meet: Affirmative Framework Choice and the Future of Debate”, Debater’s Research Guide, http://groups.wfu.edu/debate/MiscSites/ DRGArticles/Framework%20article%20for%20the%20DRG%20final2.doc)

According to the *Oxford English Dictionary,* a framework consists of “a set of standards, beliefs, or assumptions” that govern behavior. When we speak of frameworks in competitive academic debate we are talking about the set of standards, beliefs, or assumptions that generate the question that the judge ought to answer at the end of the debate. Given that there is no agreement among participants about which standards, beliefs, or assumptions ought to be universally accepted, it seems that we will never be able to arrive at an agreeable normative assumption about what the question ought to be. So the issue before us is how we preserve community while agreeing to disagree about the question in a way that recognizes that there is richness in answering many different questions that would not otherwise exist if we all adhered to a “rule” which stated that there is one and only one question to be answered. More importantly, how do we stop talking past each other so that we can have a genuine conversation about the substantive merits of any one question? The answer, I believe, resides deep in the rhetorical tradition in the often overlooked notion of stasis.[[1]](#endnote-1) Although the concept can be traced to Aristotle’s *Rhetoric*, it was later expanded by Hermagoras whose thinking has come down to us through the Roman rhetoricians Cicero and Quintillian. Stasis is a Greek word meaning to “stand still.” It has generally been considered by argumentation scholars to be the point of clash where two opposing sides meet in argument. Stasis recognizes the fact that interlocutors engaged in a conversation, discussion, or debate need to have some level of expectation regarding what the focus of their encounter ought to be. To reach stasis, participants need to arrive at a decision about what the issue is prior to the start of their conversation. Put another way, they need to mutually acknowledge the point about which they disagree. What happens when participants fail to reach agreement about what it is that they are arguing about? They talk past each other with little or no awareness of what the other is saying. The oft used cliché of two ships passing in the night, where both are in the dark about what the other is doing and neither stands still long enough to call out to the other, is the image most commonly used to describe what happens when participants in an argument fail to achieve stasis. In such situations, genuine engagement is not possible because participants have not reached agreement about what is in dispute. For example, when one advocate says that the United States should increase international involvement in the reconstruction of Iraq and their opponent replies that the United States should abandon its policy of preemptive military engagement, they are talking past each other. When such a situation prevails, it is hard to see how a productive conversation can ensue. I do not mean to suggest that dialogic engagement always unfolds along an ideal plain where participants always can or even ought to agree on a mutual starting point. The reality is that many do not. In fact, refusing to acknowledge an adversary’s starting point is itself a powerful strategic move. However, it must be acknowledged that when such situations arise, and participants cannot agree on the issue about which they disagree, the chances that their exchange will result in a productive outcome are diminished significantly. In an enterprise like academic debate, where the goals of the encounter are cast along both educational and competitive lines, the need to reach accommodation on the starting point is urgent. This is especially the case when time is limited and there is no possibility of extending the clock. The sooner such agreement is achieved, the better. Stasis helps us understand that we stand to lose a great deal when we refuse a genuine starting point.[[2]](#endnote-2) How can stasis inform the issue before us regarding contemporary debate practice? Whether we recognize it or not, it already has. The idea that the affirmative begins the debate by using the resolution as a starting point for their opening speech act is nearly universally accepted by all members of the debate community. This is born out by the fact that affirmative teams that have ignored the resolution altogether have not gotten very far. Even teams that use the resolution as a metaphorical condensation or that “affirm the resolution as such” use the resolution as their starting point. The significance of this insight warrants repeating. Despite the numerous differences about what types of arguments ought to have a place in competitive debate we all seemingly agree on at least one point – the vital necessity of a starting point. This common starting point, or topic, is what separates debate from other forms of communication and gives the exchange a directed focus.[[3]](#endnote-3)

#### Limits outweigh – they’re the vital access point for any theory impact – its key to fairness – huge research burdens mean we can’t prepare to compete – and its key to education – big topics cause hyper-generics, lack of clash, and shallow debate – and it destroys participation

Rowland 84 (Robert C., Debate Coach – Baylor University, “Topic Selection in Debate”, American Forensics in Perspective, Ed. Parson, p. 53-54)

The first major problem identified by the work group as relating to topic selection is the decline in participation in the National Debate Tournament (NDT) policy debate. As Boman notes: There is a growing dissatisfaction with academic debate that utilizes a policy proposition. Programs which are oriented toward debating the national policy debate proposition, so-called “NDT” programs, are diminishing in scope and size.4 This decline in policy debate is tied, many in the work group believe, to excessively broad topics. The most obvious characteristic of some recent policy debate topics is extreme breath. A resolution calling for regulation of land use literally and figuratively covers a lot of ground. Naitonal debate topics have not always been so broad. Before the late 1960s the topic often specified a particular policy change.5 The move from narrow to broad topics has had, according to some, the effect of limiting the number of students who participate in policy debate. First, the breadth of the topics has all but destroyed novice debate. Paul Gaske argues that because the stock issues of policy debate are clearly defined, it is superior to value debate as a means of introducing students to the debate process.6 Despite this advantage of policy debate, Gaske belives that NDT debate is not the best vehicle for teaching beginners. The problem is that broad policy topics terrify novice debaters, especially those who lack high school debate experience. They are unable to cope with the breadth of the topic and experience “negophobia,”7 the fear of debating negative. As a consequence, the educational advantages associated with teaching novices through policy debate are lost: “Yet all of these benefits fly out the window as rookies in their formative stage quickly experience humiliation at being caugh without evidence or substantive awareness of the issues that confront them at a tournament.”8 The ultimate result is that fewer novices participate in NDT, thus lessening the educational value of the activity and limiting the number of debaters or eventually participate in more advanced divisions of policy debate. In addition to noting the effect on novices, participants argued that broad topics also discourage experienced debaters from continued participation in policy debate. Here, the claim is that it takes so much times and effort to be competitive on a broad topic that students who are concerned with doing more than just debate are forced out of the activity.9 Gaske notes, that “broad topics discourage participation because of insufficient time to do requisite research.”10 The final effect may be that entire programs either cease functioning or shift to value debate as a way to avoid unreasonable research burdens. Boman supports this point: “It is this expanding necessity of evidence, and thereby research, which has created a competitive imbalance between institutions that participate in academic debate.”11 In this view, it is the competitive imbalance resulting from the use of broad topics that has led some small schools to cancel their programs.

#### Switch-side is key---Effective deliberation is crucial to the activation of personal agency and is only possible in a switch-side debate format where debaters divorce themselves from ideology to engage in political contestation

Patricia Roberts-Miller 3 is Associate Professor of Rhetoric at the University of Texas "Fighting Without Hatred:Hannah Ar endt ' s Agonistic Rhetoric" JAC 22.2 2003

Totalitarianism and the Competitive Space of Agonism

Arendt is probably most famous for her analysis of totalitarianism (especially her The Origins of Totalitarianism andEichmann in Jerusa¬lem), but the recent attention has been on her criticism of mass culture (The Human Condition). Arendt's main criticism of the current human condition is that the common world of deliberate and joint action is fragmented into solipsistic and unreflective behavior. In an especially lovely passage, she says that in mass society people are all imprisoned in the subjectivity of their own singular experience, which does not cease to be singular if the same experience is multiplied innumerable times. The end of the common world has come when it is seen only under one aspect and is permitted to present itself in only one perspective. (Human 58)

What Arendt so beautifully describes is that isolation and individualism are not corollaries, and may even be antithetical because obsession with one's own self and the particularities of one's life prevents one from engaging in conscious, deliberate, collective action. Individuality, unlike isolation, depends upon a collective with whom one argues in order to direct the common life. Self-obsession, even (especially?) when coupled with isolation from one' s community is far from apolitical; it has political consequences. Perhaps a better way to put it is that it is political precisely because it aspires to be apolitical. This fragmented world in which many people live simultaneously and even similarly but not exactly together is what Arendt calls the "social."

Arendt does not mean that group behavior is impossible in the realm of the social, but that social behavior consists "in some way of isolated individuals, incapable of solidarity or mutuality, who abdicate their human capacities and responsibilities to a projected 'they' or 'it,' with disastrous consequences, both for other people and eventually for themselves" (Pitkin 79). One can behave, butnot act. For someone like Arendt, a German-assimilated Jew, one of the most frightening aspects of the Holocaust was the ease with which a people who had not been extraordinarily anti-Semitic could be put to work industriously and efficiently on the genocide of the Jews. And what was striking about the perpetrators of the genocide, ranging from minor functionaries who facilitated the murder transports up to major figures on trial at Nuremberg, was their constant and apparently sincere insistence that they were not responsible. For Arendt, this was not a peculiarity of the German people, but of the current human and heavily bureaucratic condition of twentieth-century culture: we do not consciously choose to engage in life's activities; we drift into them, or we do them out of a desire to conform. Even while we do them, we do not acknowledge an active, willed choice to do them; instead, we attribute our behavior to necessity, and we perceive ourselves as determined—determined by circumstance, by accident, by what "they" tell us to do. We do something from within the anonymity of a mob that we would never do as an individual; we do things for which we will not take responsibility. Yet, whether or not people acknowledge responsibil¬ity for the consequences of their actions, those consequences exist. Refusing to accept responsibility can even make those consequences worse, in that the people who enact the actions in question, because they do not admit their own agency, cannot be persuaded to stop those actions. They are simply doing their jobs. In a totalitarian system, however, everyone is simply doing his or her job; there never seems to be anyone who can explain, defend, and change the policies. Thus, it is, as Arendt says, rule by nobody.

It is illustrative to contrast Arendt's attitude toward discourse to Habermas'. While both are critical of modern bureaucratic and totalitar¬ian systems, Arendt's solution is the playful and competitive space of agonism; it is not the rational-critical public sphere. The "actual content of political life" is "the joy and the gratification that arise out of being in company with our peers, out of acting together and appearing in public, out of inserting ourselves into the world by word and deed, thus acquiring and sustaining our personal identity and beginning something entirely new" ("Truth" 263). According to Seyla Benhabib, Arendt's public realm emphasizes the assumption of competition, and it "represents that space of appearances in which moral and political greatness, heroism, and preeminence are revealed, displayed, shared with others. This is a competitive space in which one competes for recognition, precedence, and acclaim" (78). These qualities are displayed, but not entirely for purposes of acclamation; they are not displays of one's self, but of ideas and arguments, of one's thought. When Arendt discusses Socrates' thinking in public, she emphasizes his performance: "He performed in the marketplace the way the flute-player performed at a banquet. It is sheer performance, sheer activity"; nevertheless, it was thinking: "What he actually did was to make public, in discourse, the thinking process" {Lectures 37). Pitkin summarizes this point: "Arendt says that the heroism associated with politics is not the mythical machismo of ancient Greece but something more like the existential leap into action and public exposure" (175-76). Just as it is not machismo, although it does have considerable ego involved, so it is not instrumental rationality; Arendt's discussion of the kinds of discourse involved in public action include myths, stories, and personal narratives.

Furthermore, the competition is not ruthless; it does not imply a willingness to triumph at all costs. Instead, it involves something like having such a passion for ideas and politics that one is willing to take risks. One tries to articulate the best argument, propose the best policy, design the best laws, make the best response. This is a risk in that one might lose; advancing an argument means that one must be open to the criticisms others will make of it. The situation is agonistic not because the participants manufacture or seek conflict, but because conflict is a necessary consequence of difference. This attitude is reminiscent of Kenneth Burke, who did not try to find a language free of domination but who instead theorized a way that the very tendency toward hierarchy in language might be used against itself (for more on this argument, see Kastely). Similarly, Arendt does not propose a public realm of neutral, rational beings who escape differences to live in the discourse of universals; she envisions one of different people who argue with passion, vehemence, and integrity.

Continued…

Eichmann perfectly exemplified what Arendt famously called the "banal¬ity of evil" but that might be better thought of as the bureaucratization of evil (or, as a friend once aptly put it, the evil of banality). That is, he was able to engage in mass murder because he was able not to think about it, especially not from the perspective of the victims, and he was able to exempt himself from personal responsibility by telling himself (and anyone else who would listen) that he was just following orders. It was the bureaucratic system that enabled him to do both. He was not exactly passive; he was, on the contrary, very aggressive in trying to do his duty. He behaved with the "ruthless, competitive exploitation" and "inauthen-tic, self-disparaging conformism" that characterizes those who people totalitarian systems (Pitkin 87).

Arendt's theorizing of totalitarianism has been justly noted as one of her strongest contributions to philosophy. She saw that a situation like Nazi Germany is different from the conventional understanding of a tyranny. Pitkin writes,

Totalitarianism cannot be understood, like earlier forms of domination, as the ruthless exploitation of some people by others, whether the motive be selfish calculation, irrational passion, or devotion to some cause. Understanding totalitarianism's essential nature requires solving the central mystery of the holocaust—the objectively useless and indeed dysfunctional, fanatical pursuit of a purely ideological policy, a pointless process to which the people enacting it have fallen captive. (87)

Totalitarianism is closely connected to bureaucracy; it is oppression by rules, rather than by people who have willfully chosen to establish certain rules. It is the triumph of the social.

Critics (both friendly and hostile) have paid considerable attention to Arendt's category of the "social," largely because, despite spending so much time on the notion, Arendt remains vague on certain aspects of it. Pitkin appropriately compares Arendt's concept of the social to the Blob, the type of monster that figured in so many post-war horror movies. That Blob was "an evil monster from outer space, entirely external to and separate from us [that] had fallen upon us intent on debilitating, absorb¬ing, and ultimately destroying us, gobbling up our distinct individuality and turning us into robots that mechanically serve its purposes" (4).

Pitkin is critical of this version of the "social" and suggests that Arendt meant (or perhaps should have meant) something much more complicated. The simplistic version of the social-as-Blob can itself be an instance of Blob thinking; Pitkin's criticism is that Arendt talks at times as though the social comes from outside of us and has fallen upon us, turning us into robots. Yet, Arendt's major criticism of the social is that it involves seeing ourselves as victimized by something that comes from outside our own behavior. I agree with Pitkin that Arendt's most powerful descriptions of the social (and the other concepts similar to it, such as her discussion of totalitarianism, imperialism, Eichmann, and parvenus) emphasize that these processes are not entirely out of our control but that they happen to us when, and because, we keep refusing to make active choices. We create the social through negligence. It is not the sort of force in a Sorcerer's Apprentice, which once let loose cannot be stopped; on the contrary, it continues to exist because we structure our world to reward social behavior. Pitkin writes, "From childhood on, in virtually all our institutions, we reward euphemism, salesmanship, slo¬gans, and we punish and suppress truth-telling, originality, thoughtful-ness. So we continually cultivate ways of (not) thinking that induce the social" (274). I want to emphasize this point, as it is important for thinking about criticisms of some forms of the social construction of knowledge: denying our own agency is what enables the social to thrive. To put it another way, theories of powerlessness are self-fulfilling prophecies.

Arendt grants that there are people who willed the Holocaust, but she insists that totalitarian systems result not so much from the Hitlers or Stalins as from the bureaucrats who may or may not agree with the established ideology but who enforce the rules for no stronger motive than a desire to avoid trouble with their superiors (see Eichmann and Life). They do not think about what they do. One might prevent such occurrences—or, at least, resist the modern tendency toward totalitarian¬ism—by thought: "critical thought is in principle anti-authoritarian" (Lectures 38).

By "thought" Arendt does not mean eremitic contemplation; in fact, she has great contempt for what she calls "professional thinkers," refusing herself to become a philosopher or to call her work philosophy. Young-Bruehl, Benhabib, and Pitkin have each said that Heidegger represented just such a professional thinker for Arendt, and his embrace of Nazism epitomized the genuine dangers such "thinking" can pose (see Arendt's "Heidegger"). "Thinking" is not typified by the isolated con¬templation of philosophers; it requires the arguments of others and close attention to the truth. It is easy to overstate either part of that harmony. One must consider carefully the arguments and viewpoints of others:

Political thought is representative. I form an opinion by considering a given issue from different viewpoints, by making present to my mind the standpoints of those who are absent; that is, I represent them. This process of representation does not blindly adopt the actual views of those who stand somewhere else, and hence look upon the world from a different perspective; this is a question neither of empathy, as though I tried to be or to feel like somebody else, nor of counting noses and joining a majority but of being and thinking in my own identity where actually I am not. The more people's standpoints I have present in my mind while I am ponder¬ing a given issue, and the better I can imagine how I would feel and think if I were in their place, the stronger will be my capacity for represen¬tative thinking and the more valid my final conclusions, my opinion. ("Truth" 241)

There are two points to emphasize in this wonderful passage. First, one does not get these standpoints in one's mind through imagining them, but through listening to them; thus, good thinking requires that one hear the arguments of other people. Hence, as Arendt says, "critical thinking, while still a solitary business, does not cut itself off from' all others.'" Thinking is, in this view, necessarily public discourse: critical thinking is possible "only where the standpoints of all others are open to inspection" (Lectures 43). Yet, it is not a discourse in which one simply announces one's stance; participants are interlocutors and not just speakers; they must listen. Unlike many current versions of public discourse, this view presumes that speech matters. It is not asymmetric manipulation of others, nor merely an economic exchange; it must be a world into which one enters and by which one might be changed.

Second, passages like the above make some readers think that Arendt puts too much faith in discourse and too little in truth (see Habermas). But Arendt is no crude relativist; she believes in truth, and she believes that there are facts that can be more or less distorted. She does not believe that reality is constructed by discourse, or that truth is indistinguishable from falsehood. She insists tha^ the truth has a different pull on us and, consequently, that it has a difficult place in the world of the political. Facts are different from falsehood because, while they can be distorted or denied, especially when they are inconvenient for the powerful, they also have a certain positive force that falsehood lacks: "Truth, though powerless and always defe ated in a head-on clash with the powers that be, possesses a strength of its own: whatever those in power may contrive, they are unable to discover or invent a viable substitute for it. Persuasion and violence can destroy truth, but they cannot replace it" ("Truth" 259).

Facts have a strangely resilient quality partially because a lie "tears, as it were, a hole in the fabric of factuality. As every historian knows, one can spot a lie by noticing incongruities, holes, or the j unctures of patched-up places" ("Truth" 253). While she is sometimes discouraging about our ability to see the tears in the fabric, citing the capacity of totalitarian governments to create the whole cloth (see "Truth" 252-54), she is also sometimes optimistic. InEichmann in Jerusalem, she repeats the story of Anton Schmidt—a man who saved the lives of Jews—and concludes that such stories cannot be silenced (230-32). For facts to exert power in the common world, however, these stories must be told. Rational truth (such as principles of mathematics) might be perceptible and demonstrable through individual contemplation, but "factual truth, on the contrary, is always related to other people: it concerns events and circumstances in which many are involved; it is established by witnesses and depends upon testimony; it exists only to the extent that it is spoken about, even if it occurs in the domain of privacy. It is political by nature" (23 8). Arendt is neither a positivist who posits an autonomous individual who can correctly perceive truth, nor a relativist who positively asserts the inherent relativism of all perception. Her description of how truth functions does not fall anywhere in the three-part expeditio so prevalent in bothrhetoric and philosophy: it is not expressivist, positivist, or social constructivist. Good thinking depends upon good public argument, and good public argument depends upon access to facts: "Freedom of opinion is a farce unless factual information is guaranteed" (238).

The sort of thinking that Arendt propounds takes the form of action only when it is public argument, and, as such, it is particularly precious: "For if no other test but the experience of being active, no other measure but the extent of sheer activity were to be applied to the various activities within the vita activa, it might well be that thinking as such would surpass them all" (Human 325). Arendt insists that it is "the same general rule— Do not contradict yourself (not your self but your thinking ego)—that determines both thinking and acting" (Lectures 3 7). In place of the mildly resentful conformism that fuels totalitarianism, Arendt proposes what Pitkin calls "a tough-minded, open-eyed readiness to perceive and judge reality for oneself, in terms of concrete experience and independent, critical theorizing" (274). The paradoxical nature of agonism (that it must involve both individuality and commonality) makes it difficult to maintain, as the temptation is great either to think one's own thoughts without reference to anyone else or to let others do one's thinking.

Arendt's Polemical Agonism

As I said, agonism does have its advocates within rhetoric—Burke, Ong, Sloane, Gage, and Jarratt, for instance—but while each of these theorists proposes a form of conflictual argument, not one of these is as adversarial as Arendt's. Agonism can emphasize persuasion, as does John Gage's textbook The Shape of Reason or William Brandt et al.'s The Craft of Writing. That is, the goal of the argument is to identify the disagreement and then construct a text that gains the assent of the audience. This is not the same as what Gage (citing Thomas Conley) calls "asymmetrical theories of rhetoric": theories that "presuppose an active speaker and a passive audience, a speaker whose rhetorical task is therefore to do something to that audience" ("Reasoned" 6). Asymmetric rhetoric is not and cannot be agonistic. Persuasive agonism still values conflict, disagreement, and equality among interlocutors, but it has the goal of reaching agreement, as when Gage says that the process of argument should enable one's reasons to be "understood and believed" by others (Shape 5; emphasis added).

Arendt's version is what one might call polemical agonism: it puts less emphasis on gaining assent, and it is exemplified both in Arendt's own writing and in Donald Lazere's "Ground Rules for Polemicists" and "Teaching the Political Conflicts." Both forms of agonism (persuasive and polemical) require substantive debate at two points in a long and recursive process. First, one engages in debate in order to invent one's argument; even silent thinking is a "dialogue of myself with myself (Lectures 40). The difference between the two approaches to agonism is clearest when one presents an argument to an audience assumed to be an opposition. In persuasive agonism, one plays down conflict and moves through reasons to try to persuade one's audience. In polemical agonism, however, one's intention is not necessarily to prove one's case, but to make public one' s thought in order to test it. In this way, communicability serves the same function in philosophy that replicability serves in the sciences; it is how one tests the validity of one's thought. In persuasive agonism, success is achieved through persuasion; in polemical agonism, success may be marked through the quality of subsequent controversy.

Arendt quotes from a letter Kant wrote on this point:

You know that I do not approach reasonable objections with the intention merely of refuting them, but that in thinking them over I always weave them into my judgments, and afford them the opportunity of overturning all my most cherished beliefs. I entertain the hope that by thus viewing my judgments impartially from the standpoint of others some third view that will improve upon my previous insight may be obtainable. {Lectures 42)

Kant's use of "impartial" here is interesting: he is not describing a stance that is free of all perspective; it is impartial only in the sense that it is not his own view. This is the same way that Arendt uses the term; she does not advocate any kind of positivistic rationality, but instead a "universal interdependence" ("Truth" 242). She does not place the origin of the "disinterested pursuit of truth" in science, but at "the moment when Homer chose to sing the deeds of the Trojans no less than those of the Achaeans, and to praise the glory of Hector, the foe and the defeated man, no less than the glory of Achilles, the hero of his kinfolk" ("Truth" 262¬63). It is useful to note that Arendt tends not to use the term "universal," opting more often for "common," by which she means both what is shared and what is ordinary, a usage that evades many of the problems associated with universalism while preserving its virtues (for a brief butprovocative application of Arendt's notion of common, see Hauser 100-03).

In polemical agonism, there is a sense in which one' s main goal is not to persuade one's readers; persuading one's readers, if this means that they fail to see errors and flaws in one' s argument, might actually be a sort of failure. It means that one wishes to put forward an argument that makes clear what one's stance is and why one holds it, but with the intention of provoking critique and counterargument. Arendt describes Kant's "hope" for his writings not that the number of people who agree with him would increase but "that the circle of his examiners would gradually be en¬larged" {Lectures 39); he wanted interlocutors, not acolytes.

This is not consensus-based argument, nor is it what is sometimes called "consociational argument," nor is this argument as mediation or conflict resolution. Arendt (and her commentators) use the term "fight," and they mean it. When Arendt describes the values that are necessary in our world, she says, "They are a sense of honor, desire for fame and glory, the spirit of fighting without hatred and 'without the spirit of revenge,' and indifference to material advantages" {Crises 167). Pitkin summarizes Arendt's argument: "Free citizenship presupposes the ability to fight— openly, seriously, with commitment, and about things that really mat¬ter—without fanaticism, without seeking to exterminate one's oppo¬nents" (266). My point here is two-fold: first, there is not a simple binary opposition between persuasive discourse and eristic discourse, the conflictual versus the collaborative, or argument as opposed to debate.

Second, while polemical agonismrequires diversity among interlocutors, and thus seems an extraordinarily appropriate notion, and while it may be a useful corrective to too much emphasis on persuasion, it seems to me that polemical agonism could easily slide into the kind of wrangling that is simply frustrating. Arendt does not describe just how one is to keep the conflict useful. Although she rejects the notion that politics is "no more than a battlefield of partial, conflicting interests, where nothing countfs] but pleasure and profit, partisanship, and the lust for dominion," she does not say exactly how we are to know when we are engaging in the existential leap of argument versus when we are lusting for dominion ("Truth" 263).

Like other proponents of agonism, Arendt argues that rhetoric does not lead individuals or communities to ultimate Truth; it leads to decisions that will necessarily have to be reconsidered. Even Arendt, who tends to express a greater faith than many agonists (such as Burke, Sloane, or Kastely) in the ability of individuals to perceive truth, insists that self-deception is always a danger, so public discourse is necessary as a form of testing (see especially Lectures and "Truth"). She remarks that it is difficult to think beyond one's self-interest and that "nothing, indeed, is more common, even among highly sophisticated people, than the blind obstinacy that becomes manifest in lack of imagination and failure to judge" ("Truth" 242).

Agonism demands that one simultaneously trust and doubt one' s own perceptions, rely on one's own judgment and consider the judgments of others, think for oneself and imagine how others think. The question remains whether this is a kind of thought in which everyone can engage. Is the agonistic public sphere (whether political, academic, or scientific) only available to the few? Benhabib puts this criticism in the form of a question: "That is, is the 'recovery of the public space' under conditions of modernity necessarily an elitist and antidemocratic project that can hardly be reconciled with the demand for universal political emancipa¬tion and the universal extension of citizenship rights that have accompa¬nied modernity since the American and French Revolutions?" (75). This is an especially troubling question not only because Arendt's examples of agonistic rhetoric are from elitist cultures, but also because of com¬ments she makes, such as this one from The Human Condition: "As a living experience, thought has always been assumed, perhaps wrongly, to be known only to the few. It may not be presumptuous to believe that these few have not become fewer in our time" {Human 324).

Yet, there are important positive political consequences of agonism.

Arendt' s own promotion of the agonistic sphere helps to explain how the system could be actively moral. It is not an overstatement to say that a central theme in Arendt's work is the evil of conformity—the fact that the modern bureaucratic state makes possible extraordinary evil carried out by people who do not even have any ill will toward their victims. It does so by "imposing innumerable and various rules, all of which tend to 'normalize' its members, to make them behave, to exclude spontaneous action or outstanding achievement" (Human 40). It keeps people from thinking, and it keeps them behaving. The agonistic model's celebration of achievement and verbal skill undermines the political force of conformity, so it is a force against the bureaucratizing of evil. If people think for themselves, they will resist dogma; if people think of themselves as one of many, they will empathize; if people can do both, they will resist totalitarianism. And if they talk about what they see, tell their stories, argue about their perceptions, and listen to one another—that is, engage in rhetoric—then they are engaging in antitotalitarian action.

In post-Ramistic rhetoric, it is a convention to have a thesis, and one might well wonder just what mine is—whether I am arguing for or against Arendt's agonism. Arendt does not lay out a pedagogy for us to follow (although one might argue that, if she had, it would lookmuch like the one Lazere describes in "Teaching"), so I am not claiming that greater attention to Arendt would untangle various pedagogical problems that teachers of writing face. Nor am I claiming that applying Arendt's views will resolve theoretical arguments that occupy scholarly journals. I am saying, on the one hand, that Arendt's connection of argument and thinking, as well as her perception that both serve to thwart totalitarian¬ism, suggest that agonal rhetoric (despite the current preference for collaborative rhetoric) is the best discourse for a diverse and inclusive public sphere. On the other hand, Arendt's advocacy of agonal rhetoric is troubling (and, given her own admiration for Kant, this may be intentional), especially in regard to its potential elitism, masculinism, failure to describe just how to keep argument from collapsing into wrangling, and apparently cheerful acceptance of hierarchy. Even with these flaws, Arendt describes something we would do well to consider thoughtfully: a fact-based but not positivist, communally grounded but not relativist, adversarial but not violent, independent but not expressivist rhetoric.

#### Effective decision-making outweighs---

#### Only portable skill---means our framework turns case

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After several days of intense debate, first the United States House of Representatives and then the U.S. Senate voted to authorize President George W. Bush to attack Iraq if Saddam Hussein refused to give up weapons of mass destruction as required by United Nations's resolutions. Debate about a possible military\* action against Iraq continued in various governmental bodies and in the public for six months, until President Bush ordered an attack on Baghdad, beginning Operation Iraqi Freedom, the military campaign against the Iraqi regime of Saddam Hussein. He did so despite the unwillingness of the U.N. Security Council to support the military action, and in the face of significant international opposition.

Meanwhile, and perhaps equally difficult for the parties involved, a young couple deliberated over whether they should purchase a large home to accommodate their growing family or should sacrifice living space to reside in an area with better public schools; elsewhere a college sophomore reconsidered his major and a senior her choice of law school, graduate school, or a job. Each of these\* situations called for decisions to be made. Each decision maker worked hard to make well-reasoned decisions.

Decision making is a thoughtful process of choosing among a variety of options for acting or thinking. It requires that the decider make a choice. Life demands decision making. We make countless individual decisions every day. To make some of those decisions, we work hard to employ care and consideration; others seem to just happen. Couples, families, groups of friends, and coworkers come together to make choices, and decision-making homes from committees to juries to the U.S. Congress and the United Nations make decisions that impact us all. Every profession requires effective and ethical decision making, as do our school, community, and social organizations.

We all make many decisions even- day. To refinance or sell one's home, to buy a high-performance SUV or an economical hybrid car. what major to select, what to have for dinner, what candidate CO vote for. paper or plastic, all present lis with choices. Should the president deal with an international crisis through military invasion or diplomacy? How should the U.S. Congress act to address illegal immigration?

Is the defendant guilty as accused? Tlie Daily Show or the ball game? And upon what information should I rely to make my decision? Certainly some of these decisions are more consequential than others. Which amendment to vote for, what television program to watch, what course to take, which phone plan to purchase, and which diet to pursue all present unique challenges. At our best, we seek out research and data to inform our decisions. Yet even the choice of which information to attend to requires decision making. In 2006, TIMI: magazine named YOU its "Person of the Year." Congratulations! Its selection was based on the participation not of ''great men" in the creation of history, but rather on the contributions of a community of anonymous participants in the evolution of information. Through blogs. online networking. You Tube. Facebook, MySpace, Wikipedia, and many other "wikis," knowledge and "truth" are created from the bottom up, bypassing the authoritarian control of newspeople. academics, and publishers. We have access to infinite quantities of information, but how do we sort through it and select the best information for our needs?

The ability of every decision maker to make good, reasoned, and ethical decisions relies heavily upon their ability to think critically. Critical thinking enables one to break argumentation down to its component parts in order to evaluate its relative validity and strength. Critical thinkers are better users of information, as well as better advocates.

Colleges and universities expect their students to develop their critical thinking skills and may require students to take designated courses to that end. The importance and value of such study is widely recognized.

Much of the most significant communication of our lives is conducted in the form of debates. These may take place in intrapersonal communications, in which we weigh the pros and cons of an important decision in our own minds, or they may take place in interpersonal communications, in which we listen to arguments intended to influence our decision or participate in exchanges to influence the decisions of others.

Our success or failure in life is largely determined by our ability to make wise decisions for ourselves and to influence the decisions of others in ways that are beneficial to us. Much of our significant, purposeful activity is concerned with making decisions. Whether to join a campus organization, go to graduate school, accept a job oiler, buy a car or house, move to another city, invest in a certain stock, or vote for Garcia—these are just a few of the thousands of decisions we may have to make. Often, intelligent self-interest or a sense of responsibility will require us to win the support of others. We may want a scholarship or a particular job for ourselves, a customer for out product, or a vote for our favored political candidate.

### 1NC

#### No exports now because of increased demand

Burnes et al 12-7 (John, Lisa Epifani, Curt Moffatt, Janna Chesno, Partner – VanNess Feldman, “DOE Releases LNG Export Study and Requests Public Comment,” VanNess Feldman, 2012, http://www.vnf.com/news-alerts-778.html)

Exports of natural gas, including LNG, must be authorized by DOE’s Office of Fossil Energy. By statute, exports of LNG to FTA nations must be approved “without modification or delay”. By contrast, before approving an application to export LNG to non-FTA nations, DOE must determine that the export is and will remain in the “public interest”. DOE’s primary focus is upon the domestic need for the gas to be exported. In May 2011, DOE conditionally authorized Sabine Pass Liquefaction, LLC (Sabine Pass) to export LNG to non-FTA nations. The authorization was finalized in August 2012. This remains the only long-term DOE authorization to export LNG from the lower 48 states to non-FTA nations. In the Sabine Pass order, DOE determined that it had a continuing duty to protect the public interest, and announced that it would monitor gas supply/demand conditions in the United States and the world to ensure that the cumulative impacts of the exports authorized in the order and in future orders would not lead to a reduction in the supply of natural gas needed to meet essential domestic needs. DOE also provided notice that it would take any action in the future, including amending or even revoking export authorizations, as appropriate or necessary to protect the public interest.

#### Plan decreases demand for natural gas

Wiser 5 (Ryan, PhD scientist at Lawrence Berkeley National Laboratory, “Easing the Natural Gas Crisis: Reducing Natural Gas Prices through Electricity Supply Diversification,” March 8, http://eetd.lbl.gov/ea/ems/reports/Senate-Testimony.pdf)

With the recent run-up in natural gas prices, and the expected continuation of volatile and high prices for at least the mid-term future, a growing number of voices are calling for increased diversification of electricity supplies. Such diversification holds the prospect of directly reducing our dependence on a fuel whose costs are highly uncertain, thereby hedging the risk of natural gas price volatility and escalation. In addition, as I will describe in a moment, by reducing natural gas demand, increased diversification away from gas-fired generation can indirectly suppress natural gas prices. Our report highlights the impact of increased deployment of renewable energy and energy efficiency on natural gas prices and consumer natural gas bills. A growing number of modeling studies conducted by government, non-profit, and private sector entities are showing that renewable energy and energy efficiency could significantly reduce natural gas prices and bills. Our report summarizes these recent modeling studies and reviews the reasonableness of their findings in light of economic theory and other analyses. (Though our report focuses on renewable energy and energy efficiency, other non-natural-gas resources would likely have a similar effect). We find that, by displacing natural-gas-fired electricity generation, increased levels of renewable energy and energy efficiency will reduce demand for natural gas and thus put downward pressure on gas prices. These price reductions hold the prospect of providing consumers with significant natural gas bill savings. In fact, although we did not analyze in detail the electricity price impacts reported in the studies, the studies often show that any predicted increase in the price of electricity caused by greater use of renewable energy or energy efficiency is largely or completely offset by the predicted natural gas price savings. We conclude that policies to encourage fuel diversification within the electricity sector should consider the potentially beneficial cross-sector impact of that diversification on natural gas prices and bills.

#### Exports destroy Russia’s economy

Mead 12

Walter Russell Mead, April 25, 2012 (Professor of Foreign Affairs and Humanities at Bard College, Henry A. Kissinger senior fellow for U.S. foreign policy at the Council on Foreign Relations (CFR), and Editor-at-Large of The American Interest magazine), , The American Interest, North American Shale Gas Gives Russia Serious Headache, <http://blogs.the-american-interest.com/wrm/2012/04/25/north-american-shale-gas-gives-russia-serious-headache/>

North America’s shale gas boom is chipping away at the market for gas producers like Russia. What’s more, if the United States becomes a gas exporter, Russia’s customers (especially in Europe) could decide to cancel expensive contracts with Gazprom in favor of cheaper American natural gas. “If the US starts exporting LNG to Europe and Asia, it gives [customers there] an argument to renegotiate their prices with Gazprom and Qatar, and they will do it,” says Jean Abiteboul, head of Cheniere supply & marketing. Gazprom supplied 27 percent of Europe’s natural gas in 2011. While American gas is trading below $2 per MMBTU (million British thermal units), Gazprom’s prices are tied to crude oil markets, and its long-term contracts charge customers roughly $13 per MMBTU, says the *FT*. European customers would love to reduce their dependence on Gazprom and start to import American gas. Already Gazprom has had to make concessions to its three biggest customers, and others are increasingly dissatisfied with their contracts. Worse, from Russia’s point of view: evidence that western and central Europe contain substantial shale gas reserves of their own. Fracking is unpopular in thickly populated, eco-friendly Europe, but so are high gas prices. All this ought to give Russia serious heartburn. Eroding Gazprom’s dominance of the European energy market would be a major check on Russian economic growth and political influence.

**Goes nuclear and turns case**

**Filger 9** (Sheldon, Columnist and Founder – Global EconomicCrisis.com, “Russian Economy Faces Disasterous Free Fall Contraction”, <http://www.huffingtonpost.com/sheldon-filger/russian-economy-faces-dis_b_201147.html>)

In Russia, historically, economic health and political stability are intertwined to a degree that is rarely encountered in other major industrialized economies. It was the economic stagnation of the former Soviet Union that led to its political downfall. Similarly, Medvedev and Putin, both intimately acquainted with their nation's history, are unquestionably alarmed at the prospect that Russia's economic crisis will endanger the nation's political stability, achieved at great cost after years of chaos following the demise of the Soviet Union. Already, strikes and protests are occurring among rank and file workers facing unemployment or non-payment of their salaries. Recent polling demonstrates that the once supreme popularity ratings of Putin and Medvedev are eroding rapidly. Beyond the political elites are the financial oligarchs, who have been forced to deleverage, even unloading their yachts and executive jets in a desperate attempt to raise cash. Should the Russian economy deteriorate to the point where economic collapse is not out of the question, the impact will go far beyond the obvious accelerant such an outcome would be for the Global Economic Crisis. There is a geopolitical dimension that is even more relevant then the economic context. Despite its economic vulnerabilities and perceived decline from superpower status, Russia remains one of only two nations on earth with a nuclear arsenal of sufficient scope and capability to destroy the world as we know it. For that reason, it is not only President Medvedev and Prime Minister Putin who will be lying awake at nights over the prospect that a national economic crisis can transform itself into a virulent and destabilizing social and political upheaval. It just may be possible that U.S. President Barack Obama's national security team has already briefed him about the consequences of a major economic meltdown in Russia for the peace of the world. After all, the most recent national intelligence estimates put out by the U.S. intelligence community have already concluded that the Global Economic Crisis represents the greatest national security threat to the United States, due to its facilitating political instability in the world. During the years Boris Yeltsin ruled Russia, security forces responsible for guarding the nation's nuclear arsenal went without pay for months at a time, leading to fears that desperate personnel would illicitly sell nuclear weapons to terrorist organizations. If the current economic crisis in Russia were to deteriorate much further, how secure would the Russian nuclear arsenal remain? It may be that the financial impact of the Global Economic Crisis is its least dangerous consequence.

### Consumption Focus

#### Consumption focus fails-~--political action key

Bryant 12—prof of philosophy at Collin College (Levi, Black Ecology: A Pessimistic Moment, larvalsubjects.wordpress.com/2012/03/19/black-ecology-a-pessimistic-moment/)

So why is this an issue? It’s an issue because while environmentalists prescribe all sorts of action we need to take to avert the climate catastrophe, it seems to me that in failing to engage in an ecology of social and political institutions they are whistling past the graveyard by failing to address the question of the conditions under which action is possible. Here’s the part where everyone gets angry with me. Given the way in which government and corporations are today intertwined, I don’t think there’s much we can do to avert the coming catastrophe. As Morton says, referring to logical time, “the catastrophe has already happened”. So what would it mean, I wonder, to take Morton’s thesis seriously? Here I know Tim will disagree with me. When I look at environmental discussions in popular media and from many around me, I see the discussion revolving almost entirely around consumers. We’re told that we have to consume differently to solve this problem. I agree that we need to consume differently, but **I don’t see any feasible way in which** driving fuel efficient cars, **using less** heat and AC, eating less meat, etc **will solve these problems**. This is because the lion’s share of our climate change problems arise from the production and distribution end of the equation, rather than the consumption end. They are problems arising from agricultural practices, factories, and how we ship goods throughout countries and the world. The problem is that given the way in which governments and corporations are intertwined with one another, and given the way in which third world countries are dependent on fossil fuels for their development, and given the fact that only governmental solutions can address problems of production and distribution, **we’re left with no recourse for action**. We can only watch helplessly while our bought and sold politicians continue to fiddle as the world burns.

### Growth Sustainable

#### Growth is sustainable and solves resource depletion

**Emerson 10** (Patrick, Associate Professor of Economics – Oregon State University, “Economic Growth: The Planet's Poor Need Sustainable Expansion,” Oregon Live, 8-7, http://www.oregonlive.com/opinion/index.ssf/2010/08/economic\_growth\_the\_planets\_po.html)

Does economic growth represent the biggest threat to the planet, or its salvation? In a recent op-ed ("The fallacy of growth in a finite world," Aug. 1), Jack Hart argues that the goal of economic growth is antithetical to a sustainable world. Hart's views reveal a wealthy-country bias about what growth means and fail to appreciate the perspective of poor countries. His characterization of growth is also inaccurate and perpetuates a common misconception about economic growth -- that it necessarily means resource depletion. Finally, his anti-growth agenda would leave the world more imperiled: Economic growth represents the world's best hope to meet the challenges of the future. What does growth mean for the stark realities of life in a low-income society? High-income countries enjoy an average life expectancy of almost 80 years, while in low-income countries it's just 53 years. In developing countries an estimated 900 million people do not have enough food, 1 billion people have no access to safe drinking water, 2.4 billion people have inadequate sanitation and 10,000 children die every day from diseases caused by contaminated water. The infant mortality rate in high-income countries is 7 per 1,000, compared with 114 in low-income countries. These sobering facts of poverty result from a lack of growth. What economic growth has brought to those of us fortunate to live in a wealthy country is not just big TVs and fancy cars, but a safe, secure and long life for ourselves and our children. These statistics are real measures of despair for most of the world's population. The myth of the happy peasant is an arrogant conceit of the wealthy that has existed for centuries to justify income inequality, and it is no truer today than it was in feudal times. Hart argues that the growth of the 19th and 20th centuries has come largely through the depletion and degradation of the earth's natural resources. Growth does not mean resource depletion, however; this is but one way to accomplish growth. Becoming more efficient -- in other words, conserving our resources -- is another. Anything that provides value produces growth. A better, more energy-efficient light bulb, a time-saving personal computer and a better electric car are all ways through which growth can be achieved. Poverty and population growth are highly correlated because poor families in developing countries need children to provide the social safety net that their governments do not. Societies that have experienced economic growth, however, have seen population growth rates decline precipitously. And more people doesn't necessarily represent a problem; it represents a challenge, an incentive and a resource. More people means an increased emphasis on finding more efficient ways to live; it means more potential talent -- brainpower and creativity -- to help solve the very problems we face. Not only does growth not mean resource depletion, but creating more efficient technologies is necessarily growth-enhancing. This is why growth represents the hope of the future, not the challenge to it. Much of the recent growth in developed countries has been achieved not through resource depletion but through the microcomputer and information technology revolution, through designing more efficient buildings and machines, and through substantial improvements in transportation efficiency. This is what will typify 21st century growth: doing more with less. High-income countries, led by the United States, do use the lion's share of the world's energy. But the U.S. produces a lot more value per unit of energy than does China. And high-income countries are making the biggest investment in renewable-energy technology, because our wealth causes us to place increased value on the environment.

### No Limits

#### No limit to growth – their authors rely on discredited Malthusian predictions—they don’t account for new technology

Friedman 5 — Benjamin M. Friedman, William Joseph Maier Professor of Political Economy at Harvard University, former Chair of the Department of Economics at Harvard University, holds a Ph.D. in Economics from Harvard University, 2005 (“Growth and the Environment,” *The Moral Consequences of Economic Growth*, Published by Knopf Publishing Group, ISBN 0679448918, p. 377)

The Limits of Growth authors made such faulty predictions because they underestimated the power of technological advance, and ignored altogether the role of initially higher prices both in encouraging substitution by users and in stimulating new supplies. 23 The conceptual framework they took as their model was essentially that of Malthus, who nearly two centuries before, living in what was still a predominantly agricultural economy, had focused on the tension between the arithmetic increase of food production and exponential population growth. (The first two chapters of The Limits to Growth were titled “The Nature of Exponential Growth” and “The Limits to Exponential Growth.”) But Malthus had failed to see the implications of the technological revolution that was beginning to take place around him, including advances in agricultural methods as well as new modes of transportation that opened the way to grow food on land previously too far away to be useful.\* On the evidence of the three decades since the Club of Rome report appeared, its authors similarly failed to anticipate the power of new technology, or to understand the functioning of the price mechanism.

#### No limits to growth – new methods of extraction solve

**Sagoff 97** (Mark, Researcher for the Institute of Philosophy and Public Policy at the University of Maryland “Do We Consume Too Much?” Volume 279, No. 6; pages 80-96. <http://www.theatlantic.com/issues/97jun/consume.htm>)

These prudential and economic arguments are not likely to succeed much longer. It is simply wrong to believe that nature sets physical limits to economic growth -- that is, to prosperity and the production and consumption of goods and services on which it is based. The idea that increasing consumption will inevitably lead to depletion and scarcity, as plausible as it may seem, is mistaken both in principle and in fact. It is based on four misconceptions. IN the 1970s Paul Ehrlich, a biologist at Stanford University, predicted that global shortages would soon send prices for food, fresh water, energy, metals, paper, and other materials sharply higher. "It seems certain," Paul and Anne Ehrlich wrote in The End of Affluence (1974), "that energy shortages will be with us for the rest of the century, and that before 1985 mankind will enter a genuine age of scarcity in which many things besides energy will be in short supply." Crucial materials would near depletion during the 1980s, Ehrlich predicted, pushing prices out of reach. "Starvation among people will be accompanied by starvation of industries for the materials they require." Things have not turned out as Ehrlich expected. In the early 1990s real prices for foodoverall fell. Raw materials -- including energy resources -- are generally more abundant and less expensive today than they were twenty years ago. When Ehrlich wrote, economically recoverable world reserves of petroleum stood at 640 billion barrels. Since that time **reserves** have increased by more than 50 percent, reaching more than 1,000 billion barrels in 1989. They have held steady in spite of rising consumption. The pre-tax real price of gasoline was lower during this decade than at any other time since 1947. The World Energy Council announced in 1992 that "fears of imminent [resource] exhaustion that were widely held 20 years ago are now considered to have been unfounded." The World Resources Institute, in a 1994-1995 report, referred to "the frequently expressed concern that high levels of consumption will lead to resource depletion and to physical shortages that might limit growth or development opportunity." Examining the evidence, however, the institute said that "the world is not yet running out of most nonrenewable resources and is not likely to, at least in the next few decades." A 1988 report from the Office of Technology Assessment concluded, "The nation's future has probably never been less constrained by the cost of natural resources.**"** It is reasonable to expect that as raw materials become less expensive, they will be more rapidly depleted. This expectation is also mistaken. From 1980 to 1990, for example, while the prices of resource-based commodities declined (the price of rubber by 40 percent, cement by 40 percent, and coal by almost 50 percent), reserves of most raw materials increased. Economists offer three explanations. First, with regard to subsoil resources, the world becomes ever more adept at discovering new reserves and exploiting old ones. Exploring for oil, for example, used to be a hit-or-miss proposition, resulting in a lot of dry holes. Today oil companies can use seismic waves to help them create precise computer images of the earth. New methods of extraction -- for example, using bacteria to leach metals from low-grade ores -- greatly increase resource recovery. Reserves of resources "are actually functions of technology," one analyst has written. "The more advanced the technology, the more reserves become known and recoverable.**"** Second, plentiful resources can be used in place of those that become scarce. Analysts speak of an Age of Substitutability and point, for example, to nanotubes, tiny cylinders of carbon whose molecular structure forms fibers a hundred times as strong as steel, at one sixth the weight. As technologies that use more-abundant resources substitute for those needing less-abundant ones -- for example, ceramics in place of tungsten, fiber optics in place of copper wire, aluminum cans in place of tin ones -- the demand for and the price of the less-abundant resources decline. One can easily find earlier instances of substitution. During the early nineteenth century whale oil was the preferred fuel for household illumination. A dwindling supply prompted innovations in the lighting industry, including the**.**

### 1NC Resource Wars

#### No resource wars – prefer statistical evidence

Pinker 11 (Steven, Harvard College Professor and Johnstone Family Professor in the Department of Psychology – Harvard University, “The Better Angels of Our Nature: Why Violence Has Declined,” Google Books)

Once again it seems to me that the appropriate response is "maybe, but maybe not." Though climate change can cause plenty of misery and deserves to be mitigated for that reason alone, it will not necessarily lead to armed conflict. The political scientists who track war and peace, such as Halvard Buhaug, Idean Salehyan, Ole Theisen, and Nils Gleditsch, are skeptical of the popular idea that people fight wars over scarce resources. Hunger and resource shortages are tragically common in sub-Saharn countries such as Malawi, Zambia, and Tanzania, but wars involving them are not. Hurricanes, floods, droughts, and tsunamis (such as the disastrous one in the Indian Ocean in 2004) do not generally lead to armed conflict. The American dust bowl in the 1930s, to take another example, caused plenty of deprivation but no civil war. And while temperatures have been rising steadily in Africa during the past fifteen years, civil wars and war deaths have been falling. Pressures on access to land and water can certainly cause local skirmishes, but a genuine war requires that hostile forces be organized and armed, and that depends more on the influence of bad governments, closed economies, and militant ideologies than on the sheer availability of land and water. Certainly any connection to terrorism is in the imagination of the terror warriors: terrorists tend to be underemployed lower-middle-class men, not subsistence farmers. As for genocide, the Sudanese government finds it convenient to blame violence in Darfur on desertification, distracting the world from its own role in tolerating or encouraging the ethnic cleansing. In a regression analysis on armed conflicts from 1980 to 1992, Theisen found that conflict was more likely if a country was poor, populous, politically unstable, and abundant in oil, but not if it had suffered from droughts, water shortages, or mild land degradation. (Severe land degradation did have a small effect.) Reviewing analyses that examined a large number (N) of countries rather than cherry-picking one or two, he concluded, "those who foresee doom, because of the relationship between resource scarcity and violent internal conflict, have very little support in the large-N literature." Salehyan adds that relatively inexpensive advances in water use and agriculture practices in the developing world can yield massive increases in productivity with a constant or even shrinking amount of land, and that better governance can mitigate the human costs of environmental damage, as it does in developed democracies. Since the state of the environment is at most one ingredient in a mixture that depends far more on political and social organization, resource wars are far from inevitable, even in a climate-changed world.

### Environment Resilient

#### No brink to environmental collapse

Lomborg 12 -- director of the Copenhagen Consensus Center and author of Smart Solutions to Climate Change (Bjorn, July/August, "Environmental Alarmism, Then and Now," http://www.foreignaffairs.com/articles/137681/bjorn-lomborg/environmental-alarmism-then-and-now?page=show)

As for its pollution predictions, The Limits to Growth was simultaneously scary and vague. Pollution's increase was supposed to trigger a global collapse if the decrease of food or resources didn't do so first, but how exactly pollution was defined was left unclear. Individual pollutants, such as DDT, lead, mercury, and pesticides, were mentioned, but how those could kill any significant number of people was unspecified, making it a bit tricky to test the prediction. Air pollution might be considered a good proxy for overall pollution, since it was the biggest environmental killer in the twentieth century and since the Environmental Protection Agency estimates that its regulation produces 86-96 percent of all the social benefits from environmental regulation more generally. In the developing world, outdoor air pollution is indeed rising and killing more people, currently perhaps over 650,000 per year. Indoor air pollution (from using dirty fuels for cooking and heating) kills even more, almost two million per year (although that number has been decreasing slightly).

#### -- Environment is resilient

Easterbrook 95 (Gregg, Distinguished Fellow – Fullbright Foundation, A Moment on Earth, p. 25)

In the aftermath of events such as Love Canal or the Exxon Valdez oil spill, every reference to the environment is prefaced with the adjective "fragile." "Fragile environment" has become a welded phrase of the modern lexicon, like "aging hippie" or "fugitive financier." But the notion of a fragile environment is profoundly wrong. Individual animals, plants, and people are distressingly fragile. The environment that contains them is close to indestructible. The living environment of Earth has survived ice ages; bombardments of cosmic radiation more deadly than atomic fallout; solar radiation more powerful than the worst-case projection for ozone depletion; thousand-year periods of intense volcanism releasing global air pollution far worse than that made by any factory; reversals of the planet's magnetic poles; the rearrangement of continents; transformation of plains into mountain ranges and of seas into plains; fluctuations of ocean currents and the jet stream; 300-foot vacillations in sea levels; shortening and lengthening of the seasons caused by shifts in the planetary axis; collisions of asteroids and comets bearing far more force than man's nuclear arsenals; and the years without summer that followed these impacts. Yet hearts beat on, and petals unfold still. Were the environment fragile it would have expired many eons before the advent of the industrial affronts of the dreaming ape. Human assaults on the environment, though mischievous, are pinpricks compared to forces of the magnitude nature is accustomed to resisting.

### Democracy Good

**Democracy is key to environmental protection**

**Li and Reuveny 7** (Quan, Professor of Political Science – Penn State University and Rafael, Professor of Public and Environmental Affairs, “The Effects of Liberalism on the Terrestrial Environment”, Conflict Management and Peace Science, 24(3), September)

Moving to the view that democracy reduces the level of environmental degradation, one set of considerations focuses on the institutional qualities of democracy. The responsiveness argument is that democracies are more responsive to the environmental needs of the public than are autocracies due to their very nature of taking public interests into account (Kotov and Nikitina, 1995). It is also argued that democracies comply with environmental agreements well, since they respect, and respond to, the rule of law (Weiss and Jacobsen, 1999). The freedom of information channel is offered by Schultz and Crockett (1990) and Payne (1995). They theorize that political rights and greater freedom for information ﬂows help2 to promote the cause of environmental groups, raise public awareness of problems and potential solutions, and encourage environmental legislation to curtail environmental degradation. Democracies also tend to have market economies, which further promotes the ﬂow of information as economic efﬁciency and proﬁts requires full information. Hence, unlike the above argument, this channel expects that proﬁt-maximizing markets will promote environmental quality (Berger, 1994).

**Democracy’s on the brink --- consolidation solves global WMD conflict**

**Halperin 11** (Morton H., Senior Advisor – Open Society Institute and Senior Vice President of the Center for American Progress, “Unconventional Wisdom – Democracy is Still Worth Fighting For”, Foreign Policy, January / February, http://www.foreignpolicy.com/articles/2011/01/02/unconventional\_wisdom?page=0,11)

As the United States struggles to wind down two wars and recover from a humbling financial crisis, realism is enjoying a renaissance. Afghanistan and Iraq bear scant resemblance to the democracies we were promised. The Treasury is broke. And America has a president, Barack Obama, who once compared his foreign-policy philosophy to the realism of theologian Reinhold Niebuhr: "There's serious evil in the world, and hardship and pain," Obama said during his 2008 campaign. "And we should be humble and modest in our belief we can eliminate those things." But one can take such words of wisdom to the extreme-as realists like former Secretary of State Henry Kissinger and writer Robert Kaplan sometimes do, arguing that the United States can't afford the risks inherent in supporting democracy and human rights around the world. Others, such as cultural historian Jacques Barzun, go even further, saying that America can't export democracy at all, "because it is not an ideology but a wayward historical development." Taken too far, such realist absolutism can be just as dangerous, and wrong, as neoconservative hubris. For there is one thing the neocons get right: As I argue in *The Democracy Advantage*, democratic governments are more likely than autocratic regimes to engage in conduct that advances U.S. interests and avoids situations that pose a threat to peace and security. Democratic states are more likely to develop and to avoid famines and economic collapse. They are also less likely to become failed states or suffer a civil war. Democratic states are also more likely to cooperate in dealing with security issues, such as terrorism and proliferation of weapons of mass destruction. As the bloody aftermath of the Iraq invasion painfully shows, democracy cannot be imposed from the outside by force or coercion. It must come from the people of a nation working to get on the path of democracy and then adopting the policies necessary to remain on that path. But we should be careful about overlearning the lessons of Iraq. In fact, the outside world can make an enormous difference in whether such efforts succeed. There are numerous examples-starting with Spain and Portugal and spreading to Eastern Europe, Latin America, and Asia-in which the struggle to establish democracy and advance human rights received critical support from multilateral bodies, including the United Nations, as well as from regional organizations, democratic governments, and private groups. It is very much in America's interest to provide such assistance now to new democracies, such as Indonesia, Liberia, and Nepal, and to stand with those advocating democracy in countries such as Belarus, Burma, and China. It will still be true that the United States will sometimes need to work with a nondemocratic regime to secure an immediate objective, such as use of a military base to support the U.S. mission in Afghanistan, or in the case of Russia, to sign an arms-control treaty. None of that, however, should come at the expense of speaking out in support of those struggling for their rights. Nor should we doubt that America would be more secure if they succeed.

### Feenberg

#### Only innovative responses to tech-induced environmental destruction enable reconceptualization of technology as more than an instrument and of nature as more than standing reserve – the aff’s rejection of technology fails

Feenberg 7 (Andrew, Canada Research Chair in the Philosophy of Technology in the School of Communication at Simon Fraser University, Danish Yearbook of Philosophy, Volume 42, “Between Reason and Experience,” p. 24-27, http://www.sfu.ca/~andrewf/books/Between\_Reason\_and\_Experience\_DYP42.pdf)

As I reformulate this social version of the technical revealing, it has political consequences. Political protests arise as feedback from disastrous technical projects and designs reaches those excluded from the original networks of control. These protests are often based on scientific knowledge of the devastation caused by technology designed in indifference to human needs. This is the point at which objective facts enter experience as motives for distrust and fear of technology and technical authority. The subjects become aware of the contingency of the technically structured world on choices and decisions that do not proceed from a supposedly pure rationality. The lifeworld reacts back on technology through the objective contents of knowledge of its side effects. There have been many attempts to articulate the implications of this new situation. My approach is closest to that of Ulrich Beck. Like him I argue that we are entering a new phase of technological development in which the externalities associated with the prevailing technologies threaten the survival of the industrial system (Beck, 1992). This threat has begun to force redesign of many technologies and changes in the disciplines and training underlying the technical professions. Beck explains the transition from a capitalism based on distinct spheres with little interaction, to a “reflexive modernity” in which interaction between spheres becomes the norm. Multiple approaches and cross disciplinary conceptions increasingly shape the design process in response. He develops the social consequences of the resultant changes while I have focused primarily on the technological dimension of the new phase. In this phase, what Gilbert Simondon calls “concretizing” innovations emerge designed to accommodate a wider range of social influences and contextual factors.12 As design is pulled in different directions by actors attempting to impose their differing functional requirements on devices, the winning design strategies are often those that reconcile multiple functions in simple and elegant structures capable of serving them all. Examples abound: hybrid engines in automobiles, refrigerants and propellants that do not damage the ozone layer, substitutes for lead in consumer products, and so on. In the process of developing these technologies environmental, medical and other concerns are brought to bear on design by new actors excluded from the original technological regime. Of course, no small refinements such as these can resolve the environmental crisis, but the fact that they are possible at all removes the threat of technological regression as a major alibi for doing nothing. The emergence of a radically new technical politics requires us to rethink the basic concept of rationality that has supplied the existing industrial society with its highest philosophical sanction. Heidegger and Marcuse help us to understand the limitations of the prevailing concept. They remind us that the hypostatization of a reason fragmented into specializations and differentiated from a broader cultural and normative context is not inevitable but belongs to a specific historical era, an era that may well be approaching its end. A new understanding of rationality is possible based not on a return to a teleological worldview in which we can no longer believe but on recognition of the complexity of experiences that have been cast in artificially narrow instrumental schemas. Concrete experience is thus the touchstone of this ontology because it is only there that the world reveals itself in its multifarious and unpredictable connections and potentialities. From this new standpoint specialization and differentiation will not disappear, but they will be treated as methodologically useful rather than as ontologically fundamental. The resultant breaching of the boundaries between disciplines and between the technical realm and the lifeworld responds to the crisis of industrial society. We may learn to bound the cosmos in modern forms by attending to the limits that emerge from the unintended interactions of domains touched by powerful modern technologies. This is the form in which the lived world we have discovered in the thought of Heidegger and Marcuse becomes active in the structure of a rationality that still has for its mission the explanation of objective nature. The discovery of a limit reveals the significance of that which is threatened beyond it. This dialectic of limitation is most obvious in the case of threats to human health or species survival. On the one side, the experienced world gains a ground in respect for an object, in this case the human body or a threatened species. On the other side, a concrete technical response is solicited employing the means at hand in new combinations or inventing new ones. From this standpoint no return to a qualitative science is possible or necessary. Modern science objectifies and reifies by its very nature but it could operate within limits standing in for the lost essences of antiquity and like them referring us to an irreducible truth of experience. As we encounter this truth we are reminded of the necessity of restraint. This must be a productive restraint leading to a process of transformation, not a passive refusal of a reified system. The forward looking Janus face is fundamental and grants hope not by rejecting scientific-technical achievements but by revealing their essential nature as processes in which human action can intervene.13 Innovative responses to the new limits can serve in the reconstruction of both technical disciplines and technology. To be sure, the process character and full complexity of reality cannot be reflected immediately in the scientific-technical disciplines, but the disciplines can be deployed in fluid combinations that reflect the complexity of reality as it enters experience through humanly provoked disasters of all sorts and through the consciousness of new threats of which we ourselves are the ultimate source. The goal is not merely to survive but to reconstruct modern technology around a new model of wealth that is environmentally compatible and that draws on human capacities suppressed or ignored in the present dispensation. Marcuse interpreted this in terms of the surrealist “hazard objectif,” the rather fantastic notion of an aesthetically formed world in which “human faculties and desires ... appear as part of the objective determinism of nature – coincidence of causality through nature and causality through freedom” (Marcuse, 1969: 31).

### Consumption inevitable

#### Consumption and consumerism are inevitable and build ethical democratic solidarity

Cohen 2 (Patricia, Writer for the New York Times, citing James B. Twitchell, Professor of English at the University of Florida, “In Defense Of Our Wicked, Wicked Way”, The New York Times, July 7, http://www.clas.ufl.edu/users/jtwitche/nytimesarticle.pdf)

"I CAN stand here and look at this for hours," said James B. Twitchell as he parked himself in front of the bottled water section in City Market, just past the jars of $30-per-pound teas and behind the eight-foot display of imported olive oils. Mr. Twitchell, a professor of English at the University of Florida in Gainesville, specializes in the Romantic poets, but his real obsession is shopping. Given the choice of reading literary theorists like Foucault or gazing at shelves stacked with artfully shaped bottles of water piled up like Jay Gatsby's beautifully tailored shirts, he would quickly choose the latter. "There is more that I can sustain myself with at the water aisle than in all of modern criticism," he said. In a series of books, the latest of which is "Living It Up: Our Love Affair With Luxury" (Columbia University Press), Mr. Twitchell has detailed the consumption habits of Americans with all the scholarly delight of a field anthropologist who has discovered the secret courting rituals of a remote tribe. He is exquisitely attuned to the subtle gradations of status conferred by the labels on what people wear, eat, drink, drive and freeze ice cubes in. And he is not alone. Whether prompted by the 90's spendathon or the endless fascination not only with shopping, but with reading about shopping, a new title by an academic or journalist on the subject appears practically every week. Burlington, where Mr. Twitchell grew up and where he now spends summers, was singled out by David Brooks in his wickedly funny "Bobos in Paradise" as a model Latte Town, a city that has perfectly reconciled the mercenary instincts of the bourgeoisie with the artistic spirit of the bohemians to create an upscale consumer culture. What distinguishes Mr. Twitchell's study of excessive consumerism, though, is that he applauds it. To him, Evian and Pellegrino, Vermont Pure and Dasani are evidence of what could be called his trickledown theory of luxury: that the defining characteristic of today's society is the average person's embrace of unnecessary consumption, superficial indulgence, wretched excess and endless status-seeking. Oh, earthly paradise! Once defined by exclusiveness, luxury is now available -- whether in the form of limited-edition coffee at Starbucks or Michael Graves tea kettles at Target -- to all. And that, Mr. Twitchell maintains, is a good thing. Sure, he argues in his book, buying essentially useless luxury items "is one-dimensional, shallow, ahistorical, without memory and expendable. But it is also strangely democratic and unifying. If what you want is peace on earth, a unifying system that transcends religious, cultural and caste differences, well, whoops!, here it is. The Global Village is not the City on the Hill, not quite the Emerald City, and certainly not quite what millennial utopians had in mind, but it is closer to equitable distribution of rank than what other systems have provided." That is, to say the least, a minority report. For centuries, philosophers, artists and clerics railed against luxury. Ecclesiastical courts forbade most people from eating chocolate, drinking coffee or wearing colors like Prussian blue and royal purple -- "luxuria" that signaled living above one's God-ordered place. Thorstein Veblen offered the first modern critique of "conspicuous consumption" in his 1899 treatise "The Theory of the Leisure Class." Post-World War II social critics and economists extended Veblen's critique to the expanding middle class. John Kenneth Galbraith warned in "The Affluent Society" of the binge afflicting the postwar generation. Unwitting consumers, he said, were essentially suckered by admen and salesmen into spending money on things they didn't need. In his 1970 study "The Cultural Contradictions of Capitalism" Daniel Bell argued that "the culture was no longer concerned with how to work and achieve, but with how to spend and enjoy." This trend, he warned, could end up undermining the very work ethic that made capitalism function That, obviously, did not happen. If anything people worked more so they could spend more. In "The Overspent American," Juliet B. Schor noted that people no longer compared themselves with others in the same income bracket, but with the richer and more famous they saw on television, propelling them to spend more than they could afford. To Mr. Twitchell, the naysayers are scolds and spoilsports. Indoor plumbing, sewing machines, dishwashers, college educations, microwaves, coronary bypasses, birth control and air travel all began as luxury items for the wealthy. Nor are buyers mindlessly duped by canny advertisers into buying items they don't really want, he said. Quite the opposite. They enjoy the sensual feel of an Hermes silk tie, the briny delicacy of Petrossian caviar or simply the sensation of indulging themselves. These things may not bring happiness, but neither does their absence from the lives of people too poor to afford them. It may seem an odd moment to champion luxury. The spectacular boom of the 90's now looks as if it was partly built on spectacular sleight of hand, with Enron, Global Crossing, Adelphia and WorldCom all recently admitting that billions in reported profits were nonexistent. The moment seems ripe for a chastened culture to repent its indulgences. Reassessing the get-and-spend ethic -- not defending consumerism -- might well be the defining current of the next few years. The problem with Mr. Twitchell's view, said Robert H. Frank, author of "Luxury Fever," is that our sense of what we need to live comfortably keeps spiraling upward. It is not that luxury spending isn't good for particular individuals, but that it is bad for society overall. "It's like when everybody stands up for a better view, you don't see better than before," Mr. Frank said from his home in Ithaca. There's a lot of waste in luxury spending. Instead of building safer roads or providing better health care, we are spending that money on bigger diamonds and faster cars. Mr. Twitchell is unpersuaded, however. Walking down Church Street, Burlington's busy pedestrian mall, he pointed out the transformation that the consumer culture has wrought in his hometown. Lean and tanned, with cropped gray hair and rounded tortoise-shell glasses, Mr. Twitchell looks a bit like Dennis the Menace's father after Dennis has grown up, moved across the country and given his old man a few years to recover. "Church Street once serviced needs, now it services desires," Mr. Twitchell said. The optician's shop is gone, and so is Sears and JCPenney. He pointed out the Ann Taylor store, where the Masonic temple used to be. A chic French children's store sits in the old bank. "The key to modern luxe is that **most of us can have a bit of it on the plate**," Mr. Twitchell said. "I can't own a Lexus, but I can rent one. I can't go to Bermuda for a winter, but I can have a time share for a weekend. I don't own a yacht but I'm taking a Princess cruise." The process of democratization is mirrored in Mr. Twitchell's family history. His great-grandfatherAndrew A. Buell made his fortune building wooden boxes from Adirondack lumber. Driving up Lodge Road to "the hill," where Mr. Buell built a red stone Romanesque mansion with a copper-topped tower, Mr. Twitchell passed the Burlington Country Club, which his grandfather Marshall Coleman Twitchell helped found. The family's sprawling former home is now a women's dormitory, and the surrounding 66-acre estate serves as the University of Vermont's Redstone campus. A couple of blocks from the hilltop, both in location and status, is the relatively modest white wooden house that Mr. Twitchell, the son of Marshall Coleman Twitchell Jr., an ophthalmologist, and his sisters grew up in. At that time, said Mr. Twitchell, now 59, one's social place was determined by birth, or "what I call the lucky sperm culture." Today, birth-ordained status has been supplanted by store-bought status. Mr. Twitchell has no regrets about this lost world. "Though I was a beneficiary of it, I'm glad it's over," he said. "There is something refreshing about the material world that downtown Burlington opened up." Compared to the traditional ways of marking status -- race, parentage, accent, private schools -- one's purchases are a preferable way of telling who's up and who's down, he said. On that point, Mr. Twitchell is not alone. Gary Cross, a historian at Penn State University, said that consumer culture in one sense is "democracy's highest achievement, giving meaning and dignity to people when workplace participation, ethnic solidarity and even representative democracy have failed." Still, as Mr. Cross argued in 2000 in "An All-Consuming Century: Why Commercialism Won in Modern America," "most of us, no matter our politics, are repulsed by the absolute identity of society with the market and individual choice with shopping." True enough, Mr. Twitchell readily conceded. But he maintains the critics are missing the essential characteristic of luxury spending. "Luxury has very little to do with money or things," he said. "Luxury is a story we tell about things," and it's ultimately the story we are after. That is, our purchases are imbued with elaborate narratives about the life we want to live. It is advertisers and manufacturers who give objects meaning by constructing the stories about them, Mr. Twitchell said, and that meaning is as much a source of desire as the object itself. Think of the elaborate fantasies spun by marketers like Ralph Lauren and Martha Stewart. It goes for whatever you're buying, whether it's Jimmy Choo, Birkenstock or Payless shoes. When Mr. Twitchell, a dedicated factory outlet shopper, flashes his member's card at Sam's Club, "the allure is not just that I'm saving money," he said, "but that I'm smarter and savvier, that I'm duping the duper." Or consider an experiment he performed on his colleagues. He told some English professors that he was going to spend $6,000 to buy an 1850 copy of Wordsworth's "Prelude." Brilliant idea, everyone said. A few days later, Mr. Twitchell told the same colleagues that he had changed his mind and was going to use the $6,000 to buy a used BMW. "I could have said that I was investing in a collection of Beanie Babies comics or a diamond pinkie ring for the shocked response that I got," he wrote. Critics of consumption will say they are making a moral argument, Mr. Twitchell said, but "often what is condemned as luxury is really just a matter of taste." To Mr. Twitchell, as long as human beings crave sensation, they will desire material goods and luxurious ones at that, Wall Street scandals notwithstanding. "If this year it's Enron and WorldCom, then another year it was Long-Term Capital Management," he said. Recessions may come and go, but consumption is eternal. The ad slogan is right: Diamonds are forever.

### Growth Good – Try or Die

#### Growth collapse is worse for every impact – try or die flips neg

**Monbiot 9** (George, Columnist – The Guardian, held visiting fellowships or professorships at the universities of Oxford (environmental policy), Bristol (philosophy), Keele (politics), Oxford Brookes (planning), and East London (environmental science), “Is There Any Point in Fighting to Stave Off Industrial Apocalypse?,” Guardian, 8-17, http://www.guardian.co.uk/commentisfree/cif-green/2009/aug/17/environment-climate-change)

The interesting question, and the one that probably divides us, is this: to what extent should we welcome the likely collapse of industrial civilisation? Or more precisely: to what extent do we believe that some good may come of it? I detect in your writings, and in the conversations we have had, an attraction towards – almost a yearning for – this apocalypse, a sense that you see it as a cleansing fire that will rid the world of a diseased society. If this is your view, I do not share it. I'm sure we can agree that the immediate consequences of collapse would be hideous: the breakdown of the systems that keep most of us alive; mass starvation; war. These alone surely give us sufficient reason to fight on, however faint our chances appear. But even if we were somehow able to put this out of our minds, I believe that what is likely to come out on the other side will be worse than our current settlement. Here are three observations: 1 Our species (unlike most of its members) is tough and resilient; 2 When civilisations collapse, psychopaths take over; 3 We seldom learn from others' mistakes. From the first observation, this follows: even if you are hardened to the fate of humans, you can surely see that our species will not become extinct without causing the extinction of almost all others. However hard we fall, we will recover sufficiently to land another hammer blow on the biosphere. We will continue to do so until there is so little left that even Homo sapiens can no longer survive. This is the ecological destiny of a species possessed of outstanding intelligence, opposable thumbs and an ability to interpret and exploit almost every possible resource – in the absence of political restraint. From the second and third observations, this follows: instead of gathering as free collectives of happy householders, survivors of this collapse will be subject to the will of people seeking to monopolise remaining resources. This will is likely to be imposed through violence. Political accountability will be a distant memory. The chances of conserving any resource in these circumstances are approximately zero. The human and ecological consequences of the first global collapse are likely to persist for many generations, perhaps for our species' remaining time on earth. To imagine that good could come of the involuntary failure of industrial civilisation is also to succumb to denial. The answer to your question – what will we learn from this collapse? – is nothing. This is why, despite everything, I fight on. I am not fighting to sustain economic growth. I am fighting to prevent both initial collapse and the repeated catastrophe that follows. However faint the hopes of engineering a soft landing – an ordered and structured downsizing of the global economy – might be, we must keep this possibility alive. Perhaps we are both in denial: I, because I think the fight is still worth having; you, because you think it isn't.

## 2NC

### Exports Bad – Turns Renewables/Modeling

#### Exports cause international adoption of natural gas – that crowds out renewables

Simmons 12 (Bradford, Editor-in-Chief, “The Editor's Monthly Memo: The Staggering Implications of the U.S. Natural Gas Market,” International Affairs Review, 8-12, http://www.iar-gwu.org/node/429)

At home, a cautious, yet supportive approach to LNG exports would have ancillary benefits as well. With coal plants retiring every year and the declining economic viability of nuclear power, natural gas is well positioned to vastly expand its 30 percent share of electricity production. While this will translate into lower utility bills for U.S. consumers, it also raises the specter of overreliance. If natural gas exceeds a 50 percent share of power generation, any source disruptions or sudden price fluctuations would have a calamitous economic impact. Furthermore, such cheap gas could potentially crowd out other promising sources of energy, such as renewables. Though natural gas fired plants produce roughly half the carbon of a coal plant and have contributed to an overall reduction in emissions in the United States, a recent International Energy Administration report reveals that a shift to gas generated electricity will not prove sufficient to significantly alter current climate change scenarios.

### Exports Bad – Warming

#### Exports cause methane leaks – makes warming irreversible

**Romm 11** (Joe, Senior Fellow at American Progress, editor of Climate Progress, assistant secretary of energy for energy efficiency and renewable energy in 1997, Ph.D. in physics from MIT, “Natural Gas Bombshell: Switching From Coal to Gas Increases Warming for Decades, Has Minimal Benefit Even in 2100,” 9-9-11 <http://thinkprogress.org/climate/2011/09/09/315845/natural-gas-switching-from-coal-to-gas-increases-warming-for-decades/>)

A key finding of the NCAR study is: In summary, our results show that the substitution of gas for coal as an energy source results **in increased** rather than decreased **global warming** for many decades — out to the mid 22nd century for the 10% leakage case. This is in accord with Hayhoe et al. (2002) and with the less well established claims of Howarth et al. (2011) who base their analysis on Global Warming Potentials rather than direct modeling of the climate…. The most important result, however, in accord with the above authors, is that, unless leakage rates for new methane can be kept below 2%, substituting gas for coal is not an effective means for reducing the magnitude of future climate change. What is the leakage rate for methane? Well, as I’ve written, we don’t know exactly because the gas companies won’t release all of their data. We do know that total life-cycle leakage and fugitive emissions from extraction, production, transport, and consumption is higher for shale gas than conventional gas. The controversial — but peer-reviewed — paper by Cornell’s Robert Howarth, which I wrote about here, seeks to quantify the impact of the leakage from the **best available data**. It **concluded**: Natural gas is composed largely of methane, and 3.6% to 7.9% of the methane from shale-gas production escapes to the atmosphere in venting and leaks over the life-time of a well. These methane emissions are at least 30% more than and perhaps more than twice as great as those from conventional gas. The higher emissions from shale gas occur at the time wells are hydraulically fractured — as methane escapes from flow-back return fluids — and during drill out following the fracturing. Methane is a **powerful greenhouse gas**, with a global warming potential that is far greater than that of carbon dioxide, particularly over the time horizon of the first few decades following emission.

### FW

#### 3) Effective deliberation is the lynchpin of solving all existential global problems – being relevantly informed is key

Christian O. Lundberg 10 Professor of Communications @ University of North Carolina, Chapel Hill, “Tradition of Debate in North Carolina” in Navigating Opportunity: Policy Debate in the 21st Century By Allan D. Louden, p311

The second major problem with the critique that identifies a naivety in articulating debate and democracy is that it presumes that the primary pedagogical outcome of debate is speech capacities. But the democratic capacities built by debate are not limited to speech—as indicated earlier, debate builds capacity for critical thinking, analysis of public claims, informed decision making, and better public judgment. If the picture of modem political life that underwrites this critique of debate is a pessimistic view of increasingly labyrinthine and bureaucratic administrative politics, rapid scientific and technological change outpacing the capacities of the citizenry to comprehend them, and ever-expanding insular special-interest- and money-driven politics, it is a puzzling solution, at best, to argue that these conditions warrant giving up on debate. If democracy is open to rearticulation, it is open to rearticulation precisely because as the challenges of modern political life proliferate, the citizenry's capacities can change, which is one of the primary reasons that theorists of democracy such as Ocwey in The Public awl Its Problems place such a high premium on education (Dewey 1988,63, 154). Debate provides an indispensible form of education in the modem articulation of democracy because it builds precisely the skills that allow the citizenry to research and be informed about policy decisions that impact them, to son rhroueh and evaluate the evidence for and relative merits of arguments for and against a policy in an increasingly infonnation-rich environment, and to prioritize their time and political energies toward policies that matter the most to them.

The merits of debate as a tool for building democratic capacity-building take on a special significance in the context of information literacy. John Larkin (2005, HO) argues that one of the primary failings of modern colleges and universities is that they have not changed curriculum to match with the challenges of a new information environment. This is a problem for the course of academic study in our current context, but perhaps more important, argues Larkin, for the future of a citizenry that will need to make evaluative choices against an increasingly complex and multimediatcd information environment (ibid-). Larkin's study tested the benefits of debate participation on information-literacy skills and concluded that in-class debate participants reported significantly higher self-efficacy ratings of their ability to navigate academic search databases and to effectively search and use other Web resources:

To analyze the self-report ratings of the instructional and control group students, we first conducted a multivariate analysis of variance on all of the ratings, looking jointly at the effect of instmction/no instruction and debate topic . . . that it did not matter which topic students had been assigned . . . students in the Instnictional [debate) group were significantly more confident in their ability to access information and less likely to feel that they needed help to do so----These findings clearly indicate greater self-efficacy for online searching among students who participated in (debate).... These results constitute strong support for the effectiveness of the project on students' self-efficacy for online searching in the academic databases. There was an unintended effect, however: After doing ... the project, instructional group students also felt more confident than the other students in their ability to get good information from Yahoo and Google. It may be that the library research experience increased self-efficacy for any searching, not just in academic databases. (Larkin 2005, 144)

Larkin's study substantiates Thomas Worthcn and Gaylcn Pack's (1992, 3) claim that debate in the college classroom plays a critical role in fostering the kind of problem-solving skills demanded by the increasingly rich media and information environment of modernity. Though their essay was written in 1992 on the cusp of the eventual explosion of the Internet as a medium, Worthcn and Pack's framing of the issue was prescient: the primary question facing today's student has changed from how to best research a topic to the crucial question of learning how to best evaluate which arguments to cite and rely upon from an easily accessible and veritable cornucopia of materials.

There are, without a doubt, a number of important criticisms of employing debate as a model for democratic deliberation. But cumulatively, the evidence presented here warrants strong support for expanding debate practice in the classroom as a technology for enhancing democratic deliberative capacities. The unique combination of critical thinking skills, research and information processing skills, oral communication skills, and capacities for listening and thoughtful, open engagement with hotly contested issues argues for debate as a crucial component of a rich and vital democratic life. In-class debate practice both aids students in achieving the best goals of college and university education, and serves as an unmatched practice for creating thoughtful, engaged, open-minded and self-critical students who are open to the possibilities of meaningful political engagement and new articulations of democratic life.

Expanding this practice is crucial, if only because the more we produce citizens that can actively and effectively engage the political process, the more likely we are to produce revisions of democratic life that are necessary if democracy is not only to survive, but to thrive. Democracy faces a myriad of challenges, including: domestic and international issues of class, gender, and racial justice; wholesale environmental destruction and the potential for rapid climate change; emerging threats to international stability in the form of terrorism, intervention and new possibilities for great power conflict; and increasing challenges of rapid globalization including an increasingly volatile global economic structure. More than any specific policy or proposal, an informed and active citizenry that deliberates with greater skill and sensitivity provides one of the best hopes for responsive and effective democratic governance, and by extension, one of the last best hopes for dealing with the existential challenges to democracy [in an] increasingly complex world.

### SSD Good – Energy

#### Switch-side debate strengthens skills that empirically improve climate solutions to problems like environmental racism

Mitchell 10

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The watchwords for the intelligence community’s debating initiative— collaboration, critical thinking, collective awareness—resonate with key terms anchoring the study of deliberative democracy. In a major new text, John Gastil defines deliberation as a process whereby people “carefully examine a problem and arrive at a well-reasoned solution aft er a period of inclusive, respectful consideration of diverse points of view.”40 Gastil and his colleagues in organizations such as the Kettering Foundation and the National Coalition for Dialogue and Deliberation are pursuing a research program that foregrounds the democratic telos of deliberative processes. Work in this area features a blend of concrete interventions and studies of citizen empowerment.41 Notably, a key theme in much of this literature concerns the relationship between deliberation and debate, with the latter term often loaded with pejorative baggage and working as a negative foil to highlight the positive qualities of deliberation.42 “Most political discussions, however, are debates. Stories in the media turn politics into a never-ending series of contests. People get swept into taking sides; their energy goes into figuring out who or what they’re for or against,” says Kettering president David Mathews and coauthor Noelle McAfee. “Deliberation is different. It is neither a partisan argument where opposing sides try to win nor a casual conversation conducted with polite civility. Public deliberation is a means by which citizens make tough choices about basic purposes and directions for their communities and their country. It is a way of reasoning and talking together.”43 Mathews and McAfee’s distrust of the debate process is almost paradigmatic amongst theorists and practitioners of Kettering-style deliberative democracy. One conceptual mechanism for reinforcing this debate-deliberation opposition is characterization of debate as a process inimical to deliberative aims, with debaters adopting dogmatic and fixed positions that frustrate the deliberative objective of “choice work.” In this register, Emily Robertson observes, “unlike deliberators, debaters are typically not open to the possibility of being shown wrong. . . . Debaters are not trying to find the best solution by keeping an open mind about the opponent’s point of view.”44 Similarly, founding documents from the University of Houston–Downtown’s Center for Public Deliberation state, “Public deliberation is about choice work, which is different from a dialogue or a debate. In dialogue, people oft en look to relate to each other, to understand each other, and to talk about more informal issues. In debate, there are generally two positions and people are generally looking to ‘win’ their side.”45 Debate, cast here as the theoretical scapegoat, provides a convenient, low-water benchmark for explaining how other forms of deliberative interaction better promote cooperative “choice work.” The Kettering-inspired framework receives support from perversions of the debate process such as vapid presidential debates and verbal pyrotechnics found on Crossfire-style television shows.46 In contrast, the intelligence community’s debating initiative stands as a nettlesome anomaly for these theoretical frameworks, with debate serving, rather than frustrating, the ends of deliberation. The presence of such an anomaly would seem to point to the wisdom of fashioning a theoretical orientation that frames the debate-deliberation connection in contingent, rather than static terms, with the relationship between the categories shift ing along with the various contexts in which they manifest in practice.47 Such an approach gestures toward the importance of rhetorically informed critical work on multiple levels. First, the contingency of situated practice invites analysis geared to assess, in particular cases, the extent to which debate practices enable and/ or constrain deliberative objectives. Regarding the intelligence community’s debating initiative, such an analytical perspective highlights, for example, the tight connection between the deliberative goals established by intelligence officials and the cultural technology manifest in the bridge project’s online debating applications such as Hot Grinds. An additional dimension of nuance emerging from this avenue of analysis pertains to the precise nature of the deliberative goals set by bridge. Program descriptions notably eschew Kettering-style references to democratic citizen empowerment, yet feature deliberation prominently as a key ingredient of strong intelligence tradecraft . Th is caveat is especially salient to consider when it comes to the second category of rhetorically informed critical work invited by the contingent aspect of specific debate initiatives. To grasp this layer it is useful to appreciate how the name of the bridge project constitutes an invitation for those outside the intelligence community to participate in the analytic outreach eff ort. According to Doney, bridge “provides an environment for Analytic Outreach—a place where IC analysts can reach out to expertise elsewhere in federal, state, and local government, in academia, and industry. New communities of interest can form quickly in bridge through the ‘web of trust’ access control model—access to minds outside the intelligence community creates an analytic force multiplier.”48 This presents a moment of choice for academic scholars in a position to respond to Doney’s invitation; it is an opportunity to convert scholarly expertise into an “analytic force multiplier.” In reflexively pondering this invitation, it may be valuable for scholars to read Greene and Hicks’s proposition that switch-side debating should be viewed as a cultural technology in light of Langdon Winner’s maxim that “technological artifacts have politics.”49 In the case of bridge, politics are informed by the history of intelligence community policies and practices. Commenter Th omas Lord puts this point in high relief in a post off ered in response to a news story on the topic: “[W]hy should this thing (‘bridge’) be? . . . [Th e intelligence community] on the one hand sometimes provides useful information to the military or to the civilian branches and on the other hand it is a dangerous, out of control, relic that by all external appearances is not the slightest bit reformed, other than superficially, from such excesses as became exposed in the cointelpro and mkultra hearings of the 1970s.”50 A debate scholar need not agree with Lord’s full-throated criticism of the intelligence community (he goes on to observe that it bears an alarming resemblance to organized crime) to understand that participation in the community’s Analytic Outreach program may serve the ends of deliberation, but not necessarily democracy, or even a defensible politics. Demand-driven rhetoric of science necessarily raises questions about what’s driving the demand, questions that scholars with relevant expertise would do well to ponder carefully before embracing invitations to contribute their argumentative expertise to deliberative projects. By the same token, it would be prudent to bear in mind that the technological determinism about switch-side debate endorsed by Greene and Hicks may tend to flatten reflexive assessments regarding the wisdom of supporting a given debate initiative—as the next section illustrates, manifest differences among initiatives warrant context-sensitive judgments regarding the normative political dimensions featured in each case. Public Debates in the EPA Policy Process Th e preceding analysis of U.S. intelligence community debating initiatives highlighted how analysts are challenged to navigate discursively the heteroglossia of vast amounts of diff erent kinds of data flowing through intelligence streams. Public policy planners are tested in like manner when they attempt to stitch together institutional arguments from various and sundry inputs ranging from expert testimony, to historical precedent, to public comment. Just as intelligence managers find that algorithmic, formal methods of analysis often don’t work when it comes to the task of interpreting and synthesizing copious amounts of disparate data, public-policy planners encounter similar challenges. In fact, the argumentative turn in public-policy planning elaborates an approach to public-policy analysis that foregrounds deliberative interchange and critical thinking as alternatives to “decisionism,” the formulaic application of “objective” decision algorithms to the public policy process. Stating the matter plainly, Majone suggests, “whether in written or oral form, argument is central in all stages of the policy process.” Accordingly, he notes, “we miss a great deal if we try to understand policy-making solely in terms of power, influence, and bargaining, to the exclusion of debate and argument.”51 One can see similar rationales driving Goodwin and Davis’s EPA debating project, where debaters are invited to conduct on-site public debates covering resolutions craft ed to reflect key points of stasis in the EPA decision-making process. For example, in the 2008 Water Wars debates held at EPA headquarters in Washington, D.C., resolutions were craft ed to focus attention on the topic of water pollution, with one resolution focusing on downstream states’ authority to control upstream states’ discharges and sources of pollutants, and a second resolution exploring the policy merits of bottled water and toilet paper taxes as revenue sources to fund water infrastructure projects. In the first debate on interstate river pollution, the team of Seth Gannon and Seungwon Chung from Wake Forest University argued in favor of downstream state control, with the Michigan State University team of Carly Wunderlich and Garrett Abelkop providing opposition. In the second debate on taxation policy, Kevin Kallmyer and Matthew Struth from University of Mary Washington defended taxes on bottled water and toilet paper, while their opponents from Howard University, Dominique Scott and Jarred McKee, argued against this proposal. Reflecting on the project, Goodwin noted how the intercollegiate Switch-Side Debating Meets Demand-Driven Rhetoric of Science 107 debaters’ ability to act as “honest brokers” in the policy arguments contributed positively to internal EPA deliberation on both issues.52 Davis observed that since the invited debaters “didn’t have a dog in the fight,” they were able to give voice to previously buried arguments that some EPA subject matter experts felt reticent to elucidate because of their institutional affiliations.53 Such findings are consistent with the views of policy analysts advocating the argumentative turn in policy planning. As Majone claims, “Dialectical confrontation between generalists and experts often succeeds in bringing out unstated assumptions, conflicting interpretations of the facts, and the risks posed by new projects.”54 Frank Fischer goes even further in this context, explicitly appropriating rhetorical scholar Charles Willard’s concept of argumentative “epistemics” to flesh out his vision for policy studies: Uncovering the epistemic dynamics of public controversies would allow for a more enlightened understanding of what is at stake in a particular dispute, making possible a sophisticated evaluation of the various viewpoints and merits of diff erent policy options. In so doing, the diff ering, oft en tacitly held contextual perspectives and values could be juxtaposed; the viewpoints and demands of experts, special interest groups, and the wider public could be directly compared; and the dynamics among the participants could be scrutizined. This would by no means sideline or even exclude scientific assessment; it would only situate it within the framework of a more comprehensive evaluation.55 As Davis notes, institutional constraints present within the EPA communicative milieu can complicate eff orts to provide a full airing of all relevant arguments pertaining to a given regulatory issue. Thus, intercollegiate debaters can play key roles in retrieving and amplifying positions that might otherwise remain sedimented in the policy process. Th e dynamics entailed in this symbiotic relationship are underscored by deliberative planner John Forester, who observes, “If planners and public administrators are to make democratic political debate and argument possible, they will need strategically located allies to avoid being fully thwarted by the characteristic self-protecting behaviors of the planning organizations and bureaucracies within which they work.”56 Here, an institution’s need for “strategically located allies” to support deliberative practice constitutes the demand for rhetorically informed expertise, setting up what can be considered a demand-driven rhetoric of science. As an instance of rhetoric of science scholarship, this type of “switch-side public 108 Rhetoric & Public Affairs debate” diff ers both from insular contest tournament debating, where the main focus is on the pedagogical benefit for student participants, and first-generation rhetoric of science scholarship, where critics concentrated on unmasking the rhetoricity of scientific artifacts circulating in what many perceived to be purely technical spheres of knowledge production.58 As a form of demand-driven rhetoric of science, switch-side debating connects directly with the communication field’s performative tradition of argumentative engagement in public controversy—a different route of theoretical grounding than rhetorical criticism’s tendency to locate its foundations in the English field’s tradition of literary criticism and textual analysis.59 Given this genealogy, it is not surprising to learn how Davis’s response to the EPA’s institutional need for rhetorical expertise took the form of a public debate proposal, shaped by Davis’s dual background as a practitioner and historian of intercollegiate debate. Davis competed as an undergraduate policy debater for Howard University in the 1970s, and then went on to enjoy substantial success as coach of the Howard team in the new millennium. In an essay reviewing the broad sweep of debating history, Davis notes, “Academic debate began at least 2,400 years ago when the scholar Protagoras of Abdera (481–411 bc), known as the father of debate, conducted debates among his students in Athens.”60 As John Poulakos points out, “older” Sophists such as Protagoras taught Greek students the value of dissoi logoi, or pulling apart complex questions by debating two sides of an issue.61 Th e few surviving fragments of Protagoras’s work suggest that his notion of dissoi logoi stood for the principle that “two accounts [logoi] are present about every ‘thing,’ opposed to each other,” and further, that humans could “measure” the relative soundness of knowledge claims by engaging in give-and-take where parties would make the “weaker argument stronger” to activate the generative aspect of rhetorical practice, a key element of the Sophistical tradition.62 Following in Protagoras’s wake, Isocrates would complement this centrifugal push with the pull of synerchesthe, a centripetal exercise of “coming together” deliberatively to listen, respond, and form common social bonds.63 Isocrates incorporated Protagorean dissoi logoi into synerchesthe, a broader concept that he used flexibly to express interlocking senses of (1) inquiry, as in groups convening to search for answers to common questions through discussion;64 (2) deliberation, with interlocutors gathering in a political setting to deliberate about proposed courses of action;65 and (3) alliance formation, a form of collective action typical at festivals,66 or in the exchange of pledges that deepen social ties.67 Switch-Side Debating Meets Demand-Driven Rhetoric of Science 109 Returning once again to the Kettering-informed sharp distinction between debate and deliberation, one sees in Isocratic synerchesthe, as well as in the EPA debating initiative, a fusion of debate with deliberative functions. Echoing a theme raised in this essay’s earlier discussion of intelligence tradecraft , such a fusion troubles categorical attempts to classify debate and deliberation as fundamentally opposed activities. Th e significance of such a finding is amplified by the frequency of attempts in the deliberative democracy literature to insist on the theoretical bifurcation of debate and deliberation as an article of theoretical faith. Tandem analysis of the EPA and intelligence community debating initiatives also brings to light dimensions of contrast at the third level of Isocratic synerchesthe, alliance formation. Th e intelligence community’s Analytic Outreach initiative invites largely one-way communication flowing from outside experts into the black box of classified intelligence analysis. On the contrary, the EPA debating program gestures toward a more expansive project of deliberative alliance building. In this vein, Howard University’s participation in the 2008 EPA Water Wars debates can be seen as the harbinger of a trend by historically black colleges and universities (hbcus) to catalyze their debate programs in a strategy that evinces Davis’s dual-focus vision. On the one hand, Davis aims to recuperate Wiley College’s tradition of competitive excellence in intercollegiate debate, depicted so powerfully in the feature film The Great Debaters, by starting a wave of new debate programs housed in hbcus across the nation.68 On the other hand, Davis sees potential for these new programs to complement their competitive debate programming with participation in the EPA’s public debating initiative. Th is dual-focus vision recalls Douglas Ehninger’s and Wayne Brockriede’s vision of “total” debate programs that blend switch-side intercollegiate tournament debating with forms of public debate designed to contribute to wider communities beyond the tournament setting.69 Whereas the political telos animating Davis’s dual-focus vision certainly embraces background assumptions that Greene and Hicks would find disconcerting—notions of liberal political agency, the idea of debate using “words as weapons”70—there is little doubt that the project of pursuing environmental protection by tapping the creative energy of hbcu-leveraged dissoi logoi diff ers significantly from the intelligence community’s eff ort to improve its tradecraft through online digital debate programming. Such diff erence is especially evident in light of the EPA’s commitment to extend debates to public realms, with the attendant possible benefits unpacked by Jane Munksgaard and Damien Pfister: 110 Rhetoric & Public Affairs Having a public debater argue against their convictions, or confess their indecision on a subject and subsequent embrace of argument as a way to seek clarity, could shake up the prevailing view of debate as a war of words. Public uptake of the possibility of switch-sides debate may help lessen the polarization of issues inherent in prevailing debate formats because students are no longer seen as wedded to their arguments. This could transform public debate from a tussle between advocates, with each public debater trying to convince the audience in a Manichean struggle about the truth of their side, to a more inviting exchange focused on the content of the other’s argumentation and the process of deliberative exchange.71 Reflection on the EPA debating initiative reveals a striking convergence among (1) the expressed need for dissoi logoi by government agency officials wrestling with the challenges of inverted rhetorical situations, (2) theoretical claims by scholars regarding the centrality of argumentation in the public policy process, and (3) the practical wherewithal of intercollegiate debaters to tailor public switch-side debating performances in specific ways requested by agency collaborators. These points of convergence both underscore previously articulated theoretical assertions regarding the relationship of debate to deliberation, as well as deepen understanding of the political role of deliberation in institutional decision making. But they also suggest how decisions by rhetorical scholars about whether to contribute switch-side debating acumen to meet demand-driven rhetoric of science initiatives ought to involve careful reflection. Such an approach mirrors the way policy planning in the “argumentative turn” is designed to respond to the weaknesses of formal, decisionistic paradigms of policy planning with situated, contingent judgments informed by reflective deliberation. Conclusion Dilip Gaonkar’s criticism of first-generation rhetoric of science scholarship rests on a key claim regarding what he sees as the inherent “thinness” of the ancient Greek rhetorical lexicon.72 That lexicon, by virtue of the fact that it was invented primarily to teach rhetorical performance, is ill equipped in his view to support the kind of nuanced discriminations required for eff ective interpretation and critique of rhetorical texts. Although Gaonkar isolates rhetoric of science as a main target of this critique, his choice of subject matter Switch-Side Debating Meets Demand-Driven Rhetoric of Science 111 positions him to toggle back and forth between specific engagement with rhetoric of science scholarship and discussion of broader themes touching on the metatheoretical controversy over rhetoric’s proper scope as a field of inquiry (the so-called big vs. little rhetoric dispute).73 Gaonkar’s familiar refrain in both contexts is a warning about the dangers of “universalizing” or “globalizing” rhetorical inquiry, especially in attempts that “stretch” the classical Greek rhetorical vocabulary into a hermeneutic metadiscourse, one pressed into service as a master key for interpretation of any and all types of communicative artifacts. In other words, Gaonkar warns against the dangers of rhetoricians pursuing what might be called supply-side epistemology, rhetoric’s project of pushing for greater disciplinary relevance by attempting to extend its reach into far-flung areas of inquiry such as the hard sciences. Yet this essay highlights how rhetorical scholarship’s relevance can be credibly established by outsiders, who seek access to the creative energy flowing from the classical Greek rhetorical lexicon in its native mode, that is, as a tool of invention designed to spur and hone rhetorical performance. Analysis of the intelligence community and EPA debating initiatives shows how this is the case, with government agencies calling for assistance to animate rhetorical processes such as dissoi logoi (debating different sides) and synerchesthe (the performative task of coming together deliberately for the purpose of joint inquiry, collective choice-making, and renewal of communicative bonds).74 Th is demand-driven epistemology is diff erent in kind from the globalization project so roundly criticized by Gaonkar. Rather than rhetoric venturing out from its own academic home to proselytize about its epistemological universality for all knowers, instead here we have actors not formally trained in the rhetorical tradition articulating how their own deliberative objectives call for incorporation of rhetorical practice and even recruitment of “strategically located allies”75 to assist in the process. Since the productivist content in the classical Greek vocabulary serves as a critical resource for joint collaboration in this regard, demand-driven rhetoric of science turns Gaonkar’s original critique on its head. In fairness to Gaonkar, it should be stipulated that his 1993 intervention challenged the way rhetoric of science had been done to date, not the universe of ways rhetoric of science might be done in the future. And to his partial credit, Gaonkar did acknowledge the promise of a performance-oriented rhetoric of science, especially one informed by classical thinkers other than Aristotle.76 In his Ph.D. dissertation on “Aspects of Sophistic Pedagogy,” Gaonkar documents how the ancient sophists were “the greatest champions” 112 Rhetoric & Public Affairs of “socially useful” science,77 and also how the sophists essentially practiced the art of rhetoric in a translational, performative register: Th e sophists could not blithely go about their business of making science useful, while science itself stood still due to lack of communal support and recognition. Besides, sophistic pedagogy was becoming increasingly dependent on the findings of contemporary speculation in philosophy and science. Take for instance, the eminently practical art of rhetoric. As taught by the best of the sophists, it was not simply a handbook of recipes which anyone could mechanically employ to his advantage. On the contrary, the strength and vitality of sophistic rhetoric came from their ability to incorporate the relevant information obtained from the on-going research in other fields.78 Of course, deep trans-historical diff erences make uncritical appropriation of classical Greek rhetoric for contemporary use a fool’s errand. But to gauge from Robert Hariman’s recent reflections on the enduring salience of Isocrates, “timely, suitable, and eloquent appropriations” can help us postmoderns “forge a new political language” suitable for addressing the complex raft of intertwined problems facing global society. Such retrospection is long overdue, says Hariman, as “the history, literature, philosophy, oratory, art, and political thought of Greece and Rome have never been more accessible or less appreciated.”79 Th is essay has explored ways that some of the most venerable elements of the ancient Greek rhetorical tradition—those dealing with debate and deliberation—can be retrieved and adapted to answer calls in the contemporary milieu for cultural technologies capable of dealing with one of our time’s most daunting challenges. This challenge involves finding meaning in inverted rhetorical situations characterized by an endemic surplus of heterogeneous content.

### T K2 Environmental Justice

#### Unconditional environmental justice destroys policy priorities, tanking any risk analysis because they try to INCLUDE all viewpoints WITHOUT LIMITS

Foreman 98

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The Promise and Peril of Environmental Justice

Conceptual Drawbacks of Environmental Justice From a rationalizing perspective, a major problem with the environmental justice version of the democratizing critique is that, like ecopopulism more generally, it threatens to worsen the problem of environmental policy's missing priorities. As Walter Rosenbaum elaborates: like the man who mounted his horse and galloped off in all directions, the EPA has no constant course. With responsibility for administering nine separate statutes and parts of four others, the EPA has no clearly mandated priorities, no way of allocating scarce resources among different statutes or among programs within a single law. Nor does the EPA have a congressional charter, common to most federal departments and agencies, defining its broad organizational mission and priorities.... Congress has shown little inclination to provide the EPA with a charter or mandated priorities, in good part because the debate sure to arise on the relative merit and urgency of different environmental problems is an invitation to a political bloodletting most legislators would gladly avoid. Intense controversy would be likely among states, partisans of different ecological issues, and regulated interests over which problems to emphasize; the resulting political brawl would upset existing policy coalitions that themselves were fashioned with great difficulty. Moreover, setting priorities invites a prolonged, bitter debate over an intensely emotional issue: should the primary objective of environmental protection be to reduce public risks associated with environmental degradation as much as seems practical or—as many environmentalists fervently believe—is the goal to eliminate all significant forms of pollution altogether?18 Environmental justice inevitably enlarges this challenge of missing priorities, and for similar reasons. As noted earlier, the movement is a delicate coalition of local and ethnic concerns unable to narrow its grievances for fear of a similar "political bloodletting."1? Overt de-emphasis or removal of any issue or claim would prompt the affected coalition members (for example, groups, communities, or tribes) to disrupt or depart it. And chances are they would not leave quietly but with evident resentment and perhaps accusatory rhetoric directed at the persons and organizations remaining. Real priority-setting runs contrary to radical egalitarian value premises, and no one (perhaps least of all a strong democratizer) wants to be deemed a victimizer. Therefore movement rhetoric argues that no community should be harmed and that all community concerns and grievances deserve redress. Scholar-activist Robert Bullard proposes that "the solution to unequal protection lies in the realm of environmental justice for all Americans. No community, rich or poor, black or white, should be allowed to become a 'sacrifice zone."20 When pressed about the need for environmental risk priorities, and about how to incorporate environmental justice into priority setting, Bullard's answer is a vague plea for nondiscrimination, along with a barely more specific call for a "federal 'fair environmental protection act™ that would transform "protection from a privilege to a right."21 Bullard's position is fanciful and self-contradictory, but extremely telling. He argues essentially that the way to establish environmental priorities is precisely by guaranteeing that such priorities are impossible to implement. This is symptomatic of a movement for which untrammeled citizen voice and overall social equity are cardinal values. Bullard's position also epitomizes the desire of movement intellectuals to avoid speaking difficult truths (at least in public) to their allies and constituents. Ironically, in matters of health and risk, environmental justice poses a potentially serious, if generally unrecognized, danger to the minority and low-income communities it aspires to help. By discouraging citizens from thinking in terms of health and risk priorities (that is, by taking the position, in effect, that every chemical or site against which community outrage can be generated is equally hazardous), environmental justice can deflect attention from serious hazards to less serious or perhaps trivial ones.

### We Solve Advocacy Making – 2NC

#### That proves there is a topical version of their performance – incentivize energy on different cites, or decentralized renewables which allow for community control

Hager, professor of political science – Bryn Mawr College, ‘92

(Carol J., “Democratizing Technology: Citizen & State in West German Energy Politics, 1974-1990” *Polity*, Vol. 25, No. 1, p. 45-70)

What is the role of the citizen in the modern technological state? As political decisions increasingly involve complex technological choices, does a citizen's ability to participate in decision making diminish? These questions, long a part of theoretical discourse, gained new salience with the rise of grassroots environmental protest in advanced industrial states. In West Germany, where a strong environmental movement arose in the 1970s, protest has centered as much on questions of democracy as it has on public policy. Grassroots groups challenged not only the construction of large technological projects, especially power plants, but also the legitimacy of the bureaucratic institutions which produced those projects.

Policy studies generally ignore the legitimation aspects of public policy making.2 A discussion of both dimensions, however, is crucial for understanding the significance of grassroots protest for West German political development in the technological age and for assessing the likely direction of citizen politics in united Germany.

In the field of energy politics, West German citizen initiative groups tried to politicize and ultimately to democratize policy making.3 The technicality of the issue was not a barrier to their participation. On the contrary, grassroots groups proved to be able participants in technical energy debate, often proposing innovative solutions to technological problems. Ultimately, however, they wanted not to become an elite of "counterexperts," but to create a political discourse between policy makers and citizens through which the goals of energy policy could be recast and its legitimacy restored. Only a deliberative, expressly democratic form of policy making, they argued, could enjoy the support of the populace. To this end, protest groups developed new, grassroots democratic forms of decision making within their own organizations, which they then tried to transfer to the political system at large. The legacy of grassroots energy protest in West Germany is twofold.

First, it produced major substantive changes in public policy. Informed citizen pressure was largely responsible for the introduction of new plant and pollution control technologies. Second, grassroots protest undermined the legitimacy of bureaucratic experts. Yet, an acceptable forum for a broadened political discussion of energy issues has not been found; the energy debate has taken place largely outside the established political institutions. Thus, the legitimation issue remains unresolved. It is likely to reemerge as Germany deals with the problems of the former German Democratic Republic. Nevertheless, an evolving ideology of citizen participationa vision of "technological democracy"-is an important outcome of grassroots action.

## 1NR

### Sustainability – 1AR – General

#### The crunch isn’t coming now – Growth is sustainable – it causes efficient innovation and avoids resource depletion – their evidence doesn’t assume 21st century growth that has a higher value on the environment – that’s Emerson. Prefer it – newer and more qualified. Also, proves that growth solves the impact to aff because it solves resource depletion

#### It’s try or die – sustainability is impossible without growth

**AtKisson 6** (Alan, Senior Fellow – Center for Sustainable Development, President and CEO – AtKisson Group “Sustainability is Dead— Long Live Sustainability,” *The Future of Sustainability*, Online, p.231-232)

The evidence that we are beyond the limits to growth is by now overwhelming: the alarms include climatic change, disappearing biodiversity, falling human sperm counts, troubling slow-downs in food production after decades of rapid expansion, the beginning of serious international tensions over basic needs like water. Wild storms and floods and eerie changes in weather patterns are but a first visible harbinger of more serious trouble to come, trouble for which we are not adequately prepared. Indeed, change of all kinds—in the Biosphere (nature as a whole), the Technosphere (the entirety of human manipulation of nature), and the Noösphere (the collective field of human consciousness)—is happening so rapidly that it exceeds our capacity to understand it, control it, or respond to it adequately in corrective ways. Humanity is simultaneously entranced by its own power, overwhelmed by the problems created by progress, and continuing to steer itself over a cliff. Our economies and technologies are changing certain basic structures of planetary life, such as the balance of carbon in the atmosphere, genetic codes, the amount of forest cover, species variety and distribution, and the foundations of cultural identity. Unless we make technological advances of the highest order, many of the destructive changes we are causing to nature are irreversible. Extinct species cannot (yet) be brought back to life. No credible strategy for controlling or reducing carbon dioxide levels in the atmosphere has been put forward. We do not know how to fix what we’re breaking. At the same time, some of the very products of our technology— plutonium, for instance—require of us that we maintain a very high degree of cultural continuity, economic and political stability, and technological capacity and sophistication, far into the future. To ensure our safety and the safety of all forms of life, we must always be able to store, clean up, and contain poisons like plutonium and persistent organic toxins. Eventually we must be able to eliminate them safely. At all times, we must be able to contain the actions of evil or unethical elements in our societies who do not care about the consequences to life of unleashing our most dangerous creations. In the case of certain creations, like nuclear materials and some artificially constructed or genetically modified organisms, our secure custodianship must be maintained for thousands of years. We are, in effect, committed to a high-technology future. Any slip in our mastery over the forces now under our command could doom our descendants—including not just human descendants, but also those wild species still remaining in the oceans and wilderness areas—to unspeakable suffering. We must continue down an intensely scientific and technological path, and we can never stop.

#### Innovation and conservation solves sustainability – their studies ignore “net savings”

**Heal 10** (Geoffrey, Professor of Public Policy and Corporate Responsibility – Columbia Business School, “The Sustainability of Economic Growth,” *Is Economic Growth Sustainable?*, February, p.3-5)

Hamilton develops a theoretical framework for defining and measuring sustainability, based on earlier ideas of Pearce and Atkinson (1993). This is the framework based on the “genuine savings” measure, also known as “adjusted net savings.” The basic proposition is that an economy cannot be sustainable unless the total value of its capital stock is increasing. Income comes from wealth, and income cannot be maintained unless wealth is constant, and cannot be increased on a long-term basis unless wealth rises. This wealth measure or capital stock must be very broadly defined to include all stocks that can affect human welfare; so in addition to conventional items such as built capital it has to include human capital and natural capital, the stock of environmental assets that can provide a flow of services (see Barbier and Heal for more discussion). Such assets include obvious physical stocks such as oil and gas reserves, and also less readily measurable but no less important variables such as the state of the climate system. Hamilton emphasizes an important point, which is that deciding whether an economy’s growth is sustainable is making a judgment, a forecast, about the future, in general about the quite distant future. A sustainability measure must be forward-looking, a point that has been noted since a paper in 1961 by Samuelson in which he conjectured that the equivalent of national income in a dynamic economy would have to look at the future flow of consumption; and indeed this is the basis for the genuine savings measure (for a more detailed analysis see Heal and Kristrom 2008). Capital stocks represent the capacity to produce in the future, and their prices should in principle— and here is a real measurement problem— reflect the value of their future products. In practice we have market prices of some capital goods, but not of all, and in particular not of most forms of natural capital. There is also a real doubt that the market prices of forms of capital that are traded fully reflect the values of their future contributions to welfare. These problems notwithstanding, the World Bank has done some remarkable work in evaluating genuine savings for all countries in the world, and Hamilton summarizes these results. According to these results, nonsustainability is mainly a problem of very poor countries and resource-exporters. Arrow et al. present the results of applying to China and the United States the concepts that Hamilton discusses in his chapter. By restricting their attention to just two countries for which reasonable economic statistics are available (though many would question the accuracy of Chinese economic statistics), they are able to conduct a more detailed implementation than the World Bank could in its study comparing a large number of countries, including many developing countries for which only limited environmental data is available. They use a more sophisticated approach to the measurement of human capital and technological progress, and also to the measurement of the depletion of natural capital, which would seem to be one of the main negative byproducts of economic growth, particularly in China given the results of the study by Cropper and her colleagues. They also estimate the consequences of the emission of greenhouse gases. The conclusions reached with respect to the sustainability of growth in the United States and China will surprise many people: both emerge as highly sustainable, with total wealth per capita growing at 1.8 percent annually in the United States and 5.05 percent in China. Perhaps in the case of China this reflects a gross savings rate in excess of 30 percent of GDP, a rate so high that it would take massive environmental degradation to overcome its contribution to wealth formation. Nevertheless, massive environmental degradation is precisely what many environmentalists associate with China. Either they were misjudging the situation or the Arrow et al. calculations are misleading. In the case of the United States, widely regarded by many environmentalists as the paradigm of unsustainable consumption paths, it is not so clear what is generating the positive outcome. Certainly in the last 30 years, following a burst of environmental legislation during the Johnson and Nixon presidencies, the United States has greatly improved the quality of its air and water, and shown greatly increased concern for species conservation. And it is also the world’s main source of technological innovation. But it is still a major emitter of greenhouse gases: indeed there is an irony in the fact that Arrow et al. find the world’s two largest emitters of greenhouse gases to be eminently sustainable by the comprehensive wealth criterion. They use rather conservative estimates of the impact of climate change on the United States, those of Nordhaus and Boyer, which are quite at variance with the results of Roberts and Schlenker in Chapter 2, and they also use a relatively low price for greenhouse gas emissions, $50 per ton of carbon (equivalent to roughly $14 per ton of CO 2 ). These choices could explain some of the unexpectedly positive outcomes, but probably no more than a small part. Either the results are basically correct in their implications, or there is a more fundamental issue with the method chosen for measuring sustainability.

#### Growth is self-correcting and sustainable – prefer new studies

**Acemoglu 12** (Daron, Professor of Economics – Massachusetts Institute of Technology, “The Environment and Directed Technical Change,” American Economics Review, 102(1), p.131-166)

How to control and limit climate change caused by our growing consumption of fossil fuels and to develop alternative energy sources to these fossil fuels are among the most pressing policy challenges facing the world today.1 While a large part of the discussion among climate scientists focuses on the effect of various policies on the development of alternative—and more “environmentally friendly”—energy sources, until recently the response of technological change to environmental policy has received relatively little attention by leading economic analyses of environment policy, which have mostly focused on computable general equilibrium models with exogenous technology.2 Existing empirical evidence indicates that changes in the relative price of energy inputs have an important effect on the types of technologies that are developed and adopted. For example, Newell, Jaffe, and Stavins (1999) show that when energy prices were stable, innovations in air conditioning reduced the prices faced by consumers, but following the oil price hikes, air conditioners became more energy efficient. Popp (2002) provides more systematic evidence on the same point by using patent data from 1970 to 1994; he documents the impact of energy prices on patents for energy-saving innovations. We propose a simple two-sector model of directed technical change to study the response of different types of technologies to environmental policies. A unique final good is produced by combining the inputs produced by these two sectors. One of them uses “dirty” machines and creates environmental degradation. Profit maximizing researchers build on previous innovations (“build on the shoulders of giants”) and direct their research to improving the quality of machines in one or the other sector. Our model highlights the central roles played by the market size and the price effects on the direction of technical change (Acemoglu 1998, 2002). The market size effect encourages innovation towards the larger input sector, while the price effect directs innovation towards the sector with higher price. The relative magnitudes of these effects are, in turn, determined by three factors: (i) the elasticity of substitution between the two sectors; (ii) the relative levels of development of the technologies of the two sectors; (iii) whether dirty inputs are produced using an exhaustible resource. Because of the environmental externality, the decentralized equilibrium is not optimal. Moreover, the laissez-faire equilibrium leads to an “environmental disaster,” where the quality of the environment falls below a critical threshold. Our main results focus on the types of policies that can prevent such disasters, the structure of optimal environmental regulation and its long-run growth implications, and the costs of delay in implementing environmental regulation. Approaches based on exogenous technology lead to three different types of answers to (some of) these questions depending on their assumptions. Somewhat oversimplifying existing approaches and assigning colorful labels, we can summarize these as follows. The Nordhaus answer is that limited and gradual interventions are necessary. Optimal regulations should reduce long-run growth by only a modest amount. The Stern answer (see Stern 2009) is less optimistic. It calls for more extensive and immediate interventions, and argues that these interventions need to be in place permanently even though they may entail significant economic cost. The more pessimistic Greenpeace answer is that essentially all growth needs to come to an end in order to save the planet. Our analysis suggests a different answer. In the empirically plausible case where the two sectors (clean and dirty inputs) are highly substitutable, immediate and decisive intervention is indeed necessary. Without intervention, the economy would rapidly head towards an environmental disaster, particularly because the market size effect and the initial productivity advantage of dirty inputs would direct innovation and production to that sector, contributing to environmental degradation. However, optimal environmental regulation, or even simple suboptimal policies just using carbon taxes or profit taxes/research subsidies, would be sufficient to redirect technical change and avoid an environmental disaster. Moreover, these policies need to be in place for only a temporary period, because once clean technologies are sufficiently advanced, research would be directed towards these technologies without further government intervention. Consequently, environmental goals can be achieved without permanent intervention and without sacrificing (much or any) long-run growth. While this conclusion is even more optimistic than Nordhaus’s answer, as in the Stern or Greenpeace perspectives delay costs are significant, not simply because of the direct environmental damage, but because delay increases the technological gap between clean and dirty sectors, necessitating a more extended period of economic slowdown in the future.

#### Their studies are one-sided – prefer ours

**Ben-Ami 10** (Daniel, Economics Writer and Financial Journalist, “An economics blind to human ingenuity,” The Guardian, 7-16, http://www.guardian.co.uk/commentisfree/2010/jul/16/economic-recovery-land-human-innovation)

On the other hand, the productive power of human labour is almost invisible in contemporary economic debate and in wider public discussions. Human beings are typically seen as vast consumers of resources: we are accused of accumulating massive quantities of "stuff" in our homes, plundering the world of natural resources and even putting the survival of the planet at stake. Yet this greenish view of humanity is grossly one-sided. It ignores our problem-solving ability, our ingenuity, our capacity to create great things. We are not just mouths to feed – we also have brains capable of great feats of imagination and hands with which to reshape the world. This one-sidedness leads, among other things, to perverse discussions of natural resources. For example, it is common to talk about water as if it is a service miraculously provided by nature. It is too often forgotten that it takes a huge amount of engineering – magic created by human effort – to provide clean water from a tap. Water has to go through many processes before it reaches us including collection, storage, filtration and disinfection. After use, it is flushed away through another barely appreciated triumph of technology: the sewage system. Underestimating human creativity also has direct implications for discussions of economic policy. For instance, the overwhelming weight of the debate about how to tackle the deficit is on curbing consumption rather than raising production. Shortly after the election, the unseemly disagreements began. Would it be better to cut parks or swimming pools? Is it preferable to reduce one benefit rather than another? What is the best way to increase the financial burden on university students? There is little debate about restructuring the economy to generate higher output. Hardly any discussion of how to promote a more innovative culture. One of the few exceptions is the Big Potatoes group, which recently launched the London Manifesto for Innovation. Among the principles it upholds are the need to think big; to take risks; to be prepared to benefit from serendipity; and to reject the notion of environmental limits on human action. An economics blind to human ingenuity is a travesty. Rather than harking back to arcane debates about land it is high-time for our productive power to be integrated into a genuinely new economics.

### \*\*Ext – Yes Sustainable – AT: Limits to Growth

#### \*\*Claims of “unsustainable growth” are incorrect and ignore human ingenuity – their authors are alarmists and ignore practical solutions for unrealistic solutions that wish humanity to mass death – empirically proven because Ophuls wrote 10 years ago

Lomborg 12 (Bjørn, Adjunct Professor at the Copenhagen Business School and head of the Copenhagen Consensus Center, “Environmental Alarmism, Then and Now,” Foreign Affairs, Jul/Aug, 91(4), Online)

FORTY YEARS ago, humanity was warned: by chasing ever-greater economic growth, it was sentencing itself to catastrophe. The Club of Rome, a blue-ribbon multinational collection of business leaders, scholars, and government officials brought together by the Italian tycoon Aurelio Peccei, made the case in a slim 1972 volume called The Limits to Growth. Based on forecasts from an intricate series of computer models developed by professors at MIT, the book caused a sensation and captured the Zeitgeist of the era: the belief that mankind's escalating wants were on a collision course with the world's finite resources and that the crash would be coming soon. The Limits to Growth was neither the first nor the last publication to claim that the end was nigh due to the disease of modern development, but in many ways, it was the most successful. Although mostly forgotten these days, in its own time, it was a mass phenomenon, selling 12 million copies in more than 30 languages and being dubbed "one of the most important documents of our age" by The New York Times. And even though it proved to be phenomenally wrong-headed, it helped set the terms of debate on crucial issues of economic, social, and particularly environmental policy, with malign effects that remain embedded in public consciousness four decades later. It is not too great an exaggeration to say that this one book helped send the world down a path of worrying obsessively about misguided remedies for minor problems while ignoring much greater concerns and sensible ways of dealing with them. That '70S show IF THE 1950s and early 1960s had been a period of technological optimism, by the early 1970s, the mood in the advanced industrial countries had begun to turn grim. The Vietnam War was a disaster, societies were in turmoil, economies were starting to stagnate. Rachel Carson's 1962 book Silent Spring had raised concerns about pollution and sparked the modern environmental movement; Paul Ehrlich's 1968 book The Population Bomb had argued that humanity was breeding itself into oblivion. The first Earth Day, in 1970, was marked by pessimism about the future, and later that year U.S. President Richard Nixon created the Environmental Protection Agency to address the problem. This was the context in which The Limits to Growth resonated; its genius was to bring together in one argument the concerns over pollution, population, and resources, showing how so-called progress would soon run into the natural world's hard constraints. Founded in 1968 and grandly declaring itself to be "a project on the predicament of mankind," the Club of Rome had set as its mission the gathering of the world's best analytic minds to find a way "to stop the suicidal roller coaster man now rides." This led it to Jay Forrester, an MIT professor who had developed a computer model of global systems, called Work2, that allowed one to calculate the impact of changes in several variables on the planet's future. The club appointed a team led by two other MIT researchers, Donella Meadows and Dennis Meadows, to create an updated version, World3, and it was the output of this model that was presented in book form in The Limits to Growth. In an age more innocent of and reverential toward computers, the reams of cool printouts gave the book's argument an air of scientific authority and inevitability; hundreds of millions of logical microcircuits seemed to banish any possibility of disagreement. The model was neither simple nor easy to understand. Even the graphic summary was mind-numbingly convoluted, and the full specifications of the model were published a year later, in a separate book of 637 pages. Still, the general concept was straightforward. The team "examined the five basic factors that determine, and therefore, ultimately limit, growth on this planet--population, agricultural production, natural resources,. industrial production, and pollution." Crucially, they assumed that all these factors grow exponentially--a step so important that the whole first chapter of the book is dedicated to explaining it. They asked readers to consider the growth of lilies in a pond: Suppose you own a pond on which a water lily is growing. The lily plant doubles in size each day. If the lily were allowed to grow unchecked, it would completely cover the pond in 30 days, choking off the other forms of life in the water. For a long time the lily plant seems small, and so you decide not to worry about cutting it back until it covers half the pond. On what day will that be? On the twenty-ninth day, of course. You have one day to save your pond. In the standard scenario, shown in Figure 1, the authors projected the most likely future that would play out for humanity. With the years 1900 to 2100 on the horizontal axis, the graph shows levels of population, pollution, nonrenewable resources, food, and industrial output on the vertical axis. As death rates drop significantly (because of improvements in medical knowledge) and birthrates drop slightly, population increases. As each person consumes more food and products, meeting the total demand "requires an enormous input of resources." This depletes the resource reserves available, making it ever harder to fulfill next year's resource demands, and eventually leads to the collapse of the economic system. Because of lags in the effects, population keeps growing until a staggering increase in the death rate driven by a lack of food and health services kills off a large part of civilization. The culprit is clear: "The collapse occurs because of nonrenewable resource depletion." What if the world gets better at conserving resources or finding new ones? It doesn't matter. Run the model again with double or infinite resources, and a collapse still occurs--only now it is caused by pollution. As population and production explode, pollution does, too, crippling food production and killing off three-quarters of the population. What if pollution is kept in check through technology and policy? It still doesn't matter. Run the model again with unlimited resources and curbs on pollution, and the prediction remains bleak. As production soars, the world's population does, too, and with it demands for food. Eventually, the limit of arable land is reached, and industry is starved as capital is diverted into ever-feebler attempts to increase agricultural yields. With food production back at the subsistence level, death rates shoot up, and civilization is again doomed. The authors concluded that the "basic behavior mode of the world system is exponential growth of population and capital followed by collapse." And "when we introduce technological developments that successfully lift some restraint to growth or avoid some collapse, the system simply grows to another limit, temporarily surpasses it, and falls back." Unlike previous gloomy forecasts, this one offered no easy way out. Carson wanted to stop the use of pesticides; Ehrlich wanted to slow population growth. But The Limits to Growth seemed to show that even if pollution and population growth were controlled, the world's resources would eventually be exhausted and food production would decline back to the subsistence level. The only hope was to stop economic growth itself. The world needed to cut back on its consumption of material goods and emphasize recycling and durability. The only hope to avoid a civilizational collapse, the authors argued, was through draconian policies that forced people to have fewer children and cut back on their consumption, stabilizing society at a level that would be significantly poorer than the present one. Since most people saw such a solution as wildly unrealistic, the real takeaway was simple: the world was screwed. And so Time magazine s 1972 story on The Limits to Growth was headlined "The Worst Is Yet to Be?" It read: The furnaces of Pittsburgh are cold; the assembly lines of Detroit are still. In Los Angeles, a few gaunt survivors of a plague desperately till freeway center strips, backyards and outlying fields, hoping to raise a subsistence crop. London's offices are dark, its docks deserted. In the farm lands of the Ukraine, abandoned tractors litter the fields: there is no fuel for them. The waters of the Rhine, Nile and Yellow rivers reek with pollutants. Fantastic? No, only grim inevitability if society continues its present dedication to growth and "progress." The Limits to Growth got an incredible amount of press attention. Science gave it five pages, Playboy featured it prominently, and Life asked whether anyone wanted to hear "the awful truth." Publications such as The Economist and Newsweek chimed in with criticisms, but in 1973, the oil embargo made the book look prescient. With the oil shock and soaring commodity prices, it seemed that the world was fast-forwarding to the Club of Rome future. OOPS FORTY YEARS on, how do the predictions stack up? Defenders like to point out that The Limits to Growth carefully hedged its bets, with its authors claiming that they were not presenting "exact predictions" and that they were "deliberately… somewhat vague" on time frames because they wanted to focus on the general behavior of the system. But this is sophistry. It was obvious from the way the book was both presented and understood that it made a number of clear predictions, including that the world would soon run out many nonrenewable resources. Assuming exponentially increasing demand, The Limits to Growth calculated how soon after 1970 various resources would be exhausted. Their conclusion was that before 2012, the world would run out of aluminum, copper, gold, lead, mercury, molybdenum, natural gas, oil, silver, tin, tungsten, and zinc--12 of the 19 substances they looked at. They were simply and spectacularly wrong. They singled out mercury, claiming that its known global reserves in 1970 would last for only 13 years of exponential growth in demand, or 41 years if the reserves magically quintupled. They noted that "the prices of those resources with the shortest static reserve indices have already begun to increase. The price of mercury, for example, has gone up 500 percent in the last 20 years." Since then, however, technological innovations have led to the replacement of mercury in batteries, dental fillings, and thermometers. Mercury consumption has collapsed by 98 percent, and by 2000, the price had dropped by 90 percent. They predicted that gold might run out as early as 1979 and would certainly do so by 1999, based on estimations of 10,980 tons of known reserves in 1970. In the subsequent 40 years, however, 81,410 tons of gold have been mined, and gold reserves are now estimated to be 51,000 tons. Known reserves of copper in 1970 came to 280 million tons. Since then, about 400 million tons have been produced globally, and world copper reserves are now estimated at almost 700 million tons. Since 1946, new copper reserves have been discovered faster than existing copper reserves have been depleted. And the same goes for the other three most economically important metals: aluminum, iron, and zinc. Despite a 16-fold increase in aluminum consumption since 1950, and despite the fact that the world has consumed four times the 1950 known reserves in the years since, aluminum reserves now could support 177 years of the present level of consumption. The Limits to Growth also worried about running out of oil (in 1990) and natural gas (in 1992). Not only have those not run out, but their reserves, measured in terms of years of current consumption, are larger today than they have ever been since 1970, even though consumption has increased dramatically. WHAT THEY MISSED THE BASIC point of The Limits to Growth seemed intuitive, even obvious: if ever-more people use ever-more stuff, eventually they will bump into the planet's physical limits. So why did the authors get it wrong? Because they overlooked human ingenuity. The authors of The Limits to Growth named five drivers of the world system, but they left out the most important one of all: people, and their ability to discover and innovate. If you think there are only 280 million tons of copper in the ground, you'll think you'll be out of luck once you have dug it out. But talking about "known reserves" ignores the many ways available resources can be increased. Prospecting has improved, for example. As recently as 2007, Brazil found the Sugar Loaf oil field off the coast of São Paulo, which could hold 40 billion barrels of oil. Extraction techniques have also been improving. The oil industry now drills deeper into the ground, farther out into the oceans, and higher up in the Arctic. It drills horizontally and uses water and steam to squeeze out more from existing fields. And shale gas can now be liberated with new fracking technology, which has helped double U.S. potential gas resources within the past six years. This is similar to the technological breakthrough of chemical flotation for copper, which made it possible to mine ores that had previously been thought worthless, and similar to the Haber-Bosch process, which made nitrogen fixation possible, yielding fertilizers that now help feed a third of humanity. Aluminum is one of the most common metallic elements on earth. But extracting it was so difficult and expensive that not so long ago, it was more costly than gold or platinum. Napoleon III had bars of aluminum exhibited alongside the French crown jewels, and he gave his honored guests aluminum forks and spoons while lesser visitors had to make do with gold utensils. Only with the invention of the Hall-Héroult process in 1886 did aluminum suddenly drop in price and massively increase in availability. Most often, however, ingenuity manifests itself in much less spectacular ways, generating incremental improvements in existing methods that cut costs and increase productivity. None of this means that the earth and its resources are not finite. But it does suggest that the amount of resources that can ultimately be generated with the help of human ingenuity is far beyond what human consumption requires. This is true even of energy, which many think of as having peaked. Costs aside, for example, by itself, the Green River Formation in the western United States is estimated to hold about 800 billion barrels of recoverable shale oil, three times the proven oil reserves of Saudi Arabia. And even with current technology, the amount of energy the entire world consumes today could be generated by solar panels covering just 2.6 percent of the area of the Sahara. Worries about resources are not new. In 1865, the economist William Stanley Jevons wrote a damning book on the United Kingdoms coal use. He saw the Industrial Revolution relentlessly increasing the country's demand for coal, inevitably exhausting its reserves and ending in collapse: "It will appear that there is no reasonable prospect of any release from future want of the main agent of industry." And in 1908, it was Andrew Carnegie who fretted: "I have for many years been impressed with the steady depletion of our iron ore supply. It is staggering to learn that our once-supposed ample supply of rich ores can hardly outlast the generation now appearing, leaving only the leaner ores for the later years of the century." Of course, his generation left behind better technology, so today, exploiting harder-to-get-at, lower-grade ore is easier and cheaper. Another way to look at the resource question is by examining the prices of various raw materials. The Limits to Growth camp argues that as resource constraints get tighter, prices will rise. Mainstream economists, in contrast, are generally confident that human ingenuity will win out and prices will drop. A famous bet between the two groups took place in 1980. The economist Julian Simon, frustrated by incessant claims that the planet would run out of oil, food, and raw materials, offered to bet $10,000 that any given raw material picked by his opponents would drop in price over time. Simons gauntlet was taken up by the biologist Ehrlich and the physicists John Harte and John Holdren (the latter is now U.S. President Barack Obama's science adviser), saying "the lure of easy money can be irresistible." The three staked their bets on chromium, copper, nickel, tin, and tungsten, and they picked a time frame of ten years. When the decade was up, all five commodities had dropped in price, and they had to concede defeat (although they continued to stand by their original argument). And this was hardly a fluke: commodity prices have generally declined over the last century and a half (see Figure 2). In short, the authors of The Limits to Growth got their most famous factor, resources, spectacularly wrong. Their graphs show resource levels starting high and dropping, but the situation is precisely the opposite: they start low and rise. Reserves of zinc, copper, bauxite (the principal ore of aluminum), oil, and iron have all been going spectacularly up (see Figure 3). MORE, MORE, MORE WHAT OF the other factors in the analysis? Their devastating collapse was predicted to occur just after 2010, so it may be too soon for that to be definitively falsified. But the trends to date offer little support for the gloom-and-doom thesis. The growth in industrial production per capita to date was slightly overestimated by The Limits to Growth, possibly because resources have gotten cheaper rather than more expensive and more and more production has moved into the service industry. But mainstream forecasts of long-term GDP growth, a plausible proxy, are positive as far as the eye can see, in sharp contrast to what The Limits to Growth expected. The Intergovernmental Panel on Climate Change, for example, the only major group to have set out informed GDP scenarios through 2100, estimates that global GDP per capita will increase 14-fold over the century and increase 24-fold in the developing world. The amount of population growth was somewhat underestimated, mainly because medical advances have reduced death rates even faster than expected (despite the unforeseen HIV/AIDS crisis). But the population growth rate has slowed since the late 1960s, unlike the World3 predictions, because birthrates have fallen along with development. And predictions about the last two factors, agricultural production and pollution, were way off--which is important because these were the two backup drivers of collapse if a scarcity of resources didn't do the job. Global per capita food consumption was expected to increase by more than 50 percent in the four decades after 1970, peak in 2010, and then drop by 70 percent. Calorie availability has indeed increased, if not quite so dramatically (by somewhat more than 25 percent), but the collapse of the food supply is nowhere in sight, and there is every reason to believe that the gains will continue and be sustainable. Malnutrition has not been vanquished, and the absolute number of people going hungry has in fact increased slightly recently (in part because some crops have been diverted from food to biofuel production due to concerns about global warming). But over the past 40 years, the fraction of the global population that is malnourished has dropped from 35 percent to less than 16 percent, and well over two billion more people have been fed adequately. The world is nowhere close to hitting a ceiling on the usage of arable land; currently, 3.7 billion acres are being used, and 6.7 billion acres are in reserve. Nor have productivity gains maxed out. The latest long-range UN report on food availability, from 2006, estimated that the world would be able to feed ever-more people, each with evermore calories, out to midcentury. As for its pollution predictions, The Limits to Growth was simultaneously scary and vague. Pollution's increase was supposed to trigger a global collapse if the decrease of food or resources didn't do so first, but how exactly pollution was defined was left unclear. Individual pollutants, such as DDT, lead, mercury, and pesticides, were mentioned, but how those could kill any significant number of people was unspecified, making it a bit tricky to test the prediction. Air pollution might be considered a good proxy for overall pollution, since it was the biggest environmental killer in the twentieth century and since the Environmental Protection Agency estimates that its regulation produces 86-96 percent of all the social benefits from environmental regulation more generally. In the developing world, outdoor air pollution is indeed rising and killing more people, currently perhaps over 650,000 per year. Indoor air pollution (from using dirty fuels for cooking and heating) kills even more, almost two million per year (although that number has been decreasing slightly). Even in the developed world, outdoor air pollution is still the biggest environmental killer (at least 250,000 dead each year), although environmental regulation has reduced the death toll dramatically over the past half century. Indoor air pollution in the developed world kills almost nobody. Whereas the Club of Rome imagined an idyllic past with no pollution and happy farmers and a future world choked by fumes and poisons from industrialization run amok, the reality is quite different. Over the last century, pollution has neither spiraled out of control nor gotten more deadly, and the risk of death from air pollution is predicted to continue to drop (see Figure 4). WHO CARES? So THE Limits to Growth project got its three main drivers spectacularly wrong and the other two modestly wrong. The world is not running out of resources, not running out of food, and not gagging on pollution, and the world's population and industrial output are rising sustainably. So what? Why should anyone care now? Because the project's analysis sunk deep into popular and elite consciousness and helps shape the way people think about a host of important policy issues today. Take natural resources and the .environment. Ask someone today whether he cares about the environment and what he is doing about it, and you are likely to hear something like, "Of course I care; I recycle." The caring part is all to the good and a major positive change from a few decades ago. But the recycling part is often just a feel-good gesture that provides little environmental benefit at a significant cost. Recycling is not a new idea. It made sense for companies and people to recycle precious commodities long before the Limits to Growth project came along, and they did so. Copper, for example, was recycled at a rate of about 45 percent throughout most of the past century, for purely practical, and not environmental, reasons. Why wasn't the rate higher? Because some used copper comes in great bundles and is easy to reprocess, making the recycling effort worthwhile, whereas other used copper is dispersed in small, hard-to-get-at pieces, making recycling inefficient. When people think of recycling today, however, they often think of paper. This, too, is not a new idea; trash has been a resource for centuries, with the extent of its culling and reprocessing depending on the current market prices of the goods in question. Throughout the past century, about 30-50 percent of all paper was recycled, before the advent of public information campaigns or peer pressure. But now, in the wake of jeremiads such as The Limits to Growth, recycling tends to be seen less as an economic question and more as a matter of personal and civic virtue. Children learn to "reduce, reuse, and recycle" as part of their official moral education. They are told that by doing so, they are "saving trees." Yet in fact, well-managed forests for paper production in countries such as Finland and Sweden are continuously replanted, yielding not fewer trees but more. Artificially encouraging the recycling of paper lowers the payoff for such forests, making them more likely to be converted into agricultural or urban land. Nor does recycling paper save the rain forests, since it is not made "with tropical timber. Nor does recycling paper address a problem of municipal waste: incineration can recapture much of the energy from used paper with virtually no waste problems, and even without incineration, all U.S. municipal waste from the entire twenty-first century could be contained in a single square dump that was 18 miles on each side and 100 feet high. The effort to recycle substances such as paper and glass, however, consumes money and manpower, which are also scarce resources and could be expended on other socially valuable efforts, such as building roads "or staffing hospitals. And so as the price of paper has declined and the value of human work has risen dramatically, today we pay tribute to the pagan god of token , environmentalism by spending countless hours sorting, storing, and collecting hours used paper, which, when combined with government subsidies, yields slightly lower-quality paper in order to secure a resource that was never threatened in the first place. What is true about resources, moreover, is also true about two of the other supposed drivers of collapse, population and pollution. Spurred by analyses such as that presented in The Limits to Growth, much time and effort over the years has been diverted from useful activities to dubious or even pernicious ones. The specter of an ever-increasing population chewing up ever-dwindling resources, for example, helped scare people into draconian responses such as the one-child policy in China and forced sterilizations in India. These actions were not warranted, and other policies could have done a better job, at lower cost and with more preferable outcomes. Increasing education for women, reducing poverty, and ensuring higher economic growth, for example, would have reduced family sizes with many more ancillary benefits. Scary scenarios of pollutants such as DDT and pesticides killing off humanity, meanwhile, have led to attempts to ban them and to the widespread growth of the organic-food movement. But although it is true that the use of such products has costs--in large doses, DDT is likely harmful to birds, and even well-regulated pesticides probably cause about 20 deaths each year in the United States--it also yields substantial benefits. DDT is the cheapest and one of the most effective ways to tackle malaria. The ban on DDT in much of the developed world (which in itself might have made sense) led to pressures from nongovernmental organizations and aid agencies for bans elsewhere, and these campaigns, now abandoned by the World Health Organization, have likely contributed to several million unnecessary deaths. In the developed world, the push to eliminate pesticides has ignored their immense benefits. Going completely organic would increase the cost of agricultural production in the United States by more than $100 billion annually. Since organic farming is at least 16 percent less efficient, maintaining the same output would require devoting an additional 50 million acres to farmland--an area larger than the state of California. And since eating fruits and vegetables helps reduce cancer, and since organic farming would lead to higher prices and thus lower consumption, a shift to purely organic farming would cause tens of thousands of additional cancer deaths. Paying more than $100 billion, massively increasing the amount of the country's farmland, and killing tens of thousands of people seems a poor return for avoiding the dozens of American deaths due to pesticides annually. Yet this is how the Limits to Growth project and similar efforts have taught the world to think, making people worry imprudently about marginal issues while ignoring sensible actions for addressing major ones. DO THE RIGHT THING THE PROBLEMATIC legacy of The Limits to Growth is not just the unnecessary recycling of paper and a fascination with organic produce. More generally, the book and its epigones have promulgated worst-case environmental-disaster scenarios that make rational policymaking difficult Alarmism creates a lot of attention, but it rarely leads to intelligent solutions for real problems, something that requires calm consideration of the costs and benefits of various courses of action. By implying that the problems the world faces are so great and so urgent that they can be dealt with only by massive immediate interventions and sacrifices--which are usually politically impossible and hence never put into practice--environmental alarmism actually squelches debate over the more realistic interventions that could make a major difference. One of the most insightful original review of The Limits to Growth, by the economist Carl Kaysen in these pages, actually, was cleverly tided "The Computer That Printed Out W\*O\*L\*F\*." After mercilessly picking apart the flaws in the book's argument, it noted that in the fable of the boy who cried "wolf," "there were in the end, real wolves," just as "in the world today, there are real and difficult problems attendant on economic growth as we now experience it." The challenge is differentiating between false alarms and real ones and then coming up with prudent efforts at risk management. Take pollution. Thanks to works such as Silent Spring and The Limits to Growth, worrying about pesticides captured much of the early environmental debate and virtually monopolized the policy agenda of the Environmental Protection Agency during the 1970s. Unfortunately, this did nothing to address the real wolf of indoor and outdoor air pollution. The latter may still kill some 135,000 Americans each year--more than four times the number who die in traffic accidents. But because it is less interesting and has no celebrity backers, it remains an ignored wolf--as is indoor pollution, which kills about two million people annually in the developing world. But the Club of Rome did not just distract the world's attention. It actually directed that attention in precisely the wrong direction, identifying economic growth as humanity's core problem. Such a diagnosis can be entertained only by rich, comfortable residents of highly developed countries, who already have easy access to the basic necessities of life. In contrast, when a desperately poor woman in the developing world cannot get enough food for her family, the reason is not that the world cannot produce it but that she cannot afford it. And when her children get sick from breathing in fumes from burning dung, the answer is not for her to use environmentally certified dung but to raise her living standards enough to buy cleaner and more convenient fuels. Poverty, in short, is one of the greatest of all killers, and economic growth is one of the best ways to prevent it. Easily curable diseases still kill 15 million people every year; what would save them is the creation of richer societies that could afford to treat, survey, and prevent new outbreaks. By recommending that the world limit development in order to head off a supposed future collapse, The Limits to Growth led people to question the value of pursuing economic growth. Had its suggestions been followed over subsequent decades, there would have been no "rise of the rest"; no half a billion Chinese, Indians, and others lifted out of grinding poverty; no massive improvements in health, longevity, and quality of life for billions of people across the planet. Even though the Club of Rome's general school of thought has mercifully gone the way of other 1970s-era relics, such as mood rings and pet rocks, the effects linger in popular and elite consciousness. People get more excited about the fate of the Kyoto Protocol than the fate of the Doha Round--even though an expansion of trade would do hundreds or thousands of times as much good as feeble limitations of emissions, and do so more cheaply, quickly, and efficiently for the very people who are most vulnerable. It is past time to acknowledge that economic growth, for lack of a better word, is good, and that what the world needs is more of it, not less.

### Innovation

#### Innovation and accelerating returns makes growth sustainable

**Kurzweil 08** (Ray, Scientist, Inventor and Entrepreneur inducted in the National Inventors Hall of Fame and winner of the 1999 National Medal of Technology, Washington Post, “Making the World A Billion Times Better”, 4-13, http://www.washingtonpost.com/wp-dyn/content/article/2008/04/11/AR2008041103326.html)

M IT was so advanced in 1965 (the year I entered as a freshman) that it actually had a computer. Housed in its own building, it cost $11 million (in today's dollars) and was shared by all students and faculty. Four decades later, the computer in your cellphone is a million times smaller, a million times less expensive and a thousand times more powerful. That's a billion-fold increase in the amount of computation you can buy per dollar. Yet as powerful as information technology is today, we will make another billion-fold increase in capability (for the same cost) over the next 25 years. That's because information technology builds on itself -- we are continually using the latest tools to create the next so they grow in capability at an exponential rate. This doesn't just mean snazzier cellphones. It means that change will rock every aspect of our world. The exponential growth in computing speed will unlock a solution to global warming, unmask the secret to longer life and solve myriad other worldly conundrums. This exponential progress in the power of information technology goes back more than a century to the data-processing equipment used in the 1890 census, the first U.S. census to be automated. It has been a smooth -- and highly predictable -- phenomenon despite all the vagaries of history through that period, including two world wars, the Cold War and the Great Depression. I say highly predictable because, thanks to its exponential power, only technology possesses the scale to address the major challenges -- such as energy and the environment, disease and poverty -- confronting society. That, at least, is the major conclusion of a panel, organized by the National Science Foundation and the National Academy of Engineering, on which I recently participated. Take energy. Today, 70 percent of it comes from fossil fuels, a 19th-century technology. But if we could capture just one ten-thousandth of the sunlight that falls on Earth, we could meet 100 percent of the world's energy needs using this renewable and environmentally friendly source. We can't do that now because solar panels rely on old technology, making them expensive, inefficient, heavy and hard to install. But a new generation of panels based on nanotechnology (which manipulates matter at the level of molecules) is starting to overcome these obstacles. The tipping point at which energy from solar panels will actually be less expensive than fossil fuels is only a few years away. The power we are generating from solar is doubling every two years; at that rate, it will be able to meet all our energy needs within 20 years. Nanotechnology itself is an information technology and therefore subject to what I call the "law of accelerating returns," a continual doubling of capability about every year. Venture capital groups and high-tech companies are investing billions of dollars in these new renewable energy technologies. I'm confident that the day is close at hand when we will be able to obtain energy from sunlight using nano-engineered solar panels and store it for use on cloudy days in nano-engineered fuel cells for less than it costs to use environmentally damaging fossil fuels. It's important to understand that exponentials seem slow at first. In the mid-1990s, halfway through the Human Genome Project to identify all the genes in human DNA, researchers had succeeded in collecting only 1 percent of the human genome. But the amount of genetic data was doubling every year, and that is actually right on schedule for an exponential progression. The project was slated to take 15 years, and if you double 1 percent seven more times you surpass 100 percent. In fact, the project was finished two years early. This helps explain why people underestimate what is technologically feasible over long periods of time -- they think linearly while the actual course of progress is exponential. We see the same progression with other biological technologies as well. Until just recently, medicine -- like energy -- was not an information technology. This is now changing as scientists begin to understand how biology works as a set of information processes. The approximately 23,000 genes in our cells are basically software programs, and we are making exponential gains in modeling and simulating the information processes that cracking the genome code has unlocked. We also have new tools, likewise just a few years old, that allow us to actually reprogram our biology in the same way that we reprogram our computers. For example, when the fat insulin receptor gene was turned off in mice, they were able to eat ravenously yet remain slim and obtain the health benefits of being slim. They didn't get heart disease or diabetes and lived 20 percent longer. There are now more than a thousand drugs in the pipeline to turn off the genes that promote obesity, heart disease, cancer and other diseases. We can also turn enzymes off and on, and add genes to the body. I'm an adviser to a company that removes lung cells, adds a new gene, reproduces the gene-enhanced cell a million-fold and then injects it back into the body where it returns to the lungs. This has cured a fatal disease, pulmonary hypertension, in animals and is now undergoing human trials. The important point is this: Now that we can model, simulate and reprogram biology just like we can a computer, it will be subject to the law of accelerating returns, a doubling of capability in less than a year. These technologies will be more than a thousand times more capable in a decade, more than a million times more capable in two decades. We are now adding three months every year to human life expectancy, but given the exponential growth of our ability to reprogram biology, this will soon go into high gear. According to my models, 15 years from now we'll be adding more than a year each year to our remaining life expectancy. This is not a guarantee of living forever, but it does mean that the sands of time will start pouring in rather than only pouring out. What's more, this exponential progression of information technology will affect our prosperity as well. The World Bank has reported, for example, that poverty in Asia has been cut in half over the past decade due to information technologies and that at current rates it will be cut by another 90 percent over the next decade. That phenomenon will spread around the globe. Clearly, the transformation of our 21st-century world is under way, and information technology, in all its forms, is helping the future look brighter . . . exponentially.

### Util

#### Evaluate consequences – allowing violence for the sake of moral purity is evil

Isaac 2 (Jeffrey C., Professor of Political Science – Indiana-Bloomington, Director – Center for the Study of Democracy and Public Life, Ph.D. – Yale, Dissent Magazine, 49(2), “Ends, Means, and Politics”, Spring, Proquest)

As writers such as Niccolo Machiavelli, Max Weber, Reinhold Niebuhr, and Hannah Arendt have taught, an unyielding concern with moral goodness undercuts political responsibility. The concern may be morally laudable, reflecting a kind of personal integrity, but it suffers from three fatal flaws: (1) It fails to see that the purity of one’s intention does not ensure the achievement of what one intends. Abjuring violence or refusing to make common cause with morally compromised parties may seem like the right thing; but if such tactics entail impotence, then it is hard to view them as serving any moral good beyond the **clean conscience** of their supporters; (2) it fails to see that in a world of real violence and injustice, moral purity is not simply a form of powerlessness; it is often a form of complicity in injustice. This is why, from the standpoint of politics--as opposed to religion--pacifism is always a potentially immoral stand. In categorically repudiating violence, it refuses in principle to oppose certain violent injustices with any effect; and (3) it fails to see that politics is as much about **unintended consequences** as it is about intentions; it is the effects of action, rather than the motives of action, that is most significant. Just as the alignment with “good” may engender impotence, it is often the pursuit of “good” that generates evil. This is the lesson of communism in the twentieth century: it is not enough that one’s goals be sincere or idealistic; it is equally important, always, to ask about the effects of pursuing these goals and to judge these effects in pragmatic and historically contextualized ways. Moral absolutism inhibits this judgment. It alienates those who are not true believers. It promotes arrogance. And it undermines political effectiveness.

### Democracy Debate

#### Democracy is sustainable – it’s flexible

Bluhdorn 11(Ingolf – Associate Professor in Politics / Political Sociology at the Department of European Studies, “The sustainability of democracy: On limits to growth, the post-democratic turn and reactionary democrats”, 7/11, http://www.eurozine.com/articles/2011-07-11-bluhdorn-en.html)

In the wake of the post-democratic turn, the sustainability of democracy itself may well become a problem, and the capacity of democracy to initiate a turn towards sustainability may be permanently impaired. But democracy comes in many shapes and forms, of course, and political scientists have always praised its great flexibility and adaptability. They have drawn hope from its proven problem-solving capacity and its ability to reflexively address its own faults.[29] Indeed, although the social and cultural resources on which democracy has always been based have, in the process of modernisation, become dangerously depleted, the collapse of democracy predicted by some[30] has not yet not occurred. Even in countries like the UK, where the exhaustion of socio-cultural capital is most dramatically on display, where the diagnosis of the "broken society" is widely debated,[31] and which Crouch portrayed as the paradigmatic example of "post-democracy", the basic structures of democracy remain intact. The Arab Spring, meanwhile, seems to provide strong evidence of the ongoing appeal of democratic ideals worldwide, and in the industrialised nations democracy has powerful allies firmly committed to its defence. Nevertheless, given the cultural shift outlined above, a revitalization of democracy as envisaged by Leggewie and Welzer, Crouch, Hamilton, Hausknost and so many others will not easily be feasible. For in the wake of the post-democratic turn, the structural limitations that have always existed are powerfully reinforced by new cultural limitations that essentially stifle all hopes for the profound value change necessary for any democratic transition to sustainability. Indeed, contrary to the narratives of an emerging alternative hedonism, it is to be feared that, under the conditions of advanced modern societies, more democracy could imply even less sustainability. None of this implies that expertocratic-authoritarian policy approaches are in any way more promising. Hence, it has been suggested that even "despite its evident insufficiencies, democracy might still be the best chance we have to address the challenges" of the sustainability crisis.[32] This is the eco-political reformulation of the old Churchill-hypothesis. Dangerously, however, this proposal fails to recognize the extent to which democracy is quietly changing its quality. For after the post-democratic turn, democratic values are forcefully mobilised to fend off the structural changes without which sustainability will never be achieved. In its classical understanding, democracy was perceived as emancipatory, egalitarian and progressive. It aimed for the empowerment of the underprivileged vis-à-vis the ruling elites. At the limits to growth, however, and in view of the second-order emancipation discussed above, it transmutes into a tool for the defence of established order. Whilst there is little evidence that democracy is suited to the implementation of sustainability, constraint and burden-sharing, there is plenty of evidence to show that democratic values are invoked by the power-elites as well as by the embattled middle classes to legitimize privileged lifestyles that can now be sustained only at the price of increasing social injustice and exclusion. This is most drastically visible in the United States, where neoliberal elites and the bottom-up Tea Party movement have joined forces to deny climate change, alarmed that it might "provide a rationale for the government to "intrude" everywhere, curtail consumer choice and property rights, and increase the state's size and surveillance".[33] But it reverberates also in Europe. In the UK, for example, the Conservative government's "big society" project has appropriated the language of civil society and empowerment to orchestrate a massive austerity programme set to dramatically reinforce the already high level of social inequality and exclusion. Thus, at the limits to growth and after the post-democratic turn, democracy – redefined purely in terms of individual freedom and the right to unfettered consumer choice – is turning reactionary and exclusive. When the modernist normative foundations upon which it once rested have largely crumbled away, democracy may become the most powerful instrument for the governance of unsustainability. For the disempowered who are having to bear the brunt, the chuzpe of neoliberal intellectuals who candidly state – pretentiously veiled as social criticism – that democracy is becoming "a system, open and accessible in theory, but ruled in reality by organized or rich or fanatical minorities, protecting themselves for the present and sacrificing the future", only adds insult to injury.[34] Thus, in a quite unexpected manner, democracy once again provides evidence of its great flexibility and adaptability. It again demonstrates its impressive problem-solving-capacity – the problem now being the governance of unsustainability. The narratives of those who simplistically rave about democratic empowerment and alternative hedonism may, unintendedly, be contributing to this agenda. What is required instead is a much more detailed enquiry into this new reactionary democracy. This is a theoretical as well as an empirical challenge to which the social sciences are only now beginning to face up.

### Growth Good – Environment

#### Growth solves environment – Kuznets curve prove

**Orubu 11** (Dr. Christopher, Professor of Economics – Delta State University, “Environmental Quality and Economic Growth: Searching for Environmental Kuznets Curves for Air and Water Pollutants in Africa,” Energy Policy, 39(7), July, 4178–4188, ScienceDirect)

The EKC hypothesis places the relationship between environmental quality and economic growth within the framework of the development continuum. Specifically, observed historical facts suggest that economic growth, taking place at the intermediate stage does increase pollution, hence deterioration in environmental quality. However, the capacity to offset this relationship tends to increase in later stages of the growth process. [Grossman and Krueger, 1991] and [Grossman and Krueger., 1995] argue that during the initial stage of the developmental process, when the typical economy is dominated by agriculture and allied activities, pollution intensity will be generally low. But as the economy moves into heavy industry, pollution will tend to increase. Furthermore, as the economy shifts into high technology and services, pollution intensity will tend to fall. What is implied in this observation is that pollution intensity is likely to be increasing in countries at the lowest rung of the development ladder, up to the intermediate stage, before possibly declining after reaching a threshold point. A number of factors are commonly advanced as the proximate determinants of the EKC relationship (Copeland and Taylor, 2004). The most important explanations relate to the scale, composition, and technology effects. The scale effect arises from the fact that increasing the output of the economy requires the use of more inputs in the form of material and natural resources. At the same time, more output implies more wastes and emissions as by-products, which contribute to environmental degradation. Economic growth, which necessarily involves expanding the scale of production therefore, has the potential of adversely affecting the quality of the environment. Scale is ultimately determined by the total amount of material inputs into the process of producing goods and services as well as the volume of output that is consumed and fed into the environment by way of pollution and waste. Essentially, the scale effect encapsulates two types of environmental pressure – one arising from increased use of resources, which has a depletion effect – and the other from increased associated waste, with a pollution effect. It is equally true that the scale effect works to reduce environmental degradation or pollution at higher levels, as certain pollution control measures may not be practicable at small scales of production. More specifically, at higher levels of output (hence income), it becomes relatively cheaper to reduce pollution, and producers are more easily able and willing to adopt pollution-reducing measures and technologies. The composition effect has to do with the proportion of each type of productive activity in the volume of the economy's output. As noted by Stagl (1999), the common trajectory of development has been that societies progress from subsistence agriculture, which is less polluting, to more material and energy-intensive modes of agricultural production, agro-processing and light manufacturing that are relatively more pollution-intense. Pollution intensity is highest as the economy moves into the stage of heavy industry, and finally declines as it shifts toward high technology, knowledge, and service-based industries. Within this compositional continuum, pollution per unit of output will tend to rise as the economy progresses on the development ladder, but eventually falls as structural changes take place over time. During the earlier stages of development; the composition effect tends to reinforce environmental pressures arising from increasing scale, while tending to counteract it at higher levels of development. It could therefore be argued that the composition effect works to reduce environmental degradation over time, by reducing the relative size of those sectors of the economy that produce large residuals, and by expanding those sectors that produce relatively less residuals per unit of output. The technological effect arises from the impact of improvements in the state of technology. Generally, improvements in processing technology reduces pollution indirectly by reducing the consumption of material inputs, while technological advancement makes it possible to adopt better pollution control techniques. Thus the technological effect works through productivity and emissions-related advantages. In these ways, it is possible for a naturally heavily polluting industry to record declining emissions even as output rises, provided the increase in output comes from factories using less polluting production processes. In principle, the technological effect works to improve environmental quality as economic growth progresses by reducing the residuals intensity of production through the invention and adoption of new technologies and standards, which leave smaller amounts of residuals per unit of output produced and through changes in input mixes that result from substituting less environmentally damaging inputs for more injurious types.

\*\*environmental Kuznets curve (EKC)

# Quarters

## Additional FW Cards

#### Over inclusion in the context of the topic undermines effective advocacy to help minority communities.

**Foreman 1998** (Christopher – nonresident senior fellow in Governance Studies at the Brookings Institution, The Promise and Peril of Environmental Justice, p. 117)

Therefore movement rhetoric argues that no community should be harmed and that all community concerns and grievances deserve redress. Scholar-activist Robert Bullard proposes that “the solution to unequal protection lies in the realm of environmental justice for all Americans. No community, rich or poor, black or white, should be allowed to become a ‘sacrifice zone.’”20 When pressed about the need for environmental risk priorities, and about how to incorporate environmental justice into priority setting, Bullard’s answer is a vague plea for nondiscrimination, along with a barely more specific call for a “federal ‘fair environmental protection act’” that would transform “protection from a privilege to a right.”21 Bullard’s position is fanciful and self-contradictory, but extremely telling. He argues essentially that the way to establish environmental priorities is precisely by guaranteeing that such priorities are impossible to implement. This is symptomatic of a movement for which untrammeled citizen voice and overall social equity are cardinal values. Bullard’s position also epitomizes the desire of movement intellectuals to avoid speaking difficult truths (at least in public) to their allies and constituents. Ironically, in matters of health and risk, environmental justice poses a potentially serious, if generally unrecognized, danger to the minority and low-income communities it aspires to help. By discouraging citizens from thinking in terms of health and risk priorities (that is, by taking the position, in effect, that every chemical or site against which community outrage can be generated is equally hazardous), environmental justice can deflect attention from serious hazards to less serious or perhaps trivial ones.

## Additional Warming Cards

#### Warming locks in environmental racism --- preventing climate change is a pre-requisite to progressive politics.

**Glantz 6** (Michael H., Senior Scientist – National Center for Atmospheric Research, “Africans, African-Americans and Climate Impacts: Top-down vs. Bottom-up Approach to Capacity Building”, Fragile Ecologies, 7-7, http://www.fragilecologies.com/jul07\_06.html)

Numerous studies document that the poor and people of color in the United States and around the world have borne greater health and environmental risks than the society at large when it comes to workplace hazards, pollution from chemical plants, municipal landfills, incinerators, abandoned toxic waste dumps, lead smelters, and emissions from clogged freeways. The environmental and economic justice movement was born in response to these injustices and disparities. The movement's diverse allies have much to offer policymakers in resolving many of the problems that have resulted from industrial pollution and human settlement patterns. Finding solutions to global climate change is one of the areas that desperately need the input from those populations most likely to be negatively affected, poor people in the developing countries of the South and people of color and the poor in the North. Global climate change looms as a major environmental justice issue of the 21st century. Another recent expression of interest in climate's impacts on the minorities focused specifically on the United States . The US Congressional Black Caucus, a group that includes all African-American members of the US Congress, commissioned a report that focused on the potential impacts of global warming on African Americans. The report (entitled “Black Americans and Global Warming: An Unequal Burden”) was released to the public in July 2004. The report supported Bullard's (among others') contention that minorities (in America , African Americans specifically) are most likely to suffer disproportionately as a result of the foreseeable impacts of climate change (for example, flooding, heat waves and high energy prices). Most likely, they already are suffering disproportionately from the impacts of today's climate variability and extreme events, such as Hurricane Katrina's impacts in New Orleans in 2005 and Hurricane Floyd's impacts in North Carolina in 1999. To be sure, all poor people along with people in other socio-economic strata in these areas, regardless of race, were adversely affected by these events. However, the African-American communities have been the worst affected with regard to adverse impacts (deaths) and in the economic recovery process as well, when compared with other nearby communities and socioeconomic groups. The report of the Caucus seemed to dwell primarily on energy-related issues, especially the impacts of the rising costs to Black consumers of energy (heat, light, gasoline, for example). However, there are many more obvious and subtle climate-related impacts that can adversely affect Black Americans. Some of those adverse impacts were exposed on TV and in newspapers worldwide as Hurricane Katrina made landfall along the US Gulf Coast on August 29, 2005. Poor people, many of whom were African-Americans, were the primary victims of Katrina. They were living in areas known to be most vulnerable to flooding, as much of New Orleans had been built below sea level and protected by levees from invasion of waters from the Gulf of Mexico and Lake Ponchetrain. Making a risky situation even riskier, poorer people in New Orleans were also the least likely to have life or property insurance coverage on their lives and property, transportation or cash in hand for a rapid escape from the potential threats from Hurricane Katrina. A brief comparison of two parts of the city, one predominantly Black and the other White, underscores the demographic differences and disadvantages between these communities: the Lower Ninth Ward (African American) and the Lake District (Caucasian). While reflecting on the discriminatory impacts of Katrina and how it exposed the vulnerabilities of African-American minority residents, I was reminded about the devastating impacts of Hurricane Floyd (September 1999) which, today, few remember. It damaged greatly a predominantly African American town called Princeville, as well as nearby communities. In the first year or two after having been hit by Hurricane Floyd, Princeville still struggled to get support to rebuild itself, whereas other adversely affected communities seemed to have been on the mend at a much faster pace. In 2004 (a year before Katrina), I sought to encourage the development of a “Climate Affairs” program for undergraduates at the Historically Black Colleges and Universities (HBCUs). This was (and still is) an attempt to develop awareness of and interest among African-Americans (i.e., to build capacity) in climate-related science, impacts and equity issues. This can empower the African-American community to better cope with the obvious and not so obvious ways that climate variability, change and extremes can influence human activities in general and their communities in particular. Keeping Bullard's earlier statement in mind, Finding solutions to global climate change is one of the areas that desperately need the input from those populations most likely to be negatively affected, poor people in the developing countries of the South and people of color and the poor in the North. there are not many African-Americans focused on climate-related impacts. At least, I have not encountered many over the years at various climate-related meetings I have attended. There are some African-American scientists researching the science of climate change, and there are many Africans who have come to the USA to teach science at the university level. The main point of a comparison of Africans and African Americans focused on climate impact assessments is to underscore what I believe is an urgent need to sharply and quickly increase the involvement in climate-related impact assessments of African-Americans, the minority most likely to be adversely affected by global warming. Only by getting involved directly in climate impact studies related to climate change --- whether public health, disaster preparedness, political and legal aspects, risk assessments, and so on --- will African Americans be prepared to do their own bidding in political circles, for the greater protection of the African-American community, not only from global warming but from other climate and weather extremes as well, such as hurricanes, floods, vector-borne diseases (e.g., mosquitoes), and other climate-related problems.

## Binary K

#### Focusing on disrupting whiteness generates a black/white binary – that re-inscribes oppression

Harris 6 (Cheryl – Professor of Law, UCLA School of Law; Faculty Director, Critical Race Studies Program. B.A., Wellesley College; J.D., Northwestern University, “Review Essay: Whitewashing Race: Scapegoating Culture”, 2006, 94 Calif. L. Rev. 907, lexis)

I The Project A. About Method: Revisiting the Black/White Binary At the outset, Whitewashing Race makes a critical methodological choice to focus almost exclusively on racial subordination as reflected by dichotomous constructions of Blackness and Whiteness, a binary that has been called the Black/White paradigm. Legal scholars have critiqued this racial frame as one that tends to view racial subordination solely through the experience of Blacks, and consequently obscures the ways in which subordination is experienced differently across racial groups. Clearly racial formation - the processes by which racial categories come into being and are maintained n24 - varies across time, geography, and peoples. As the authors of Whitewashing Race openly acknowledge, in the United States "the color of race and racism has never been monochromatic," particularly as the contemporary racial landscape is complicated by changing racial demographics in which the Black population is decreasing and interracial couplings produce contested racial identities outside familiar categories (x). Nonetheless, the authors choose to articulate their critique of colorblindness through an analysis of Black/White inequality (x-xi). They justify this "Black and White" frame on two primary grounds (x). They first contend that their project responds to conservative racial politics that are largely articulated in Black and White terms. They note that Latinos and Asians, for example, appear in the dominant racial discourse primarily as disciplinary examples invoked in opposition to, and in condemnation of, Blacks (x). For example, Latinos, particularly immigrant workers, are lauded for their quiescence and hard work, in contrast to Black workers who are viewed as contentious and unmotivated. Asians are said to exhibit both a salutary work ethic and greater intellectual capabilities than Blacks. n25 Asian and Latino racial identities, while still subject to highly negative stereotypes, are nevertheless invoked to reinforce the story of Blacks' failure to assimilate. Asian and Latino racial experiences, then, are not engaged on their own terms, but are primarily mechanisms to reinforce Black inferiority and, by logical extension, the fact of White superiority. However, that the prevailing view of race is grounded in Black and White does not necessarily legitimate the authors' choice, particularly [\*916] where, as here, the crabbed, dominant conception of race is precisely what is being contested. The authors therefore offer a second, more substantive rationale for working through the Black/White paradigm: The Black/White binary persists as a feature of everyday life and is crucial to the commonsense understanding of racism... . Whiteness in the United States has never been simply a matter of skin color. Being White is also a measure, as Lani Guinier and Gerald Torres put it, "of one's social distance from Blackness." In other words, Whiteness in America has been ideologically constructed mostly to mean "not Black." The increasing numbers of Asians and Latinos in the United States and the development of a Black middle class have not changed this ideological construction of Whiteness... . [The] dichotomy [is] not between Black and White, but between Black and non Black (x-xi). n26 By explicitly focusing on Black/White inequality, the authors implicitly challenge the critique that the Black/White paradigm is a faulty description of racial hierarchies in the United States. n27 Their approach accepts that the Black/White paradigm may not accurately reflect racial demographics, because, in part, it does not seek to do so. Instead, it describes racial power. n28 Within the Black/White binary that undergirds prevailing social relations, "Black" and "White" signify ideological concepts and do not operate as phenotypic markers, nor even as racial categories in the sense of creating socially constructed communities. Rather, Black and White are relationally constructed. Whiteness is the position of relative privilege marked by the distance from Blackness; Blackness, on the other hand, is a legal and social construction of disadvantage and subordination marked by the distance from White privilege. n29 [\*917] This is not to say that "Yellow," "Red," and "Brown," are not also oppositionally positioned vis-a-vis Whiteness. Rather the point is that "Yellow," "Red," and "Brown," are often explicitly situated within the racial frames of "Black" and "White." Indeed, "Black" or "colored" have historically functioned within the law to include Chinese and Japanese immigrants, and others who have struggled to escape the chains of Blackness. n30 At the same time, "White" has expanded and contracted to both include and exclude Mexicans n31 and Arabs. n32 The real binary, then, is Black/not Black. n33 Thus, by focusing on Black/White inequality, Whitewashing Race does not uncritically affirm the Black/White paradigm that excludes or marginalizes the experiences of other racially subordinated groups, but instead self-consciously chooses to frame its analysis within this dominant view. That said, it becomes important to situate this work, and indeed to situate any work that focuses on a binary racial comparison, in the context [\*918] of its role in the racial dialogue. n34 Not all projects warrant condemnation for choosing to employ a Black/White analytic framework. On the other hand, it does not follow that any project that focuses on Black/White relations is immune from the criticism that this binary obscures rather than reveals current racial dynamics. How then do we tell the difference? In part, the answer must begin with an analysis of the purpose for which the comparison is being deployed. Here the project is to attack colorblindness, a reductionist view of race and racism that is intimately linked to asserting a relationship between racial inequality and social pathology, of which Black people are the paradigm case. n35 While racial subordination impacts all persons, and particularly all persons of color, the point the authors make is that, given the strength of the Black/not Black paradigm, it is crucial to focus on Blackness, precisely because it is materially and phenomenologically defined relative to White advantage. That said, the success of the bigger project - to expose the myth of colorblindness - depends upon engagement with other analyses of the experiences of Asians, Latinos, and indigenous peoples. To further expose the myth the authors seek to dislodge, these analyses should not only identify important commonalities and differences between groups, but should also clarify why everyone has a stake in eliminating racism. n36 Mapping the interlocking ways in which racial subordination functions both within and among groups remains central to shifting the national discourse about race and racism.

#### This paradigm actively places non-black minorities as aliens within society – that results in racial exclusion and socially constructs multiple threats

Lugay 5 (Arvin – J.D., University of California, Berkeley School of Law, “Book Review: "In Defense of Internment": Why Some Americans Are More "Equal" than Others”, 2005, 12 Asian L.J. 209, lexis)

This black/white paradigm is further complicated by other racial groups; the paradigm deals with those who are neither black nor white by construing them as aliens. One of the critical features of the legal status and racial identity of non-black racial minorities is the notion of "foreignness." n119 This previously underexamined dimension of the relationship between race and law sheds light not only on the Japanese American internment, but on contemporary debate as well. n120 "Most important in this development has been the persistence of the view that even American-bornnon-Whites were somehow "foreign.'" n121 Natsu Tailor Saito explains that, The Japanese American internment cases could not be explained merely by race or, alternately, by alienage. Acts that could not be justified in the name of race were done in the name of alienage and vice versa. There was overlap and slippage, a legalistic sleight of hand. The racialized identification of Japanese Americans as foreign - regardless of their citizenship - allowed for otherwise unlawful actions to be taken against United States citizens. n122 Michelle Malkin relies heavily on the racialization of Japanese Americans (in the context of the internment) and Arab Americans (in the context of the "War on Terror") as disloyal foreigners to justify her dismissal of civil liberties. Malkin and American legal history share a larger racial ideology that defines American national identity through the exclusion of people who do not fit a certain white racial paradigm. Critical race theory teaches that the law not only reflects social institutions such as race, but also actively constructs them. n123 The law has helped define the boundaries of racial groups. n124 Far from being a matter of skin color or biology, critical race theory defines race as a social construct. Professor Ian F. Haney Lopez lists four important facets to the social construction of race: First, humans rather than abstract social forces produce races. Second, as human constructs, races constitute an integral part of a whole social fabric that includes gender and class relations. Third, the meaning-systems [\*223] surrounding race change quickly rather than slowly. Finally, races are constructed relationally, against one another, rather than in isolation. n125 In the American legal context, racial differences are societal creations that justify the retention of power by one group - whites - over other groups, those who are not white. n126 Courts have struggled to define race and have not successfully done so because they have ignored the historical significance of the social creation of racial difference as a hegemonic device. n127 Historically, our government and legal system have often officially approved of the presumption that non-white immigrants are disloyal. n128 This has helped to inscribe disloyalty as a racial characteristic. n129 This presumption of disloyalty is an underlying rationale for the creation of laws that ensured the exclusion of non-white immigrant out-groups. These laws kept such groups from becoming legally and socially integrated into the predominantly white American social fabric. Such laws include the Chinese Exclusion Act of 1882 (which barred entry of Chinese laborers into the United States), n130 citizenship laws that prevented many non-white immigrants from gaining U.S. citizenship, n131 and the Alien Land Laws (which prevented people incapable of proving loyalty through citizenship from owning land). n132 In the case of the Japanese internment, federal law denied Japanese naturalization and prevented their immigration; state law prevented property ownership and intermarriage with Whites; and economic discrimination limited professional and employment opportunities. n133 Courts used these exclusionary laws to justify further oppression. For example, the Supreme Court in Hirabayashi reasoned that Japanese Americans posed an even greater security threat precisely because they had been historically excluded and oppressed by the United States. n134 As Jerry [\*224] Kang described, "the Court said: because America has treated you badly, you have reason to be disloyal; therefore, America now has reason to treat you still more badly, by restricting your civil rights." n135 Kang labels this phenomenon the "vicious cycle" in which "tomorrow's burdens will be justified by the resentment caused by today's burdens." n136 The boundaries of the nation continue to be constructed through excluding certain groups. n137 Discourses of democracy used to support the U.S. war effort against terrorism rests on an image of anti-democracy, in the form of those who seek to destroy the "American way of life." n138 The "imagined community" of the American nation, constituted by loyal citizens, relies on separating itself from the "Middle Eastern terrorist" or the "Yellow Peril" to fuse its identity at moments of crisis. n139 Yet this policy of continued exclusionmerely generates a "vicious cycle" that fails to increase security by breeding additional resentment among communities of non-white immigrants and naturalized citizens. A more effective way to increase national security would be to decrease resentment among immigrants and naturalized citizens of color by breaking the "vicious cycle" of exclusion and unequal burden sharing of the cost of national security. If traditionally excluded groups are allowed to share the benefits of American citizenship that are granted to white citizens, they would have the same incentive as white citizens to protect national security. Arguments for the continued exclusion of outgroups must rest on an assumption of deep, inherent difference. This assumption ignores that people of color have as much to lose from poor national security as do White Americans. Such assumptions rely on a white supremacist paradigm that subordinates and denies the inherent dignity of people of color. The only way to break the "vicious cycle" is to eliminate the underlying paradigm of white supremacy. One way this dominant white racial paradigm subordinates people of color is by racializing them as perpetual foreigners who are presumptively disloyal to America. This subordination creates white citizen "insiders," as opposed to colored immigrant "foreigners/outsiders**."** The paradigm can be challenged by acknowledging its existence in American laws and social norms while simultaneously asserting the dignity of people of color. Once this has been achieved, we can begin to effectively bring exclusionary laws into compliance with the Fifth and Fourteenth Amendments.

#### The inevitable result is extermination – the process of otherization necessitates global destruction

Stein 7 (Howard, PhD and Full Professor in the Department of Family and Preventive Medicine – University of Oklahoma Health Sciences Center, Journal of Organizational Psychodynamics, Spring, (1)1)

Despite the fact that the federal government had been abundantly warned about the precarious condition of the levees, federal officials insisted on their innocence, ignorance, and goodness, while vilifying the New Orleans government and the Louisiana government for a delayed and incompetent response to the disaster. “Mother” Nature, too, became labeled as the unpredictable enemy. In this national scenario, as in organizational life, leaders often resort to psychological splitting between us/them, good/bad, and count on frightened loyalty from followers. Allcorn writes of the critical role of corporate ideology in establishing this either/or process: Ideology aimed at destroying all opposing views to maintain the certainty of its [that is, the reified organization’s] righteousness and correctness, is a sign of simplicity triumphing over complexity and the regressive withdrawal into a primitive state of oneness and homogeneity. (2006) Through ideology, leaders psychologically “bind” workers to the organization, whereby all opposing views are rejected and doubt is eliminated. For psychoanalyst Christopher Bollas, in the fascist state of mind, “The mind ceases to be complex, achieving a simplicity held together initially by bindings around the signs of ideology” (1992, p. 201). Followers are recruited and subsequently “bound” to the ideology by the promise of alleviating intense anxiety and radically splitting the perceptual world into “good” people (us, insiders) and “bad” people (them, others). Organizational leaders’ appeal to grave danger and their offer of a magical solution, is illustrated by the following story from Seth Allcorn: I recall hearing of a meeting in a large teaching hospital that was called to formally announce that downsizing was about to ensue with the help of a notorious downsizing consulting group. The hospital CEO was speaking to all of upper and middle management, approximately 150 people. He explained the downsizing process this way. “You are standing on a train station platform. You have three choices. You can get on the train that is going where I want to go. You can wait just a little bit before deciding what you want to do. Or, you can get on the second train that is leaving the hospital.” Since I studied downsizing in depth as a researcher…I can bear witness to the fact that the metaphorical trains both lead to a man-made hell on earth. (1998, p. xii) 10 As I have described elsewhere (Stein, 1998; 2001), Nazi Holocaust-era trains are a widespread metaphor used by leaders, victims, and survivors to describe the harrowing experience of downsizing, reductions in force, rightsizing, and other forms of “managed social change.” The CEO offers Captain Ahab’s choice: follow me and you live; don’t follow me and you’re dead. The irony, of course, is that to follow Ahab is to doom oneself to death. Firm belief in the totalitarian ideology and the cause that it champions becomes more vital than life itself. Before continuing, let me say a few words about the psychodynamics of what is “total” in the ideology and practice of totalitarianism. The work of a number of psychoanalytic writers converges to help us understand the psychodynamics of organizational and political totalitarianism, and hence the appeal of its ideology and its ability to mobilize people in its service. In his pioneering work on the adolescent quality of the either/or, inside/outside thinking that characterizes totalitarian ideologies, Erik Erikson distinguished between exclusivistic “totalistic” thinking and inclusivistic “wholism” in identity formation (1968, pp. 74–90). In “totalistic” thinking, an ideology is created and embraced that radically simplifies the world, repudiates if not destroys all opposing views, and is intolerant of all doubt. Erikson described the universal process of dividing the world into what he called “pseudospecies” (pp. 41–42), by which all peoples to some degree describe themselves as THE human beings, and others as lesser and lower life forms. That is, there is a split in affect such that affiliative “good” feelings are associated with one’s own group, and disaffiliative “bad” feelings are associated with Others. “Inside” is idealized and “outside” is demonized. The Others “were at least useful as a screen of projection for the negative identities which were the necessary, if most uncomfortable, counterpart of the positive ones” (p. 41). Erikson continues: “The pseudospecies…is one of the more sinister aspects of all group identity” (p. 42). This process becomes exaggerated and ossified in times of crisis, anxiety, and massive large group regression, as Vamik Volkan (1997; 2002) and Howard Stein (2004) have described. Under such circumstances, people come to rely on emergency psychological measures to protect themselves. What George Devereux (1955) called “catastrophic” thinking tends to seize the group, and the reduction of (psychotic) anxiety becomes the central obsession of the group and its leaders. Great effort is mobilized to revitalize the loss- and death-obsessed group (see La Barre, 1972). Under these simultaneously inner and outer circumstances, people come to re-experience annihilation anxiety, against which they defend themselves by the use of some of the earliest developmental defense mechanisms such as splitting, massive projective identification, and externalization. Identity rigidity replaces continuous identity development. “Total immersion in a synthetic identity” goes hand in glove with “a totally stereotyped enemy of the new identity” (Erikson, 1968, p. 89). Erikson continues: The fear of loss of identity which fosters such indoctrination contributes significantly to that mixture of righteousness and criminality which, under totalitarian conditions, becomes available for organized terror and for the establishment of major industries of extermination. (ibid.)

#### Reject their description of race in terms of the Black/White binary paradigm – scrutinizing critical scholarship on race is key to contest the broader and more multi-faceted operations of diverse forms of racial oppression.

Perea 97 (Juan F., Professor of Law, University of Florida College of Law, California Law Review, 85 Calif. L. Rev. 1213, “The Black/White Binary Paradigm of Race,” October, Lexis)

The point of critical theory generally is to demonstrate shortcomings in our current understandings of legal and social structures and perhaps to suggest alternatives that improve upon these shortcomings. One implication of this Article is that, to the extent that critical theory has focused on questions of race, it is still tightly bound by the Black/White binary paradigm. Although this is much less true of critical race theory in particular, as some writers have focused on the points of view and histories of many racialized American groups, a true paradigm shift away from the Black/White paradigm will only occur when such scholarship is more widely promulgated and accepted than is currently the case. My review of important literature on race establishes the existence of the Black/White binary paradigm and its structuring of writing on race. The "normal science" of race scholarship specifies inquiry into the relationship between Blacks and Whites as the exclusive aspect of race relations that needs to be explored and elaborated. As a result, much relevant legal history and information concerning Latinos/as and other racialized groups is simply omitted from books on race and constitutional law. The omission of this history is extraordinarily damaging to Mexican Americans and other Latinos/as. By omitting this history, students get no understanding that Mexican Americans have long struggled for equality. The absence of Latinos/as from histories of racism and the struggle against it enables people to maintain existing stereotypes of Mexican Americans. These stereotypes are perpetuated even by America's leading thinkers on race. Ignorance of Mexican-American history allows Andrew Hacker to proclaim that Hispanics are passive "spectators" in social struggle, n212 and allows Cornel West to imply that Latino/a struggles against racism have been "slight though significant." n213 To the extent that the legitimacy of claims for civil rights depends on a public perception of having engaged in struggle for them, the omission of this legal history also undermines the legitimacy of Latino/a claims for civil rights. This may explain why courts treat Latino/a claims of discrimination with such indifference. Paradigmatic descriptions and study of White racism against Blacks, with only cursory mention of "other people of color," marginalizes all people of color by grouping them, without particularity, as somehow [\*1258] analogous to Blacks. "Other people of color" are deemed to exist only as unexplained analogies to Blacks. Thus, scholars encourage uncritical readers to continue to assume the paradigmatic importance of the Black/White relationship and to ignore the experiences of other Americans who also are subject to racism in profound ways. Critical readers are left with many important questions: Beyond the most superficial understanding of aversion to non-White skin color, in what ways is White racism against Blacks explanatory of or analogous to White racism against Latinos/as, Asian Americans, Native Americans, and others? Given the unique historical legacy of slavery, what does a deep understanding of White-Black racism contribute to understanding racisms against other "Others?" Why are "other people of color" consistently relegated to parenthetical status and near-nonexistence in treatises purporting to cover their fields comprehensively? It is time to ask hard questions of our leading writers on race. It is also time to demand better answers to these questions about inclusion, exclusion, and racial presence, than perfunctory references to "other people of color." In the midst of profound demographic changes, it is time to question whether the Black/White binary paradigm of race fits our highly variegated current and future population. Our "normal science" of writing on race, at odds with both history and demographic reality, needs reworking.

## A2: Social Death

#### Blacks aren’t ontologically dead and Wilderson offers no alternative

SAËR MATY BÂ, teaches film at Portsmouth University, September 2011 "The US Decentred: From Black Social Death to Cultural Transformation" book review of Red, Black & White: Cinema and the Structure of US Antagonisms and Mama Africa: Reinventing Blackness in Bahia, Cultural Studies Review volume 17 number 2 http://epress.lib.uts.edu.au/journals/index.php/csrj/index pp. 381–91]

Red, White and Black is particularly undermined by Wilderson’s propensity for exaggeration and blinkeredness. In chapter nine, ‘“Savage” Negrophobia’, he writes: The philosophical anxiety of Skins is all too aware that through the Middle Passage, African culture became Black ‘style’ ... Blackness can be placed and displaced with limitless frequency and across untold territories, by whoever so chooses. Most important, there is nothing real Black people can do to either check or direct this process ... Anyone can say ‘nigger’ because anyone can be a ‘nigger’. (235)7 Similarly, in chapter ten, ‘A Crisis in the Commons’, Wilderson addresses the issue of ‘Black time’. Black is irredeemable, he argues, because, at no time in history had it been deemed, or deemed through the right historical moment and place. In other words, the black moment and place are not right because they are ‘the ship hold of the Middle Passage’: ‘the most coherent temporality ever deemed as Black time’ but also ‘the “moment” of no time at all on the map of no place at all’. (279) Not only does Pinho’s more mature analysis expose this point as preposterous (see below), I also wonder what Wilderson makes of the countless historians’ and sociologists’ works on slave ships, shipboard insurrections and/during the Middle Passage,8 or of groundbreaking jazz‐studies books on cross‐cultural dialogue like The Other Side of Nowhere (2004). Nowhere has another side, but once Wilderson theorises blacks as socially and ontologically dead while dismissing jazz as ‘belonging nowhere and to no one, simply there for the taking’, (225) there seems to be no way back. It is therefore hardly surprising that Wilderson ducks the need to provide a solution or alternative to both his sustained bashing of blacks and anti‐ Blackness.9 Last but not least, Red, White and Black ends like a badly plugged announcement of a bad Hollywood film’s badly planned sequel: ‘How does one deconstruct life? Who would benefit from such an undertaking? The coffle approaches with its answers in tow.’ (340)

#### No social death – history proves

Brown 9 Vincent, Prof. of History and African and African-American Studies @ Harvard Univ., December, "Social Death and Political Life in the Study of Slavery," American Historical Review, p. 1231-1249

THE PREMISE OF ORLANDO PATTERSON’S MAJOR WORK, that enslaved Africans were natally alienated and culturally isolated, was challenged even before he published his influential thesis, primarily by scholars concerned with “survivals” or “retentions” of African culture and by historians of slave resistance. In the early to mid-twentieth century, when Robert Park’s view of “the Negro” predominated among scholars, it was generally assumed that the slave trade and slavery had denuded black people of any ancestral heritage from Africa. The historians Carter G. Woodson and W. E. B. Du Bois and the anthropologist Melville J. Herskovits argued the opposite. Their research supported the conclusion that while enslaved Africans could not have brought intact social, political, and religious institutions with them to the Americas, they did maintain significant aspects of their cultural backgrounds.32 Herskovits ex- amined “Africanisms”—any practices that seemed to be identifiably African—as useful symbols of cultural survival that would help him to analyze change and continuity in African American culture.33 He engaged in one of his most heated scholarly disputes with the sociologist E. Franklin Frazier, a student of Park’s, who empha- sized the damage wrought by slavery on black families and folkways.34 More recently, a number of scholars have built on Herskovits’s line of thought, enhancing our understanding of African history during the era of the slave trade. Their studies have evolved productively from assertions about general cultural heritage into more precise demonstrations of the continuity of worldviews, categories of belonging, and social practices from Africa to America. For these scholars, the preservation of distinctive cultural forms has served as an index both of a resilient social personhood, or identity, and of resistance to slavery itself. 35 Scholars of slave resistance have never had much use for the concept of social death. The early efforts of writers such as Herbert Aptheker aimed to derail the popular notion that American slavery had been a civilizing institution threatened by “slave crime.”36 Soon after, studies of slave revolts and conspiracies advocated the idea that resistance demonstrated the basic humanity and intractable will of the enslaved—indeed, they often equated acts of will with humanity itself. As these writ- ers turned toward more detailed analyses of the causes, strategies, and tactics of slave revolts in the context of the social relations of slavery, they had trouble squaring abstract characterizations of “the slave” with what they were learning about the en- slaved.37 Michael Craton, who authored Testing the Chains: Resistance to Slavery in the British West Indies, was an early critic of Slavery and Social Death, protesting that what was known about chattel bondage in the Americas did not confirm Patterson’s definition of slavery. “If slaves were in fact ‘generally dishonored,’ ” Craton asked, “how does he explain the degrees of rank found among all groups of slaves—that is, the scale of ‘reputation’ and authority accorded, or at least acknowledged, by slave and master alike?” How could they have formed the fragile families documented by social historians if they had been “natally alienated” by definition? Finally, and per- haps most tellingly, if slaves had been uniformly subjected to “permanent violent domination,” they could not have revolted as often as they did or shown the “varied manifestations of their resistance” that so frustrated masters and compromised their power, sometimes “fatally.”38 The dynamics of social control and slave resistance falsified Patterson’s description of slavery even as the tenacity of African culture showed that enslaved men, women, and children had arrived in the Americas bearing much more than their “tropical temperament.” The cultural continuity and resistance schools of thought come together pow- erfully in an important book by Walter C. Rucker, The River Flows On: Black Re- sistance, Culture, and Identity Formation in Early America. In Rucker’s analysis of slave revolts, conspiracies, and daily recalcitrance, African concepts, values, and cul- tural metaphors play the central role. Unlike Smallwood and Hartman, for whom “the rupture was the story” of slavery, Rucker aims to reveal the “perseverance of African culture even among second, third, and fourth generation creoles.”39 He looks again at some familiar events in North America—New York City’s 1712 Coromantee revolt and 1741 conspiracy, the 1739 Stono rebellion in South Carolina, as well as the plots, schemes, and insurgencies of Gabriel Prosser, Denmark Vesey, and Nat Turner—deftly teasing out the African origins of many of the attitudes and actions of the black rebels. Rucker outlines how the transformation of a “shared cultural heritage” that shaped collective action against slavery corresponded to the “various steps Africans made in the process of becoming ‘African American’ in culture, orientation, and identity.”40

#### --The invocation of social death as ontologically inevitable inscribes a pessimism towards politics which makes agency impossible and oversimplifies the history of resistance

Brown 9 Vincent, Prof. of History and African and African-American Studies @ Harvard Univ., December, "Social Death and Political Life in the Study of Slavery," American Historical Review, p. 1231-1249

Specters of the Atlantic is a compellingly sophisticated study of the relation be- tween the epistemologies underwriting both modern slavery and modern capitalism, but the book’s discussion of the politics of anti-slavery is fundamentally incomplete. While Baucom brilliantly traces the development of “melancholy realism” as an op- positional discourse that ran counter to the logic of slavery and finance capital, he has very little to say about the enslaved themselves. Social death, so well suited to the tragic perspective, stands in for the experience of enslavement. While this heightens the reader’s sense of the way Atlantic slavery haunts the present, Baucom largely fails to acknowledge that the enslaved performed melancholy acts of accounting not unlike those that he shows to be a fundamental component of abolitionist and human rights discourses, or that those acts could be a basic element of slaves’ oppositional activities. In many ways, the effectiveness of his text depends upon the silence of slaves—it is easier to describe the continuity of structures of power when one down- plays countervailing forces such as the political activity of the weak. So Baucom’s deep insights into the structural features of Atlantic slave trading and its afterlife come with a cost. Without engagement with the politics of the enslaved, slavery’s history serves as an effective charge leveled against modernity and capitalism, but not as an uneven and evolving process of human interaction, and certainly not as a locus of conflict in which the enslaved sometimes won small but important victories.11 Specters of the Atlantic is self-consciously a work of theory (despite Baucom’s prodigious archival research), and social death may be largely unproblematic as a matter of theory, or even law. In these arenas, as David Brion Davis has argued, “the slave has no legitimate, independent being, no place in the cosmos except as an instrument of her or his master’s will.”12 But the concept often becomes a general description of actual social life in slavery. Vincent Carretta, for example, in his au- thoritative biography of the abolitionist writer and former slave Olaudah Equiano, agrees with Patterson that because enslaved Africans and their descendants were “stripped of their personal identities and history, [they] were forced to suffer what has been aptly called ‘social death.’ ” The self-fashioning enabled by writing and print “allowed Equiano to resurrect himself publicly” from the condition that had been imposed by his enslavement.13 The living conditions of slavery in eighteenth-century Jamaica, one slave society with which Equiano had experience, are described in rich detail in Trevor Burnard’s unflinching examination of the career of Thomas Thistle- wood, an English migrant who became an overseer and landholder in Jamaica, and who kept a diary there from 1750 to 1786. Through Thistlewood’s descriptions of his life among slaves, Burnard glimpses a “world of uncertainty,” where the enslaved were always vulnerable to repeated depredations that actually led to “significant slave dehumanization as masters sought, with considerable success, to obliterate slaves’ personal histories.” Burnard consequently concurs with Patterson: “slavery completely stripped slaves of their cultural heritage, brutalized them, and rendered ordinary life and normal relationships extremely difficult.”14 This was slavery, after all, and much more than a transfer of migrants from Africa to America.15 Yet one wonders, after reading Burnard’s indispensable account, how slaves in Jamaica or- ganized some of British America’s greatest political events during Thistlewood’s time and after, including the Coromantee Wars of the 1760s, the 1776 Hanover conspiracy, and the Baptist War of 1831–1832. Surely they must have found some way to turn the “disorganization, instability, and chaos” of slavery into collective forms of belonging and striving, making connections when confronted with alien- ation and finding dignity in the face of dishonor. Rather than pathologizing slaves by allowing the condition of social death to stand for the experience of life in slavery, then, it might be more helpful to focus on what the enslaved actually made of their situation. Among the most insightful texts to explore the experiential meaning of Afro- Atlantic slavery (for both the slaves and their descendants) are two recent books by Saidiya Hartman and Stephanie Smallwood. Rather than eschewing the concept of social death, as might be expected from writing that begins by considering the per- spective of the enslaved, these two authors use the idea in penetrating ways. Hart- man’s Lose Your Mother: A Journey along the Atlantic Slave Route and Smallwood’s Saltwater Slavery: A Middle Passage from Africa to American Diaspora extend social death beyond a general description of slavery as a condition and imagine it as an experience of self. Here both the promise and the problem with the concept are most fully apparent.16 Both authors seek a deeper understanding of the experience of enslavement and its consequences for the past, present, and future of black life than we generally find in histories of slavery. In Hartman’s account especially, slavery is not only an object of study, but also the focus of a personal memoir. She travels along a slave route in Ghana, from its coastal forts to the backcountry hinterlands, symbolically reversing the first stage of the trek now commonly called the Middle Passage. In searching prose, she meditates on the history of slavery in Africa to explore the precarious nature of belonging to the social category “African American.” Rendering her re- markable facility with social theory in elegant and affective terms, Hartman asks the question that nags all identities, but especially those forged by the descendants of slaves: What identifications, imagined affinities, mythical narratives, and acts of re- membering and forgetting hold the category together? Confronting her own alienation from any story that would yield a knowable genealogy or a comfortable identity, Hartman wrestles with what it means to be a stranger in one’s putative motherland, to be denied country, kin, and identity, and to forget one’s past—to be an orphan.17 Ultimately, as the title suggests, Lose Your Mother is an injunction to accept dis- possession as the basis of black self-definition. Such a judgment is warranted, in Hartman’s account, by the implications of social death both for the experience of enslavement and for slavery’s afterlife in the present. As Patterson delineated in sociological terms the death of social personhood and the reincorporation of individuals into slavery, Hartman sets out on a personal quest to “retrace the process by which lives were destroyed and slaves born.”18 When she contends with what it meant to be a slave, she frequently invokes Patterson’s idiom: “Seized from home, sold in the market, and severed from kin, the slave was for all intents and purposes dead, no less so than had he been killed in combat. No less so than had she never belonged to the world.” By making men, women, and children into commodities, enslavement destroyed lineages, tethering people to own- ers rather than families, and in this way it “annulled lives, transforming men and women into dead matter, and then resuscitated them for servitude.” Admittedly, the enslaved “lived and breathed, but they were dead in the social world of men.”19 As it turns out, this kind of alienation is also part of what it presently means to be African American. “The transience of the slave’s existence,” for example, still leaves its traces in how black people imagine and speak of home: We never tire of dreaming of a place that we can call home, a place better than here, wherever here might be . . . We stay there, but we don’t live there . . . Staying is living in a country without exercising any claims on its resources. It is the perilous condition of existing in a world in which you have no investments. It is having never resided in a place that you can say is yours. It is being “of the house” but not having a stake in it. Staying implies transient quarters, a makeshift domicile, a temporary shelter, but no attachment or affiliation. This sense of not belonging and of being an extraneous element is at the heart of slavery.20 “We may have forgotten our country,” Hartman writes, “but we haven’t forgotten our dispossession.”21 Like Baucom, Hartman sees the history of slavery as a constituent part of a tragic present. Atlantic slavery continues to be manifested in black people’s skewed life chances, poor education and health, and high rates of incarceration, poverty, and premature death. Disregarding the commonplace temporalities of professional historians, whose literary conventions are generally predicated on a formal distinction between past, present, and future, Hartman addresses slavery as a problem that spans all three. The afterlife of slavery inhabits the nature of belonging, which in turn guides the “freedom dreams” that shape prospects for change. “If slavery persists as an issue in the political life of black America,” she writes, “it is not because of an antiquated obsession with bygone days or the burden of a too-long memory, but because black lives are still imperiled and devalued by a racial calculus and a political arithmetic that were entrenched centuries ago.”22 A professor of English and comparative literature, Hartman is in many respects in a better position than most historians to understand events such as the funeral aboard the Hudibras. This is because for all of her evident erudition, her scholarship is harnessed not so much to a performance of mastery over the facts of what hap- pened, which might substitute precision for understanding, as to an act of mourning, even yearning. She writes with a depth of introspection and personal anguish that is transgressive of professional boundaries but absolutely appropriate to the task. Reading Hartman, one wonders how a historian could ever write dispassionately about slavery without feeling complicit and ashamed. For dispassionate accounting—exemplified by the ledgers of slave traders—has been a great weapon of the powerful, an episteme that made the grossest violations of personhood acceptable, even necessary. This is the kind of bookkeeping that bore fruit upon the Zong. “It made it easier for a trader to countenance yet another dead black body or for a captain to dump a shipload of captives into the sea in order to collect the insurance, since it wasn’t possible to kill cargo or to murder a thing already denied life. Death was simply part of the workings of the trade.” The archive of slavery, then, is “a mortuary.” Not content to total up the body count, Hartman offers elegy, echoing in her own way the lamentations of the women aboard the Hudibras. Like them, she is concerned with the dead and what they mean to the living. “I was desperate to reclaim the dead,” she writes, “to reckon with the lives undone and obliterated in the making of human commodities.”23 It is this mournful quality of Lose Your Mother that elevates it above so many histories of slavery, but the same sense of lament seems to require that Hartman overlook

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small but significant political victories like the one described by Butter- worth. Even as Hartman seems to agree with Paul Gilroy on the “value of seeing the consciousness of the slave as involving an extended act of mourning,” she remains so focused on her own commemorations that her text makes little space for a consideration of how the enslaved struggled with alienation and the fragility of belonging, or of the mourning rites they used to confront their condition.24 All of the ques- tions she raises about the meaning of slavery in the present—both highly personal and insistently political—might as well be asked about the meaning of slavery to slaves themselves, that is, if one begins by closely examining their social and political lives rather than assuming their lack of social being. Here Hartman is undone by her reliance on Orlando Patterson’s totalizing definition of slavery. She asserts that “no solace can be found in the death of the slave, no higher ground can be located, no perspective can be found from which death serves a greater good or becomes any- thing other than what it is.”25 If she is correct, the events on the Hudibras were of negligible importance. And indeed, Hartman’s understandable emphasis on the personal damage wrought by slavery encourages her to disavow two generations of social history that have demonstrated slaves’ remarkable capacity to forge fragile com- munities, preserve cultural inheritance, and resist the predations of slaveholders. This in turn precludes her from describing the ways that violence, dislocation, and death actually generate culture, politics, and consequential action by the enslaved.26 This limitation is particularly evident in a stunning chapter that Hartman calls “The Dead Book.” Here she creatively reimagines the events that occurred on the voyage of the slave ship Recovery, bound, like the Hudibras, from the Bight of Biafra to Grenada, when Captain John Kimber hung an enslaved girl naked from the mizzen stay and beat her, ultimately to her death, for being “sulky”: she was sick and could not dance when so ordered. As Hartman notes, the event would have been unre- markable had not Captain Kimber been tried for murder on the testimony of the ship’s surgeon, a brief transcript of the trial been published, and the woman’s death been offered up as allegory by the abolitionist William Wilberforce and the graphic satirist Isaac Cruikshank. Hartman re-creates the murder and the surge of words it inspired, representing the perspectives of the captain, the surgeon, and the aboli tionist, for each of whom the girl was a cipher “outfitted in a different guise,” and then she puts herself in the position of the victim, substituting her own voice for the unknowable thoughts of the girl. Imagining the experience as her own and wistfully representing her demise as a suicide—a final act of agency—Hartman hopes, by this bold device, to save the girl from oblivion. Or perhaps her hope is to prove the impossibility of ever doing so, because by failing, she concedes that the girl cannot be put to rest. It is a compelling move, but there is something missing. Hartman discerns a convincing subject position for all of the participants in the events sur- rounding the death of the girl, except for the other slaves who watched the woman die and carried the memory with them to the Americas, presumably to tell others, plausibly even survivors of the Hudibras, who must have drawn from such stories a basic perspective on the history of the Atlantic world. For the enslaved spectators, Hartman imagines only a fatalistic detachment: “The women were assembled a few feet away, but it might well have been a thousand. They held back from the girl, steering clear of her bad luck, pestilence, and recklessness. Some said she had lost her mind. What could they do, anyway? The women danced and sang as she lay dying.” Hartman ends her odyssey among the Gwolu, descendants of peoples who fled the slave raids and who, as communities of refugees, shared her sense of dispos- session. “Newcomers were welcome. It didn’t matter that they weren’t kin because genealogy didn’t matter”; rather, “building community did.” Lose Your Mother con- cludes with a moving description of a particular one of their songs, a lament for those who were lost, which resonated deeply with her sense of slavery’s meaning in the present. And yet Hartman has more difficulty hearing similar cries intoned in the past by slaves who managed to find themselves.27 Saltwater Slavery has much in common with Lose Your Mother. Smallwood’s study of the slave trade from the Gold Coast to the British Americas in the late seventeenth and early eighteenth centuries likewise redeems the experience of the people traded like so many bolts of cloth, “who were represented merely as ciphers in the political arithmetic,” and therefore “feature in the documentary record not as subjects of a social history but as objects or quantities.”28 Each text offers a penetrating analysis of the market logic that turned people into goods. Both books work with the concept of social death. However, Smallwood examines the problem of social death for the enslaved even more closely than Hartman does.29 Like Hartman, Smallwood sees social death as a by-product of commodification. “If in the regime of the market Africans’ most socially relevant feature was their exchangeability,” she argues, “for Africans as immigrants the most socially relevant feature was their isolation, their desperate need to restore some measure of social life to counterbalance the alienation engendered by their social death.” But Small- wood’s approach is different in a subtle way. Whereas for Hartman, as for others, social death is an accomplished state of being, Smallwood veers between a notion of social death as an actual condition produced by violent dislocation and social death as a compelling threat. On the one hand, she argues, captivity on the Atlantic littoral was a social death. Exchangeable persons “inhabited a new category of mar- ginalization, one not of extreme alienation within the community, but rather of ab- solute exclusion from any community.” She seems to accept the idea of enslaved commodities as finished products for whom there could be no socially relevant relationships: “the slave cargo constituted the antithesis of community.” Yet elsewhere she contends that captives were only “menaced” with social death. “At every point along the passage from African to New World markets,” she writes, “we find a stark contest between slave traders and slaves, between the traders’ will to commodify people and the captives’ will to remain fully recognizable as human subjects.”30 Here, I think, Smallwood captures the truth of the idea: social death was a receding ho- rizon—the farther slaveholders moved toward the goal of complete mastery, the more they found that struggles with their human property would continue, even into the most elemental realms: birth, hunger, health, fellowship, sex, death, and time. If social death did not define the slaves’ condition, it did frame their vision of apocalypse. In a harrowing chapter on the meaning of death (that is, physical death) during the Atlantic passage, Smallwood is clear that the captives could have no frame of reference for the experience aboard the slave ships, but she also shows how des- perate they were to make one. If they could not reassemble some meaningful way to map their social worlds, “slaves could foresee only further descent into an endless purgatory.” The women aboard the Hudibras were not in fact the living dead; they were the mothers of gasping new societies. Their view of the danger that confronted them made their mourning rites vitally important, putting these at the center of the women’s emerging lives as slaves—and as a result at the heart of the struggles that would define them. As Smallwood argues, this was first and foremost a battle over their presence in time, to define their place among ancestors, kin, friends, and future progeny. “The connection Africans needed was a narrative continuity between past and present—an epistemological means of connecting the dots between there and here, then and now, to craft a coherent story out of incoherent experience.” That is precisely what the women on the Hudibras fought to accomplish.31

#### We don’t need a revolution, we need a blueprint for political change

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A question that must be asked is also just what a black revolution would even be about today. Certainly black America has serious problems. However, a revolution does not consist solely of howling grievances. For a revolutionary effort to be worth anyone's time, the demands have to be ones that those being revolted against have some way of fulfilling. In one episode of the animated version of Aaron McGruder's *The Boondocks,* there is an articulate depiction of the idea that black people need to Rise Up as a group and Make Demands. Huey, whose bitter frown is as in­grained in his design as a vapid smile is on Mickey Mouse, imagines that Martin Luther King comes back to life and inspires a revolution in black America, graphically indi­cated as hordes of blacks swarming the gates at the White House. "It's fun to dream," Huey concludes, the idea being that black people know what to rise up against, but that they would run up against the heartless moral cesspool that is AmeriKKKa, where, say, "George Bush doesn't care about black people." But the question is: what would the people at the gates, if attended to, demand? Fifty years ago, the demands were obvious: dismantle Jim Crow. And since then, a lot more has been given: affirmative action, the transformation of welfare from a stingy program for widows to an open- ended dole for any unmarried woman with children (done largely as riot insurance in the late 1960s, called for by left­ist activists including black ones) ... I could go on. So—yes, black America still has problems. Yes, there is still racism. But what is it that the White House should do now, in 2008, that is staring everyone in the face but hasn't happened because white people just "don't care" and the black community has failed to "demand" it? What? Precisely? I am not implying that what needs to happen is black people getting acquainted with those "bootstraps" we hear so much about. But the problems are not the kind that could be solved by simply buckshotting whitey with the usual cries of "racism." Would the people at the gates be calling for inner city schools to get as much money as schools in leafy white suburbs? If they did, they would see the same thing that has happened when exactly that was done in places like New Jersey and Kansas City: nothing changes. Obviously something needs to be done about the schools. But what, of the sort that should be shouted through the White House fence? How many of the shouters would know about poor black kids kicking academic butt in KIPP schools? Or in other charter schools filled with kids there because of—oh dear—vouchers, in Ohio and Florida? Let's face it—most of the people at that fence would draw a blank on what KIPP schools even were, much less the good that vouchers are doing. Some revolution. Would the people at the gates be calling for police forces to stop beating up on young black men and some­times killing them? Well, that's a legitimate concern. But the revolution on that is already happening, in every American city making concerted efforts to foster dialogue between the police and the street. We're not there yet, but things are better. Anyone who says that the shooting death of Sean Bell in 2006 in New York was evidence that noth­ing had changed since the death of Amadou Diallo in 1998 knows little of what the relationship between the police and black people was like in New York and so many other places before the nineties. In 1960, the death of Amadou Diallo would have made the local papers only, for one day, and, even in those papers, on some back page. It wouldn't have been considered important news. Going through newspapers of that era, one constantly comes across stories about things that happened to "Negroes," on page A31, that today would be front-page breaking news. We are blissfully past that America. And back to the main point: what could the White House do to prevent things like the Diallo and Bell inci­dents? What simple, wave-the-wand policy point would make it so that never again would a young black man be killed by the police in dicey circumstances where every­body lost his head for a minute or so? The relationship between police forces and black people is not as simple as something that could be changed by storming through a gate, which is obvious from how persistent that prob­lem has been despite profound changes on so many other fronts.

# Semis

## Eco-Authoritarian Cards

#### Environmental apocalypticism causes eco-authoritarianism and mass violence against those deemed environmental threats – also causes political apathy which turns case

Buell 3Frederick—cultural critic on the environmental crisis and a Professor of English at Queens College and the author of five books, *From Apocalypse To Way of Life,* pages 185-186

Looked at critically, then, crisis discourse thus suffers from a number of liabilities. First, it seems to have become a political liability almost as much as an asset. It calls up a fierce and effective opposition with its predictions; worse, its more specific predictions are all too vulnerable to refutation by events. It also exposes environmentalists to being called grim doomsters and antilife Puritan extremists. Further, concern with crisis has all too often tempted people to try to find a “total solution” to the problems involved— a phrase that, as an astute analyst of the limitations of crisis discourse, John Barry, puts it, is all too reminiscent of the Third Reich’s infamous “final solution.”55 A total crisis of society—environmental crisis at its gravest—threatens to translate despair into inhumanist authoritarianism; more often, however, it helps keep merely dysfunctional authority in place. It thus leads, Barry suggests, to the belief that only elite- and expert-led solutions are possible.56 At the same timeit depoliticizes people, inducing them to accept their impotence as individuals; this is something that has made many people today feel, ironically and/or passively, that since it makes no difference at all what any individual does on his or her own, one might as well go along with it. Yet another pitfall for the full and sustained elaboration of environmental crisis is, though least discussed, perhaps the most deeply ironic. A problem with deep cultural and psychological as well as social effects, it is embodied in a startlingly simple proposition: the worse one feels environmental crisis is, the more one is tempted to turn one’s back on the environment. This means, preeminently, turning one’s back on “nature”—on traditions of nature feeling, traditions of knowledge about nature (ones that range from organic farming techniques to the different departments of ecological science), and traditions of nature-based activism. If nature is thoroughly wrecked these days, people need to delink from nature and live in postnature—a conclusion that, as the next chapter shows, many in U.S. society drew at the end of the millenium. Explorations of how deeply “nature” has been wounded and how intensely vulnerable to and dependent on human actions it is can thus lead, ironically, to further indifference to nature-based environmental issues, not greater concern with them. But what quickly becomes evident to any reflective consideration of the difficulties of crisis discourse is that all of these liabilities are in fact bound tightly up with one specific notion of environmental crisis—with 1960s- and 1970s-style environmental apocalypticism. Excessive concern about them does not recognize that crisis discourse as a whole has significantly changed since the 1970s. They remain inducements to look away from serious reflection on environmental crisis only if one does not explore how environmental crisis has turned of late from apocalypse to dwelling place. The apocalyptic mode had a number of prominent features: it was preoccupied with running out and running into walls; with scarcity and with the imminent rupture of limits; with actions that promised and temporally predicted imminent total meltdown; and with (often, though not always) the need for immediate “total solution.” **Thus doomsterism was its reigning mode;** eco-authoritarianism was a grave temptation; and as crisis was elaborated to show more and more severe deformations of nature, temptation increased to refute it, or give up, or even cut off ties to clearly terminal “nature.”

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#### Even if warming is true, framing it as apocalypse is strategically even more dangerous.

**Crist ‘7** – Ass. Prof. Sci & Tech in Society @ VT (Eileen, Telos 141, Winter, Beyond the Climate Crisis)

While the dangers of climate change are real, I argue that there are **even greater dangers** in representing it as the most urgent problem we face. Framing climate change in such a manner deserves to be challenged for two reasons: it encourages the restriction of proposed solutions to the technical realm, by powerfully insinuating that the needed approaches are those that directly address the problem; and it detracts attention from the planet’s ecological predicament as a whole, by virtue of claiming the limelight for the one issue that trumps all others. Identifying climate change as the biggest threat to civilization, and ushering it into center stage as the highest priority problem, has bolstered the proliferation of technical proposals that address the specific challenge. The race is on for figuring out what technologies, or portfolio thereof, will solve “the problem.” Whether the call is for reviving nuclear power, boosting the installation of wind turbines, using a variety of renewable energy sources, increasing the efficiency of fossil-fuel use, developing carbon-sequestering technologies, or placing mirrors in space to deflect the sun’s rays, the narrow character of such proposals is evident: confront the problem of greenhouse gas emissions by technologically phasing them out, superseding them, capturing them, or mitigating their heating effects. In his The Revenge of Gaia, for example, Lovelock briefly mentions the need to face climate change by “changing our whole style of living.”16 But the thrust of this work, what readers and policy-makers come away with, is his repeated and strident call for investing in nuclear energy as, in his words, “the one lifeline we can use immediately.”17 In the policy realm, the first step toward the technological fix for global warming is often identified with implementing the Kyoto protocol. Biologist Tim Flannery agitates for the treaty, comparing the need for its successful endorsement to that of the Montreal protocol that phased out the ozone-depleting CFCs. “The Montreal protocol,” he submits, “marks a signal moment in human societal development, representing the first ever victory by humanity over a global pollution problem.”18 He hopes for a similar victory for the global climate-change problem. Yet the deepening realization of the threat of climate change, virtually in the wake of stratospheric ozone depletion, also suggests that dealing with global problems treaty-by-treaty is no solution to the planet’s predicament. Just as the risks of unanticipated ozone depletion have been followed by the dangers of a long underappreciated climate crisis, so it would be naïve not to anticipate another (perhaps even entirely unforeseeable) catastrophe arising after the (hoped-for) resolution of the above two. Furthermore, if greenhouse gases were restricted successfully by means of technological shifts and innovations, the **root cause** of the ecological crisis as a whole would remain unaddressed. The destructive patterns of production, trade, extraction, land-use, waste proliferation, and consumption, coupled with population growth, would go unchallenged, continuing to run down the integrity, beauty, and biological richness of the Earth. Industrial-consumer civilization has entrenched a form of life that admits virtually no limits to its expansiveness within, and perceived entitlement to, the entire planet.19 But questioning this civilization is by and large sidestepped in climate-change discourse, with its single-minded quest for a global-warming techno-fix.20 Instead of confronting the forms of social organization that are causing the climate crisis—among numerous other catastrophes—climate-change literature often focuses on how global warming is endangering the culprit, and agonizes over what technological means can save it from impending tipping points.21 The dominant frame of climate change funnels cognitive and pragmatic work toward specifically addressing global warming, while muting a host of equally monumental issues. Climate change looms so huge on the environmental and political agenda today that it has contributed to downplaying other facets of the ecological crisis: mass extinction of species, the devastation of the oceans by industrial fishing, continued old-growth deforestation, topsoil losses and desertification, endocrine disruption, incessant development, and so on, are made to appear secondary and more forgiving by comparison with “dangerous anthropogenic interference” with the climate system. In what follows, I will focus specifically on how climate-change discourse encourages the continued marginalization of the biodiversity crisis—a crisis that has been soberly described as a holocaust,22 and which despite decades of scientific and environmentalist pleas remains a virtual non-topic in society, the mass media, and humanistic and other academic literatures. Several works on climate change (though by no means all) extensively examine the consequences of global warming for biodiversity, 23 but rarely is it mentioned that biodepletion predates dangerous greenhouse-gas buildup by decades, centuries, or longer, and will not be stopped by a technological resolution of global warming. Climate change is poised to exacerbate species and ecosystem losses—indeed, is doing so already. But while technologically preempting the worst of climate change may **temporarily** avert some of those losses, such a resolution of the climate quandary will not put an end to—will **barely address**—the ongoing destruction of life on Earth.

**Irrelevant whether warming is real or not – Crist says when you frame that as the pantamount problem you restrict solutions to technological quick fixes that ignore warming's root cause – the ethic of ecological exploitation remains unadressed, preventing any long-term solvency**

#### Their framing of climate change causes a distraction for more pressing environmental movements that solve extinction

**Crist ‘7** – Ass. Prof. Sci & Tech in Society @ VT (Eileen, Telos 141, Winter, Beyond the Climate Crisis)

The diminishment of life's richness began with the exodus of hunters and gatherers from Africa thousands of years ago, and deepened with the [end page 36] invention of agriculture and cities, the development of warfare, and the advent of the European voyages.24 But **biodepletion accelerated enormously after the emergence of industrial civilization, and particularly since the mid-twentieth century, with billions of people not only doubling every few decades, but inclining**—by force, choice, or delusion—**toward a consumer culture founded on overproduction and global trade. Overproduction and global trade, in turn, require the ceaseless conversion of living beings and natural systems into dead objects, "resources," and humanized landscapes and seascapes**.25 **The significance of human-driven extinction can never be overstated, because it means not only the death of species but the end of their evolutionary destinies as well**—of the life-forms they would or might have eventually originated. Present-day extinction is not about species blinking out sporadically; it is a global and escalating spasm of en masse losses that, the geological record reveals, is an infrequent event in Earth's natural history. Notwithstanding circulating shallow sophistry that proclaims extinction to be "natural" or "normal," anthropogenic extinction is neither natural (for countless species are disappearing from targeted onslaught or pressures far exceeding their capacity to adapt) nor normal (for this level of losses occurs rarely as a consequence of a catastrophic event). Yet, as tragic as extinction is, species are also being devastated without being annihilated: losses of distinct populations and plunges in population numbers are a blow to the vigor, ecological contributions and connectedness, and evolutionary potential of species. Today, drops of 70, 80, 90 percent, or more, of wild plants and animals, on land and in oceans, are common. Such declines mean that species hang on as relics, with shortened lifespans or committed to extinction, no longer able to play significant ecological and evolutionary roles. **The nosedive of wild-animal and plant abundance foregrounds** yet [end page 37] another facet of biodepletion: **the simplification of ecosystems**. From a landscape perspective, the decline of numbers and geographic races of wild organisms signifies constrictions of their former ranges. **As populations blink out from diverse places, their place-bound contributions are lost; the losses cascade through the communities of organisms to which the extinguished populations belonged, leaving behind degraded ecosystems. While the simplification of ecosystems is often dramatically visible, it can also unfold as an incremental, barely noticeable process. And it is not that ecosystems, here and there, are occasionally suffering simplification by losing constituent locals. The biosphere is experiencing gross decline or elimination of areas that are, in certain cases, centers of diversification**—most notably, tropical forests, wetlands, mangrove forests, and coral reefs everywhere. The whittling down of ecological complexity has been a global trend proceeding from the conversion of ecosystems for intensive human uses, the aforementioned population depletions, and the invasion of nonnative species. Nonnative species are the generalists hitching rides in the bustle of globalization—from the climate-change-favored fungus that is killing frogs, to millions of domestic cats preying on birds, to innumerable more.26 Human-facilitated invasions, coupled with the disappearance of natives, lead to places losing the constellation of life-forms that once uniquely constituted them. The inevitable outcome of extinction, plummeting populations, lost and simplified ecosystems, and a bio-homogenized world is not only the global demolition of wild nature, but also the halting of speciation of much complex life. The conditions for the birth of new species within a wide band of life, especially of large-bodied species that reproduce slowly, are being suspended.27 [end page 38] **All these interconnected dimensions constitute** what conservation biologists call **the biodiversity crisis**—a term that to the postmodernist rings of rhetoric, while to the broad public (insofar as it has heard anything about it) involves a largely illiterate and vague understanding of "extinction."28 Academic frivolity and public ignorance aside, **the biodiversity crisis heralds a biospheric impoverishment that will be the condition and experience of all future human generations: it requires 5 to 10 million years for biodiversity to recover after a mass extinction of the current scope**. In light of this fact, I submit that **unless global warming unleashes appalling penalties—in which case, the climate crisis and biodepletion will merge into one devastating event for virtually all life**29**—the implications of humanity's impact on biodiversity are so far-reaching that they may, in reality, dwarf the repercussions of climate change**. And yet, **the current framing of climate change as the urgent issue encourages regarding the unwinding of biodiversity as a less critical matter than the forthcoming repercussions of global warming.** Attention to the long-standing ruination of biodiversity underway is subverted in two ways in climate-change discourse: either it gets elided through a focus on anthropocentric anxieties about how climate change will specifically affect people and nations; or biodepletion is presented as a corollary of climate change in writings that closely consider how global warming will cause biodiversity losses. **Climate change is undoubtedly speeding up the unraveling of life's interconnectedness and variety. But if global warming has such potential to afflict the natural world, it is because the latter's "immunity" has been severely compromised. It is on an already profoundly wounded natural world that global warming is delivering its blow. Focusing on the added blow of climate change is important, but this focus should not come at the expense of erasing from view the prior, ongoing, and climate-change-independent wounding of life on Earth**.

#### And it trades off with more useful mitigation policies

O’Neill 9 (Saffron, Research Fellow in the National Climate Change Adaptation Research Facility, ““Fear Won’t Do It”: Promoting Positive Engagement With Climate Change Through Visual and Iconic Representations,” Science Communication, Volume 30 Number 3, March)

Individuals May Become Desensitized to Fear Appeals A further consequence of long-term reliance on fear appeals, as stated by Hastings et al. (2004), is that it is possible that a law of diminishing returns may exist. If this exists, fear approaches need to be made more intense as time goes by because of repeated exposure to threatening information in order to produce the same impact on individuals. Linville and Fischer’s (1991) “finite pool of worry” effect is also worthy of note here. This theory states that increased concern for one risk may decrease concern for other risks, as if individuals only have a certain capacity for worry. So it could be posited that communicating particularly fearful messages about certain climatic phenomena (e.g., dramatically rising sea levels because of ice sheet melt) might desensitize individuals to be concerned about other potentially more salient concerns (e.g., the consideration of local impacts such as city heat waves), impacts that they could act on constructively.

#### Framing warming in terms of extinction is net worse for mobilizing action

Feinberg and Willer 11 (Matthew, Psychology Department – UC Berkley, and Rob, Sociology Department – UC Berkley, “Apocalypse Soon? Dire Messages Reduce Belief in Global Warming by Contradicting Just-World Beliefs,” 1-12, Journal of Psychological Science)

Although scientific evidence attests to the existence and severity of global warming, high percentages of people in the United States and elsewhere increasingly see global warming as nonexistent, exaggerated, or unrelated to human activity (BBC Climate Change Poll, 2010; Gallup Poll, 2009, 2010; Pew Research Center for the People and the Press, 2009). Because scientists agree that large-scale action will be necessary to counteract the effects of global warming, environmental advocates often engage in public appeals designed to increase rates of proenvironmental behaviors and promote support for initiatives aimed at counteracting climate change. These appeals often emphasize the severity of potential consequences, relying on messages that highlight the dire risks associated with unchecked global warming (Kerr, 2007). But what if these appeals are in fact counterproductive? We contend that one cause of skepticism concerning global warming may be that such dire messages threaten individuals’ need to believe that the world is just, orderly, and stable, a motive that is widely held and deeply ingrained in many people (Lerner, 1980; Lerner & Miller, 1978). Research shows that many individuals have a strong need to perceive the world as just, believing that rewards will be bestowed on individuals who judiciously strive for them and punishments will be meted out to those who deserve them (Dalbert, 2001; Furnham, 2003). Research on just-world theory has demonstrated that when individuals’ need to believe in a just world is threatened, they commonly employ defensive responses, such as dismissal or rationalization of the information that threatened their justworld beliefs (for reviews, see Furnham, 2003; Hafer & Bégue, 2005). Information regarding the potentially severe and arbitrary effects of global warming should constitute a significant threat to belief in a just world, and discrediting or denying global warming’s existence could serve as a means of resolving the resulting threat. Many dire messages aimed at stopping global warming make salient the impending chaos and unpredictable catastrophe that global warming will bring with it. Moreover, these messages often emphasize the harm that will be done to children and future generations who have done nothing themselves to cause global warming. Such messages contradict the belief that the world is predictable and fair by suggesting that good people will suffer and that the innocent will be the primary victims. Because these messages contradict just-world beliefs, individuals who most strongly hold such beliefs should be the most threatened. When such people are exposed to dire messages concerning global warming, they are thus likely to discount the evidence. By increasing skepticism about global warming, these dire messages should, in turn, also reduce people’s willingness to engage in behaviors aimed at combating global warming. We conducted two experiments testing these claims. In the first, we measured participants’ tendencies to hold just-world beliefs, varied the type of global-warming message participants were exposed to, and then measured their levels of skepticism regarding global warming. In the second study, we investigated the role of just-world beliefs more directly, manipulating the salience of these beliefs before exposing participants to a dire global-warming message. We then measured both levels of skepticism and participants’ willingness to curb their daily carbon emissions.

#### Their apocalyptic framing of warming undermines the political will to act, turning the case

Foust et al. 8 [Christina R. Foust, Assistant Professor in the Department of Human Communication Studies at the University of Denver, et al., with William O. Murphy, Doctoral Student and Graduate Teaching Instructor in the Department of Human Communication Studies at the University of Denver, and Chelsea Stow, Doctoral Student and Graduate Teaching Instructor in the Department of Human Communication Studies at the University of Denver, 2008, “Global Warming and Apocalyptic Rhetoric: A Critical Frame Analysis of US Popular and Elite Press Coverage from 1997-2007,” Paper Submitted to the Environmental Communication Division of the National Communication Association Convention in San Diego, November 20th, Available Online at http://www.allacademic.com/meta/p260125\_index.html, Accessed 03-18-2009, p. 22-23]

Elements of an apocalyptic frame could be said to exist in most of the articles we read, though all elements were not present in each article. Nonetheless, **apocalyptic framing** should give us pause, for it **threatens to hinder progress in forming a political will to change the carbon-based energy economy** (and thus mitigate the consequences of global warming). **To announce the coming of the apocalypse creates despair as people feel they cannot stop such an event, but can only hope that they are among the chosen few to be saved** (if they believe in the immanence of the end). **Apocalyptic framing also creates denial, as when people fail to exit the movie theater because they have heard fire yelled once too often. There may also be a sense of denial in terms of the effectiveness of solutions: Why make changes to our lifestyle, if the world is going to end** [end page 22] **quickly and our actions don’t make a difference anyway? If the end is, indeed, the total destruction of earth, won’t our efforts to make change now be in vain?** As Brummett suggests of pre-millennial apocalyptic rhetoric (which assumes that the world will be destroyed after a judgment day), **the cosmically mandated telos of catastrophe overshadows any efforts to change the trajectory of the narrative. The only place for human agency within such rhetoric is the capacity to agree with prophesies, against the polarized opposition of non-believers. By agreeing with the prophesies, “believers” feel a sense of control over the situation because they are “right,” not necessarily because they are taking collective and personal steps to resolve the issue**.

1. [↑](#endnote-ref-1)
2. [↑](#endnote-ref-2)
3. [↑](#endnote-ref-3)