## Off

#### Restrictions on production must mandate a decrease in the quantity produced

Anell 89 Lars is the Chairman of the WTO panel adopted at the Forty-Fifth Session of Contracting Parties on December 5, 1989. Other panel members: Mr. Hugh Bartlett and Mrs. Carmen Luz Guarda. “Canada – Import Restrictions on Ice Cream and Yoghurt,” http://www.wto.org/english/tratop\_e/dispu\_e/88icecrm.pdf

The United States argued that Canada had failed to demonstrate that it effectively restricted domestic production of milk. The differentiation between "fluid" and "industrial" milk was an artificial one for administrative purposes; with regard to GATT obligations, the product at issue was raw milk from the cow, regardless of what further use was made of it. The use of the word "permitted" in Article XI:2(c)(i) required that there be a limitation on the total quantity of milk that domestic producers were authorized or allowed to produce or sell. The provincial controls on fluid milk did not restrict the quantities permitted to be produced; rather dairy farmers could produce and market as much milk as could be sold as beverage milk or table cream. There were no penalties for delivering more than a farmer's fluid milk quota, it was only if deliveries exceeded actual fluid milk usage or sales that it counted against his industrial milk quota. At least one province did not participate in this voluntary system, and another province had considered leaving it. Furthermore, Canada did not even prohibit the production or sale of milk that exceeded the Market Share Quota. The method used to calculate direct support payments on within-quota deliveries assured that most dairy farmers would completely recover all of their fixed and variable costs on their within-quota deliveries. The farmer was permitted to produce and market milk in excess of the quota, and perhaps had an economic incentive to do so. 27. The United States noted that in the past six years total industrial milk production had consistently exceeded the established Market Sharing Quota, and concluded that the Canadian system was a regulation of production but not a restriction of production**.** Proposals to amend Article XI:2(c)(i) to replace the word "restrict" with "regulate" had been defeated; what was required was the reduction of production. The results of the econometric analyses cited by Canada provided no indication of what would happen to milk production in the absence not only of the production quotas, but also of the accompanying high price guarantees which operated as incentives to produce. According to the official publication of the Canadian Dairy Commission, a key element of Canada's national dairy policy was to promote self-sufficiency in milk production. The effectiveness of the government supply controls had to be compared to what the situation would be in the absence of all government measures.

#### Vote negative:

#### Including regulations is a limits disaster---undermines preparedness for all debates

Doub 76 William is a principal in the law firm of Doub and Muntzing. Previously he was a partner in LeBoeuf, Lamb, Leiby, and MacRae. He was a member of the U.S. Atomic Energy Commission (1971-1974). He served as a member of the Executive Advisory Committee to the Federal Power Commission (1968-1971) and was appointed by the President to the President’s Air Quality Advisory Board. He is a past chairman of the U.S. National Committee of the World Energy Conference. “Energy Regulation: A Quagmire for Energy Policy,” http://www.annualreviews.org/doi/abs/10.1146/annurev.eg.01.110176.003435

FERS began with the recognition that federal energy policy must result from concerted efforts in all areas dealing with energy, not the least of which was the manner in which energy is regulated by the federal government. Energy self sufficiency is improbable, if not impossible, without sensible regulatory processes, and effective regulation is necessary for public confidence. Thus, the President directed that "a comprehensive study be undertaken, in full consultation with Congress, to determine the best way to organize all energy-related regulatory activities of the government." An interagency task force was formed to study this question. With 19 different federal departments and agencies contributing, the task force spent seven months deciphering the present organizational makeup of the federal energy regulatory system, studying the need for organizational improvement, and evaluating alternatives. **More than 40 agencies were found to be involved** with making regulatory decisions on energy. Although only a few deal exclusively with energy, most of the 40 could **significantly affect** the **availability and/or cost of energy**. For example, in the field of gas transmission, there are five federal agencies that must act on siting and land-use issues, seven on emission and effluent issues, five on public safety issues, and one on worker health and safety issues-all before an onshore gas pipeline can be built. The complexity of energy regulation is also illustrated by the case of Standard Oil Company (Indiana), which reportedly must file about 1000 reports a year with 35 different federal agencies. Unfortunately, this example is the rule rather than the exception.

#### And precision---only direct prohibition is a restriction---key to predictability

Sinha 6 S.B. Sinha is a former judge of the Supreme Court of India. “Union Of India & Ors vs M/S. Asian Food Industries,” Nov 7, http://webcache.googleusercontent.com/search?q=cache:http://www.indiankanoon.org/doc/437310/

We may, however, notice that this Court in State of U.P. and Others v. M/s. Hindustan Aluminium Corpn. and others [AIR 1979 SC 1459] stated the law thus: "It appears that a distinction between regulation and restriction or prohibition has always been drawn, ever since Municipal Corporation of the City of Toronto v. Virgo. Regulation promotes the freedom or the facility which is required to be regulated in the interest of all concerned, whereas prohibition obstructs or shuts off, or denies it to those to whom it is applied. The Oxford English Dictionary does not define regulate to include prohibition so that if it had been the intention to prohibit the supply, distribution, consumption or use of energy, the legislature would not have contented itself with the use of the word regulating without using the word prohibiting or some such word, to bring out that effect."

## Off

#### Restrictions must be currently enforced to be a restriction

Berger 1 Justice Opinion, INDUSTRIAL RENTALS, INC., ISAAC BUDOVITCH and FLORENCE BUDOVITCH, Appellants Below, Appellants, v. NEW CASTLE COUNTY BOARD OF ADJUSTMENT and NEW CASTLE COUNTY DEPARTMENT OF LAND USE, Appellees Below, Appellees. No. 233, 2000SUPREME COURT OF DELAWARE776 A.2d 528; 2001 Del. LEXIS 300April 10, 2001, Submitted July 17, 2001, Decided lexis

We disagree. Statutes must be read as a whole and all the words must be given effect. 3 The word "restriction" means "a limitation (esp. in a deed) placed on the use or enjoyment of property." 4 If a deed restriction has been satisfied, and no longer limits the use or enjoyment of the property, then it no longer is a deed restriction -- even though the paper on which it was written remains. [\*\*6] Thus, the phrase "projects containing deed restrictions requiring phasing…," in Section 11.130(A)(7) means presently existing deed restrictions. As of June 1988, the Acierno/Marta Declaration contained no remaining deed restrictions requiring phasing to coincide with improvements.

#### The aff violates---EPA regs won’t be enforced till 2015

Fitzsimmons and Tennis 12

Mark Fitzsimmons, is a partner in the toxic tort and environmental litigation section, and Rachel Tennis, is an associate in the litigation and environmental regulatory sections, of Steptoe & Johnson LLP in the firm’s Washington, D.C., office, Power Magazine, April 18, 2012, "Fracking Industry Braces for a Wave of Regulation", http://www.powermag.com/gas/Fracking-Industry-Braces-for-a-Wave-of-Regulation\_4542\_p4.html

Water quality is not the only issue on the EPA's radar. On April 18, the EPA issued new regulations using its authority under the Clean Air Act. The rule expands New Source Performance Standards to apply to gas wellheads and other equipment used in hydraulic fracturing. It also amends the National Emissions Standards for Hazardous Air Pollutants as they apply to oil and gas production, storage, and transportation. Under the rule, all fractured wells will eventually be required to use an emissions-reduction technology called “green completions,” which allows for the capture and sale of natural gas emissions. However, the agency is delaying implementation until 2015 to give industry time to acquire the technology. In the meantime, producers can choose between green completions and flaring emissions.

#### Vote negative:

1. Neg ground---they destroy uniqueness for all DA’s because the aff doesn’t change anything from the status quo---they keep production at the level it’s at now
2. Limits---justifies removing any possible future restrictions---overstretches our research burden

## Off

#### Comprehensive immigration reform including path to citizenship will pass now---PC is key to avoid piecemeal legislation

Grant 12/28 David is a staff writer for the Christian Science Monitor. “Immigration reform: Is 'amnesty' a possibility now?” 2012, <http://www.csmonitor.com/USA/Politics/2012/1228/Immigration-reform-Is-amnesty-a-possibility-now>

The momentum of President Obama's resounding victory in November's election – with a big push from Latinos and other minority groups – has catapulted immigration policy to the top of Washington's 2013 agenda, making reform **not only possible but also** likely. ¶ The shift in the political conversation has been so dramatic that even a pathway to citizenship for some of the estimated 12 million undocumented immigrants in the United States – long rejected out of hand by most Republicans and some Democrats – could be part of the deal. ¶ The task is momentous. It involves weighing the wishes of industries from agriculture to high-tech, as well as the sensitivities of opening the door to immigrant workers at a time when unemployment remains high. ¶ The past only reinforces the potential difficulties ahead. In 1986, Republicans felt betrayed when Democrats stripped the enforcement provisions from a bill that offered citizenship to some 3 million illegal immigrants. By 2005, the issue had become so politically toxic to conservatives that they blocked President George W. Bush's push for a new round of immigration reform. ¶ Yet with Election 2012 highlighting the electoral consequences of America's changing demographics, the next year appears to be **ripe for compromise**. **How reforms might take shape could be a** major **point of contention** between the parties, but lawmakers on both sides suddenly see an opportunity for what could be their most expansive achievement of 2013. ¶ "It has to be in 2013," says Rep. Raúl Labrador (R) of Idaho, an immigration lawyer who thundered into Congress in the tea party wave of 2010. "If we wait until 2014, it's going to be election time. And you know how efficient we are here during election time." ¶ Recent weeks have seen a flurry of activity on Capitol Hill. In the Senate, a "Gang of Eight" – led by longtime immigration reformers Sen. Chuck Schumer (D) of New York and Republican Sens. John McCain of Arizona and Lindsey Graham of South Carolina – has added freshman Sens. Michael Bennett (D) of Colorado and Mike Lee (R) of Utah, while potential 2016 presidential aspirant Sen. Marco Rubio (R) of Florida leads his own initiative. ¶ Members of the House have seen movement, too. "One thing clearly has changed," says Rep. Luis Gutierrez (D) of Illinois, the lawmaker who co-wrote a 2005 comprehensive immigration reform measure with now Sen.-elect Jeff Flake (R) of Arizona. "Nobody is talking about self-deportation. Nobody is talking about how [Arizona's controversial immigration law] should be the standard applied across the land. Nobody is talking about vetoing the DREAM Act," which offers a path to citizenship for some young undocumented immigrants. ¶ "We are having wonderful conversations," Representative Gutierrez says. ¶ That more moderate tone from the GOP is what the November election has wrought. ¶ In a postelection analysis and poll of Latino voters, Republican polling group Resurgent Republic offered a searing critique of the GOP's political strategy of pumping up turnout among white voters, often by championing hard-line policies on immigration issues that turn off key Asian and Hispanic voters. ¶ "Republicans have run out of persuadable white voters," wrote conservative pollster Whit Ayres and Jennifer Korn, the head of the right-leaning Hispanic Leadership Network, in a recent research memo. "Trying to win a national election by gaining a larger and larger share of a smaller and smaller portion of the electorate is a losing political proposition." ¶ Between 2008 and 2012, white voters shrank two percentage points to 72 percent of the electorate, while Asian and Latino voters expanded a percentage point each to 3 percent and 10 percent, respectively. ¶ While GOP presidential candidate Mitt Romney won 60 percent of white voters, 71 percent of Latinos and 73 percent of Asian-Americans backed Mr. Obama – up four percentage points and 11 percentage points from 2008, respectively. ¶ And those numbers of minority voters are only going to grow. For the next two decades, 50,000 Latino voters will turn 18 every month, adding an additional New Hampshire of voters to the US each year into the 2030s. ¶ While Resurgent Republic's poll showed that Hispanics aren't singularly focused on immigration issues, Republican politicians who favor immigration reform see the issue as primary: The GOP's message of conservative family values, entrepreneurship, and individual freedom won't reach Latino voters unless the immigration question is solved. ¶ "This is like a wall that stops the other issues from getting through," says Rep. Mario Diaz-Balart (R) of Florida, a longtime immigration reform advocate. "And while that wall is there, the Republican Party has a serious problem." ¶ House Speaker John Boehner (R) of Ohio signaled a shift when he told ABC News a day after the election that "a comprehensive approach [to immigration] is long overdue, and I'm confident that the president, myself, others, can find the common ground to take care of this issue once and for all." ¶ That's a departure from previous immigration-reform attempts, in which the GOP brass wasn't on board. ¶ Perhaps just as important, though, is that several leading lawmakers with near-pristine conservative credentials are also involved. ¶ Two tea party superstars – Senators Rubio and Lee, both of whom knocked out establishment Republican figures to win their seats – are going to be key players in any reform. ¶ In the House, the involvement of House Judiciary chairman Rep. Bob Goodlatte (R) of Virginia and Representative Labrador of Idaho can provide cover to conservative lawmakers from the party's right flank. ¶ "The fact that you're going to have strong conservative voices helping lead this debate is going to be critical to solving it instead of using it as a political wedge," says Rep. Steve Scalise (R) of Louisiana, incoming chairman of the Republican Study Committee, the largest and most conservative caucus in the House. ¶ It's notable that both Labrador and Rubio believe in, one way or another, a path to citizenship for some illegal immigrants, even while they leave open just who can get on that path. ¶ Some conservatives say any form of citizenship given to illegal immigrants – no matter the conditions attached to it – constitutes an "amnesty," which is a guarantee only of more illegal immigration unless the nation's borders are firmly secured and stringent workplace verification systems are put in place. ¶ But a recent poll by George Washington University and Politico found 62 percent of Americans support a proposal that would allow illegal immigrants to earn citizenship over a period of several years, with 40 percent strongly supporting such a measure. Only 35 percent opposed it. ¶ Some Democrats on the Hill are extending a friendly hand to the GOP. When the Congressional Hispanic Caucus – which is entirely Democratic – offered its vision for immigration reform, for example, it served up principles rather than a specific bill, a move received by Republicans as attempting to maximize common ground. ¶ But Democrats also know they are in a position of power. ¶ "You've got a realization on the part of GOP leadership not just in the House but in the Republican Party writ large that if they don't do something about it, they aren't going to win the presidency again," says Rep. Zoe Lofgren (D) of California, a leading immigration reform advocate.¶ For that reason, she says, Republicans "aren't going to get the credit" for pushing immigration through, but they "can still get the blame if they block" it.¶ Latino advocacy groups and labor unions, emboldened by the community's growing electoral power, vow to take the fight to those who stand in immigration reform's way in 2013. ¶ "This comprehensive immigration reform for the Latino community is personal. The fact that we've come out in record numbers in 2012 was personal. And that's a calculation that members of Congress don't understand," says Maria Teresa Kumar, executive director of Voto Latino. "If they are not with us, 2014 may not look pretty with them." ¶ **The president**, too, **has** political pressure **to pursue immigration reform**. He has already come up short once on immigration-reform promises: In 2009, he said that a comprehensive immigration solution would be a top priority. ¶ Yet his first term also saw record numbers of undocumented immigrants deported. Only this summer, after he directed immigration officials to defer deportation of some young illegal immigrants, was he seen as making good on promises to the Latino community. ¶ "The president says that his biggest failure in the first term was not moving forward with immigration reform," says Hector Sanchez, executive director of the Labor Council for Latin American Advancement. "The Latino community decided to give him a second chance." ¶ **Obama has publicly vowed to make immigration reform an** immediate priority in his second term, which could begin just on the other side of the "fiscal cliff" negotiations. ¶ "**He's the one who has the mandate on this subject;** **he's the guy who got the voters who care most intensely about this**," says Bruce Morrison, a former Democratic congressman from Connecticut who was involved in immigration reform efforts in the 1980s and early '90s. ¶ But even while the parties broadly agree on the need to pursue immigration reform, how to do it remains up in the air. ¶ Both Rubio and Labrador – like many Republicans – favor breaking up the immigration issue into smaller pieces. ¶ Rubio argues that before Congress deals with the millions of undocumented immigrants, it must prove to the American people that it can secure US borders and establish an effective workplace-verification system. Labrador says he prefers a handful of bills moving simultaneously, with different coalitions able to support each measure. ¶ Obama and Democrats in Congress favor a single comprehensive immigration bill, believing that taking one difficult but all-encompassing vote is more secure for lawmakers than having to vote for a half-dozen or more specific proposals. ¶ "It's not a policy decision. It's a strategy decision, but it's an important one," says Representative Lofgren. ¶ While Democrats and Republicans have been negotiating immigration reform for years, lawmakers also say it is vital that small groups of negotiators not hand down a fully formed bill to either chamber with, in effect, a "take it or leave it" sticker on top. ¶ "It's important that we listen to our colleagues; it's important that we listen to the American people," says Representative Diaz-Balart. "I think it would be a grave mistake if we try to ram something down and pretend like we have all the answers." ¶ And while Republicans are on board now, there's a reason they've been hesitant to tackle immigration reform in the past. For one, a vocal part of their base views any form of citizenship for illegal immigrants as a repudiation of the rule of law. Whether these voters – or their representatives – can be persuaded to accept amnesty is an open question.

#### Plan’s massively unpopular

Dicker 9/4 Daniel is a Senior Columnist at The Street. “Why Isn't Natural Gas an Election Issue?” 2012, http://www.thestreet.com/story/11684440/1/why-isnt-natural-gas-an-election-issue.html?cm\_ven=GOOGLEN

Why has this opportunity towards increased reliance on natural gas been so obvious and yet so difficult for politicians of both parties to embrace?¶ It hasn't been solely because 2012 is an election year. Boone Pickens was on CNBC last week marking the fourth anniversary of his "Pickens Plan," the failed congressional effort to invest in truck natural gas engines and fuelling infrastructure to run them on.¶ In fact, if anyone wanted to see political partisanship in action slowing the real economic progress this nation could make, they'd find no better example than the history of the Pickens plan and other natural gas initiatives in Washington.¶ **Both radical wings of each party have made advocating natural gas use** impossible. Democratic environmentalists are concerned about hydraulic fracturing and its possible impact to aquifers. Republicans are reluctant to approve further federal spending of any kind as well as risk a charge of "picking winners" in natural gas -- a charge they have made successfully against Democrats.¶ Of course, both radical wings of both parties are wrong: Overwhelming evidence from every independent research source has concluded that hydraulic fracturing of shale for natural gas has proven to be safe to our water supplies and is getting safer all the time.¶ Republican reticence to support natural gas expansion belies a long history of government incentives for developing new energy sources, from as far back as our development of coal to our much discussed modern tax incentives for crude oil exploration and production.¶ It is a fact that our government has been picking winners in energy for as long as there's been government.¶ The advantages of natural gas conversion and greater use are obvious but bear repeating. Natural gas is a domestic source of energy and promises energy independence here in the U.S. Production, transport and building of infrastructure for natural gas would mean millions of new jobs. Natural gas prices are literally half that of competing oil and gasoline. Finally, carbon emissions for natural gas are about a third that for coal and other fossil fuels.¶ What's not to like?¶ But it seems both radical wings of each party continue to wield enormous influence. Neither candidate has made natural gas a cornerstone of a new and necessary energy policy.

#### CIT’s key to Latin American relations

Shifter 12 Michael is the President of Inter-American Dialogue. “Remaking the Relationship: The United States and Latin America,” April, IAD Policy Report, http://www.thedialogue.org/PublicationFiles/IAD2012PolicyReportFINAL.pdf

Some enduring problems stand squarely in the way of partnership and effective cooperation. The **inability of Washington to reform its broken immigration system is a constant source of friction between the U**nited **S**tates **and** nearly **every other country in the Americas**. Yet US officials rarely refer to immigration as a foreign policy issue. Domestic policy debates on this issue disregard the United States’ hemispheric agenda as well as the interests of other nations.

#### Relations are key to solve a laundry list of existential threats---the brink is now

Shifter 12 Michael is the President of Inter-American Dialogue. “Remaking the Relationship: The United States and Latin America,” April, IAD Policy Report, http://www.thedialogue.org/PublicationFiles/IAD2012PolicyReportFINAL.pdf

There are compelling reasons for the United States and Latin America to pursue more robust ties. Every country in the Americas would benefit from strengthened and expanded economic relations, with improved access to each other’s markets, investment capital, and energy resources. Even with its current economic problems, the United States’ $16-trillion economy is a **vital** market and source of capital (including remittances) and technology **for Latin America**, and it could contribute more to the region’s economic performance. For its part, **Latin America’s rising economies will** inevitably **become** more and more **crucial to the U**nited **S**tates’ economic future. The United States and many nations of Latin America and the Caribbean would also gain a great deal by more cooperation on such **global matters as climate change**, nuclear **non-proliferation,** and **democracy and human rights.** With a rapidly expanding US Hispanic population of more than 50 million, the cultural and demographic integration of the United States and Latin America is proceeding at an accelerating pace, setting a firmer basis for hemispheric partnership Despite the multiple opportunities and potential benefits, relations between the United States and Latin America remain disappointing . If new opportunities are not seized, relations will likely continue to drift apart . The longer the current situation persists, the harder it will be to reverse course and rebuild vigorous cooperation . Hemispheric affairs require urgent attention—both from the United States and from Latin America and the Caribbean.

## Off

#### The United States Federal Government should establish that the penalty for violating the restrictions on natural gas production in the Environmental Protection Agency’s New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews may include entry into a Supplemental Environmental Project.

#### Implementation of the Supplemental Environmental Projects should follow the 1991 *Policy on the Use of Supplemental Environmental Projects in EPA Settlements*, and any conflicting federal laws and regulations should be modified to provide a narrow exemption for the above penalty.

#### Penalties determine regulatory compliance—restrictions are irrelevant if penalties are marginal

CPR 8 – The Center for Progressive Reform, a nonprofit research and educational organization with a network of Member Scholars working to protect health, safety, and the environment through analysis and commentary, 2008, “Environmental Enforcement,” <http://progressiveregulation.org/perspectives/environEnforce.html>

Effective enforcement is key to ensuring that the ambitious goals of our environmental statutes are realized. Enforcement refers to the set of actions that the government can take to promote compliance with environmental law. . Currently, rates of noncompliance with environmental laws remain disturbingly high; experts believe that as many as twenty to forty percent of firms regulated by federal environmental statutes regularly violate the law. Tens of millions of citizens live in areas out of compliance with the health based standards of the Clean Air Act, and close to half of the water bodies in the country fail to meet water quality standards set by the Clean Water Act. In communities burdened by multiple sources of pollution, noncompliance has particularly serious health consequences for affected residents.

As in virtually every other area of government regulation, environmental enforcement traditionally has been based on the theory of deterrence. This theory assumes that persons and businesses act rationally to maximize profits, and will comply with the law where the costs of noncompliance outweigh the benefits of noncompliance. The job of enforcement agencies is to make both penalties and the probability of detection high enough that it becomes irrational– unprofitable-- for regulated firms to violate the law.

EPA’s enforcement policies traditionally have reflected these principles. EPA has emphasized the importance of regular inspections and monitoring activity to detect noncompliance, and has responded to violations with swift and appropriate sanctions. EPA’s policies also mandate that the agency recover the economic benefit firms realize through noncompliance, since **if a firm is able to profit from illegal activity, it has little incentive to comply in the first place.**

State environmental agencies actually carry out the majority of enforcement activity in this country because most states have received authority from EPA to administer federal environmental laws under EPA oversight (see CPR Perspective on Devolution) States also administer and enforce their own state laws. As in other areas of environmental regulation, the quality of state enforcement programs vary considerably. Some states carefully follow EPA mandates and vigorously enforce environmental requirements. In other states, enforcement is relatively lax, and agencies rarely respond to violations with penalties.

Citizen enforcement also is a feature of most federal environmental statutes. The statutes allow citizens to sue companies for violations when the government fails to do so and various, often strict, procedural conditions are met. Traditionally, Congress has viewed citizen enforcement as an important supplement to agency enforcement and an important prod to agency regulators.

What People are Fighting About

In recent years there has been a sharp debate over the future direction of environmental enforcement. Many states and regulated entities advocate a more business-friendly, conciliatory enforcement strategy, one that does not emphasize enforcement actions and penalties as the keys to securing compliance. In their view, businesses are likely to comply without resort to sanctions because of adherence to social and political norms, market forces, and other factors.

Thus, many states have reduced funding for inspections. enforcement cases and similar activities, and shifted resources toward compliance assistance programs. Some have created “customer service centers” for regulated entities. Many states do not follow EPA guidance for responding to violations with “timely and appropriate” enforcement actions. Many impose only limited penalties on violators, penalties that typically are far lower than those assessed by EPA in similar circumstances. Many states fail to recover economic benefit when assessing penalties--a core element of deterrence theory. In the past decade, almost one-half of the states have enacted environmental audit privilege or immunity laws that preclude penalties for violations voluntarily disclosed and corrected by regulated entities as a result of environmental audits. These laws also keep materials contained in environmental audits secret and exempt from public disclosure.

At the same time, EPA has to some degree deemphasized traditional enforcement and used its limited resources to provide more compliance assistance to small businesses and other regulated sectors. It has also searched for positive incentives for companies that carry out self-policing efforts. Until very recently, however, EPA has continued to demand that the states impose sanctions, conduct inspections, and bring enforcement actions as the main tools for deterring firms from violating the law. EPA also resisted the most far-reaching efforts of states to weaken enforcement of environmental laws. Funding shortfalls and emerging policy changes in such areas as whether new sources must obtain new permits have taken their toll and EPA’s commitment to deterrence-based enforcement appears to be weakening.

In reaction to these changes, environmental groups, contend that government enforcement is too lax, that too often fines for violating environmental requirements have become no more than a routine cost of doing business for regulated entities, and that the government lacks the resources to pursue most violations. They would like to more vigorously enforce environmental violations. During the past decade or so, however, the Supreme Court has erected a series of hurdles to citizen enforcement of environmental laws. The Court has imposed restrictions on who has standing to bring suit, what type of illegal conduct can be challenged, when a decision is “ripe” for suit, when government agencies can be sued, and when attorneys fees can be awarded to successful plaintiffs’ attorneys. These court-imposed obstacles have significantly undermined the role envisioned by Congress for citizen enforcers.

#### The SEP penalty causes industry noncompliance --- triggers the same industry response as the aff, while preserving the restriction

David Dana, Professor of Law, Boston University School of Law, 1998, ARTICLE: THE UNCERTAIN MERITS OF ENVIRONMENTAL ENFORCEMENT REFORM: THE CASE OF SUPPLEMENTAL ENVIRONMENTAL PROJECTS, 1998 Wis. L. Rev. 1181, Lexis

The previous analysis illustrates that the inclusion of SEPs in an enforcement regime may lead to negotiated settlements that cost violators substantially less than the standard monetary penalty. The particular implications of this insight for a deterrence analysis depend on whether the standard monetary penalty represents "an optimal penalty" or instead a sub- or super-optimal penalty. As a preliminary matter, a brief discussion of the concept of optimal penalty (PEN<opt>) thus may be in order. Economists typically regard the goal of an enforcement regime as the achievement of "optimal deterrence." The phrase optimal deterrence, of course, implies that absolute or complete deterrence of regulatory violations should not be the goal of an enforcement regime. Rather, the regime should act to prevent violations which will generate social costs in excess of social benefits. Conversely, of course, the regime should not discourage violations that produce net social benefits. In settings involving perfect detection and prosecution of regulatory violations by government agencies, a penalty equalling the social harm of a violation will produce optimal deterrence. Where detection and prosecution are imperfect, a penalty equalling the harm of a violation will result in underdeterrence because potential violators will discount the nominal penalty to take account of the probability that they will evade detection and/or prosecution. To achieve optimal deterrence, therefore, [\*1206] nominal penalties must equal the social harm divided by the probability of detection and prosecution. The standard monetary penalty for any particular regulatory violation - the penalty that would be imposed in the absence of any SEP settlement options - logically can have only one of three relations to the optimal penalty: The standard monetary penalty can be less than the optimal penalty, equal to the optimal penalty, or greater than the optimal penalty. In all three of these cases, the introduction of SEP settlement options into an enforcement regime is troublesome from an optimal deterrence perspective. Each case will be taken in turn. 1. pen[in'mon.std'] < pen<opt> Where the standard monetary penalty is less than the optimal penalty, regulators' exclusive reliance on monetary penalties will produce underdeterrence. n77 That is, some violations will occur even though the social costs of the violations exceed the social benefits. The introduction of SEPs into such regimes will only make matters worse: SEPs will lower regulated entities' expected penalties for regulatory violations n78 and [\*1207] hence produce more underdeterrence and more socially costly violations. For example, imagine that the harm from a particular regulatory violation has a dollar equivalent value of $ 400, and the perceived probability of detection is 0.1. The optimal penalty thus would be $ 400/0.1 or $ 4000. Assume, however, that the standard monetary penalty is only $ 3000 and regulated entities' expected penalty for violating the regulation is thus only $ 300. Profit-maximizing regulated entities will take the risk of violating the regulation if they expect to gain more than $ 300 by doing so. Now assume that a regulatory agency adds SEP settlements to the enforcement regime. The regulated entity in question now believes that there is a fifty percent probability that it could successfully negotiate a SEP in the event government regulators detect its regulatory noncompliance. n79 Assume also that the regulated entity estimates that the SEP discount or savings off the standard monetary penalty would be thirty-three percent, so that the expected cost of a SEP would be $ 2000. The total expected penalty thus would be 0.1[(0.5)($ 3000) + (0.5)(0.66)($ 3000)], or approximately $ 250. This reduction in the expected penalty from $ 300 to $ 250 could translate into real differences in regulated entities' behavior. Under the pre-SEP regime, regulated entities at least would avoid socially undesirable violations offering them less than $ 300 in savings. The addition of SEPs to the regime eliminates deterrence for violations offering between $ 250 and $ 300 in savings. 2. pen[in'mon.std'] = pen<opt> Where the standard monetary penalty equals the optimal penalty, the enforcement regime will achieve optimal deterrence. Regulated entities will be deterred from committing all of the potential violations that result in greater social loss than social gain, but they will not be deterred from [\*1208] committing any potential violations that are, on net, socially beneficial. The introduction of SEPs into the penalty regime will lower expected penalties and thus produce a shift from this state of optimal deterrence to one of underdeterrence.

#### Adopting the ’91 guidelines is key

Kenneth T. Kristl 7, Associate Professor of Law and Director of the Environmental and Natural Resources Law Clinic, Widener University School of Law, “MAKING A GOOD IDEA EVEN BETTER: RETHINKING THE LIMITS ON SUPPLEMENTAL ENVIRONMENTAL PROJECTS,” Vermont Law Review, Vol. 31, 2007, <http://lawreview.vermontlaw.edu/files/2012/02/kristl.pdf>

If in fact the mitigation percentage is ultimately meaningless, why have it in the SEP Policy at all? Perhaps because it allows EPA to create the illusion that it is being “tough” on violators, consistent with the Policy’s strong assertions about the importance of “substantial monetary penalties” and deterring non-compliance. 254 One must question, however, whether the illusion is worth the price if that price is to discourage defendants from seeking to propose SEPs because of the perceived “discount” their SEP dollars will receive. The fact that almost 90% of defendants have chosen not to do SEPs strongly suggests that this discouragement of SEP participation is not merely theoretical. If EPA is really serious about encouraging more SEPs, it needs to explore why nearly 90% of defendants are turning away from what EPA says it wants to encourage. The better solution is to get rid of the 80% cap on the mitigation percentage and **re-adopt the 100% ceiling in the 1991 SEP Policy**. Such a cap would allow EPA to treat mediocre projects less favorably but would **incentivize and reward defendants who develop proposals that deliver solid environmental benefits**. More importantly, it would remove the “second class” stigma that SEPs inevitably get when SEP dollars are “discounted.” Such a change is much more likely to **increase SEP participation rates, and** thereby **allow more environmental benefits from SEPs.**

CONCLUSION

Having defendants agree to undertake Supplemental Environmental Projects holds great promise for providing environmental benefits beyond those arising from mere compliance with the law or governmental programs. If EPA is seriously committed to its stated goal of increasing the use of SEPs above the historically low participation levels, it needs to examine critically the restraints its own policies impose on such projects. The insistence on nexus and a mitigation percentage ceiling found in EPA’s approach toward SEPs both lack legal or economic justification and work to shackle SEPs in ways that **forfeit potential benefits**. Careful reexamination of nexus and the mitigation percentage ceiling justify removal of these concepts from EPA’s policies. Such a change is **simple to implement** and would unshackle SEPs, likely increase their use in environmental enforcement cases, and make the good idea of SEPs even better by **increasing the environmental benefits** that enforcement activity can bring.

#### Establishing SEP penalties solves inevitable environmental crisis

Jeff Ganguly, Executive Editor, BOSTON COLLEGE ENVIRONMENTAL AFFAIRS LAW REVIEW, Fall 1998, COMMENT: ENVIRONMENTAL REMEDIATION THROUGH SUPPLEMENTAL ENVIRONMENTAL PROJECTS AND CREATIVE NEGOTIATION: RENEWED COMMUNITY INVOLVEMENT IN FEDERAL ENFORCEMENT, 26 B.C. Envtl. Aff. L. Rev. 189, Lexis

Such a dynamic has been developing through EPA's employment of SEPs as well. While oversight is critical to ensure the SEP program continues to attain breakthrough achievements in creative and effective settlement agreements, the unique ability of SEPs to respond to the individual circumstances of environmental problems must be maintained. Thus, while litigation remains an effective tool to apply pressure and force action in some cases, dispute resolution and creative settlements should become the goal in the new generation of environmental enforcement. The use of SEPs is only one advantage to dispute resolution, as SEP provisions could be written into federal statutes and become an everyday part of adjudicated relief. Dispute resolution also saves time and money. n303 All of these qualities, as evidenced by the MHD settlement, are the most effective means of responding to environmental crises. Apart from outright prevention, dispute negotiation and community remediation through creative settlements and SEPs continue to be one of the most effective means of preserving and protecting human health and the environment.

#### Extinction

Clark and Downes 6

Dana Clark, Center for International Environmental Law, and David Downes, US Interior Dept. Policy Analysis Senior Trade Advisor, 2006, What price biodiversity?, http://www.ciel.org/Publications/summary.html

Biodiversity is the diversity of life on earth, on which we depend for our survival. The variability of and within species and ecosystems helps provide some of our basic needs: food, shelter, and medicine, as well as recreational, cultural, spiritual and aesthetic benefits. Diverse ecosystems create the air we breathe, enrich the soil we till and purify the water we drink. Ecosystems also regulate local and global climate. No one can seriously argue that biodiversity is not valuable.

Nor can anyone seriously argue that biodiversity is not at risk. There are over 900 domestic species listed as threatened or endangered under the Endangered Species Act, and 4,000 additional species are candidates for listing. We are losing species as a result of human activities at hundreds of times the natural rate of extinction. The current rate of extinction is the highest since the mass extinction of species that wiped out the dinosaurs millions of years ago.

The Economics of Biodiversity Conservation

The question which engenders serious controversy is whether society can afford the costs associated with saving biodiversity. Opponents of biodiversity conservation argue that the costs of protecting endangered species are too high. They complain that the regulatory burden on private landowners is too heavy, and that conservation measures impede development. They seek to override scientific determinations with economic considerations, and to impose cost/benefit analyses on biodiversity policy making.

An equally important question, however, is whether we can afford not to save biodiversity. The consequences of losing this critical resource could be devastating. As we destroy species and habitat, we endanger food supplies (such as crop varieties that impart resistance to disease, or the loss of spawning grounds for fish and shellfish); we lose the opportunity to develop new medicines or other chemicals; and we impair critical ecosystem functions that protect our water supplies, create the air we breathe, regulate climate and shelter us from storms. We lose creatures of cultural importance - the bald eagle is an example of the cultural significance of biodiversity and also of the need for strong regulations to protect species from extinction. And, we lose the opportunity for mental or spiritual rejuvenation through contact with nature.

## Off

#### US LNG exports cause a global transition from oil indexation to spot pricing

Hulbert 12 (Matthew Hulbert - Lead Analyst at European Energy Review, government consultant, Senior Research Fellow @ Netherlands Institute for International Relations, working on energy and political risk. Senior Energy Analyst at Datamonitor for global utilities. “Why America Can Make or Break A New Global Gas World,” 8/05/2012 http://www.forbes.com/sites/matthewhulbert/2012/08/05/why-america-can-make-or-break-a-new-global-gas-world)

The same **debate is raging in the US**. Despite the phenomenal breakthroughs in American shale developments, the front runner of the revolution now risks becoming a victim of its own success in terms of Henry Hub prices dropping so low, that full cycle economics for US shale gas plays have become negative. Unless prices organically firm, or US producers learn the dark art of supply restraint, current output levels will be difficult to maintain or enhance for American consumers. Companies will fold; fields will be mothballed, with Chesapeake providing the best ‘poster boy’ example of how precarious shale gas economics have become. The quick fix option to get Henry Hub back at a sustainable $4-7/MMbtu level (and by far the most lucrative for some of the mid-cap players involved), is to sign up international LNG contracts. That’s exactly what’s being done, with some of the larger IOCs (Royal Dutch Shell, BP and ExxonMobil) also aggressively pushing for LNG exports to capitalise on huge spreads, not to mention preventing further write-downs on shale assets. It’s not like Chinese champions working on US plays would have any ideological opposition to such a prospect. In total, **FERC has around 125bcm/y of LNG applications currently awaiting approval** – even on a ‘bad day’ 40-50bcm exports should be very feasible by 2020. **That would make the US** the third largest LNG player in the world. **It’s also going to be** the crucial factor over the next five years **to decide where gas markets are heading**. **America will be** decisive **for** future pricing models**,** **whether they shift to gas (rather than oil) fundamentals**. US LNG could be the straw that breaks oil indexation back.

#### Spot pricing causes short term volatility---Russia floods the market to crowd out producers and engages in collusion to drive up future prices

Hulbert 12 (Matthew Hulbert - Lead Analyst at European Energy Review, government consultant, Senior Research Fellow @ Netherlands Institute for International Relations, working on energy and political risk. Senior Energy Analyst at Datamonitor for global utilities. “Why America Can Make or Break A New Global Gas World,” 8/05/2012 http://www.forbes.com/sites/matthewhulbert/2012/08/05/why-america-can-make-or-break-a-new-global-gas-world)

But it’s not all bad news for Russia. The first point is that most consumers (especially continental Europeans) are labouring under the illusion that spot markets mean cheap prices. What they miss, is that **setting gas prices based on gas fundamentals has got nothing to do with being cheap** – it’s purely about achieving a cost reflective price for whatever the markets (and fundamentals) suggest gas should be. Gas on gas competition might well have positive medium term effects on price given marginal costs of production are generally cheaper than oil. But there are never any guarantees. If anything, **prices could initially be far more volatile than those associated with piped gas given the cyclical nature of the beast**, not to mention adapting to new upstream investment regimes unable to fall back on the oil ‘certainties’ of old. But assuming these initial hurdles are jumped and gas markets are politically allowed to bed in, that’s where the real fun and games start. As much as consumers think they’ve taken the political sting out of gas producers tails, **spot markets could actually give producers far more leverage to manipulate prices, either on a collective or bilateral basis**. When you take a quick look at the map, it’s clear to see **supply side dynamics are essentially oligopolistic in Europe, a position that Russia might decide to capitalise on**. The question is whether Russia would have the nerve to go for it, or be able to take the ideological leap of faith needed to explore and exploit a potentially lucrative new world of gas benchmarks?

Much would depend on pricing pressures involved and how far convergence has got, but **the lower prices go, the more compelling prospect supply side collusion would become**. Warning shots along such lines have been repeatedly fired by the GECF (even if often behind closed doors) with Russia, Algeria, Iran and Venezuela all wanting to recalibrate markets back towards producer interests. Obviously someone would have to shoulder initial opportunity costs and absorb likely free riding, enforce quotas and restrict new market entry at the fringe. They would also need to find a swing producer, that many have long thought would be Qatar, but actually, flags up a huge opportunity for Russia here.

Instead of issuing empty threats to flood markets or decimate upstream investments, independent gas benchmarks might just provide Moscow with sufficient incentive to do what it should always have done: get to grips with the fact that US shale has made Russia a price taker in Europe (and Asia), and start developing LNG prospects to reclaim control of global gas fundamentals. Despite sitting on over 30% of global gas supplies, Russian LNG production accounts for less than 5% of global share. Moscow has let itself become a fringe player in a global gas world. A ridiculous statement when you consider Russia is the gas equivalent to Saudi Arabia for oil. Developing Shtokman, Sakhalin and indeed Bazhenov and Achimov fields will undoubtedly put some people’s nose out of joint, but given **Russia’s own unconventional reserves are estimated to be ten times larger than the whole of Europe**, it still has the time (and potential) to break anybody in the field on volume to dictate long term prices. If global gas benchmarks are the way of the future, then we should at least be aware that **Russia has the potential to play a pivotal role as the swing LNG producer** of the world. **The initial 62 million tonnes of LNG Shtokman and Sakhalin should hold, tells us as much.**

Not only could Russia lean far heavier on Qatar, Australia, Algeria, West African and burgeoning Latin American LNG production **to align short term prices**, **it would set the stage for a serious approach towards a** gas cartel **as** the logical conclusion of independent global gas prices. Worst of all, Russia’s swing status would be built on the shoulders of a well-supplied, but largely isolated US market. If the US goes native, Europe fails to develop indigenous supplies, and Asia soaks up excess supplies, then **Russia can have lots of fun applying its own logic of ‘gas on gas’ competition**. That should certainly give Europe something to think about at the wrong end of the Eurasian pipeline. But you never know, if Brussels asks the Chinese politely, the clever chaps in Beijing might have a plan C. Beijing LNG ‘freedom carriers’ making their way to Europe by 2025 might just be a better bet than hoping the US delivers on its global gas potential. Ironic times indeed.

#### Causes Russian resurgence and collapses the global economy

Fang et al 12 (Songying Fang - Ph.D. Assistant Professor of Political Science Rice University. Amy Myers Jaffe - Fellow in Energy Studies JamesA. Baker III Institute for Public Policy Rice University. TedTemzelides, Ph.D., Prof of Economics. “New Alignments? The Geopolitics of Gas and Oil Cartels and the Changing Middle East,” January 2012, <http://www.bakerinstitute.org/publications/EF-pub-GasOilCartels-012312.pdf>)

Ill this study, we investigate three related questions raised by the above observations. First, what is the likelihood that Russia will be successful in creating new coalitions in energy markets in the near future? Russia’s aggressive use of its own energy exports as a tool of statecraft and diplomatic leverage in recent years **has reintroduced fears of an “energy weapon”** that could be wielded in international discourse. It has been argued that tightening energy markets could raise the benefits and possible chances of success for an energy exporting country that, alone or in combination with others, **is trying to wrest political concessions** by threatening to cut off energy supplies. Such an event would present a challenge for the international economy, and it could even lead to military conflict.2

#### Russian resurgence causes global nuclear war

Blank 9 – Dr. Stephen Blank , Research Professor of National Security Affairs at the Strategic Studies Institute of the U.S. Army War College, March 2009, “Russia And Arms Control: Are There Opportunities For The Obama Administration?,” online: http://www.strategicstudiesinstitute.army.mil/pdffiles/pub908.pdf

Proliferators or nuclear states like China and Russia can then deter regional or intercontinental attacks either by denial or by threat of retaliation.168 Given a multipolar world structure with little ideological rivalry among major powers, it is unlikely that they will go to war with each other. Rather, like Russia, they will strive for exclusive hegemony in their own “sphere of influence” and use nuclear instruments towards that end. However, wars may well break out between major powers and weaker “peripheral” states or between peripheral and semiperipheral states given their lack of domestic legitimacy, the absence of the means of crisis prevention, the visible absence of crisis management mechanisms, and their strategic calculation that asymmetric wars might give them the victory or respite they need.169 Simultaneously,

The states of periphery and semiperiphery have far more opportunities for political maneuvering. Since war remains a political option, these states may find it convenient to exercise their military power as a means for achieving political objectives. Thus international crises may increase in number. This has two important implications for the use of WMD. First, they may be used deliberately to offer a decisive victory (or in Russia’s case, to achieve “intra-war escalation control”—author170) to the striker, or for defensive purposes when imbalances in military capabilities are significant; and second, crises increase the possibilities of inadvertent or accidental wars involving WMD.171

Obviously nuclear proliferators or states that are expanding their nuclear arsenals like Russia can exercise a great influence upon world politics if they chose to defy the prevailing consensus and use their weapons not as defensive weapons, as has been commonly thought, but as offensive weapons to threaten other states and deter nuclear powers. Their decision to go either for cooperative security and strengthened international military-political norms of action, or for individual national “egotism” will critically affect world politics. For, as Roberts observes,

But if they drift away from those efforts [to bring about more cooperative security], the consequences could be profound. At the very least, the effective functioning of inherited mechanisms of world order, such as the special responsibility of the “great powers” in the management of the interstate system, especially problems of armed aggression, under the aegis of collective security, could be significantly impaired. Armed with the ability to defeat an intervention, or impose substantial costs in blood or money on an intervening force or the populaces of the nations marshaling that force, the newly empowered tier could bring an end to collective security operations, undermine the credibility of alliance commitments by the great powers, [undermine guarantees of extended deterrence by them to threatened nations and states] extend alliances of their own, and perhaps make wars of aggression on their neighbors or their own people.172

## Off

#### TEXT: The United States Federal Government should fund the development and fund installation of emissions mitigation technology for coal-fired plants in the United States.

#### New EPA regulations require coal to get to the level of natural gas for emissions—only possible with new technologies.

Dayen 12—David Dayen, FDL News, 3/27/12, The End of Coal? New EPA Rules Will Limit GHG Emissions, <http://news.firedoglake.com/2012/03/27/the-end-of-coal-new-epa-rules-will-limit-ghg-emissions/>

After years of study, the EPA will finally release their initial greenhouse gas emissions rules for power plants, which are likely to end the construction of any coal-fired plants from this point forward.¶ The proposed rule — years in the making and approved by the White House after months of review — will require any new power plant to emit no more than 1,000 pounds of carbon dioxide per megawatt of electricity produced. The average U.S. natural gas plant, which emits 800 to 850 pounds of CO2 per megawatt, meets that standard; coal plants emit an average of 1,768 pounds of carbon dioxide per megawatt.¶ Industry officials and environmentalists said in interviews that the rule, which comes on the heels of tough new requirements that the Obama administration imposed on mercury emissions and cross-state pollution from utilities within the past year, dooms any proposal to build a coal-fired plant that does not have costly carbon controls.¶“This standard effectively bans new coal plants,” said Joseph Stanko, who heads government relations at the law firm Hunton and Williams and represents several utility companies. “So I don’t see how that is an ‘all of the above’ energy policy.”¶ I don’t see how coal is “cheap energy.” Pollutants from coal caused a public health crisis and hundreds of thousands if not millions of preventable illnesses and deaths. No coal executive ever paid a dime for that. If they have the technology to create “clean coal” and get under the emissions limits, they can deploy it. They might have to – gasp! – pay for their own research and development to make that happen. It would be a small price to pay in exchange for all the externality costs everyone else has picked up over the years.

#### Government support can help develop and install needed tech

CATF 9—Clean Air Task Force, September, 2009, Innovation Policy for Climate Change: REPORT TO THE NATION

Coal consists primarily of carbon and burning a ton of coal releases about two tons of CO2. In 2007, coal-fired plants—fewer than 1500 boiler-turbine-generator units on perhaps 500 sites—generated 48.5 percent of U.S. electrical power and more than 35 percent of the nation’s CO2 emissions.a Like the United States, China and India have abundant coal reserves that can be cheaply mined for producing low-cost electrical power. China is putting up new coal-burning plants at a high rate and India seems poised to follow within the next decade. Unless PCC technology is reduced to practice and implemented soon, it will be very difficult to stabilize, much less bring down, atmospheric concentrations of CO2.¶ There are two basic ways of reducing or eliminating the CO2 produced when coal burns. The coal can be gasified, for instance in an integrated gasification combined cycle (IGCC) plant, with the CO2 removed prior to combustion. Or CO2 can be removed after coal is burned. The second route is technologically straightforward and at least in principle would permit existing coal-fired power plants to be retrofitted. (IGCC would almost certainly require new construction; so, most likely, would a third alternative, oxyfuel combustion, which burns coal in nearly pure oxygen so as to leave flue gases consisting of nearly pure CO2 to facilitate separation.) Any of these paths would be costly. Adding PCC to an average-size U.S. power plant would probably require an initial investment in the range of $500 million. Operating costs would increase substantially, in part because a considerable fraction of the electricity generated would be consumed in separating out the CO2 and compressing it for transport and sequestration.¶ Separation processes of a sort widely used in industry for other purposes and well understood by chemists and chemical engineers can remove 90 percent or more of the CO2 in flue gas. Gas separation is a standard process in the chemical industry, with many thousands of plants operating worldwide to produce industrial gases for sale, including CO2, which has value in uses that range from carbonating beverages to shielding welding arcs and enhanced oil recovery. Because these markets are small relative to anthropogenic CO2 emissions, experience transfers only partially, and processes such as scrubbing flue gases with amines (compounds related to ammonia, which bind the CO2 for later separation) have yet to be demonstrated on the scale of typical power plants. Long-term sequestration of highly compressed CO2 would likewise need further demonstration for any CCS option. Nonetheless, the major obstacles to PCC appear to lie in the costs, not in technologies for either capture or storage. Expensive new equipment would be needed, costly to operate as well as to build. Electricity costs would rise. Indeed, they might double.¶ Proprietary amine-based processes for separating CO2 from nitrogen (the principal constituent in air, and hence in CO2-heavy flue gases) have been available for decades. They work something like sulfur dioxide scrubbing. All coal contains up to a few percent sulfur, which combines with oxygen during combustion to form sulfur dioxide. In the scrubber, sulfur dioxide reacts chemically with another substance to form a solid that can be disposed of. Power companies began installing sulfur dioxide scrubbers several decades ago; with experience, costs have come down and performance has improved. Amine scrubbers, somewhat similarly, pass flue gases through a solution of an amine compound, generally in water, to absorb (i.e., dissolve) CO2. In a downstream stage, the CO2 is released (“stripped”), leaving a relatively pure gas to be compressed for transport and storage, with the amine solution regenerated for reuse. A 500 MW plant that produces 10 tons per hour of sulfur dioxide might emit some 500 tons per hour of CO2. Thus equipment of much larger size is needed and both first costs and operating costs will be much greater.¶ There are two primary reasons for increased operating costs. In most of the PCC processes so far envisioned, steam from the boiler would be bled off for process heat (e.g., to strip the CO2 from solution). Energy that would otherwise drive the turbine to generate electricity will be lost. (In retrofits, moreover, the turbine may have to be operated off of design conditions, resulting in further losses.) Second, electricity equivalent to a significant portion of the plant’s electrical output will be consumed for driving compressors and pumps, notably for raising the pressure of the CO2 to perhaps 2000 pounds per square inch (over 100 times atmospheric pressure) prior to transport and storage. These “parasitic” losses could amount to 30 percent of the electrical output otherwise available.¶ In the absence of utility-scale demonstrations, cost estimates are uncertain. Engineering studies prepared by the Department of Energy (DOE) for representative cases of retrofits to an existing coal-fired plant and for a new “greenfield” plant, with and without what is described as “advanced amine-based capture technology,” yield an estimated incremental cost of 6.9 ¢ per kilowatt-hour (kWh) for the retrofit case and 5.5 ¢ per kWh for a new plant.b These can be compared with generating costs for a typical pulverized coal plant, put by DOE at 6.4 ¢ per kWh.¶ Costs would probably decline somewhat over time, but gas separation is a relatively mature technology and none of the alternatives to amine separation under investigation appear to hold substantial promise of major, rather than incremental, gains. These alternatives include different amine compounds and combinations of amines, ammonia as a solvent instead of an amine, distillation, membranes that pass CO2 preferentially, and porous solids to adsorb it.¶ In addition to cost increases, retrofitting of existing pulverized coal plants would sharply reduce generating capacity, while retrofitting may be impossible at some sites, perhaps a considerable number, for lack of space (ground area occupied might nearly double). Some of the technical compromises necessary in retrofits could be avoided for new plants, but not the fundamental issue of high investment and operating costs. Gasifying coal and removing the CO2 before combustion, rather than at the “end of the pipe,” holds more promise for greenfield construction.¶ Policy¶ Coal-fired power plants emit huge tonnages of CO2. Equipping such plants to control CO2 emissions will drastically diminish their cost advantages over other generating technologies, perhaps raising the costs above some alternatives. Government technology and innovation policies should support long-term R&D and demonstration aimed at substantial improvements in PCC and CCS (e.g., pre-combustion gasification), but without the expectation of breakthroughs (which are possible but by no means assured), and at higher overall thermal cycle efficiencies, which moderate emissions since less coal must be burned to generate a given amount of electrical power.¶ To this point, business and financing arrangements for implementing PCC have hardly been explored. Chemical companies and equipment suppliers have had little incentive to push forward with engineering development and demonstration. Alternatives for government include simply paying some or all of the costs or mandating installation and allowing the market to determine how costs would be apportioned and revenues raised (e.g., through higher rates for electricity).

## Warming Advantage

### Turn

#### EPA regs solve methane leaks

Howarth et al 11 Robert is the David R. Atkinson Prof of Ecology at Cornell, Renee Santoro is a Research Aide in the same program, and Dwight Baum, Professorship in Engineering, “Methane and the greenhouse-gas footprint of natural gas from shale formations,” Climate Change, http://link.springer.com/content/pdf/10.1007%2Fs10584-011-0061-5

7 Can methane emissions be reduced? The EPA estimates that ’green’ technologies can reduce gas-industry methane emissions by 40% (GAO 2010). For instance, liquid-unloading emissions can be greatly reduced with plunger lifts (EPA 2006; GAO 2010); industry reports a 99% venting reduction in the San Juan basin with the use of smart-automated plunger lifts (GAO 2010). Use of flash-tank separators or vapor recovery units can reduce dehydrator emissions by 90% (Fernandez et al. 2005). Note, however, that our lower range of estimates for 3 out of the 5 sources as shown in Table 2 already reflect the use of best technology: 0.3% lower-end estimate for routine venting and leaks at well sites (GAO 2010), 0% lower-end estimate for emissions during liquid unloading, and 0% during processing. Methane emissions during the flow-back period in theory can be reduced by up to 90% through Reduced Emission Completions technologies, or REC (EPA 2010). However, REC technologies require that pipelines to the well are in place prior to completion, which is not always possible in emerging development areas. In any event, these technologies are currently not in wide use (EPA 2010). If emissions during transmission, storage, and distribution are at the high end of our estimate (3.6%; Table 2), these could probably be reduced through use of better storage tanks and compressors and through improved monitoring for leaks. Industry has shown little interest in making the investments needed to reduce these emission sources, however (Percival 2010). Better regulation can help push industry towards reduced emissions. In reconciling a wide range of emissions, the GAO (2010) noted that lower emissions in the Piceance basin in Colorado relative to the Uinta basin in Utah are largely due to a higher use of low-bleed pneumatics in the former due to stricter state regulations.

#### Methane emissions lead to fast-tipping points---immediate reductions via natural gas regulation are key

**Howarth et al 12** (Robert W. Howarth, David R. Atkinson Professor of Ecology & Environmental Biology at Cornell, Director of the Agriculture, Energy & the Environment Program, Renee Santoro, Renee Santoro, Research Aide Ecology & Evol. Bio, and Anthony Ingraffea, Dwight C. Baum Professorship in Engineering, “Venting and leaking of methane from shale gas,” <http://cce.cornell.edu/EnergyClimateChange/NaturalGasDev/Documents/PDFs/Howarth%20et%20al.%202012%20--%20Climatic%20Change.pdf>)

Methane is a far more powerful GHG than carbon dioxide, although the residence time for methane in the atmosphere is much shorter. Consequently, the time frame for comparing methane and carbon dioxide is critical. In Howarth et al. (2011), we equally presented two time frames, the 20 and 100 years integrated time after emission, using the global warming potential (GWP) approach. Note that GWPs for methane have only been estimated at time scales of 20, 100, and 500 years, and so GHG analyses that compare methane and carbon dioxide on other time scales require a more complicated atmospheric modeling approach, such as that used by Hayhoe et al. (2002) and Wigley (2011). The GWP approach we follow is quite commonly used in GHG lifecycle analyses, sometimes considering both 20-year and 100-year time frames as we did (Lelieveld et al. 2005; Hultman et al. 2011), but quite commonly using only the 100-year time frame (Jamarillo et al. 2007; Jiang et al. 2011; Fulton et al. 2011; Skone et al. 2011; Burnham et al. 2011). Cathles et al. state that a comparison based on the 20-year GWP is inappropriate, and criticize us for having done so. We very strongly disagree. Considering methane’s global-warming effects at the decadal time scale is critical (Fig. 2). Hansen et al. (2007) stressed the need for immediate control of methane to avoid critical tipping points in the Earth’s climate system, particularly since methane release from permafrost becomes increasingly likely as global temperature exceeds 1.8°C above the baseline average temperature between 1890 and 1910 (Hansen and Sato 2004; Hansen et al. 2007). This could lead to a rapidly accelerating positive feedback of further global warming (Zimov et al. 2006; Walter et al. 2007). Shindell et al. (2012) and a recent United Nations study both conclude that this 1.8°C threshold may be reached within 30 years unless societies take urgent action to reduce the emissions of methane and other short-lived greenhouse gases now (UNEP/WMO 2011). The reports predict that the lower bound for the danger zone for a temperature increase leading to climate tipping points – a 1.5°C increase – will occur within the next 18 years or even less if emissions of methane and other short-lived radiatively active substances such as black carbon are not better controlled, beginning immediately (Fig. 2) (Shindell et al. 2012; UNEP/WMO 2011). In addition to different time frames, studies have used a variety of GWP values. We used values of 105 and 33 for the 20- and 100-year integrated time frames, respectively (Howarth et al. 2011), based on the latest information on methane interactions with other radiatively active materials in the atmosphere (Shindell et al. 2009). Surprisingly, EPA (2011a) uses a value of 21 based on IPCC (1995) rather than higher values from more recent science (IPCC 2007; Shindell et al. 2009). Jiang et al. (2011), Fulton et al. (2011), Skone et al. (2011), and Burnham et al. (2011) all used the 100-year GWP value of 25 from IPCC (2007), which underestimates methane’s warming at the century time scale by 33% compared to the more recent GWP value of 33 from Shindell et al. (2009). We stand by our use of the higher GWP values published by Shindell et al. (2009), believing it appropriate to use the best and most recent science. While there are considerable uncertainties in GWP estimates, inclusion of the suppression of photosynthetic carbon uptake due to methaneinduced ozone (Sitch et al. 2007) would further increase methane’s GWP over all the values discussed here. In Fig. 3, we present the importance of methane to the total GHG inventory for the US, considered at both the 20- and 100-year time periods, and using the Shindell et al. (2009) GWP values. Figure 3 uses the most recently available information on methane fluxes for the 2009 base year, reflecting the new methane emission factors and updates through July 2011 (EPA 2010; 2011a, b); see Electronic Supplemental Materials. Natural gas systems dominate the methane flux for the US, according to these EPA estimates, contributing 39% of the nation’s total. And methane contributes 19% of the entire GHG inventory of the US at the century time scale and 44% at the 20-year scale, including all gases and all human activities. The methane emissions from natural gas systems make up 17% of the entire anthropogenic GHG inventory of the US, when viewed through the lens of the 20-year integrated time frame. If our high-end estimate for downstream methane emissions during gas storage, transmission, and distribution is correct (Howarth et al. 2011), the importance of methane from natural gas systems would be even greater.

### AT: Bridge Fuel

#### Natural gas can’t serve as a bridge fuel---crowds out renewables

Jesse Jenkins And Alex Trembath 12 are Director and Policy Associate, respectively, with the Breakthrough Institute's Energy and Climate Program. January 19, 2012 6:21 PM 9 agree Submit Avoiding a Natural Gas Bridge to Nowhere By Jesse Jenkins Director of Energy and Climate Policy, Breakthrough Institute By Jesse Jenkins and Alex Trembath <http://energy.nationaljournal.com/2012/01/whats-ahead-for-natural-gas.php>

Cheap gas simultaneously puts pressure on higher-cost nuclear, wind, and solar energy, however. If cheap gas leads to complacency in the development of sustainable, low-carbon electricity sources, today’s gas boon may become tomorrow’s curse, as natural gas eclipses not only coal, but also cleaner, carbon-free energy sources. An increasingly dominant role for natural gas in America’s energy mix also exposes the United States to the inherent volatility of natural gas markets. As a gas, methane flows much faster from wells than crude oil. Natural gas wells thus produce and deplete quite rapidly, with roughly 50 percent of a typical well’s lifetime production expended in the first three or four years. This basic dynamic of rapid production and depletion often leads to a boom-bust cycle in markets, as anyone observing North American natural gas markets over the past half century can attest. If North America begins to export large quantities of natural gas, this inherent volatility will only be exacerbated. The future of natural gas is unlikely to part with this history of boom and bust – unless the United States once again commits to long-term investment in the development of affordable, clean, domestic energy technologies. Without significant and strategic investments in next-generation solar, wind, nuclear, and electric vehicles, there’s every reason to believe the natural gas revolution will continue and gas will ultimately become an increasingly dominant share of the U.S. energy supply. The result will likely be near-term declines in CO2 and pollutants along with growing reliance on another volatile and increasingly costly fossil energy source. The shale gas “bridge fuel” may well become a bridge to nowhere. If instead the United States makes smart, sustained investments in clean energy R&D, demonstration, manufacturing, and infrastructure, there’s no reason to believe America can’t continue to unlock even greater supplies of cleaner, cheaper, domestic energy technologies, from next-generation solar to advanced nuclear reactors. In short, America’s energy future, just like its past, depends on our willingness to invest in innovation.

### Squo Solves Coal

#### Climate regulations are already closing the worst coal plants.

Keller 12—Ryan Keller, Examiner, 11/5/12, EPA planning new anti-coal regulations for after election, <http://www.examiner.com/article/epa-planning-new-anti-coal-regulations-for-after-election>

According to Conn Carroll at the Washington Examiner on Sunday, the Environmental Protection Agency is planning new anti-coal regulations to be implemented at the end of the month should President Barack Obama win reelection on Tuesday. These regulations will prevent new plants from being built and will cost Americans nearly a trillion dollars.¶ More than 50 EPA staff are now crashing to finish greenhouse gas emission standards that would essentially ban all construction of new coal-fired power plants. Never before have so many EPA resources been devoted to a single regulation. The independent and non-partisan Manhattan Institute estimates that the EPA’s greenhouse gas coal regulation will cost the U.S. economy $700 billion.¶ Should Obama win, then the EPA will have another term to continue their agenda against coal and to advance “green energy,” further deindustrializing the country, all in the name of stopping global warming, of course, even though it stopped 16 years ago according to the U.K. Met Office.¶ Throughout the last four years, Obama has made sure that the EPA has been able to advance this agenda.¶ In 2011, Obama’s EPA issued new mandates that will cause energy prices for most Americans to rise, though Obama campaign contributor General Electric will be exempt. According to the EPA mandates, utility companies will have to pay an initial outlay of $800 million in order to reduce harmful emissions as dictated by the Clean Air Act. This will cost $129 billion and cause one-fifth of coal plants to be shut down, according to the Edison Electric Institute.¶ Earlier this year, the administration proposed “the first rules to cut carbon dioxide emissions from new U.S. power plants,” according to Reuters. Plants would be forced to cut emissions by 50 percent, which “would effectively stop the building of most new coal-fired plants.”¶ This was the plan for Obama from the beginning. As he infamously told the San Francisco Chronicle while campaigning in 2008, he plans on bankrupting the coal industry: “If somebody wants to build a coal powered plant, they can, it’s just that, it will bankrupt them because they’re going to be charged a huge sum for all that greenhouse gas that’s being emitted.”¶ And the plan is working.¶ This past summer, the Energy Information Administration announced that 175 coal-fired generators, a record number, will be “retired” over the next few years due to decreasing demand and crippling federal regulations. This means that 8.5 percent of U.S. coal capacity will be gone.

### China DA

#### Falling coal demand spurs exports

EIA 12 (Energy Information Administration, June 19, 2012 "Most U.S. coal exports went to European and Asian markets in 2011," www.eia.gov/todayinenergy/detail.cfm?id=6750)

Several major factors contributed to the rise of U.S. coal exports in 2011. In general, coal use abroad continued to grow. U.S. coal exports helped to meet rising Asian demand and provided coal for other emerging markets. **Falling domestic coal consumption** (down 4.6% in 2011) along with a slight increase in U.S. coal production (0.9%) freed up more coal to export. A series of international coal supply disruptions in 2011 in traditional supply areas such as Australia, Indonesia, and Colombia meant that Asian countries needed to secure coal supplies from alternative markets. Rising spot natural gas prices in Europe, up about 35% in 2011, prompted European electricity generators to use more coal.

#### U.S. exports lock in expanded Chinese coal capacity---causes warming over the tipping point---it’s unique because absent U.S. exports the rising cost of coal will cause a shift to renewables

Thomas M. Power 12, Research Professor and Professor Emeritus, Department of Economics, University of Montana; Principal, Power Consulting; February 2012, “The Greenhouse Gas Impact of Exporting Coal from the West Coast: An Economic Analysis,” <http://www.sightline.org/wp-content/uploads/downloads/2012/02/Coal-Power-White-Paper.pdf>

The cumulative impact of these coal port proposals on coal consumption in Asia could be much larger than even that implied by the two pending proposals. If Arch, Peabody, and other western U.S. coal producers’ projections of the competitiveness of western coal in Asia are correct, facilitating the opening of the development of West Coast coal ports could have a very large impact on the supply of coal to China and the rest of Asia.

6.4 The Long-term Implications of Fueling Additional Coal-Fired Electric Generation

Although the economic life of coal-fired generators is often given as 30 or 35 years, a permitted, operating, electric generator is kept on line a lot longer than that, as long as 50 or more years through ongoing renovations and upgrades. Because of that long operating life, the impact of the lower Asian coal prices and costs triggered by PRB coal competing with other coal sources cannot be measured by the number of tons of coal exported each year. Those lower coal costs will lead to commitments to more coal being burned for a half-century going forward.

That time-frame is very important. During exactly this time frame, the next half-century, the nations of the world will have to get their greenhouse gas emission stabilized and then reduced or the concentrations of greenhouse gases in the atmosphere may pass a point that will make it very difficult to avoid massive, ongoing, negative climate impacts. Taking actions now that encourage fifty-years of more coal consumption around the world is not a minor matter. Put more positively, allowing coal prices to rise (and more closely approximate their full cost, including “external” costs) will encourage extensive investments in improving the efficiency with which coal is used and the shift to cleaner sources of energy. This will lead to long-term reductions in greenhouse gas emissions that will also last well into the next half-century. 57

## Economy Advantage

### 1NC---No Impact to Econ Decline

#### Even massive economic decline has zero chance of war

Robert Jervis 11, Professor in the Department of Political Science and School of International and Public Affairs at Columbia University, December 2011, “Force in Our Times,” Survival, Vol. 25, No. 4, p. 403-425

Even if war is still seen as evil, the security community could be dissolved if severe conflicts of interest were to arise. Could the more peaceful world generate new interests that would bring the members of the community into sharp disputes? 45 A zero-sum sense of status would be one example, perhaps linked to a steep rise in nationalism. More likely would be a worsening of the current economic difficulties, which could itself produce greater nationalism, undermine democracy and bring back old-fashioned beggar-my-neighbor economic policies. While these dangers are real, it is hard to believe that the conflicts could be great enough to lead the members of the community to contemplate fighting each other. It is not so much that economic interdependence has proceeded to the point where it could not be reversed – states that were more internally interdependent than anything seen internationally have fought bloody civil wars. Rather it is that even if the more extreme versions of free trade and economic liberalism become discredited, it is hard to see how without building on a preexisting high level of political conflict leaders and mass opinion would come to believe that their countries could prosper by impoverishing or even attacking others. Is it possible that problems will not only become severe, but that people will entertain the thought that they have to be solved by war? While a pessimist could note that this argument does not appear as outlandish as it did before the financial crisis, an optimist could reply (correctly, in my view) that the very fact that we have seen such a sharp economic down-turn without anyone suggesting that force of arms is the solution shows that even if bad times bring about greater economic conflict, it will not make war thinkable.

### 1NC---Unsustainable

#### Growth’s unsustainable and causes extinction because of physical demands on space, water, forests, and habitat---tech can’t solve because collapse of ecosystem services is irreversible

David Shearman 7, Emeritus professor of medicine at Adelaide University, Secretary of Doctors for the Environment Australia, and an Independent Assessor on the IPCC; and Joseph Wayne Smith, lawyer and philosopher with a research interest in environmentalism, 2007, The Climate Change Challenge and the Failure of Democracy, p. 153-156

Hundreds of scientists writing in Millennium Assessment and other scientific reports pronounce that humanity is in peril from environmental damage. If liberal democracy is to survive it will need to offer leadership, resolve, and sacrifice to address the problem. To date there is not a shred of evidence that these will be provided nor could they be delivered by those at the right hand of American power. Some liberal democracies that recognize that global warming is a dire problem are trying but nevertheless failing to have an impact on greenhouse emissions. To arrest climate change, greenhouse reductions of 60 to 80 percent are required during the next few decades. By contrast the Kyoto Protocol prescribes reductions of only a few percent. The magnitude of the problem seems overwhelming, and indeed it is. So much so, it is still denied by many because it cannot be resolved without cataclysmic changes to society. Refuge from necessary change is being sought in technological advances that will allow fossil fuels to be used with impunity, but this ignores the kernel of the issue. If all humanity had the ecological footprint of the average citizen of Australia or the United States, at least another three planets would be needed to support the present population of the world.2 The ecological services of the world cannot be saved under a regime of attrition by growth economies that each year use more land, water, forests, natural resources, and habitat. Technological advances cannot retrieve dead ecological services.

The measures required have been discussed and documented for several decades. None of them are revolutionary new ideas. We will discuss the main themes of a number of important issues such as the limits to growth, the separation of corporatism and governance, the control of the issue of credit (i.e., financial reform), legal reform, and the reclaiming of the commons. Each of these issues has been discussed in great depth in the literature, and a multitude of reform movements have been spawned. Unfortunately, given the multitude of these problems and the limited resources and vision of the reformers, each of the issues tends to be treated in isolation. From an ecological perspective, which is a vision seeking wholeness and integration, this is a mistake. These areas of reform are closely interrelated and must be tackled as a coherent whole to bring about change. Banking and financial reform is, for example, closely related to the issue of control and limitation of corporate power, because finance capital is the engine of corporate expansion. The issue of reclaiming the commons and protecting the natural environment from corporate plunder is also intimately connected to the issue of the regulation of corporate power. In turn this is a legal question, and in turn legal structures are highly influenced by political and economic factors. Finally, the issue of whether there are ecological limits to growth underlies all these issues. Only if an ecologically sustainable solution can be given to this totality of problems can we see the beginnings of a hope for reform of liberal democracy. And even then, there still remains a host of cultural and intellectual problems that will need to be solved. The prospects for reform are daunting, but let us now explore what in principle is needed.

THE LIMITS TO GR OWTH

Our loving marriage to economic growth has to be dissolved. The dollar value of all goods and services made in an economy in one year is expressed as the gross domestic product (GDP). It is a flawed measurement in that it does not measure the true economic and social advance of a society,3 but it is relevant to our discussion here for most of the activities it measures consume energy. Each country aims for economic growth, for every economy needs this for its success in maintaining employment and for the perceived ever-expanding needs of its populace. Politicians salivate about economic growth, it is their testosterone boost. Most would be satisfied with 3 percent per annum and recognize that this means that the size of the economy is 3 percent greater than the previous year. On this basis the size of the economy doubles every 23 years. In 43 years it has quadrupled. Now in 23 years let us suppose that energy needs will also double in order to run this economy. Therefore if greenhouse emissions are to remain at today’s level, then approximately half the energy requirements in 23 years’ time will have to be alternative energy. The burgeoning energy requirements of the developing countries have not yet been included in these considerations. To date, these countries have been reluctant to consider greenhouse reductions saying that they have a right to develop without hindrance, and in any case the developed countries are responsible for most of the present burden of carbon dioxide in the atmosphere. It is not difficult to calculate therefore that there is no future for civilization in the present cultural maladaptation to the growth economy. Sustainable economic growth is an oxymoron. These arguments about doubling time apply to all other environmental calculations. Other forms of pollution that arise from the consumer society will also increase proportionally to growth, the human and animal wastes, mercury, the persistent organic pollutants, and so on. And even if some of these are ameliorated, others will arise from the activities of the burgeoning population. Science tells us that we have already exceeded the capacity of the earth to detoxify these.

In advocating a no-growth economy it has been shown in many studies that beyond the basic needs of health, nutrition, shelter, and cultural activity, which can be provided with much less income than Westerners presently enjoy, there is little correlation between wealth and happiness or well-being. A no-growth economy4 would supply the essentials for life and happiness. Human and economic activity fuelling the consumer market would be severely curtailed and the resources redeployed to truly sustainable enterprises, basic care and repair of the environment, conservation of energy, and the manufacture of items and systems that support these needs. The standard of living as measured at present (again by flawed criteria) will fall, but there may be no alternative. The fundamental question is how can a transition be made under a liberal democracy that has consumerism and a free market as its lifeblood?

### 1NC---Warming

#### Collapse of the economy now is key to prevent extinction through warming---causes a stable transition to peaceful society

Barry 8 – President and Founder of Ecological Internet, Ph.D. in Land Resources from U-Wisconsin-Madison

(Glen, “Economic Collapse And Global Ecology”, http://www.countercurrents.org/barry140108.htm)

Humanity and the Earth are faced with an enormous conundrum -- sufficient climate policies enjoy political support only in times of rapid economic growth. Yet this growth is the primary factor driving greenhouse gas emissions and other environmental ills. The growth machine has pushed the planet well beyond its ecological carrying capacity, and unless constrained, can only lead to human extinction and an end to complex life. With every economic downturn, like the one now looming in the United States, it becomes more difficult and less likely that policy sufficient to ensure global ecological sustainability will be embraced. This essay explores the possibility that from a biocentric viewpoint of needs for long-term global ecological, economic and social sustainability; it would be better for the economic collapse to come now rather than later. Economic growth is a deadly disease upon the Earth, with capitalism as its most virulent strain. Throw-away consumption and explosive population growth are made possible by using up fossil fuels and destroying ecosystems. Holiday shopping numbers are covered by media in the same breath as Arctic ice melt, ignoring their deep connection. Exponential economic growth destroys ecosystems and pushes the biosphere closer to failure. Humanity has proven itself unwilling and unable to address climate change and other environmental threats with necessary haste and ambition. Action on coal, forests, population, renewable energy and emission reductions could be taken now at net benefit to the economy. Yet, the losers -- primarily fossil fuel industries and their bought oligarchy -- successfully resist futures not dependent upon their deadly products. Perpetual economic growth, and necessary climate and other ecological policies, are fundamentally incompatible. Global ecological sustainability depends critically upon establishing a steady state economy, whereby production is right-sized to not diminish natural capital. Whole industries like coal and natural forest logging will be eliminated even as new opportunities emerge in solar energy and environmental restoration. This critical transition to both economic and ecological sustainability is simply not happening on any scale. The challenge is how to carry out necessary environmental policies even as economic growth ends and consumption plunges. The natural response is going to be liquidation of even more life-giving ecosystems, and jettisoning of climate policies, to vainly try to maintain high growth and personal consumption. We know that humanity must reduce greenhouse gas emissions by at least 80% over coming decades. How will this and other necessary climate mitigation strategies be maintained during years of economic downturns, resource wars, reasonable demands for equitable consumption, and frankly, the weather being more pleasant in some places? If efforts to reduce emissions and move to a steady state economy fail; the collapse of ecological, economic and social systems is assured. Bright greens take the continued existence of a habitable Earth with viable, sustainable populations of all species including humans as the ultimate truth and the meaning of life. Whether this is possible in a time of economic collapse is crucially dependent upon whether enough ecosystems and resources remain post collapse to allow humanity to recover and reconstitute sustainable, relocalized societies. It may be better for the Earth and humanity's future that economic collapse comes sooner rather than later, while more ecosystems and opportunities to return to nature's fold exist. Economic collapse will be deeply wrenching -- part Great Depression, part African famine. There will be starvation and civil strife, and a long period of suffering and turmoil. Many will be killed as balance returns to the Earth. Most people have forgotten how to grow food and that their identity is more than what they own. Yet there is some justice, in that those who have lived most lightly upon the land will have an easier time of it, even as those super-consumers living in massive cities finally learn where their food comes from and that ecology is the meaning of life. Economic collapse now means humanity and the Earth ultimately survive to prosper again. Human suffering -- already the norm for many, but hitting the currently materially affluent -- is inevitable given the degree to which the planet's carrying capacity has been exceeded. We are a couple decades at most away from societal strife of a much greater magnitude as the Earth's biosphere fails. Humanity can take the bitter medicine now, and recover while emerging better for it; or our total collapse can be a final, fatal death swoon. A successful revolutionary response to imminent global ecosystem collapse would focus upon bringing down the Earth's industrial economy now. As society continues to fail miserably to implement necessary changes to allow creation to continue, maybe the best strategy to achieve global ecological sustainability is economic sabotage to hasten the day. It is more fragile than it looks.

### 1NC---Disease

#### Development makes global pandemics inevitable---causes extinction

**Krepinevich 9** (Andrew, President of the Center for Strategic and Budgetary Assessments and Distinguished Visiting Professor @ George Mason's School of Public Policy, Congressional Consultant on Military Affairs, PhD Harvard, "7 Deadly Scenarios," February)

Over the past several decades the world has experience a wave of globalization, far surpassing the great surge that swept over the globe in the years leading up to World War I. The growth of the world economy---facilitated by lower trade barriers, global supply chains, international financial networks, and global communication---has yielded many benefits, including increased wealth and great economic efficiencies. It has also yielded an unprecedented level of mobility---in the movement of capital, goods, and services, in people (including migration) , and last but not least, in disease. For nearly a century the world has been spared the specter of mass deaths induced by a killer disease. The last great global pandemic occurred at the end of World War I, when the misnamed Spanish influenza killed an estimated 20 million people---including nearly 700,000 Americans---before it ran its course. To a significant degree, the spread of influenza was aided and abetted by the world war, which saw the armed forces of many nations on the move from their home countries to other parts of the world. Even then, however, human mobility and trade were far more constrained than they are today, when every year millions of passengers pass through U.S. airports alone. There have been several canaries in humanity's mine shaft, warning of impending disaster. According to the scientific community, the world has been overdue for some form of pandemic. On occasions too numerous to count, members of the medical profession have stated that "it is not a matter of if such an event will occur, but when." As the World Health Organization met in Geneva in the summer of 2009, health officials were citing the "near-misses" the world had recently experienced with the AIDS virus, tuberculosis, and avian flu (commonly referred to as bird flu), and warned that, absent a major effort to improve the globe's public health system, humanity's good fortune could not---and would not---last. But the issue has to struggle to get on the global agenda. Here in America the 2008 presidential campaign (which began in early 2007) was dominated by the wars in Afghanistan and Iraq, the broader problem of militant Islam, rising energy prices, a falling economy, and growing concerns about global warming. Neither public health concerns over a pandemic nor the country's illegal alien problem appeared prominently on the political radar screen. Call them the "stealth" issues---the ones that we failed to detect.

## Solvency

### Not Enough Gas

#### Not enough gas

Cobb 10/15 Kurt- founding member of the Association for the Study of Peak Oil and Gas—USA and currently serves on its board. He also serves on the board of the Arthur Morgan Institute for Community Solutions. October 15, 2012, "Oil And Gas Industry Pushing U.S. Exports," www.forexpros.com/analysis/oil-and-gas-industry-pushing-u.s.-exports-139764

The EIA projects, however, that U.S. domestic natural gas production will grow sufficiently so that the United States will become a net exporter of natural gas by 2022. Still, some **analysts have cast doubts on such forecasts**. In fact, **claims that the United States has a 100-year supply of natural gas have been** widely refuted. First, the claim was based on estimated resources. As I am obliged to remind people again and again, resources are what is thought to be in the Earth's crust based on sketchy evidence at best. Reserves, on the other hand, are what the drillbit has shown can be produced using existing technology at current prices from known fields. **Proven and probable reserves of U.S. domestic natural gas add up to only 22 years of supply at the current rate of consumption.**¶Second, **the** refuted 100-year figure assumes that we will continue to **use natural gas only at the current rate.** But that forecast was being quoted by industry boosters who foresee vast new applications such as natural gas-powered vehicles which would greatly increase the rate of consumption and dramatically shorten the time to exhaustion. Here's how I explained the problem in a previous piece: ¶ Simple spreadsheet calculations will tell you what you need to know about what happens to such claims under the pressure of a little exponential growth. At 2 percent per year growth...the 100-year U.S. domestic natural gas supply is exhausted in 56 years. If we assume that production peaks when about 50 percent of the resource is exhausted, this puts the peak within 35 years. Think about it. Even if the optimists are correct, with a production growth rate of just 2 percent per year, the country reaches a **peak within 35 years**! What will we do after that?¶ The picture gets acutely worse as the rate of production growth rises. A 3 percent rate implies exhaustion in 47 years and peak in 31 years. A 5 percent growth rates means exhaustion in 37 years and a peak in just 26 years. Now consider that domestic supplies are probably going to be less than claimed, and you'll see why shale gas simply cannot solve our energy problems. (emphasis added) ¶ Third, EIA's estimates of technically recoverable shale gas resources in the United States have **fallen dramatically from 827 trillion cubic feet** (tcf) **to 482 tcf.** And, **this says little about whether those resources would be economically recoverable**. In any case, the previous larger estimate formed the basis for the widely refuted 100-year claim. Fourth, **annual production decline rates for U.S. natural gas wells are now running about 32 percent.** That means that with no drilling, production would fall by one-third over the next year. So, we now must drill furiously just to maintain, let alone grow our supplies. And, shale gas--which the EIA thinks will make up 49 percent of U.S. domestic natural gas production by 2035--**shows decline rates reaching 65 percent in the first year and 80 percent by the second year. It will be difficult to drill enough wells each year to replace lost production if half of all production comes from shale gas deposits**.

### Doesn’t Hurt Industry

#### EPA Regulation key to solve pollution and warming and doesn’t hurt industry production

NYT 12 John Broder, April 18, 2012, "U.S. Caps Emissions in Drilling for Fuel" [www.nytimes.com/2012/04/19/science/earth/epa-caps-emissions-at-gas-and-oil-wells.html](http://www.nytimes.com/2012/04/19/science/earth/epa-caps-emissions-at-gas-and-oil-wells.html)

Oil and gas companies will have to capture toxic and climate-altering gases from wells, storage sites and pipelines under new air quality standards issued on Wednesday by the Environmental Protection Agency.¶ The rule is the first federal effort to address serious air pollution associated with the natural gas drilling process known as hydraulic fracturing, or fracking, which releases toxic and cancer-causing chemicals like benzene and hexane, as well as methane, a powerful greenhouse gas.¶ The standards were proposed last summer in response to complaints from citizens and environmental groups that gases escaping from the 13,000 wells drilled each year by fracking were causing health problems and widespread air pollution.¶ Industry groups said meeting the proposed standards would cost hundreds of millions of dollars and slow the boom in domestic natural gas production. The original proposal was significantly revised, **giving industry more than two years to comply and lowering the cost.**¶ “Because these regulations rely on technologies and practices that are already in use by some companies and required by some states, they are practical, flexible, affordable and achievable,” Gina McCarthy, head of the E.P.A.’s office of air and radiation, said in a conference call. “Natural gas is key to our clean energy future.”¶ She said **the new rule would reduce emissions of volatile organic compounds by** 190,000 to **290,000 tons per year and toxic air pollutants by** 12,000 to **20,000** tons a year.¶ The agency said that **the industry could meet the standards by deploying existing technology**, and that nearly half the wells drilled using hydraulic fracturing already had the gas capture equipment, known as “green completions.”¶ The agency said that once the rule was fully effective, in January 2015**, the industry would save** $11 million to **$19 million a year** because drillers would be able to capture and sell the methane that is now burned off, or flared.¶ Methane is a potent heat-trapping gas, 20 times more powerful in its effect on the atmosphere than carbon dioxide. The E.P.A. estimates that **capturing methane from thousands of new wells will reduce greenhouse gas emissions by** the equivalent of 28 million to **44 million tons a year**, making the rule one of the federal government’s largest measures to mitigate climate change.¶ The American Petroleum Institute, which had lobbied to weaken the proposed rule, said the revised standards issued Wednesday were an improvement over the original proposal. Howard **Feldman, the institute’s** director **of regulatory and scientific affairs, said the industry had** already adopted many of the requirements **of the new rule and welcomed the delay in its effective date.**¶“The industry has led efforts to reduce emissions by developing new technologies that were adopted in the rule,” Mr. Feldman said. “E.P.A. has made some improvement in the rules that allow our companies to continue reducing emissions while producing the oil and natural gas our country needs.”¶ Other industry groups were less generous. The Western Energy Alliance, a group of independent oil and gas companies, said the new rule’s costs far outweighed its benefits and accused the E.P.A. of using the Clean Air Act illegally to deal with global warming.¶ Kathleen Sgamma, the group’s vice president for government affairs, also asserted that the rules were not flexible enough “to account for new exploratory areas where infrastructure does not yet exist.”¶ “Small businesses disproportionately operate in such conditions, and this rule could make exploring in new areas cost-prohibitive,” she said.¶ Environmental advocacy groups said the new rule was a step forward for clean air. The American Lung Association said that the reduction of a variety of emissions, including sulfur dioxide, nitrogen oxide and volatile organic compounds, would improve the health of people living downwind from oil and gas operations.¶ Ann Brewster Weeks, senior counsel for the Clean Air Task Force, said **reductions in emissions that contribute to smog and global warming were good news** but objected to the E.P.A.’s concessions on the timetable.

#### Delayed implementation solves

**Efstathiou 12** (4/17/12, Jim, Bloomberg Businessweek, “Drillers Say Costs Manageable From Pending Gas Emissions Rule,” http://www.bloomberg.com/news/2012-04-17/drillers-say-costs-manageable-from-pending-gas-emissions-rule.html)

Three Years

The rule would take effect about 60 days after it is issued. The American Petroleum Institute says it will take up to three years to manufacture equipment needed to comply and train people to use it. Benjamin Salisbury, a senior energy policy analyst at FBR Capital Markets Corp. in Arlington, Virginia, said he expects the EPA to delay the effective date of the rule to prevent any “short-term dislocations.” “We have every reason to believe that the Obama administration wants to ensure that they maintain a vibrant natural gas industry,” Salisbury said in an interview. “Assuming that EPA grants adequate phase-in time, then our read is that this is something that should be manageable for the industry.”

#### Regulation costs are less than 1% of revenue---won’t damage industry production

Barnett and Costello 9/3 Rob Barnett is an energy analyst and Tony Costello the lead analyst with Bloomberg Government., "Growing U.S. Energy Supply Alters Political Debate: BGOV Insight," September 3, 2012, www.businessweek.com/news/2012-09-03/growing-u-dot-s-dot-energy-supply-alters-political-debate-bgov-insight)

Most aspects of hydraulic fracturing are regulated at the state level, but there’s pressure for the federal government to get involved. The EPA’s recent regulations aimed at fracking -- and the expectation of more to come -- may increase production costs and slow the development of domestic oil and natural gas.¶ In April, the EPA issued its first regulation aimed at the roughly 13,000 wells that are “fracked” each year. The rule requires exploration companies to conduct “green completions” to reduce emissions from their oil- and gas-extraction sites. The EPA and the industry hold differing views of what this will mean to the economics of fracking. EPA says the rule won’t cost the industry a cent; the industry says it will suffer $2.5 billion a year in added costs.¶ In its own study, Bloomberg Government concluded that both the EPA and the industry miss the mark. It found the regulation will cost the industry from $316 million to $511 million a year -- not nothing, but also less than 1 percent of revenues associated with oil and gas production.¶ **EPA’s fracking regulation alone should be easily surmounted by the industry**. Still, it raises questions about the next round of rulemaking. EPA is currently studying fracking’s impact on drinking water, which may increase pressure to develop new federal regulations using the Clean Water Act.

#### State regulations are worse

Lustgarten 11

Abrahm Lustgarten, staff writer, The Guardian, April 21, 2011, "Natural gas drilling is at a crucial turning point", http://www.guardian.co.uk/environment/2011/apr/21/natural-gas-drilling-turning-point

In the US that is going to be tough, because the federal government does not regulate hydraulic fracturing. Oversight is left to states where regulations vary widely Europe, where disparate governments oversee a shared continuous natural landscape, may face similar challenges. The energy industry already knows how to prevent water pollution and how to sharply reduce toxic air emissions, for example. Drilling companies have figured out how to drill wells with fewer toxic chemicals, enclose wastewater so it can In the US, legislators are considering a baseline set of rules with higher standards which would make fracturing slightly more expensive than the industry has wanted, but also offer an opportunity for consistency, predictability, and the streamlining of operations. For places already coping with the environmental consequences of drilling, that will boost confidence that natural gas can be harvested safely. It will also lead to political and regulatory stability that will end up saving the industry money. And only then can drilling for gas be the win-win it was promised to be.