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#### They don’t specific their agent – that’s a voter

#### 1. Poor decision-making – we don’t learn how the government actually works – outweighs because decision-making is the only portable impact

#### 2. Education – 90% of the plan is implementation

Elmore 80, Professor of Public Affairs at University of Michigan, Polysci Quarterly Pages 79-80

Analysis of Policy choices matters very little if the mechanism for implementing those choices is poorly understood. In the Normal Case, it was about 10%, leaving 90% in the realm of Implementation.

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#### NNSA stemming human capital shortages- plan trades off- no link turns

Aloise, 12 -- GAO Nuclear Security, Safety, and Nonproliferation director

(Gene, former GAO Assistant Director for Report and Testimony Quality Control, "Modernizing the Nuclear Security Enterprise: Strategies and Challenges in Sustaining Critical Skills in Federal and Contractor Workforces," Government Accountability Office, GAO-12-468, April 2012, http://www.gao.gov/assets/600/590488.pdf, accessed 9-4-12, mss)

The enterprise’s work environments and site locations pose recruiting challenges, and NNSA and its M&O contractors face shortages of qualified candidates, among other challenges. For example, staff must often work in secure areas that prohibit the use of personal cell phones, e-mail, and social media, which is a disadvantage in attracting younger skilled candidates. In addition, many sites are geographically isolated and may offer limited career opportunities for candidates’ spouses. Critically skilled positions also require security clearances—and therefore U.S. citizenship—and a large percentage of students graduating from top science, technology, and engineering programs are foreign nationals. The pool of qualified candidates is also attractive to high technology firms in **the private sector**, which **may offer more desirable work** environments. **NNSA** and its M&O contractors **are** **taking actions to address these challenges where possible**, including streamlining hiring and security clearance processes and taking actions to proactively identify new scientists and engineers to build a pipeline of critically skilled candidates. The National Nuclear Security Administration (NNSA)—a separately organized agency within the Department of Energy (DOE)—has primary responsibility for ensuring the safety, security, and reliability of the nation’s nuclear weapons stockpile. 1 NNSA carries out these activities at eight government-owned, contractor-operated sites, which include three national laboratories, four production plants, and one test site. Collectively, these sites are referred to as the nuclear security enterprise. The enterprise, formerly known as the nuclear weapons complex, has been a significant component of U.S. national security since the 1940s. Contractors operate sites within the enterprise under management and operations (M&O) contracts. 2 These contracts provide the contractor with broad discretion in carrying out the mission of the particular contract but grant the government the option to become much more directly involved in day-to-day management and operations. Historically, confidence in the safety and reliability of the nuclear stockpile was derived through a continuous process of designing, testing, and deploying new weapons to replace older weapons. In 1992, at the end of the Cold War, and in response to a congressionally imposed U.S. nuclear test moratorium, 3 the United States ceased underground testing of nuclear weapons, and adopted the Stockpile Stewardship Program as an alternative to testing and producing new weapons. The Stockpile Stewardship Program primarily relies on analytical simulations and computer modeling to make expert judgments about the safety, security, and reliability of the nation’s nuclear weapons. In addition, NNSA refurbishes weapons in the stockpile to extend their operational lives. Under current national policy, NNSA may also be called upon to resume underground nuclear testing at the Nevada National Security Site within a 3-year time frame under certain circumstances, including the accumulation of uncertainties about the reliability of the nuclear stockpile. Currently, NNSA’s workforce is made up of about 34,000 M&O contractor employees that span the enterprise, and about 2,400 federal employees directly employed by NNSA in its Washington headquarters, at site offices located at each of the eight enterprise sites, and at its Albuquerque, New Mexico, complex. NNSA’s staff provide leadership and program management for the nuclear security enterprise and support and oversee its M&O contractors by providing business, technical, financial, legal, and management advice, including support for contractor workforce planning and restructuring, compensation, benefits, oversight of labor management relations, and the quality of contractor deliverables such as nuclear weapons components. Many workers in the enterprise––both NNSA’s staff and its M&O contractors––possess certain critical skills not readily available in the job market. These workers often have advanced degrees in scientific or engineering fields or experience in high-skill, advanced manufacturing techniques. In addition, certain critical skills are **unique to the enterprise** and, according to NNSA officials, **can** **only be developed** with**in its** secure, **classified environment**. According to these officials, it generally takes **a minimum of 3 years** of on-the-job training to achieve the skills necessary to succeed in most critical skills positions. Some nuclear weapons expertise can take even longer to develop and must be gained through several years of mentoring, training, and on-the-job experience. For example, according to officials at Los Alamos National Laboratory, it takes 5 to **10 years** to train a scientist or engineer with an advanced degree to be a fully qualified nuclear weaponeer. Over the last 20 years, in an effort to operate more efficiently and at reduced cost, DOE has **sharply reduced** its enterprise contractor workforce––from approximately 52,000 in 1992 to its current level of about 34,000. This decrease raised concerns about preserving critical skills in the enterprise. In 1999, a report from a congressionally mandated commission warned that unless DOE acted quickly to recruit and retain its critically skilled staff and M&O contractor employees—and sharpen the expertise already available—the department could have difficulty ensuring the safety, security, and reliability of the nation’s nuclear weapons. 4 DOE, and later **NNSA**, **took steps to correct these problems**, and in February 2005, we reported that these efforts had been generally effective. 5 However, in February 2011, in a report assessing the extent to which NNSA has the data necessary to make informed, enterprisewide decisions, 6 we found that NNSA did not have comprehensive information on the status of its M&O contractor workforce. In particular, we reported that NNSA did not have data on the critical skills needed to maintain the Stockpile Stewardship Program’s capabilities. As a result, we recommended that NNSA establish a plan with time frames and milestones for the development of a comprehensive contractor workforce baseline that includes the identification of critical human capital skills, competencies, and levels needed to maintain the nation’s nuclear weapons strategy. NNSA stated that it understood all of our recommendations in that report and believed that it could implement them. As of March 2012, NNSA had completed a draft plan and was incorporating stakeholders’ comments. NNSA officials said that they expect to complete the final contractor workforce baseline plan by May 2012. NNSA expressed concerns in its FY 2012 Stockpile Stewardship Management Plan about the state of both its federal and contractor workforces, stating that there was an urgent need to “refresh” both. In particular, NNSA noted that many employees have retired or are expected to retire soon. At the same time, NNSA’s mission has become even more dependent on high-level science, computer science, technology, and engineering skills as it has moved from underground testing as a means for assessing the safety and reliability of nuclear weapons to one dependent on advanced computer simulations, analyses, and nonnuclear tests. These changes make it even more important that NNSA and its M&O contractors preserve critical skills in their workforces. Additional concerns about human capital in the enterprise have been raised by the debate over––and eventual ratification of––the New Start Treaty, 7 which commits the United States to reduce the size of its strategic nuclear weapon stockpile from a maximum of 2,200 to 1,550 nuclear weapons. Reductions in the number of nuclear weapons make it all the more important that NNSA and contractor staff have the requisite critical skills to maintain the safety, security, and reliability of the remaining weapons. However, as the enterprise has contracted, NNSA officials note that **training opportunities have been limited, leaving little or no redundancy** in certain critical skills within the contractor workforce. In this context, you asked us to examine NNSA’s human capital planning. Specifically, our objectives were to examine: (1) the strategies NNSA and its M&O contractors use to recruit, develop, and retain the workforces needed to preserve the critical skills in the enterprise; (2) how NNSA assesses the effectiveness of these strategies; and (3) challenges that NNSA and its M&O contractors face in recruiting, retaining, and developing this specialized workforce and their efforts to mitigate these challenges. To address these three objectives, we conducted interviews with human capital planning officials at NNSA headquarters, the Albuquerque complex in New Mexico, and all eight NNSA site offices. We also obtained and reviewed NNSA information about recruiting and retention practices for critically skilled employees, as well as each site’s efforts to preserve knowledge needed to sustain critical capabilities. We visited six of the eight sites in the enterprise, including the three national laboratories, Los Alamos National Laboratory and Sandia National Laboratories in New Mexico and Lawrence Livermore National Laboratory in California; two of the production plants, the Pantex Plant in Texas and the Y-12 Plant in Tennessee; and the test site, Nevada National Security Site in Nevada. We conducted telephone interviews with human capital managers at the two other production plants, the Kansas City Plant in Missouri and the Savannah River Site in South Carolina. To examine the strategies NNSA and its M&O contractors use to recruit and retain critically skilled workers, we collected key workforce data from each facility, including NNSA and M&O contractor reports and other documents on the performance and progress made in meeting recruitment and retention targets. To identify challenges in retaining, recruiting, and developing the critical skills workforce, we sent a standardized set of questions about workforce planning efforts and challenges to each M&O contractor and NNSA site office, and analyzed their written responses. We also interviewed NNSA and M&O human capital officials at each site about site-specific workforce challenges and their efforts to address them. We reviewed two NNSA systems for managing human capital data; to assess the reliability of these systems, we interviewed knowledgeable NNSA officials to assess the reliability of these data and determined that they were sufficiently reliable for the purposes of this report. We conducted this performance audit from December 2010 through April 2012, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. To ensure the safety, security, and reliability of the nation’s nuclear weapons stockpile, NNSA relies on contractors who manage and operate government-owned laboratories, production plants, and a test site. NNSA’s eight enterprise sites each perform a different function, all collectively working toward fulfilling NNSA’s nuclear weapons-related mission. Figure 1 shows the locations of the sites and describes their functions. To provide support and oversight, NNSA locates between about 30 and 110 NNSA staff in a site office at each facility, and also draws on the resources of NNSA staff in headquarters and the Albuquerque complex. According to NNSA officials, this support and oversight requires that some NNSA staff have critical skills comparable to the contractors they support and oversee. For example, NNSA staff may need technical knowledge and expertise to accept and review deliverables from M&O contracts and, when presented with options, be able to determine how best to proceed to meet contract goals, mission, and objectives. They may also need skills related to the safe operation of sensitive defense nuclear facilities such as expertise in occupational safety and fire safety. For example, according to NNSA officials at the Livermore Site Office, most of the staff in critical skills positions there are focused on ensuring safety at the laboratory’s nuclear facilities. Maintaining critical skills within its workforce is not a challenge unique to NNSA. Every 2 years, we provide Congress with an update on GAO’s high-risk program, under which GAO designates certain government operations as high risk due to their greater vulnerabilities to fraud, waste, abuse, and mismanagement, or their need for transformation to address economy, efficiency, or effectiveness challenges. In 2001, GAO designated strategic human capital management across the entire federal government as a high-risk area, in part because critical skill gaps could undermine agencies’ abilities to accomplish their missions. We have also reported in the past that NNSA and its predecessor organizations’ record of inadequate management and oversight of contractors has left the government vulnerable to fraud, waste, abuse, and mismanagement. Contract management at DOE has been on GAO’s high risk list since 1990, the first year our high-risk list was published. 8 **Progress has been made, but NNSA** and DOE’s Office of Environmental Management **remain on our high-risk list**. 9 As of 2011, our most recent update of the high-risk list, significant steps had been taken to address some of the federal government’s strategic human capital challenges. Strategic human capital management was designated a high-risk area 10 years earlier governmentwide and remains on the high-risk list because of a need for all federal agencies to address current and emerging critical skills gaps that are or could undermine agencies’ abilities to meet their vital missions. Specifically, across the federal government, we reported that resolving remaining high-risk human capital challenges will require three categories of actions: • Planning. Agencies’ workforce plans must define the root causes of skills gaps, identify effective solutions to skills shortages, and provide the steps necessary to implement solutions. • Implementation. Agencies’ recruitment, hiring, and development strategies must be responsive to changing applicant and workforce needs and expectations and also show the capacity to define and implement corrective measures to narrow skill shortages. • Measurement and evaluation. Agencies need to measure the effects of key initiatives to address critical skills gaps, evaluate the performance of those initiatives, and make appropriate adjustments.

#### Plan trades off- its zero-sum

Lorentzen, 8 -- Human Sciences Research Council chief research specialist

(Jo, PhD from the European University Institute in Italy, worked at universities and research institutes in Europe and in the US for a decade during which he taught courses on international business and economic development, and Il-Haam Petersen "Human Capital Dynamics in Three Technology Platforms: Nuclear, Space and Biotechnology," March 2008, https://www.labour.gov.za/downloads/documents/research-documents/Technology%20Platforms.pdf, accessed 9-6-12, mss)

For the new build programme, the time lines are such that construction could feasibly start in 2010 and would last six years, irrespective of location. **New build implies a massive human capital effort** at the level of artisans, technicians, and engineers. Insofar as the new plants are turn-key projects, it would be the contractor’s responsibility to field the required number and quality of welders, electricians, and so forth. But it is also true that **in view of the scarcity of these** kinds of **skills** in the country, **any upscale of the nuclear workforce would come at the expense of other** infrastructure **projects**, thus **resulting in a zero-sum game**. In light of this massive market failure, it is unlikely that the solution to the skills constraints could be entirely privatised, i.e. rest with Westinghouse and whoever else makes up its consortium.

#### NNSA human capital key to solve disease

D'Agostino, 10 – U.S. Under Secretary for Nuclear Security

(Thomas, former Stockpile Stewardship Program director, "NNSA Administrator Addresses Next Generation of Computational Scientists," 6-22-10, www.nnsa.energy.gov/mediaroom/speeches/csgfremarks062210, accessed 9-4-12, mss)

Since I spoke to this group last summer, a lot has changed. I believe that the long-term opportunities to promote our Nation’s nuclear security are greater today than at any point since the end of the Cold War. And I believe that means even more opportunities for you and your generation of nuclear security professionals to make valuable and rewarding contributions to our nation’s security. Take, for example, the Nuclear Posture Review released publicly this past April. While it obviously defines the role of nuclear weapons for our future national security, it also recognizes and explicitly mentions a key theme I have been promoting for a number of years: the importance of recruiting and retaining the “human capital” needed in the NNSA for the nuclear security mission. **In order to succeed** in our mission, **we must have the best and brightest** minds working to tackle the toughest challenges.Without question, **our highly specialized work force is our greatest asset.** This Nuclear Posture Review has helped generate renewed interest in nuclear security by elevating these issues to the very top of our national security agenda. I want to share with you a statement from the Directors of Los Alamos, Sandia, and Lawrence Livermore that provides their views on the NPR. The Directors universally state that: “We are reassured that a key component of the NPR is the recognition of the importance of supporting ‘a modern physical infrastructure -comprised of the national security laboratories and a complex of supporting facilities--and a highly capable workforce…..’” The President has now clearly outlined the importance of nuclear issues for our national security, and of keeping the U.S. nuclear deterrent safe, secure, and effective for the foreseeable future. The Administration’s commitment to a clear and long-term plan for managing the stockpile and its comprehensive nuclear security agenda, ensures the scientists and engineers of tomorrow like yourselves will have the opportunity to engage in challenging research and development activities. The mission in NNSA encompasses the nuclear deterrent, nonproliferation, nuclear propulsion, nuclear counterterrorism, emergency management, nuclear forensics and nuclear intelligence analysis. And, we anticipate that those R&D activities will expand far beyond the classical nuclear weapons mission. At the Department of Energy, we are expected to deliver for the Nation in science, energy, and security. The Department will soon issue a new Strategic Plan that reflects an integrated approach to national security activities. We anticipate that our nuclear security facilities will provide significant science, technology, and engineering capabilities that can address non-NNSA issues. Conversely, we anticipate that other DOE programs can provide science, technology, and engineering capabilities to NNSA for our issues. We are looking at a number of areas to move forward: Exa-scale Computing, Energy Systems Simulation, the behavior of Materials in Extreme Environments, and Inertial Fusion Energy – these are some of the cross cutting areas we are a looking at as we map out the future strategic vision of the Department. Already, the supercomputing capabilities born of our nation’s investment in nuclear security are **providing the tools to tackle** global challenges like climate change, **the spread of pandemic diseases**, and even hurricane modeling. As we move to the next generation of supercomputers, we will see even more opportunities for the kind of cutting edge science and research that can engage people like you and your colleagues. Creating computational simulations to provide solutions – **in effect, creating a new discipline of predictive sciences** – is a technical base we need and is a direction that many of you in this room will help pioneer. Like generations of scientists and researchers before you, we hope you will find the opportunity we provide to develop novel solutions to critical challenges to be irresistible to your career path decisions. And I am confident of our future when I look out at audiences like this and see people like you. The work you do, your interests and your choices will form our future. Don’t be bashful about striving for what you want. Your investments now in developing your skills make you best able to contribute towards solving our most complex national problems. From Oppenheimer during the Manhattan Project, to the men and women serving in our national laboratories today, the people who come before you have included some of the greatest names in science and discovery. You are the inheritors of a proud tradition of achievement and advancement. I am confident that legacy is in good hands. Secretary Chu recently stated that the Department of Energy “...must discover and deliver the solutions to advance our national priorities.” The NNSA and our Nuclear Security Enterprise are poised to provide those solutions along with the rest of the Department.

#### Extinction

Keating, 9 -- Foreign Policy web editor

(Joshua, "The End of the World," Foreign Policy, 11-13-9, www.foreignpolicy.com/articles/2009/11/13/the\_end\_of\_the\_world?page=full, accessed 9-7-12, mss)

How it could happen: Throughout history, plagues have brought civilizations to their knees. The Black Death killed more off more than half of Europe's population in the Middle Ages. In 1918, a flu pandemic killed an estimated 50 million people, nearly 3 percent of the world's population, a far greater impact than the just-concluded World War I. Because of globalization, diseases today spread even faster - witness the rapid worldwide spread of H1N1 currently unfolding. A global outbreak of a disease such as ebola virus -- which has had a 90 percent fatality rate during its flare-ups in rural Africa -- or a mutated drug-resistant form of the flu virus on a global scale could have a devastating, even civilization-ending impact. How likely is it? Treatment of deadly diseases has improved since 1918, but so have the diseases. Modern industrial farming techniques have been blamed for the outbreak of diseases, such as swine flu, and as the world’s population grows and humans move into previously unoccupied areas, the risk of exposure to previously unknown pathogens increases. More than 40 new viruses have emerged since the 1970s, including ebola and HIV. Biological weapons experimentation has added a new and just as troubling complication.

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#### **Immigration reform will pass, but capital’s key**

Star-Telegram 2/2 [“Finally, a bipartisan approach to immigration policy”, http://www.star-telegram.com/2013/02/02/4595720/finally-a-bipartisan-approach.html]

With leadership from the president, both political parties and both houses of Congress, comprehensive immigration reform -- one of the most divisive issues in the nation for a generation -- appears to be on a fast track for approval. Of course, that doesn't mean that grand plans offered back-to-back by a bipartisan group of senators and President Obama won't be sidetracked, as anything can happen in a politically polarized nation and on such a volatile subject. But the fact that Republicans and Democrats are in agreement that something has to be done, and that the two newly unveiled plans for immigration overall have similar objectives, it would be regrettable if Congress botched this opportunity.

#### Plan saps capital and kills the agenda

Sands 12

(Derek, “Before the US can store its nuclear waste, the Senate fights about who's in charge of that decision”, Platts, 6-8-2012, <http://www.platts.com/weblog/oilblog/2012/06/08/before_the_us_c.html>)

However, the two committees may focus on different priorities as part of potential nuclear waste legislation. Bingaman said Wednesday that the bill he is crafting would focus on creating an entity outside DOE to deal with nuclear waste, while senators on the environment and public works committee aimed their questions to Blue Ribbon Commission members on the mechanics of gaining state and local consent for a repository. Whether the committees can work together or will come to legislative blows is still unclear. But if one thing has been proven so far, it is that escaping gridlock and delay when debating nuclear waste disposal is impossible. "It was over 30 years ago when the Congress realized the importance of finding a permanent solution for the disposal of our spent fuel and high level waste," Carper said. "In response, Congress passed the Nuclear Waste Policy Act of 1982, moving this country forward towards deep mine geologic nuclear waste repositories. After years of study and debate, we find ourselves 30 years later in what's really a dead end."

**Reform expands skilled labor – spurs relations and growth in China and India**

Los Angeles Times, 11/9/20**12** (Other countries eagerly await U.S. immigration reform, p. http://latimesblogs.latimes.com/world\_now/2012/11/us-immigration-reform-eagerly-awaited-by-source-countries.html)

"Comprehensive immigration reform will see **expansion of skilled labor visas**," predicted B. Lindsay Lowell, director of policy studies for the Institute for the Study of International Migration at Georgetown University. A former research chief for the congressionally appointed Commission on Immigration Reform, Lowell said he expects to see at least a **fivefold increase** in the number of highly skilled labor visas that would provide "a **significant shot in the arm for India and China**." There is **widespread consensus among economists and academics** that skilled migration **fosters new trade and business relationships** between countries and **enhances links to the global economy**, Lowell said. "Countries like India and China weigh the opportunities of business abroad from their expats with the possibility of brain drain, and I think they still see the immigration opportunity as a bigger plus than not," he said.

**U.S.-India relations key to avert South Asian war**

**Schaffer 2** (Teresita – Director of the South Asia Program at the Center for Strategic and International Security, Washington Quarterly, p. Lexis)

Washington's increased interest in India since the late 1990s reflects India's economic expansion and position as Asia's newest rising power. New Delhi, for its part, is adjusting to the end of the Cold War. As a result, both giant democracies see that they can **benefit by closer cooperation**. For Washington, the advantages include a wider network of friends in Asia at a time when the region is changing rapidly, as well as a **stronger position** from which to help **calm possible future nuclear tensions in the region**. Enhanced trade and investment benefit both countries and are a **prerequisite for improved U.S. relations with India**. For India, the country's ambition to assume a stronger leadership role in the world and to maintain an economy that lifts its people out of poverty depends critically on good relations with the United States.

#### Extinction

Hundley 12 (Tom Hundley is senior editor at the [Pulitzer Center on Crisis Reporting](http://pulitzercenter.org/). This article for Foreign Policy is part of the Pulitzer Center's [Gateway project](http://pulitzercenter.org/going-nuclear) on nuclear security. [Race to the End](http://www.foreignpolicy.com/articles/2012/09/05/race_to_the_end) http://www.foreignpolicy.com/articles/2012/09/05/race\_to\_the\_end?page=0,3)

The arms race could make a loose nuke more likely. After all, Pakistan's assurances that its nuclear arsenal is safe and secure rest heavily on the argument that its warheads and their delivery systems have been uncoupled and stored separately in heavily guarded facilities. It would be very difficult for a group of mutinous officers to assemble the necessary protocols for a launch and well nigh impossible for a band of terrorists to do so. But that calculus changes with the deployment of mobile battlefield weapons. The weapons themselves, no longer stored in heavily guarded bunkers, would be far more exposed. Nevertheless, military analysts from both countries still say that a nuclear exchange triggered by miscalculation, miscommunication, or panic is far more likely than terrorists stealing a weapon -- and, significantly, that the odds of such an exchange increase with the deployment of battlefield nukes. As these ready-to-use weapons are maneuvered closer to enemy lines, the chain of command and control would be stretched and more authority necessarily delegated to field officers. And, if they have weapons designed to repel a conventional attack, there is obviously a reasonable chance they will use them for that purpose. "It lowers the threshold," said Hoodbhoy. "The idea that tactical nukes could be used against Indian tanks on Pakistan's territory creates the kind of atmosphere that greatly shortens the distance to apocalypse." Both sides speak of the possibility of a limited nuclear war. But even those who speak in these terms seem to understand that this is fantasy -- that once started, a nuclear exchange would be almost impossible to limit or contain. "The only move that you have control over is your first move; you have no control over the nth move in a nuclear exchange," said Carnegie's Tellis. The first launch would create hysteria; communication lines would break down, and events would rapidly cascade out of control. Some of the world's most densely populated cities could find themselves under nuclear attack, and an estimated 20 million people could die almost immediately. What's more, the resulting firestorms would put 5 million to 7 million metric tons of smoke into the upper atmosphere, according to a [new model](http://www.scientificamerican.com/article.cfm?id=local-nuclear-war) developed by climate scientists at Rutgers University and the University of Colorado. Within weeks, skies around the world would be permanently overcast, and the condition vividly described by Carl Sagan as "nuclear winter" would be upon us. The darkness would likely last about a decade. The Earth's temperature would drop, agriculture around the globe would collapse, and a billion or more humans who already live on the margins of subsistence could starve. This is the real nuclear threat that is festering in South Asia. It is a threat to all countries, including the United States, not just India and Pakistan. Both sides acknowledge it, but neither seems able to slow their dangerous race to annihilation.

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#### Nuclear power centralizes energy – becomes a counter-weight to democratic forces and an instrument of political control

**Montague 7 (**Peter, executive director of Environmental Research Foundation, Ph.D in History and Specializes in Environmental Justice History and Research “Why is Uncle Sam so committed to reviving nuclear power?”, http://gristmill.grist.org/story/2007/9/30/81452/0397, )

So why is Uncle Sam hell-bent on reviving nuclear power? I don't have a firm answer and can only speculate. Perhaps from the viewpoint of both Washington and Wall Street, nuclear power is preferable to renewable-energy alternatives because it is **extremely capital-intensive and the people who provide the capital get to control the machine and the energy it provides. It provide a rationale for a large centralized bureaucracy and tight military and police security to thwart terrorists**. This kind of **central control can act as a powerful counterweight to excessive democratic tendencies** in any country that buys into nuclear power. **Particularly if they sign a contract with the U.S. or one of its close allies for delivery of fuel and removal of radioactive wastes, political control becomes a powerful** (though unstated) **part of the bargain**. If you are dependent on nuclear power for electricity and you are dependent on us for reactor fuel, **you are in our pocket**. On the other hand, solar, wind and other renewable energy alternatives lend themselves to **small-scale, independent installations under the control of local communities or even households.** Who knows where that could lead?

#### Energy centralization makes extinction inevitable – exacerbates structural violence – Tech Optimism makes the aff epistemologically suspect

Byrne and Toley 6 (John – Head of the Center for Energy and Environmental Policy – It’s a leading institution for interdisciplinary graduate education, research, and advocacy in energy and environmental policy – John is also a Distinguished Professor of Energy & Climate Policy at the University of Delaware – 2007 Nobel Peace Prize for his work on the Intergovernmental Panel on Climate Change (IPCC), Toley – Directs the Urban Studies and Wheaton in Chicago programs - Selected to the Chicago Council on Global Affairs Emerging Leaders Program for 2011-2013 - expertise includes issues related to urban and environmental politics, global cities, and public policy, “Energy as a Social Project: Recovering a Discourse,” p. 1-32)

From climate change to acid rain, contaminated landscapes, mercury pollution, and biodiversity loss, the origins of many of our least tractable environmental problems can be traced to the operations of the modern energy system. A scan of nightfall across the planet reveals a social dila that also accompanies this system’s operations: invented over a century ago, electric light **remains an experience only for the** socially privileged. Two billion human beings—almost one-third of the planet’s population—experience evening light by candle, oil lamp, or open fire, reminding us that energy modernization has left intact—and sometimes exacerbated—social inequalities that its architects promised would be banished (Smil, 2003: 370 - 373). And there is the disturbing link between modern energy and war. 3 Whether as a mineral whose control is fought over by the powerful (for a recent history of conflict over oil, see Klare, 2002b, 2004, 2006), or as the enablement of an atomic war of extinction**,** modern energy makes modern life possible and threatens its future. With environmental crisis, social inequality, and military conflict among the significant problems of contemporary energy-society relations, the importance of a social analysis of the modern energy system appears easy to establish. One might, therefore, expect a lively and fulsome debate of the sector’s performance, including critical inquiries into the politics, sociology, and political economy of modern energy. Yet, contemporary discourse on the subject is disappointing: instead of a social analysis of energy regimes, the field seems to be a captive of euphoric technological visions and associated studies of “energy futures” that imagine the pleasing consequences of new energy sources and devices. 4 One stream of euphoria has sprung from advocates of conventional energy, perhaps best represented by the unflappable optimists of nuclear power 12 Transforming Power who, early on, promised to invent a “magical fire” (Weinberg, 1972) capable of meeting any level of energy demand inexhaustibly in a manner “too cheap to meter” (Lewis Strauss, cited in the New York Times 1954, 1955). In reply to those who fear catastrophic accidents from the “magical fire” or the proliferation of nuclear weapons, a new promise is made to realize “inherently safe reactors” (Weinberg, 1985) that risk neither serious accident nor intentionally harmful use of high-energy physics. Less grandiose, but no less optimistic, forecasts can be heard from fossil fuel enthusiasts who, likewise, project more energy, at lower cost, and with little ecological harm (see, e.g., Yergin and Stoppard, 2003). Skeptics of conventional energy, eschewing involvement with dangerously scaled technologies and their ecological consequences, find solace in “sustainable energy alternatives” that constitute a second euphoric stream. Preferring to redirect attention to smaller, and supposedly more democratic, options, “green” energy advocates conceive devices and systems that prefigure a revival of human scale development, local self-determination, and a commitment to ecological balance. Among supporters are those who believe that greening the energy system embodies universal social ideals and, as a result, can overcome current conflicts between energy “haves” and “havenots.” 5 In a recent contribution to this perspective, Vaitheeswaran suggests (2003: 327, 291), “today’s nascent energy revolution will truly deliver power to the people” as “micropower meets village power.” Hermann Scheer echoes the idea of an alternative energy-led social transformation: the shift to a “solar global economy... can satisfy the material needs of all mankind and grant us the freedom to guarantee truly universal and equal human rights and to safeguard the world’s cultural diversity” (Scheer, 2002: 34). 6 The euphoria of contemporary energy studies is noteworthy for its **historical consistency** with a **nearly unbroken social narrative of wonderment** extending from the advent of steam power through the spread of electricity (Nye, 1999). The modern energy regime that now **powers nuclear weaponry and risks disruption of the planet’s climate** is a product of promises pursued without sustained public examination of the political, social, economic, and ecological record of the regime’s operations. However, the discursive landscape has occasionally included thoughtful exploration of the broader contours of energy-environment-society relations. As early as 1934, Lewis Mumford (see also his two-volume Myth of the Machine, 1966; 1970) critiqued the industrial energy system for being a key source of social and ecological alienation (1934: 196): The changes that were manifested in every department of Technics rested for the most part on one central fact: the increase of energy. Size, speed, quantity, the multiplication of machines, were all reflections of the new means of utilizing fuel and the enlargement of the available stock of fuel itself. Power was dissociated from its natural human and geographic limitations: from the caprices of the weather, from the irregularities that definitely restrict the output of men and animals. 02Chapter1.pmd 2 1/6/2006, 2:56 PMEnergy as a Social Project 3 By 1961, Mumford despaired that modernity had retrogressed into a **lifeharming dead end** (1961: 263, 248): ...**an orgy of uncontrolled production and** equally uncontrolled **reproduction**: machine fodder and cannon fodder: **surplus values and surplus populations**... The dirty crowded houses, the dank airless courts and alleys, the bleak pavements, the sulphurous atmosphere, the over-routinized and dehumanized factory, the drill schools, the second-hand experiences, the starvation of the senses, the remoteness from nature and animal activity—here are the enemies. The living organism demands a life-sustaining environment. Modernity’s formula for two centuries had been to increase energy in order to produce overwhelming economic growth. While diagnosing the inevitable failures of this logic, Mumford nevertheless warned that modernity’s supporters would seek to **derail present-tense evaluations** of the era’s social and ecological performance with **forecasts of a bountiful future in which**, finally, the **perennial social conflicts** over resources **would end**. Contrary to traditional notions of democratic governance, Mumford observed that the modern ideal actually issues from a pseudomorph that he named the “democratic- authoritarian bargain” (1964: 6) in which the modern energy regime and capitalist political economy join in a promise to produce “**every material advantage, every intellectual and emotional stimulus [one] may desire, in quantities hardly available hitherto even for a restricted minority”** on the condition that society demands only what the regime is capable and willing to offer. An authoritarian energy order thereby constructs an aspirational democracy while facilitating the abstraction of production and consumption from non-economic social values.

#### Vote neg - methodological investigation is a prior question to the aff – strict policy focus creates a myth of objectivity that sustains a violent business-as-usual approach

**Scrase and Ockwell 10** (J. Ivan - Sussex Energy Group, SPRU (Science and Technology Policy Research), Freeman Centre, University of Sussex, David G - Tyndall Centre for Climate Change Research, SPRU, Freeman Centre, University of Sussex, “The role of discourse and linguistic framing effects in sustaining high carbon energy policy—An accessible introduction,” Energy Policy: Volume 38, Issue 5, May 2010, Pages 2225–2233)

The way in which **energy policy is “framed**” refers to the **underlying assumptions policy is based on** and the ways in which **policy debates ‘construct’, emphasise and link particular issues**. For example energy ‘security of supply’ is often emphasised in arguments favouring nuclear-generated electricity. A more limited framing effect operates on individuals in opinion polls and public referendums: here the way in which questions are posed has a strong influence on responses. The bigger, **social framing** effect referred to here **colours societies’ thinking** about whole areas of public life, in this case energy use and its environmental impacts. A key element of the proposed reframing advanced by commentators concerned with decarbonising energy use (see, for example, [Scrase and MacKerron, 2009](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib25)) is to cease treating energy as just commercial units of fuel and electricity, and instead to focus on the energy ‘services’ people need (warmth, lighting, mobility and so on). This paper helps to explain why any such reframing, however logical and appealing, is politically very challenging if it goes against the perceived interests of powerful groups, particularly when these interests are aligned with certain imperatives which governments must fulfil if they are to avoid electoral defeat. There is a **dominant conception** of **policy-making as an objective, linear process**. In essence the process is portrayed as proceeding in a series of steps from facts to analysis, and then to solutions (for a detailed critique of this linear view see [Fischer, 2003](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib11)). In reality, policy-making is usually messy and political, rife with the exercise of **interests and power**. **The veneer of objective, rational policy-making**, that the dominant, linear model of policy-making supports is therefore cause for concern. It effectively sustains energy policy ‘business as usual’ and excludes many relevant voices that might be effective in opening up space to reframe energy policy problems and move towards more sustainable solutions (see, for example, [Ockwell, 2008](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib21)). This echoes concerns with **what counts as knowledge** and whose voices are heard in policy debates that have characterised strands of several literatures in recent decades, including science and technology studies, sociology of scientific knowledge, and various strands of the political science and development literatures, particularly in the context of knowledge, discourse and democracy. An alternative to the linear model is provided by a ‘discourse’ perspective. This draws on political scientists’ observations of ways in which politics and policy-making proceed through the use of language, and the expression of values and the assumptions therein. Discourse can be understood as: ‘… a **shared way of apprehending the world**. **Embedded in language** it enables subscribers to **interpret bits of information** and put them together into **coherent stories** or accounts. Each discourse **rests on assumptions**, judgements and contentions that provide the basic terms for analysis, debates, agreements and disagreements…’ [Dryzek (1997, p.8)](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib5). A discursive approach rejects the widely held assumption that policy language is a **neutral medium** through which ideas and an objective world are represented and discussed ([Darcy, 1999](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib4)). Discourse analysts examine and explain language use in a way that helps to **reveal the underlying interests, value judgements and beliefs** that are often **disguised by policy actors’** factual claims and the arguments that these are used to support. For example UK energy policy review documents issued in 2006–2007 are criticised below for presenting information in ways that subtly but consistently favoured new nuclear power while purporting to be undecided on the issue. People (including scientific and policy experts) **base their understanding of problems and solutions on their knowledge, experiences, interpretations and value judgements**. These are **coloured and shaped** by social interactions, for example by what is considered an ‘appropriate’ perspective in one's work life within certain institutions. Policy actors therefore expend considerable effort on influencing the design and evolution of institutions in order to ensure problems and solutions are framed in ways they favour. Thus discourse is fundamental to the way that institutions are created, but in the short-term institutions also have a constraining or structuring effect. At a more fundamental level there are even more rigid constraints, which can be identified as a set of core imperatives, such as sustained economic growth and national security, which states and their governments, with very few exceptions, must fulfil in order to ensure their survival ([Dryzek et al., 2003](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib6)—these are explored in detail further below).

### 1nc

#### The United States Federal Government should grant authority to the fifty states to provide a twenty-percent investment tax credit for the deployment of domestic nuclear fuel recycling. The fifty states should provide a twenty-percent investment tax credit for the deployment of domestic nuclear fuel recycling.

#### Solves uniform energy production policy

Energy Report 1 [“Governors adopt new energy policy to address challenges” -- August 13 -- lexis]

The governors of all 50 states last week agreed to adopt a new energy policy, recognizing the need for new supplies as well as improved conservation. The National Governors Association, at its annual meeting in Providence, R.I., adopted the new policy in an effort to keep up with the massive changes in the energy industry, and following recent spikes in gasoline, home heating and natural gas prices. The new energy policy is the first major change in a decade to the governors' policy. "The policy sends a clear message that solving our nation's energy problems demand more conservation, especially utilizing renewable fuels like ethanol," said Iowa Gov. Thomas Vilsack, the Democrat chairman of the NGA Committee on Natural Resources, which drafted the new policy. "Our goal should always be to assure American families and businesses their energy prices will be stable." The new policy recognizes that energy and environmental challenges facing the United States, such as periodic shortages in oil, gas and electricity, cause hardship for consumers and businesses, harm the economy and can harm national security. "The United States' dependence on foreign sources of oil is at an all-time high while demand for energy continues to rise," said Oklahoma Gov. Frank Keating, a Republican. "Energy issues must be addressed nationally but state and local authority over energy and environmental matters also needs to be maintained. It would be a mistake to develop a national energy policy without full cooperation and partnership with the states and their governors." The policy recognizes that "demand for energy will continue to grow, however. Simultaneously, energy efficiency is projected to continue to improve. "Yet even with more conservation, innovation, and new technology, the United States will need more energy supplies," the NGA policy states. North Dakota Gov. John Hoeven, a Republican, added: "We must expand and upgrade the transmission networks to move energy from the source to the consumer. Improving energy transmission will impact conservation, efficiency and supply." The governors and Energy Secretary Spencer Abraham last week agreed to launch a two-year project aimed at culling together recommendations for new policies applying to generation, transmission and the development of regional electricity markets (see story below). The governors made it clear, however, that states - not the federal government - should play a lead role in shaping energy policy. "Energy issues must be addressed nationally, while still recognizing state and local authority over environmental and energy matters," the policy statement said. "The solution to the need for energy will require increased conservation and energy efficiency as well as exploration of new energy supplies, including environmentally responsible development of traditional sources and greater reliance on alternative and renewable sources. We also must continue the trend of reducing emissions associated with energy production."

### warming

**No famine – the poorest are insulated from global markets**

**Paarlberg 8** (Robert, Professor of Political Science – Wellesley College, “It's Not the Price that Causes Hunger”, The International Herald Tribune, 4-23, Lexis)

International prices of rice, wheat and corn have risen sharply, setting off violent urban protests in roughly a dozen countries in Asia, Africa and Latin America. But is this a ''world food crisis?'' It is certainly a troubling instance of price instability in international commodity markets, leading to social unrest among urban food-buyers. But **we must be careful not to equate high** crop **prices with hunger around the world**. **Most of the world's hungry people do not use international food markets, and most of those who use these markets are not hungry**. **International food markets**, like international markets for everything else, **are used primarily by the prosperous** and secure, **not the poor** and vulnerable. In world corn markets, the biggest importer by far is Japan. Next comes the European Union. Next comes South Korea. Citizens in these countries are not underfed. In the poor countries of Asia, rice is the most important staple , yet most Asian countries import very little rice. As recently as March , India was keeping imported rice out of the country by imposing a 70 percent duty. Data on the actual incidence of malnutrition reveal that **the regions of the world where people are most hungry**, in South Asia and Sub-Saharan Africa, **are those that depend least on imports** from the world market. **Hunger is caused** in these countries **not by high** international **food prices, but by local conditions**, **especially** rural poverty linked to **low productivity in farming**. **When** international **prices** are **go up**, the **disposable income of** some import-dependent **urban dwellers is squeezed. But most** of the actual **hunger takes place in** the **villages** and in the countryside , **and** it **persists even when international prices are low**. When hunger is measured as a balanced index of calorie deficiency, prevalence of underweight children and mortality rates for children under five, we find that South Asia and sub-Saharan Africa in 2007 had hunger levels two times as high as in the developing countries of East Asia, four times as high as in Latin America, North Africa or the Middle East, and five times as high as in Eastern Europe and Central Asia. The poor in South Asia and sub-Saharan Africa are hungry even though their connections to high-priced international food markets are quite weak. In the poorest developing countries of Asia, where nearly 400 million people are hungry, international grain prices are hardly a factor, since imports supply only 4 percent of total consumption - even when world prices are low. Similarly in sub-Saharan Africa, only about 16 percent of grain supplies have recently been imported, going mostly into the more prosperous cities rather than the impoverished countryside, with part arriving in the form of donated food aid rather than commercial purchases at world prices. The region in Africa that depends on world markets most heavily is North Africa, where 50 percent of grain supplies are imported. Yet food consumption in North Africa is so high (average per capita energy consumption there is about 3,000 calories per day, comparable to most rich countries) that increased import prices may cause economic stress for urban consumers (and perhaps even street demonstrations) but little real hunger. Import dependence is also high in Latin America (50 percent for some countries) but again high world prices will not mean large numbers of hungry people, because per capita GDP in this region is five times higher than in sub-Saharan Africa. **There is a** severe **food crisis** among the poor **in South Asia and** sub-Saharan **Africa, but it does not come from high** world **prices**. Even in 2005 in sub-Saharan Africa, a year of low international crop prices, 23 out of 37 countries in the region consumed less than their nutritional requirements. **Africa's food crisis grows primarily out of** the **low productivity**, year in and year out, of the 60 percent of all Africans who plant crops and graze animals for a living. The average African smallholder farmer is a woman who has no improved seeds, no nitrogen fertilizers, no irrigation and no veterinary medicine for her animals. Her crop yields are only one third as high as in the developing countries of Asia, and her average income is only $1 a day.

#### Warming will not hurt agriculture- consensus of warrants prove

**Singer 7** (Singer, distinguished research professor at George Mason and Avery, director of the Center for Global Food Issues at the Hudson Institute, 2007 (S. Fred, Dennis T, “Unstoppable Global Warming: Every 1,500 Years” Pages 120-124)

FIVE REASONS NOT TO FEAR FAMINE DURING GLOBAL WARMING First: Lessons of History Human food production, historically, has prospered during the global warmings. We have seen in the earlier chapters the flourishing of human society during the Roman Warming and the Medieval Warming. Food production increased during previous historic warmings primarily because warming climates provided more of the things plants love: sunlight, rainfall, and longer growing seasons. During warmings there are also less of the things plants hate: late spring frosts and early fall frosts that shorten the growing season, and hailstorms that destroy fields of crops. Jorgen Olesen of the Danish Institute of Agricultural Sciences predicts that Europe's overall food production will increase with warming, even though some southern European regions will have crops reduced by aridity." Second: What Science Says about Food and the Modern Warming Sunshine: Richard Willson of Columbia University (and NASA) has measured an increase in the sun's radiance of 0.05 percent per decade for the past two decades. He says the upward trend in sunlight may well have been going on longer than that. Earlier, we didn't have the precision instruments to measure that small but vital trend, but every bit of it encourages the growth of food crops.: The increased temperatures of the Modern Warming may have some negative impact on crops in the southern mid-latitudes-through drier summers, for example-in places such as southern Romania, Spain, and Texas. At the same time, however, stronger sunlight will importantly increase the productivity of farmland in the northern mid-latitudes, such as Germany, Canada, and Russia. The increased food production in the very extensive northern plains would far outweigh the negative impact of slightly more arid conditions in the southern mid-latitudes. Rainfall: Increased heat means more precipitation, as more moisture evaporates from the oceans and then falls as rain or snow. NASA says global rainfall increased 2 percent in the twentieth century compared with the tailend of the Little Ice Age in the nineteenth century. Most of the increased moisture fell in the mid- and high-latitudes where much of the world's most productive cropland is located. We can expect this to continue through the \Iodern Warming. Higher CO2 Levels: Another reason food production has tended to increase during the past 150 years is that CO2 levels in the atmosphere have increased. The oceans give up CO2 when they warm. The increased CO2 not only fertilizes the plants, but enables them to use water more efficiently. Researchers at the U.S. Department of Agriculture in 1997 grew wheat in a long plastic tunnel, varying the CO2 levels for the grain plants from the Ice Age CO2 level of about 200 parts per million (ppm) at one end of the tunnel to the late-1980s level of 350 ppm at the other.' The findings? An extra 100 ppm of CO2 increased the wheat production by 72 percent under well-watered conditions, and by 48 percent under semidrought conditions. That meant an average crop yield gain of 60 percent. These results are consistent with a wide variety of CO2 enrichment studies done in more than a dozen countries on many different crops. Third: Farming Technology Human food production today depends far more on farming technology than on modest climate changes. We are no more doomed to famine by the Modern Warming than we are doomed to malaria in the era of pesticides and window screens. In fact, the food abundance the world has increasingly enjoyed since the eighteenth century is primarily due to scientific and technological advances. In 1500, Britain could feed less than one million people. By 1850, thanks to knowledge of crop rotations and improved farm machines such as the seeder and reaper, Britain fed more than 16 million people. Today, Britain has nearly 60 million people, fed mainly from its own fields. Todau'e "Climate-Secure" Agriculture Industrial nitrogen fertilizer is one of the biggest farming advances in human history. Before 1908, farmers could only maintain their soil nutrient levels by adding livestock manure or by growing more green-manure crops, such as clover. Both of those strategies require lots of land. In 1908, however, the Haber-Bosch Process began taking nitrogen from the air, which is 78 percent nitrogen. Today's farmers apply about 80 million tons of industrial nitrogen per year to maintain their soils' fertility and it doesn't cost a single acre ofland. To get 80 million tons per year of nitrogen from cattle manure, the world would require nearly eight billion additional cattle, plus five acres or so of forage land per beast. We'd thus have to eliminate half the people, clear all the forests, or use some combination of those strategies. The Green Revolution of the 1960s tripled the crop yields across Europe and much of the Third World. • More powerful seeds, many of them with resistance to drought and pests, made better use of the complete roster of plant nutrients (nitrogen, phosphate, and potash-plus twenty-six trace mineral elements) that soil-testing modern farmers apply to their fields. • Irrigation assures ample moisture, often even in semiarid areas. • Insecticides and fungicides protect the high yields of the crops both during the growing season and in storage. In America, where high-yield farming started earlier, diaries of early settlers in Virginia's Shenandoah Valley indicate that wheat yields around 1800 were only six to seven bushels per acre. The valley's farmers today often get ten times that yield. U.S. corn yields by the 1920s had risen to about twentyfive bushels per acre. Today, the national average is more than 140 bushels, and still rising. The same story of soaring yields and more certain harvests is playing out today over most of the world. The African Exception Africa is the only place in the world where per capita food production has not been increasing in recent decades. Africa's food production has been severely hampered by its ancient soils, frequent droughts, and abundant insects and diseases. There has also been a lack of adequate research for its specific soils, microcJimates, and pests-and an equally damaging lack of stable governance and infrastructure on that continent. Two recent research developments are now particularly helpful for Africa . • Quality-protein (QP) maize, bred in Mexico's International Maize and Wheat Improvement Center, not only has higher yields but also provides more lysine and tryptophan, two amino acids that are critical for human nutrition but are lacking in most corn varieties. The QP maize is able by itself to cure many Afncan children of malnutrition . • Rice breeders have successfully wide-crossed the African native rice species with Asian rice varieties, to create a family of more vigorous and higher-yield new rice varieties. More such breakthroughs for Africa's farmers can be expected if more research investments are made for and in that continent. Better roads and bridges (and better national security) would also make farm inputs less expensive and higher crop yields more marketable no matter what happens to its climate. Today s high-yield agriculture is also the most sustainable in history, thanks t,) fertilizers, soil testing, and a twentieth-century farming system called "con-crvation tillage." Conservation tillage controls weeds with cover crops and cncmical herbicides instead of by plowing, which invites soil erosion. The ..:,)nservation farmer just discs up the top two or three inches of topsoil along \\ ith the stalks and residue from the previous crop. This process creates trili ions of tiny dams that prevent wind or water erosion. The little dams also encourage water to infiltrate the root zone of the field, instead of running off mto the nearest stream. Conservation tillage cuts soil erosion by 65 to 95 percent and often doubles the soil moisture in the field. It encourages far more soil bacteria and earthworms, both because of the constant heavy supply of crop residues for them to eat and because they hate being plowed, as they are in conventional and organic farmers' fields. Through the expanded use of conservation tillage across the United States, Canada, South America, Australia and, most recently, South Asia, hundreds of millions of acres are now sustainably more productive than ever before in history. Another fruitful use of technology and increased sustainability will be more efficient irrigation. Primitive flood irrigation systems in the Third World use water at less than 40 percent efficiency. Center-pivot irrigation systems with trailing plastic tubes to deliver water right at the roots (minimizing evaporation) and computer-controlled to apply just the right amount of moisture to each part of the field, can approach 90 percent water efficiency. World farmers currently use about 70 percent of the fresh water humanity "uses up." As water becomes more valuable, the capital investments in high-efficiency irrigation systems will be justified. Fourth: The Future and Biotechnology Today's crop yields are the product of more than two hundred years of conventional trial-and-error science. But, by 2050 the world will have some seven billion affluent humans demanding the high-quality diets that only about one billion people are able to afford today. We'll also have to feed far more pets. That means world food demand will more than double, and we're already farming half of the Earth's available land. Additional sources of higher crop and livestock yields will be needed. The world is already using plant breeding, fertilizers, irrigation, and pesticides. However, the world is only beginning to use biotechnology, our new-found understanding of Nature's genetic codes. The first broad application of biotechnology in agriculture has been to make plants tolerant of synthetic herbicides, so we could use the environmentally safest herbicides to protect our crops more effectively from weed competition. As a result we have somewhat raised crop yields and lowered food costs in many countries. It also happens that one of Africa's worst endemic pests is a parasitic weed called witchweed. It invades corn and sorghum plants through their roots, and the farmer never knows it's there until his crop stalk suddenly sprouts a bright red witch weed flower instead of an ear of grain. Genetically engineered herbicide-tolerant seeds could have solved the problem. With the seed soaked in herbicide, the witchweed would have been killed as it invaded the plant roots, and the grain would have thrived. Unfortunately, activists and European governments threatened retaliation against any African government that allowed the planting of biotech-modified crops. Now, researchers have done a genetically researched end run around the biotech Luddites. Pioneer Hi-Bred identified corn seeds with a natural tolerance for the herbicide imazopyr, and donated the germ plasm to the International Maize and Wheat Improvement Center (CIMMYT) in Mexico. CIMMYT, in turn, has bred the herbicide tolerance into African corn varieties. Corn yields are four times as high. The technology is low cost and easy for even Africa's small farms to use. Biotechnology (BT) has also allowed plant researchers to put an ultra-safe natural insecticide found in soils into such crop plants as corn and cotton. Because of these pest-resistant plants, millions of pounds of pesticide no longer have to be sprayed into the environment or pose hazards to beneficial insects. BT cotton and corn are being planted by millions of small farmers, especially in China and India. An important second-generation benefit of biotechnology is finding wild natural genes that can improve our crop plants. We already have one such important breakthrough. Plant explorers nearly fifty years ago found a relative of the wild potato that was resistant to the infamous late blight virus that caused the Irish potato famine in the 1840s. Unfortunately, plant breeders were never able to successfully cross that blight resistance gene into an edible, productive domestic potato. Now, three different universities have spliced the blight resistance gene into new potato varieties. This will be especially important for densely populated parts of Asia and Africa (such as Rwanda and Bangladesh) that have become more dependent on the potato's ability to produce more food per acre than any other crop. Black Sigatoka, a new bacterial disease of bananas and plantains (important staples in much of Africa) has been spreading worldwide. Unfortunately, bananas are especially difficult to cross-breed. Fortunately, biotechnology has now produced plants resistant to Black Sigatoka, protecting the tenuous food security of tropical and subtropical Africa. Plant ,esea,che" alsn bel;eve that b;ntechnnlogy is the most J;kely path towaed drought-tolemnt c,ops, wh;ch would be hugely ;mponant;n deal;ng witf any long-te'm d,ought p'oblems brought by the Modem Waeming. Egypt has al,eady ;nsened a drought-tolemnce gene from the barley plant into wheat, produe;ng vaeieHes that need only a single ;"igat;on per crop instead of eight. The drought-tol"ant wheat wil! not only take less wal". but wil! sha'ply ;educe sa];n;zaHnn of the ;";gated land on wh;ch it's grown. It should also be a boon on large areas of good quality land where rainfall is scarce. Fifth: Modern Transportation The biggest technical advantage of the modem world in dealing with weather famines is modern transportation. In the Coming warming centuries, we will undoubtedly be able to produce enough food from the land that gets good weather in any given yea; to supply all of the world's food needs. Equally important, We will be able to store food safely from years of plenty to ensure food abundance in lean years, all it takes are inexpensive concrete silos and modern pesticides to keep the rats and bugs from feasting on Our food reserves before We need to draw on them.

#### No bio-d impact

Easterbrook 3(Gregg, senior fellow at the New Republic, “We're All Gonna Die!”, <http://www.wired.com/wired/archive/11.07/doomsday.html?pg=1&topic=&topic_set>=)

If we're talking about doomsday - the end of human civilization - many scenarios simply don't measure up. A single nuclear bomb ignited by terrorists, for example, would be awful beyond words, but life would go on. People and machines might converge in ways that you and I would find ghastly, but from the standpoint of the future, they would probably represent an adaptation. Environmental collapse might make parts of the globe unpleasant, but considering that the biosphere has survived ice ages, it wouldn't be the final curtain. Depression, which has become 10 times more prevalent in Western nations in the postwar era, might grow so widespread that vast numbers of people would refuse to get out of bed, a possibility that Petranek suggested in a doomsday talk at the Technology Entertainment Design conference in 2002. But Marcel Proust, as miserable as he was, wrote *Remembrance of Things Past* while lying in bed.

**Adaptation and migration solve**

Ian **Thompson 9**, Canadian Forest Service, Brendan Mackey, The Australian National University, The Fenner School of Environment and Society, College of Medicine, Biology and Environment, Steven McNulty, USDA Forest Service, Alex Mosseler, Canadian Forest Service, 2009, Secretariat of the Convention on Biological Diversity “Forest Resilience, Biodiversity, and Climate Change” Convention on Biological Diversity

While resilience can be attributed to many levels of organization of biodiversity, the genetic composition of species is the most fundamental. Molecular genet- ic diversity within a species, species diversity within a forested community, and community or ecosystem diversity across a landscape and bioregion represent expressions of biological diversity at different scales. The basis of all expressions of biological diversity is the genotypic variation found in populations. The individuals that comprise populations at each level of ecological organization are subject to natural se- lection and contribute to the adaptive capacity or re- silience of tree species and forest ecosystems (Mull- er-Starck et al. 2005). Diversity at each of these levels has fostered natural (and artificial) regeneration of forest ecosystems and facilitated their adaptation to dramatic climate changes that occurred during the quaternary period (review by: DeHayes et al. 2000); this diversity must be maintained in the face of antici- pated changes from anthropogenic climate warming. Genetic diversity (e.g., additive genetic variance) within a species is important because it is the basis for the natural selection of genotypes within popu- lations and species as they respond or adapt to en- vironmental changes (Fisher 1930, Pitelka 1988, Pease et al. 1989, Burger and Lynch 1995, Burdon and Thrall, 2001, Etterson 2004, Reusch et al. 2005, Schaberg et al. 2008). The potential for evolutionary change has been demonstrated in numerous long- term programmes based on artificial selection (Fal- coner 1989), and genetic strategies for reforestation in the presence of rapid climate change must focus on maintaining species diversity and genetic diversi- ty within species (Ledig and Kitzmiller 1992). In the face of rapid environmental change, it is important to understand that the genetic diversity and adap- tive capacity of forested ecosystems depends largely on in situ genetic variation within each population of a species (Bradshaw 1991). Populations exposed to a rate of environmental change exceeding the rate at which populations can adapt, or disperse, may be doomed to extinction (Lynch and Lande 1993, Burger and Lynch 1995). Genetic diversity deter- mines the range of fundamental eco-physiological tolerances of a species. It governs inter-specific competitive interactions, which, together with dispersal mechanisms, constitute the fundamental de- terminants of potential species responses to change (Pease et al. 1989, Halpin 1997). In the past, plants have responded to dramatic changes in climate both through adaptation and migration (Davis and Shaw 2001). The capacity for long-distance migration of plants by seed dispersal is particularly important in the event of rapid environmental change. Most, and probably all, species are capable of long-distance seed disper- sal, despite morphological dispersal syndromes that would indicate morphological adaptations primarily for short-distance dispersal (Cwyner and MacDon- ald 1986, Higgins et al. 2003). Assessments of mean migration rates found no significant differences be- tween wind and animal dispersed plants (Wilkinson 1997, Higgins et al. 2003). Long-distance migration can also be strongly influenced by habitat suitabil- ity (Higgins and Richardson 1999) suggesting that rapid migration may become more frequent and vis- ible with rapid changes in habitat suitability under scenarios of rapid climate change. The discrepancy between estimated and observed migration rates during re-colonization of northern temperate forests following the retreat of glaciers can be accounted for by the underestimation of long-distance disper- sal rates and events (Brunet and von Oheimb 1998, Clark 1998, Cain et al. 1998, 2000). Nevertheless, concerns persist that potential migration and ad- aptation rates of many tree species may not be able to keep pace with projected global warming (Davis 1989, Huntley 1991, Dyer 1995, Collingham et al. 1996, Malcolm et al. 2002). However, these models refer to fundamental niches and generally ignore the ecological interactions that also govern species dis- tributions.

**Their impact is based on flawed science, and it’s empirically denied**

**Campbell 11** (Hank, Science Writer for Science 2.0, “I Wouldn't Worry About The Latest Mass Extinction Scare,” March 8th, <http://www.science20.com/science_20/i_wouldnt_worry_about_latest_mass_extinction_scare-76989>, EMM)

You've seen it everywhere by now - Earth's sixth **mass extinction**: Is it almost here? and other articles discussing an article in Nature (471, 51–57 doi:10.1038/nature09678) claiming the end of the world is nigh. Hey, I like to live in important times. So do most people. And something so important it has only happened 5 times in 540 million years, well that is really special. But **is it real?** Anthony Barnosky, integrative biologist at the University of California at Berkeley and first author of the paper, claims that if currently threatened species, those officially classed as critically endangered, endangered, and vulnerable, actually went extinct, and that rate of extinction continued, the sixth mass extinction could arrive in 3-22 centuries. Wait, what?? That's a lot of helping verbs confusing what should be a fairly clear issue, if it were clear. **If you know anything about species** and extinction, **you have** already read one paragraph of my overview and **seen the flaws in their model. Taking a few extinct** mammal **species** that we know about **and then extrapolating** that out to be **extinction hysteria** right now if we don't do something about global warming **is not good science**. Worse, an integrative biologist is saying evolution does not happen. Polar bears did not exist forever, they came into existence 150,000 years ago - because of the Ice Age. Greenpeace co-founder and ecologist Dr. Patrick Moore told a global warming skepticism site, “I quit my life-long subscription to National Geographic when they published a similar 'sixth mass extinction' article in February 1999. This [latest journal] Nature article just re-hashes this theme” and "The fact that the study did make it through peer-review indicates that the peer review process has become corrupted.” Well, how did it make it through peer review? Read this bizarre justification of their methodology; "If you look only at the critically endangered mammals--those where the risk of extinction is at least 50 percent within three of their generations--and assume that their time will run out and they will be extinct in 1,000 years, that puts us clearly outside any range of normal and tells us that we are moving into the mass extinction realm." Well, **greater extinctions occurred when Europeans visited the Americas and in a much shorter time.** And since we don't know how many species there are now, or have ever been, if someone makes a model and claims tens of thousands of species are going extinct today, that sets off cultural alarms. It's not science, though. If only 1% of species have gone extinct in the groups we really know much about, that is hardly a time for panic, especially if some **99 percent of all species that have ever existed** we don't know anything about because they...**went extinct. And we did not.** **It won't keep** some **researchers, and the mass media, from pushing the panic button**. Co-author Charles Marshall, also an integrative biologist at UC-Berkeley wants to keep the panic button fully engaged by emphasizing that the small number of recorded extinctions to date does not mean we are not in a crisis. "Just because the magnitude is low compared to the biggest mass extinctions we've seen in half a billion years doesn't mean they aren't significant." **It's a double negative, bad logic and questionable science**, though.

#### Warming doesn’t kill biod

Carter et.al ‘11(Carter Robert, PhD, Adjuct Research Fellow, James Cook University, Fred Singer, PhD, President of the Science and Environmental Policy Project, Susan Crockford, evolutionary biologist with a specialty in skeletal taxonomy , paleozoology and vertebrate evolution, Joseph D’Aleo, 30 years of experience in professional meteorology, former college professor of Meteorology at Lyndon State College, Indur Goklany, independent scholar, author, and co-editor of the Electronic Journal of Sustainable Development, Sherwood Idso, President of the Center for the Study of Carbon Dioxide and Global Change, Research Physicist with the US Department of Agriculture, Adjunct Professor in the Departments of Geology, Botany, and Microbiology at Arizona State University, Bachelor of Physics, Master of Science, and Doctor of Philosophy, all from the University of Minnesota, Madhav Khandekar, former research scientist from Environment Canada and is an expert reviewer for the IPCC 2007 Climate Change Panel, Anthony Lupo, Department Chair and Professor of Atmospheric Science at the University of Missouri, Willie Soon, astrophysicist at the Solar and Stellar Physics Division of the Harvard-Smithsonian Center for Astrophysics, Mitch Taylor (Canada) [“Climate Change Reconsidered 2011 Interim Report,” September, Science and Environmental Policy Project, Center for the Study of Carbon Dioxide and Global Change)

According to the Intergovernmental Panel on Climate Change (IPCC), ―new evidence suggests that climate-driven extinctions and range retractions are already widespread‖ and the ―projected impacts on biodiversity are significant and of key relevance, since global losses in biodiversity are irreversible (very high confidence)‖ (IPCC-II, 2007, p. 213). The IPCC claims that ―globally about 20% to 30% of species (global uncertainty range from 10% to 40%, but varying among regional biota from as low as 1% to as high as 80%) will be at increasingly high risk of extinction, possibly by 2100, as global mean temperatures exceed 2 to 3°C above pre-industrial levels‖ (ibid.). The Nongovernmental International Panel on Climate Change (NIPCC) disagreed. According to Idso and Singer (2009), ―These claims and predictions are not based on what is known about the phenomenon of extinction or on real-world data about how species have endured the warming of the twentieth century, which the IPCC claims was unprecedented in the past two millennia‖ (p. 579). The basis of the IPCC‘s forecasts is an assumption that the increase in temperature predicted to result from the ongoing rise in the atmosphere‘s CO2 concentration will be so fast and of such great magnitude that many animal species will not be able to migrate poleward in latitude or upward in elevation rapidly enough to avoid extinction. In this chapter we review new research that contradicts this assumption as well as extensive observational data that contradict the claim of impending species extinctions.

#### No internal – warmth fuels species diversity

Carter et.al ‘11(Carter Robert, PhD, Adjuct Research Fellow, James Cook University, Fred Singer, PhD, President of the Science and Environmental Policy Project, Susan Crockford, evolutionary biologist with a specialty in skeletal taxonomy , paleozoology and vertebrate evolution, Joseph D’Aleo, 30 years of experience in professional meteorology, former college professor of Meteorology at Lyndon State College, Indur Goklany, independent scholar, author, and co-editor of the Electronic Journal of Sustainable Development, Sherwood Idso, President of the Center for the Study of Carbon Dioxide and Global Change, Research Physicist with the US Department of Agriculture, Adjunct Professor in the Departments of Geology, Botany, and Microbiology at Arizona State University, Bachelor of Physics, Master of Science, and Doctor of Philosophy, all from the University of Minnesota, Madhav Khandekar, former research scientist from Environment Canada and is an expert reviewer for the IPCC 2007 Climate Change Panel, Anthony Lupo, Department Chair and Professor of Atmospheric Science at the University of Missouri, Willie Soon, astrophysicist at the Solar and Stellar Physics Division of the Harvard-Smithsonian Center for Astrophysics, Mitch Taylor (Canada) [“Climate Change Reconsidered 2011 Interim Report,” September, Science and Environmental Policy Project, Center for the Study of Carbon Dioxide and Global Change)

Results of other studies also suggest the model-based species extinction hypothesis is unlikely to occur. In a review paper published in Current Biology, for example, Erwin (2009) explored past epochs and the myriad nooks and crannies of contemporary Earth, all in a search for the primary trigger of speciation. His conclusion? Warmth is the fire that fuels the process by which species originate, whereas cold tends to destroy what warmth produced. Headquartered in the Department of Paleobiology at the National Museum of Natural History in Washington, DC (USA), Erwin writes, ―some of the best evidence for a link between biodiversity and climate comes from latitudinal gradients in diversity, which provide an avenue to explore the more general relationship between climate and evolution.‖ In reviewing that evidence, he indicates ―among the wide range of biotic hypotheses, those with the greatest empirical support indicate that warmer climates [1] have provided the energetic foundation for increased biodiversity by fostering greater population size and thus increased extinction resistance, [2] have increased metabolic scope, [3] have allowed more species to exploit specialized niches as a result of greater available energy, and [4] have generated faster speciation and/or lower extinction rates.‖ He states ―in combination with geologic evidence for carbon dioxide levels and changing areas of tropical seas, these observations provide the basis for a simple, first-order model of the relationship between climate through the Phanerozoic and evolutionary patterns and diversity,‖ and he adds ―such a model suggests that we should expect greatest marine diversity during globally warm intervals,‖ as is typically also found to be the case for terrestrial diversity. Erwin notes ―the three best-studied mass extinction events are associated with sharp changes in climate and support the contention that rapid shifts in climate can reduce global diversity,‖ which sounds much like the mantra of the IPCC with respect to global warming. However, the climate shifts Erwin cites consist mostly of cooling, and it is not only the shift to cooling but stagnating in a cool state that bodes badly for Earth‘s biodiversity. As Erwin describes it, ―the long interval of stagnant evolution during the Permo-Carboniferous glaciation is consistent with studies of modern-day latitudinal diversity that [indicate] rates of evolutionary innovation and diversification are higher in high-energy climates than in low-energy climates.‖ In further explanation of this conceptual framework, Erwin notes ―contemporary studies suggest a positive relationship between high-energy climates and [1] increased diversification rates, [2] increased number of niches because of increased metabolic scope, and [3] more specialized niches, and possibly because of [4] niche construction.‖ Indeed, he states ―studies showing that the tropics are a cradle of diversity, pumping clade representatives into higher latitudes, as well as evidence of increased ordinal level originations in the tropics, and of the sudden appearance of several mammalian groups during the Paleocene-Eocene Thermal Maximum suggest an asymmetric pattern of innovations associated with high-energy climate regimes.‖ Erwin‘s parting comment in this regard is his statement, ―there is an intriguing possibility that diversity does not track climate, but rather builds up during warm intervals but without falling by proportional amounts when climates turn cooler,‖ with the result that ―warmer climates may serve as an evolutionary diversification pump with higher diversity persisting [throughout following cooler periods], at least for a time.‖

#### Ice age coming now – co2 key prevent end of civilization

Marsh ‘12 (Gerald E. Marsh, Retired Physicist from the Argonne National Laboratory and a former consultant to the Department of Defense on strategic nuclear technology and policy in the Reagan, Bush, and Clinton Administration, “The Coming of a New Ice Age,” <http://www.winningreen.com/site/epage/59549_621.htm>, 2012)

CHICAGO — Contrary to the conventional wisdom of the day, the real danger facing humanity is not global warming, but more likely the coming of a new Ice Age. What we live in now is known as an interglacial, a relatively brief period between long ice ages. Unfortunately for us, most interglacial periods last only about ten thousand years, and that is how long it has been since the last Ice Age ended. How much longer do we have before the ice begins to spread across the Earth’s surface? Less than a hundred years or several hundred? We simply don’t know. Even if all the temperature increase over the last century is attributable to human activities, the rise has been relatively modest one of a little over one degree Fahrenheit — an increase well within natural variations over the last few thousand years. While an enduring temperature rise of the same size over the next century would cause humanity to make some changes, it would undoubtedly be within our ability to adapt. Entering a new ice age, however, would be catastrophic for the continuation of modern civilization. One has only to look at maps showing the extent of the great ice sheets during the last Ice Age to understand what a return to ice age conditions would mean. Much of Europe and North-America were covered by thick ice, thousands of feet thick in many areas and the world as a whole was much colder. The last “little” Ice Age started as early as the 14th century when the Baltic Sea froze over followed by unseasonable cold, storms, and a rise in the level of the Caspian Sea. That was followed by the extinction of the Norse settlements in Greenland and the loss of grain cultivation in Iceland. Harvests were even severely reduced in Scandinavia And this was a mere foreshadowing of the miseries to come. By the mid-17th century, glaciers in the Swiss Alps advanced, wiping out farms and entire villages. In England, the River Thames froze during the winter, and in 1780, New York Harbor froze. Had this continued, history would have been very different. Luckily, the decrease in solar activity that caused the Little Ice Age ended and the result was the continued flowering of modern civilization. There were very few Ice Ages until about 2.75 million years ago when Earth’s climate entered an unusual period of instability. Starting about a million years ago cycles of ice ages lasting about 100,000 years, separated by relatively short interglacial periods, like the one we are now living in became the rule. Before the onset of the Ice Ages, and for most of the Earth’s history, it was far warmer than it is today. Indeed, the Sun has been getting brighter over the whole history of the Earth and large land plants have flourished. Both of these had the effect of dropping carbon dioxide concentrations in the atmosphere to the lowest level in Earth’s long history. Five hundred million years ago, carbon dioxide concentrations were over 13 times current levels; and not until about 20 million years ago did carbon dioxide levels dropped to a little less than twice what they are today. It is possible that moderately increased carbon dioxide concentrations could extend the current interglacial period. But we have not reached the level required yet, nor do we know the optimum level to reach. So, rather than call for arbitrary limits on carbon dioxide emissions, perhaps the best thing the UN’s Intergovernmental Panel on Climate Change and the climatology community in general could do is spend their efforts on determining the optimal range of carbon dioxide needed to extend the current interglacial period indefinitely. NASA has predicted that the solar cycle peaking in 2022 could be one of the weakest in centuries and should cause a very significant cooling of Earth’s climate. Will this be the trigger that initiates a new Ice Age? We ought to carefully consider this possibility before we wipe out our current prosperity by spending trillions of dollars to combat a perceived global warming threat that may well prove to be only a will-o-the-wisp.

#### No extinction from warming

Barrett 7, professor of natural resource economics – Columbia University

(Scott, Why Cooperate? The Incentive to Supply Global Public Goods, introduction)

First, climate change does not threaten the survival of the human species.5 If unchecked, it will cause other species to become extinction (though biodiversity is being depleted now due to other reasons). It will alter critical ecosystems (though this is also happening now, and for reasons unrelated to climate change). It will reduce land area as the seas rise, and in the process displace human populations. “Catastrophic” climate change is possible, but not certain. Moreover, and unlike an asteroid collision, large changes (such as sea level rise of, say, ten meters) will likely take centuries to unfold, giving societies time to adjust. “Abrupt” climate change is also possible, and will occur more rapidly, perhaps over a decade or two. However, abrupt climate change (such as a weakening in the North Atlantic circulation), though potentially very serious, is unlikely to be ruinous. Human-induced climate change is an experiment of planetary proportions, and we cannot be sur of its consequences. Even in a worse case scenario, however, global climate change is not the equivalent of the Earth being hit by mega-asteroid. Indeed, if it were as damaging as this, and if we were sure that it would be this harmful, then our incentive to address this threat would be overwhelming. The challenge would still be more difficult than asteroid defense, but we would have done much more about it by now.

### uranium

#### No impact to deterrence

Kober 10, research fellow, foreign policy studies – Cato, 6/13/10

(Stanley, “The deterrence illusion,” <http://www.guardian.co.uk/commentisfree/cifamerica/2010/jun/10/deterrence-war-peace>)

The world at the beginning of the 21st century bears an eerie – and disquieting – resemblance to Europe at the beginning of the last century. That was also an era of globalisation. New technologies for transportation and communication were transforming the world. Europeans had lived so long in peace that war seemed irrational. And they were right, up to a point. The first world war was the product of a mode of rational thinking that went badly off course. The peace of Europe was based on security assurances. Germany was the protector of Austria-Hungary, and Russia was the protector of Serbia. The prospect of escalation was supposed to prevent war, and it did– until, finally, it didn't. The Russians, who should have been deterred – they had suffered a terrible defeat at the hands of Japan just a few years before – decided they had to come to the support of their fellow Slavs. As countries honoured their commitments, a system that was designed to prevent war instead widened it. We have also been living in an age of globalisation, especially since the end of the cold war, but it too is increasingly being challenged. And just like the situation at the beginning of the last century, deterrence is not working. Much is made, for example, of the North Atlantic Treaty Organisation (Nato) invoking Article V – the famous "three musketeers" pledge that an attack on one member is to be considered as an attack on all – following the terrorist attacks of September 11. But the United States is the most powerful member of Nato by far. Indeed, in 2001, it was widely considered to be a hegemon, a hyperpower. Other countries wanted to be in Nato because they felt an American guarantee would provide security. And yet it was the US that was attacked. This failure of deterrence has not received the attention it deserves. It is, after all, not unique. The North Vietnamese were not deterred by the American guarantee to South Vietnam. Similarly, Hezbollah was not deterred in Lebanon in the 1980s, and American forces were assaulted in Somalia. What has been going wrong? The successful deterrence of the superpowers during the cold war led to the belief that if such powerful countries could be deterred, then lesser powers should fall into line when confronted with an overwhelmingly powerful adversary. It is plausible, but it may be too rational. For all their ideological differences, the US and the Soviet Union observed red lines during the cold war. There were crises – Berlin, Cuba, to name a couple – but these did not touch on emotional issues or vital interests, so that compromise and retreat were possible. Indeed, what we may have missed in the west is the importance of retreat in Soviet ideology. "Victory is impossible unless [the revolutionary parties] have learned both how to attack and how to retreat properly," Lenin wrote in "Left-Wing" Communism: An Infantile Disorder. When the Soviets retreated, the US took the credit. Deterrence worked. But what if retreat was part of the plan all along? What if, in other words, the Soviet Union was the exception rather than the rule? That question is more urgent because, in the post-cold war world, the US has expanded its security guarantees, even as its enemies show they are not impressed. The Iraqi insurgents were not intimidated by President Bush's challenge to "bring 'em on". The Taliban have made an extraordinary comeback from oblivion and show no respect for American power. North Korea is demonstrating increasing belligerence. And yet the US keeps emphasising security through alliances. "We believe that there are certain commitments, as we saw in a bipartisan basis to Nato, that need to be embedded in the DNA of American foreign policy," secretary of state Hillary Clinton affirmed in introducing the new National Security Strategy. But that was the reason the US was in Vietnam. It had a bipartisan commitment to South Vietnam under the Southeast Asia Treaty Organisation, reaffirmed through the Tonkin Gulf Resolution, which passed Congress with only two dissenting votes. It didn't work, and found its commitments were not embedded in its DNA. Americans turned against the war, Secretary Clinton among them. The great powers could not guarantee peace in Europe a century ago, and the US could not guarantee it in Asia a half-century ago.

#### No scenario for losing deterrence

Kristensen 12 -- FAS nuclear weapons expert

[Hans, "DOD: Strategic Stability Not Threatened Even by Greater Russian Nuclear Forces," FAS, 10-10-12, www.fas.org/blog/ssp/2012/10/strategicstability.php, accessed 1-27-13, mss]

DOD: Strategic Stability Not Threatened Even by Greater Russian Nuclear Forces

A Department of Defense (DOD) report on Russian nuclear forces, conducted in coordination with the Director of National Intelligence and sent to Congress in May 2012, concludes that even the most worst-case scenario of a Russian surprise disarming first strike against the United States would have “little to no effect” on the U.S. ability to retaliate with a devastating strike against Russia. I know, even thinking about scenarios such as this sounds like an echo from the Cold War, but the Obama administration has actually come under attack from some for considering further reductions of U.S. nuclear forces when Russia and others are modernizing their forces. The point would be, presumably, that reducing while others are modernizing would somehow give them an advantage over the United States. But the DOD report concludes that Russia “would not be able to achieve a militarily significant advantage by any plausible expansion of its strategic nuclear forces, even in a cheating or breakout scenario under the New START Treaty” (emphasis added). The conclusions are important because the report come after Vladimir Putin earlier this year announced plans to produce “over 400” new nuclear missiles during the next decade. Putin’s plan follows the Obama administration’s plan to spend more than $200 billion over the next decade to modernize U.S. strategic forces and weapons factories. The conclusions may also hint at some of the findings of the Obama administration’s ongoing (but delayed and secret) review of U.S. nuclear targeting policy. No Effects on Strategic Stability The DOD report – Report on the Strategic Nuclear Forces of the Russian Federation Pursuant to Section 1240 of the National Defense Authorization Act for Fiscal Year 2012 – was obtained under the Freedom of Information Act. It describes the U.S. intelligence community’s projection for the likely development of Russian nuclear forces through 2017 and 2022, the timelines of the New START Treaty, and possible implications for U.S. national security and strategic stability. Much of the report’s content was deleted before release – including general and widely reported factual information about Russian nuclear weapons systems that is not classified. But the important concluding section that describes the effects of possible shifts in the number and composition of Russian nuclear forces on strategic stability was released in its entirety. The section “Effects on Strategic Stability” begins by defining that stability in the strategic nuclear relationship between the United States and the Russian Federation depends upon the assured capability of each side to deliver a sufficient number of nuclear warheads to inflict unacceptable damage on the other side, even with an opponent attempting a disarming first strike. Consequently, the report concludes, “the only Russian shift in its nuclear forces that could undermine the basic framework of mutual deterrence that exists between the United States and the Russian Federation is a scenario that enables Russia to deny the United States the assured ability to respond against a substantial number of highly valued Russian targets following a Russian attempt at a disarming first strike” (emphasis added). The DOD concludes that such a first strike scenario “will most likely not occur.” But even if it did and Russia deployed additional strategic warheads to conduct a disarming first strike, even significantly above the New START Treaty limits, DOD concludes that it “would have little to no effects on the U.S. assured second-strike capabilities that underwrite our strategic deterrence posture” (emphasis added). In fact, the DOD report states, the “Russian Federation…would not be able to achieve a militarily significant advantage by any plausible expansion of its strategic nuclear forces, even in a cheating or breakout scenario under the New START Treaty, primarily because of the inherent survivability of the planned U.S. Strategic force structure, particularly the OHIO-class ballistic missile submarines, a number of which are at sea at any given time.” Implications These are BIG conclusions with BIG implications. They reaffirm conclusions made by DOD in 2010 [http://www.foreign.senate.gov/publications/download/executive-report-111-06-treaty-with-russia-on-measures-for-further-reduction-and-limitation-of-strategic-offensive-arms-the-new-start-treaty], but the new report is important because it comes after Russia earlier this year announced plans to produce “over 400” nuclear missiles over the next decade. In the real world, however, Russian nuclear forces are not increasing. Even with Putin’s missile production plan, simultaneous retirement of older missile will continue the downward trend and result in a net reduction of Russian strategic nuclear forces over the next decade and a half. This fact has not stopped some from arguing against additional U.S. nuclear reductions. Their argument is that reductions are unwise at a time when Russia and others are modernizing their nuclear forces. Others have even argued that Russia could break out of the New START Treaty by cheating and presumably achieve some strategic advantage. Even the U.S. Senate’s advice and consent resolution that in 2010 approved the New START Treaty required that “the President should regulate reductions in United States strategic offensive arms so that the number of accountable strategic offensive arms under the New START Treaty possessed by the Russian Federation in no case exceeds the comparable number of accountable strategic offensive arms possessed by the United States to such an extent that a strategic imbalance endangers the national security interests of the United States” (emphasis added). A similar obsession with numbers was echoed in the 2012 report by the State Department’s International Strategic Advisory Board on future U.S.-Russian “Mutual Assured Stability,” which concluded that it requires some “rough parity” of nuclear forces. (A similar number obsession has evolved with NATO about non-strategic nuclear weapons, but that’s another story). But the DOD report appears to conclude that such warnings and parity requirement are missing the point. Strategic stability and deterrence today are provided by a secure retaliatory capability, primarily ballistic missile submarines. In fact, although ICBMs and bombers also play a role in the U.S. nuclear posture, they seem oddly absent from the report’s description of what is required to maintain strategic stability based on a sufficient secure retaliatory capability. Retaining that capability, it seems, does not even require the ballistic missile submarines to be on alert (although the report doesn’t explicitly say so). It only requires that a sufficient number of submarines “are at sea” and secure at any given time – or perhaps even only in a crisis. Likewise, the conclusion that a Russian disarming first strike “will most likely not occur” may be obvious to most but, if formal, seems to remove the need for having ICBMs on alert, as long as a sufficient number of submarines are at sea to provide the basic deterrence that underpins strategic stability.

#### No challengers

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(Robert D and Stephen S, “America Primed,” *The National Interest*, March/April)

But in spite of the seemingly inevitable and rapid diminution of U.S. eminence, to write America’s great-power obituary is beyond premature. The United States remains a highly capable power. Iraq and Afghanistan, as horrendous as they have proved to be—in a broad historical sense—are still relatively minor events that America can easily overcome. The eventual demise of empires like those of Ming China and late-medieval Venice was brought about by far more pivotal blunders. Think of the Indian Mutiny against the British in 1857 and 1858. Iraq in particular—ever so frequently touted as our turning point on the road to destruction—looks to some extent eerily similar. At the time, orientalists and other pragmatists in the British power structure (who wanted to leave traditional India as it was) lost some sway to evangelical and utilitarian reformers (who wanted to modernize and Christianize India—to make it more like England). But the attempt to bring the fruits of Western civilization to the Asian subcontinent was met with a violent revolt against imperial authority. Delhi, Lucknow and other Indian cities were besieged and captured before being retaken by colonial forces. Yet, the debacle did not signal the end of the British Empire at all, which continued on and even expanded for another century. Instead, it signaled the transition from more of an ad hoc imperium fired by a proselytizing lust to impose its values on others to a calmer and more pragmatic empire built on international trade and technology.1 There is no reason to believe that the fate of America need follow a more doomed course. Yes, the mistakes made in Iraq and Afghanistan have been the United States’ own, but, though destructive, they are not fatal. If we withdraw sooner rather than later, the cost to American power can be stemmed. Leaving a stable Afghanistan behind of course requires a helpful Pakistan, but with more pressure Washington might increase Islamabad’s cooperation in relatively short order. In terms of acute threats, Iran is the only state that has exported terrorism and insurgency toward a strategic purpose, yet the country is economically fragile and politically unstable, with behind-the-scenes infighting that would make Washington partisans blanch. Even assuming Iran acquires a few nuclear devices—of uncertain quality with uncertain delivery systems—the long-term outlook for the clerical regime is itself unclear. The administration must only avoid a war with the Islamic Republic. To be sure, America may be in decline in relative terms compared to some other powers, as well as to many countries of the former third world, but in absolute terms, particularly military ones, the United States can easily be the first among equals for decades hence. China, India and Russia are the only major Eurasian states prepared to wield military power of consequence on their peripheries. And each, in turn, faces its own obstacles on the road to some degree of dominance. The Chinese will have a great navy (assuming their economy does not implode) and that will enforce a certain level of bipolarity in the world system. But Beijing will lack the alliance network Washington has, even as China and Russia will always be—because of geography—inherently distrustful of one another. China has much influence, but no credible military allies beyond possibly North Korea, and its authoritarian regime lives in fear of internal disruption if its economic growth rate falters. Furthermore, Chinese naval planners look out from their coastline and see South Korea and a string of islands—Japan, Taiwan and Australia—that are American allies, as are, to a lesser degree, the Philippines, Vietnam and Thailand. To balance a rising China, Washington must only preserve its naval and air assets at their current levels. India, which has its own internal insurgency, is bedeviled by semifailed states on its borders that critically sap energy and attention from its security establishment, and especially from its land forces; in any case, India has become a de facto ally of the United States whose very rise, in and of itself, helps to balance China. Russia will be occupied for years regaining influence in its post-Soviet near abroad, particularly in Ukraine, whose feisty independence constitutes a fundamental challenge to the very idea of the Russian state. China checks Russia in Central Asia, as do Turkey, Iran and the West in the Caucasus. This is to say nothing of Russia’s diminishing population and overwhelming reliance on energy exports. Given the problems of these other states, America remains fortunate indeed. The United States is poised to tread the path of postmutiny Britain. America might not be an empire in the formal sense, but its obligations and constellation of military bases worldwide put it in an imperial-like situation, particularly because its air and naval deployments will continue in a post-Iraq and post-Afghanistan world. No country is in such an enviable position to keep the relative peace in Eurasia as is the United States—especially if it can recover the level of enduring competence in national-security policy last seen during the administration of George H. W. Bush. This is no small point. America has strategic advantages and can enhance its power while extricating itself from war. But this requires leadership—not great and inspiring leadership which comes along rarely even in the healthiest of societies—but plodding competence, occasionally steely nerved and always free of illusion.

#### No impact to CBWs

**Easterbrook 3** (Gregg Easterbrook, senior fellow at The New Republic, July 2003, Wired, “We’re All Gonna Die!” http://www.wired.com/wired/archive/11.07/doomsday.html?pg=2&topic=&topic\_set=

3. Germ warfare!Like chemical agents, biological weapons have never lived up to their billing in popular culture. Consider the 1995 medical thriller Outbreak, in which a highly contagious virus takes out entire towns. The reality is quite different. Weaponized smallpox escaped from a Soviet laboratory in Aralsk, Kazakhstan, in 1971; three people died, no epidemic followed. In 1979, weapons-grade anthrax got out of a Soviet facility in Sverdlovsk (now called Ekaterinburg); 68 died, no epidemic. The loss of life was tragic, but no greater than could have been caused by a single conventional bomb. In 1989, workers at a US government facility near Washington were accidentally exposed to Ebola virus. They walked around the community and hung out with family and friends for several days before the mistake was discovered. No one died. The fact is, evolution has spent millions of years conditioning mammals to resist germs. Consider the Black Plague. It was the worst known pathogen in history, loose in a Middle Ages society of poor public health, awful sanitation, and no antibiotics. Yet it didn’t kill off humanity. **Most people** who were caught in the epidemic **survived. Any superbug introduced into today’s Western world would encounter top-notch public health, excellent sanitation, and an array of medicines specifically engineered to kill bioagents**. Perhaps one day some aspiring Dr. Evil will invent a bug that bypasses the immune system. Because it is possible some novel superdisease could be invented, or that existing pathogens like smallpox could be genetically altered to make them more virulent (two-thirds of those who contract natural smallpox survive), biological agents are a legitimate concern. They may turn increasingly troublesome as time passes and knowledge of biotechnology becomes harder to control, allowing individuals or small groups to cook up nasty germs as readily as they can buy guns today. But no superplague has ever come close to wiping out humanity before, and it seems unlikely to happen in the future.

#### 1) Uranium stocks are fine—we’ll have enough for the next century

MIT 11

[“The Future of the Nuclear Fuel Cycle”, 2011, http://web.mit.edu/mitei/research/studies/documents/nuclear-fuel-cycle/The\_Nuclear\_Fuel\_Cycle-all.pdf]

We developed a price elasticity model to estimate the future costs of uranium as a function of the cumulative mined uranium. The details of this model are in the appendix. The primary input is the model of uranium reserves as a function of ore grade [14] developed in the late 1970s by Deffeyes. The results of this model are shown in Figure 3.2. For uranium ores of practical interest, the supply increases about 2% for every 1% decrease in average grade mined down to an ore grade of ~1000 ppm. His work extended models previously applied to individual mined deposits (e.g., by Krige for gold) [15] to the worldwide ensemble of deposits of uranium. The region of interest in the figure is on the left-hand side, above about 100 ppm uranium, below which grade the energy expended to extract the uranium will approach a significant fraction of that recoverable by irradiation of fuel in LWRs. The resources of uranium increase significantly if one is willing to mine lower-grade resources. An important factor not accounted for here in prediction of uranium resources is the recovery of uranium as a co-product or by-product of other mining operations. The most important category here is phosphate deposits. A recent CEA assessment [8] projects 22 million MT from this source: by itself enough for 1000 one-GWe reactors for 100 years, subject to the caveat that co-production is fully pursued.Finally, several authors have noted that Deffeyes’ assessment was completed before the rich ore deposits in Canada, at grades in excess of 3% (30,000 ppm) were discovered. This could imply that the projected cost escalation based on his results would, in effect, be postponed for a period. Our model included three other features in addition to uranium supply versus ore grade elasticity: p Learning curve. In all industries there is a learning curve where production costs go down with cumulative experience by the industry. p Economics of scale. There are classical economics of scale associated with mining operations. p Probabilistic assessment. Extrapolation into an ill-defined future is not properly a deterministic undertaking—we can not know the exact answer. Hence, following the lead in a similar effort in 1980 by Starr and Braun of EPRI, a probabilistic approach was adopted [16] in our models. The results of our model are shown in Figure 3.3 where the relative cost of uranium is shown versus the cumulative electricity produced by LWRs of the current type. The unit of electricity is gigawatt-years of electricity generation assuming that 200 metric tons of uranium are required to produce a gigawatt-year of electricity—the amount of uranium used by a typical light water reactor. The horizontal axis shows three values of cumulative electricity production: p G1 = 100 years at today’s rate of uranium consumption and nuclear electric generation rate p G5 = 100 years at 5 times today’s uranium consumption and nuclear electricity generation rate p G10 = 100 years at 10 times today’s uranium consumption and nuclear electricity generation rate. Three lines are shown based on the probabilistic assessment described in the appendix of Chapter 3. The top line is to be interpreted as an 85% probability that the cost relative to the baseline cost will be less than the value on the trace plotted as a function of the cumulative electricity production using today’s LWR once-through fuel cycle. The three lines meet at the far left where the baseline cost of uranium is taken as 100 $/kg, and the baseline total cumulative nuclear electricity production is (somewhat arbitrarily) taken as 10 4 GWe-yr using 2005 as the reference year. The other lines correspond to 50% and 15% probabilities. As one example at 10 GWe-yr cumulative production, there is an 85% probability that uranium will cost less than double 2005 costs (i.e., less than $200/kg), a 50% probability that it will cost less than 30% greater than 2005 costs, and a 15% probability that it will be 20% or lower in cost. As another example, if there were five times as many nuclear plants (G5) and they each operated for 100 years, we would expect (at 50% probability) uranium costs to increase by less than 40%. Because uranium is ~4% of the production cost of electricity, an increase to 6% of the production costs would not have a large impact on nuclear power economics. The two points plotted on Figure 3.3 correspond to 2007 Red Book values for identified (RBI) and identified-plus-undiscovered (RBU) resources at under 130 $/kg: 5.5 and 13.0 million metric tons. These benchmarks support the expectation that uranium production costs should be tolerable for the remainder of the 21st century – long enough to develop and smoothly transition to a more sustainable nuclear energy economy.

#### 2) Plan would only save 20% of uranium ore—that’s marginally better than the squo

Garwin 09

[Richard L. Garwin, BM Fellow Emeritus at the Thomas J. Watson Research Center in Yorktown Heights, New York. He has contributed to the design of nuclear weapons, instruments and electronics for research in nuclear and low-temperature physics, and superconducting devices. His work for the U.S. government includes studies on antisubmarine warfare, military and civil aircraft, and satellite systems. In 1998, he served as a member of the nine-person Rumsfeld Commission to assess the ballistic missile threat to the United States. He received the Presidential National Medal of Science in 2003, “Reprocessing isn’t the answer”, Bulletin of the Atomic Scientists, 8-6-2009, http://www.thebulletin.org/web-edition/op-eds/reprocessing-isnt-the-answer]

Reprocessing of LWR fuel also fails to save uranium, a common argument in favor of recycle. Although 1 percent of the fuel is plutonium and can be burned as MOX; recycling all LWR fuel, including reuse of uranium, would save at most 20 percent of the necessary supply of raw uranium ore. Analysis shows this isn't worth doing unless the cost of natural uranium rose to something like $750-$1,000 per kilogram. Its current price, however, is much lower, on the order of $70 per kilogram. Even at a price of $750 per kilogram, reprocessing would only be marginally preferable.

#### Reprocessing strips plutonium from protective elements—encourages diversion and nuclear prolif – turns their deterrence impact

Ferguson 09

[Charles D. Ferguson, Philip D. Reed senior fellow for science and technology at the Council on Foreign Relations (CFR). He is also an adjunct professor in the security studies program at Georgetown University, Testimony to Committee on Science and Technology, U.S. House of Representatives Hearing on “Advancing Technology for Nuclear Fuel Recycling: What Should Our Research, Development, and Demonstration Strategy Be?”, 6-17-2009, http://gop.science.house.gov/Media/hearings/full09/june17/ferguson.pdf]

Reprocessing involves extraction of plutonium and/or other fissile materials from spent nuclear fuel in order to recycle these materials into new fuel for nuclear reactors. As discussed below, many reprocessing techniques are available for use. **Regardless of the particular technique**, fissile material is removed from all or almost all of the highly radioactive fission products, which provide a protective barrier against theft or diversion of plutonium in spent nuclear fuel. Plutonium-239 is the most prevalent fissile isotope of plutonium in spent nuclear fuel. The greater the concentration of this isotope the more weapons-usable is the plutonium mixture. Weapons-grade plutonium typically contains greater than 90 percent plutonium-239 whereas reactor-grade plutonium from commercial thermal-neutron reactors has usually less than 60 percent plutonium-239, depending on the characteristics of the reactor that produced the plutonium. The presence of non-plutonium-239 isotopes complicates production of nuclear weapons from the plutonium mixture, but the challenges are surmountable. 1 According to an unclassified U.S. Department of Energy report, reactor-grade plutonium is weapons-usable. 2 The potential proliferation threats from reprocessing of spent nuclear fuel are twofold. First, a state operating a reprocessing plant could use that technology to divert weapons usable fissile material into a nuclear weapons program or alternatively it could use the skills learned in operating that plant to build a clandestine reprocessing plant to extract fissile material. Second, a non-state actor such as a terrorist group could seize enough fissile material produced by a reprocessing facility in order to make an improvised nuclear device—a crude, but devastating, nuclear weapon. Such a non-state group may obtain help from insiders at the facility. While commercial reprocessing facilities have typically been well-guarded, some facilities such as those at Sellafield in the United Kingdom and Tokai-mura in Japan have not been able to account for several weapons’ worth of plutonium. This lack of accountability does not mean that the fissile material was diverted into a state or non-state weapons program. The discrepancy was most likely due to plutonium caked on piping. But an insider could exploit such a discrepancy. For commercial bulk handing facilities, several tons of plutonium can be processed annually. Thus, if even one tenth of one percent of this material were accounted for, an insider could conceivably divert about **one weapon’s worth of plutonium every year.**

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### AT: Framework

**Framework links – it’s a performative example of how they bracket out certain perspectives in favor of hegemonic ones – It’s not just about simulating energy debate but who has the best method for making energy debates inclusive and productive**

Sparks 3 (Holloway, asst prof of political science, Penn State, Queens, Teens, and Model Mothers Race and the Politics of Welfare Reform (Paperback) by Sanford F. Schram (Editor), Joe Soss (Editor), Richard C. Fording (Editor))

In spite of the participatory principles embodied in these theories, some deliberative democrats have given **inadequate attention** to the **barriers** to public sphere participation confronted by marginalized citizens. Activists, dissidents,, racial and ethnic minorities, and particularly poor citizens are regularly excluded from both decision making and deliberative venues, but this problem is often **sidestepped** in the mainstream theoretical literature by theorists who **downplay** the effects of social and economic inequality on public participation (see, e.g., Barber 1984; Cohen 1989; Dryzek '99°). The claim that we can effectively bracket inequality in the public sphere, however, has been strongly criticized recently by a group of theorists explicitly concerned with problems of democratic inclusion. These scholars, including James Bohman ('996), Nancy Fraser (r7), Jane Mansbridge (i5ir, 1999), and his Young (1993, 1996, woo), have emphasized the fact that formal political equality **does not guarantee equal authority** in or even **access to the public realm**. Iris Young, for example, has identified two forms of exclusion that prevent citizens from fully participating in democracies. What she calls external exclusion "names the many ways that individuals and groups that ought to be included are purposely or inadvertently left out of fora for discussion and decision making" (zooo, 53 54). External exclusion can be as blatant as deliberately failing to invite certain groups to important meetings, or can take more subtle forms such as the way economic inequalities affect access to political institutions. As Nancy Fraser has noted, in societies like the United States in which the publication and circulation of political views depends on media organizations that are privately owned and operated for profit, those citizens who lack wealth will also generally "lack access to the material means of equal participation". This criticism has obvious salience for families living on welfare budgets. On a more basic level, money and time are also necessary for participation in putatively "free" political institutions. Poor parents with young children, for example, might not have the resources to purchase child care in order to attend a town council meeting at which important political decisions are made.3 Internal exclusions, in contrast, "concern ways that people **lack effective opportunity** **to influence the thinking of others even when they have access to** fora and **procedures of decision making**" (Young 2000, 55; emphasis added). Citizens may find that "others **ignore** or **dismiss** or **patronize** their statements and expressions. Though formally included in forum or process, people may find that their claims are **not taken seriously** and may believe that they are not treated with equal respect" (fl). Internal exclusion can take the form of public ridicule or face to face inattention (Bickford 5996), but it can also stem from less obvious sources, such as the norms of articulateness, dispassionateness, and orderliness that are often privileged in political discussions (Young 2ooo, 6). As Young observes, In many formal situations the better educated white middle class people often act as though they have a right to speak and that their words carry authority, whereas those of other groups often feel intimidated by the argument requirements and the formality and rules of parliamentary procedure, so they do not speak, or speak only in a way that those in charge find "disruptive." . . . The dominant groups, moreover, often fail entirely to notice this devaluation and silencing, while the less privileged often feel put down or frustrated, either losing confidence in themselves or becoming angry. (5996, 114) Since "unruly" forms of speech tend to be used primarily by women, racial minorities, and working class people, large groups of citizens face the devaluation of their political participation.

#### Interrogating dominant policy frameworks creates space for new ways of approaching energy policy – our role as energy policy researchers should be to interrogating the framing of our policies

Scrase and Ockwell 10 (J. Ivan - Sussex Energy Group, SPRU (Science and Technology Policy Research), Freeman Centre, University of Sussex, David G - Tyndall Centre for Climate Change Research, SPRU, Freeman Centre, University of Sussex, “The role of discourse and linguistic framing effects in sustaining high carbon energy policy—An accessible introduction,” Energy Policy: Volume 38, Issue 5, May 2010, Pages 2225–2233)

This paper has provided several examples where central elements of energy policy have been discursively constructed so as to speak directly to core government priorities, such as economic growth and national security. This has served to **maintain the dominance of the current framing of energy policy** and to **promote certain political interests**. This is a challenging observation if one argues that energy policy needs to be **reframed**. The transition to a low carbon economy may be a good idea. Indeed, it is one that is increasingly central in policy discourses in both developed and developing countries. This does not, however, necessarily mean that this discursive shift will have any specific material impact on energy policy. The institutional constraints on discursive developments here still exist and must be **confronted** (or conformed to) **before new policy ideas are likely to gain** any **influence**. Having an impact on the core of energy policy requires **confronting the** dominance, or ‘**discursive hegemony’** of the existing way in which policy is framed – within the context of the constraints that have shaped and **f**acilitated this existing framing. This is almost a ‘Catch-22’ situation if one wants to see urgent action to tackle climate change: to be radical but excluded (and potentially right only with hindsight), or gradualist and engaged in a process that may move too slowly to avert disaster. This argument suggests that reframing energy policy is only likely to be successful if the arguments that support it are discursively constructed in such a way as to speak to core government imperatives. If climate change is one of the central reasons behind needing to reframe energy policy, then the fact that the environment sits outside of the core imperatives that governments have to deliver against to ensure their survival implies that this could be very challenging indeed. It is, of course, possible that future events might transpire to alter this. As mentioned above, catastrophic climate impacts might well mean that protecting the environment becomes a core government imperative. But by this point it may well be too late for any reframing of energy policy to be effective in tackling climate change. Of course there is the possibility in the shorter term that the government imperative to sustain representative legitimacy will put tackling climate on an equal footing with security or economic growth. For this to happen in a relevant timeframe, however, will require extraordinary popular pressure and institutional changes. Ideas serving expansion of fossil fuel markets are strongly embedded in today's predominantly technocratic and nationalistic energy policy discourses. We hope that this article has served to provide an accessible introduction to the ways in which discourse and linguistic framing effects might be playing a role in sustaining **energy policy frameworks** that are **resistant to** the many insightful **changes** often advocated in the pages of Energy Policy. If the influence of such framing effects is accepted, we begin to see how the process of effecting changes in energy policy is not just a technical or economic task, but also a political task. Moreover, this highlights an urgent need for civil society to engage directly with the existing framing of energy policy and the problems it seeks to address in an effort to reframe it around more sustainable, low carbon principles and concerns. The demonstration of the value of a **discourse analytic approach** in this paper, together with other emerging contributions in this field (cited above), also serves to highlight some **important considerations for energy policy researchers**. Moving away from the traditional linear understanding of the policy process **requires researchers to critically reflect** on the interplay of values, beliefs, entrenched interests and institutional structures that serve to **facilitate or constrain the policy traction** of certain framings of **energy policy problems and solutions**. Further than this, it also highlights the **role** in this process that we ourselves play as **researchers**, and the extent to which our own values, beliefs and interests influence the **framing of our research practice and communication**. This has important and far reaching implications, both methodological and normative, raising considerations that are likely to continue to **gain traction** as researchers and policy makers alike increasingly appreciate the need for reflexivity in our approach to **framing**, interpreting and implementing **energy policy** in the decades to come.[2](http://www.sciencedirect.com/science/article/pii/S0301421509009471#fn2)

#### Can’t sever the knowledge production of the 1AC – it kills advocacy building and holistic education – the way they choose to assemble and frame the 1AC compromises the political action of the plan – Instrumental policy narratives obscure root causes and produce ideology at the subconscious level – rethinking key to effectively reorient policy

Scrase and Ockwell 10 (J. Ivan - Sussex Energy Group, SPRU (Science and Technology Policy Research), Freeman Centre, University of Sussex, David G - Tyndall Centre for Climate Change Research, SPRU, Freeman Centre, University of Sussex, “The role of discourse and linguistic framing effects in sustaining high carbon energy policy—An accessible introduction,” Energy Policy: Volume 38, Issue 5, May 2010, Pages 2225–2233)

This perspective begins by seeing politics as a struggle for ‘**discursive hegemony’** in which actors seek to achieve ‘discursive closure’ by securing support for their definition of reality ([Hajer, 1995](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib14)). The notion of ‘**story-lines’** is useful here. These **narratives employ symbolic references that imply** a **common understanding of an issue** ([Hajer, 1995](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib14); [Rydin, 1999](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib24)). Essentially, the assumption is that actors do not draw on a comprehensive discursive system; instead this is **evoked through story-lines**. By uttering a specific word or phrase, for example, ‘global warming’, **a whole story-line is in effect re-invoked**; one that is subtly different, for example, to that of the ‘anthropogenic greenhouse effect’ or ‘climate change’. ‘Global warming’ implies a story-line where the whole earth will get hotter in the future; ‘climate change’ suggests something less certain and uniform (see [Whitmarsh, 2009](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib33)); ‘anthropogenic greenhouse effect’ is perhaps the most technically correct term, and it directly attributes the warming effect to human activity. Story-lines are therefore much more than simply ‘arguments’. The meanings and connotations of familiar story-lines are often recognised at an almost **subconscious level**. They can thus act to **define policy problems while obscuring underpinning interests, values and beliefs.** They can add credibility to the claims of certain groups and render those of other groups less credible. They therefore act to create social order within a given domain by serving as devices through which actors are positioned and ideas defined and linked together. Institutional arrangements are important in structuring discourses, forming routine understandings. Complex research findings or logical arguments are often reduced to an eye-catching visual representation or **memorable one-liners**. These gloss over real complexities and uncertainties, and entail significant loss of meaning. This allows considerable flexibility in interpretation, which helps recruit people with differing views into a ‘discourse coalition’. It also **avoids confrontation** or even the necessity for direct social contact between coalition members ([Hajer, 1995](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib14)). In this view, to shape policy, **a new discourse** must **dominate** in public and policy discussions, **and penetrate the routines of policy practice** through institutionalisation within laws, regulations and organisations ([Hajer, 1993](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib13); [Nossiff, 1998](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib19); [Healey, 1999](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib16)). In terms of policy change then, **promoting a new story-line** is a difficult task, involving **dismantling** those promoted by those actors who were able to achieve prominence for their claims and viewpoint originally ([Rydin, 1999](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib24)) and which may have become **embedded in institutions**. For example, it took over a decade for the issue of acid rain to impact on UK air pollution policy. A discourse coalition formed around the issue that promoted a story-line highlighting the negative international environmental impacts of emissions from coal-fired power stations, particularly trees dying in Scandinavian countries, and the related need for tighter pollution controls in Europe. In the UK the acid rain discourse coalition first had to confront the institutionally entrenched British discourse on air pollution. This was dominated by local and national concerns with urban air pollution and health effects, which left little room for the consideration of new ideas related to the international environmental impacts of industrial emissions ([Hajer, 1995, p. 268](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib14)).

“Bracketing out” of our alternative is meant to safeguard the status quo from addressing underlying justifications behind the plan

Meszaros, Chair of Philosophy at the University of Sussex, 89

(Istvan, Chair of philosophy @ U. of Sussex, The Power of Ideology, p. 232-234)

Nowhere is the myth of ideological neutrality – the self-proclaimed *Wertfeihert* or value neutrality of so-called ‘rigorous social science’ – stronger than in the field of methodology. Indeed, we are often presented with the claim that the adoption of the advocated methodological framework would automatically exempt one from all controversy about values, since they are systematically excluded (or suitably ‘bracketed out’) by the scientifically adequate method itself, thereby saving one from unnecessary complication and securing the desired objectivity and uncontestable outcome. Claims and procedures of this kind are, of course, extremely problematical. For they circularly *assume* that their enthusiasm for the virtues of ‘methodological neutrality’ is bound to yield ‘value neutral’ solutions with regard to highly contested issues, without first examining the all-important question as to the conditions of *possibility* – or otherwise – of the postulated systematic neutrality at the plane of methodology itself. The unchallengeable validity of the recommended procedure is supposed to be *self-evident* on account of its *purely methodological* character. In reality, of course, this approach to methodology is heavily loaded with a conservative ideological substance. Since, however, the plane of *methodology* (and ‘meta-theory’) is said to be *in principle* separated from that of the *substantive* issues, the methodological circle can be conveniently closed. Whereupon the mere insistence on the purely methodological character of the criteria laid down is supposed to establish the claim according to which the approach in question is neutral because everybody can adopt it as the common frame of reference of ‘rational discourse’. Yet, curiously enough, the proposed methodological tenets are so defined that vast areas of vital social concern are *a priori* excluded from this rational discourse as ‘metaphysical’, ‘ideological’, etc. The effect of circumscribing in this way the scope of the one and only admissible approach is that it automatically disqualifies, in the name of *methodology* itself, all those who do not fit into the stipulated framework of discourse. As a result, the propounders of the ‘right method’ are spared the difficulties that go with acknowledging the real divisions and incompatibilities as they necessarily arise from the contending social interests at the roots of alternative approaches and the rival sets of values associated with them. This is where we can see more clearly the social orientation implicit in the whole procedure. For – far from offering an adequate scope for critical enquiry – the advocated general adoption of the allegedly neutral methodological framework is equivalent, in fact, to consenting not even to raise the issues that really matter. Instead, the stipulated ‘common’ methodological procedure succeeds in transforming the enterprise of ‘rational discourse’ into the dubious practice of producing *methodology for the sake of methodology*: a tendency more pronounced in the twentieth century than ever before. This practice consists in sharpening the recommended methodological knife until nothing but the bare handle is left, at which point a new knife is adopted for the same purpose. For the ideal methodological knife is not meant for cutting, only for sharpening, thereby interposing itself between the critical intent and the real objects of criticism which it can obliterate for as long as the pseudo-critical activity of knife-sharpening for its own sake continues to be pursued. And that happens to be precisely its inherent ideological purpose. **6.1.2** Naturally, to speak of a ‘common’ methodological framework in which one can resolve the problems of a society torn by irreconcilable social interest and ensuing antagonistic confrontations is delusory, at best, notwithstanding all talk about ‘ideal communication communities’. But to define the methodological tenets of all rational discourse by way of transubstantiating into ‘ideal types’ (or by putting into methodological ‘brackets’) the discussion of contending social values reveals the ideological colour as well as the extreme fallaciousness of the claimed rationality. For such treatment of the major areas of conflict, under a great variety of forms – from the Viennes version of ‘logical positivism’ to Wittgenstein’s famous ladder that must be ‘thrown away’ at the point of confronting the question of values, and from the advocacy of the Popperian principle of ‘little by little’ to the ‘emotivist’ theory of value – inevitably always favours the established order. And it does so by declaring the fundamental structural parameters of the given society ‘out of bounds’ to the potential contestants, on the authority of the ideally ‘common’ methodology. However, even on a cursory inspection of the issues at stake it ought to be fairly obvious that to consent *not* to question the fundamental structural framework of the established order is *radically* different according to whether one does so as the beneficiary of that order or from the standpoint of those who find themselves at the receiving end, exploited and oppressed by the overall determinations (and not just by some limited and more or less easily corrigible detail) of that order. Consequently, to establish the ‘common’ identity of the two, opposed sides of a structurally safeguarded hierarchical order – by means of the reduction of the people who belong to the contending social forces into fictitious ‘rational interlocutors’, extracted from their divided real world and transplanted into a beneficially shared universe of ideal discourse – would be nothing short of a methodological miracle. Contrary to the wishful thinking hypostatized as a timeless and socially unspecified rational communality, the elementary condition of a truly rational discourse would be to acknowledge the legitimacy of contesting the given order of society in *substantive* terms. This would imply the articulation of the relevant problems not on the plan of self-referential theory and methodology, but as inherently *practical* issues whose conditions of solution point towards the necessity of radical structural changes. In other words, it would require the explicit rejection of all fiction of methodological and meta-theoretical neutrality. But, of course, this would be far too much to expect precisely because the society in which we live is a deeply divided society. This is why through the dichotomies of ‘fact and value’, ‘theory and practice’, ‘formal and substantive rationality’, etc., the conflict-transcending methodological miracle is constantly stipulated as the necessary regulative framework of ‘rational discourse’ in the humanities and social sciences, in the interest of the *ruling ideology*. What makes this approach particularly difficult to challenge is that its value-commitments are mediated by methodological precepts to such a degree that it is virtually impossible to bring them into the focus of the discussion without openly contesting the framework as a whole. For the conservative sets of values at the roots of such orientation remain several steps removed from the ostensible subject of dispute as defined in logico/methodological, formal/structural, and semantic/analytical terms. And who would suspect of ideological bias the impeccable – methodologically sanctioned – credentials of ‘procedural rules’, ‘models’ and ‘paradigms’? Once, though, such rules and paradigms are adopted as the common frame of reference of what may or may not be allowed to be considered the legitimate subject of debate, everything that enters into the accepted parameters is necessarily constrained not only by the scope of the overall framework, but simultaneously also by the inexplicit ideological assumptions on the basis of which the methodological principles themselves were in the first place constituted**.** This is why the allegedly ‘non-ideological’ ideologies which so successfully conceal and exercise their apologetic function in the guise of neutral methodology are doubly mystifying.

### AT: Cede the Poltical – Boggs

#### We control UQ and turn – Energy policy is ceded to dominant conservative knowledge claims – our method is key to reclaiming political agency

Scrase and Ockwell 10 (J. Ivan - Sussex Energy Group, SPRU (Science and Technology Policy Research), Freeman Centre, University of Sussex, David G - Tyndall Centre for Climate Change Research, SPRU, Freeman Centre, University of Sussex, “The role of discourse and linguistic framing effects in sustaining high carbon energy policy—An accessible introduction,” Energy Policy: Volume 38, Issue 5, May 2010, Pages 2225–2233)

All too often, however, the subjective roles of specialist knowledge, ideas, values, beliefs, and **underlying interests** are **ignored in policy discussions**. As [Adams et al. (2003, p.1915)](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib1) put it: ‘…policy debates are often **flawed** because of the **assumption** that the **actors involved share an understanding of the problem that is being discussed**. They tend to ignore the fact that the assumptions, knowledge, and understandings that **underlie** the definition of [policy] problems are frequently uncertain and contested.’ In this way the ideas of certain actors are often **dismissed** as they fail to fit with **dominant ways of expressing knowledge claims within institutional contexts**. For example, in the aftermath of Chernobyl, Cumbrian sheep farmers’ knowledge about the physical properties of the soil in the Lake District was ignored by government scientists. This led to an ill-informed and ineffective policy response, while creating antagonism and fostering distrust of officials and experts ([Wynne, 1996](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib34)). Recognising the ways in which values, beliefs and ideas are shaped and drawn upon in the construction of policy problems and solutions makes it possible to reach a better understanding of the policy process. It is an arena that involves the interplay of different and often competing ‘knowledge claims’ of various actors. Sometimes these conflicts are between the different types of knowledge (‘knowledges’) of lay or local actors and those of experts, but they can equally constitute contests within local or specialist communities.

#### Their definition of political is too narrow – Incorporating our method is key to effective energy policy and deconstructing the objectivity of the political process

Scrase and Ockwell 10 (J. Ivan - Sussex Energy Group, SPRU (Science and Technology Policy Research), Freeman Centre, University of Sussex, David G - Tyndall Centre for Climate Change Research, SPRU, Freeman Centre, University of Sussex, “The role of discourse and linguistic framing effects in sustaining high carbon energy policy—An accessible introduction,” Energy Policy: Volume 38, Issue 5, May 2010, Pages 2225–2233)

The way in which **energy policy is “framed**” refers to the **underlying assumptions policy is based on** and the ways in which **policy debates ‘construct’, emphasise and link particular issues**. For example energy ‘security of supply’ is often emphasised in arguments favouring nuclear-generated electricity. A more limited framing effect operates on individuals in opinion polls and public referendums: here the way in which questions are posed has a strong influence on responses. The bigger, **social framing** effect referred to here **colours societies’ thinking** about whole areas of public life, in this case energy use and its environmental impacts. A key element of the proposed reframing advanced by commentators concerned with decarbonising energy use (see, for example, [Scrase and MacKerron, 2009](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib25)) is to cease treating energy as just commercial units of fuel and electricity, and instead to focus on the energy ‘services’ people need (warmth, lighting, mobility and so on). This paper helps to explain why any such reframing, however logical and appealing, is politically very challenging if it goes against the perceived interests of powerful groups, particularly when these interests are aligned with certain imperatives which governments must fulfil if they are to avoid electoral defeat. There is a **dominant conception** of **policy-making as an objective, linear process**. In essence the process is portrayed as proceeding in a series of steps from facts to analysis, and then to solutions (for a detailed critique of this linear view see [Fischer, 2003](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib11)). In reality, policy-making is usually messy and political, rife with the exercise of **interests and power**. **The veneer of objective, rational policy-making**, that the dominant, linear model of policy-making supports is therefore cause for concern. It effectively sustains energy policy ‘business as usual’ and excludes many relevant voices that might be effective in opening up space to reframe energy policy problems and move towards more sustainable solutions (see, for example, [Ockwell, 2008](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib21)). This echoes concerns with **what counts as knowledge** and whose voices are heard in policy debates that have characterised strands of several literatures in recent decades, including science and technology studies, sociology of scientific knowledge, and various strands of the political science and development literatures, particularly in the context of knowledge, discourse and democracy. An alternative to the linear model is provided by a ‘discourse’ perspective. This draws on political scientists’ observations of ways in which politics and policy-making proceed through the use of language, and the expression of values and the assumptions therein. Discourse can be understood as: ‘… a **shared way of apprehending the world**. **Embedded in language** it enables subscribers to **interpret bits of information** and put them together into **coherent stories** or accounts. Each discourse **rests on assumptions**, judgements and contentions that provide the basic terms for analysis, debates, agreements and disagreements…’ [Dryzek (1997, p.8)](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib5). A discursive approach rejects the widely held assumption that policy language is a **neutral medium** through which ideas and an objective world are represented and discussed ([Darcy, 1999](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib4)). Discourse analysts examine and explain language use in a way that helps to **reveal the underlying interests, value judgements and beliefs** that are often **disguised by policy actors’** factual claims and the arguments that these are used to support. For example UK energy policy review documents issued in 2006–2007 are criticised below for presenting information in ways that subtly but consistently favoured new nuclear power while purporting to be undecided on the issue. People (including scientific and policy experts) **base their understanding of problems and solutions on their knowledge, experiences, interpretations and value judgements**. These are **coloured and shaped** by social interactions, for example by what is considered an ‘appropriate’ perspective in one's work life within certain institutions. Policy actors therefore expend considerable effort on influencing the design and evolution of institutions in order to ensure problems and solutions are framed in ways they favour. Thus discourse is fundamental to the way that institutions are created, but in the short-term institutions also have a constraining or structuring effect. At a more fundamental level there are even more rigid constraints, which can be identified as a set of core imperatives, such as sustained economic growth and national security, which states and their governments, with very few exceptions, must fulfil in order to ensure their survival ([Dryzek et al., 2003](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib6)—these are explored in detail further below).

### AT: Extinction OWs – Nuclear Aff’s

#### Structural violence is the proximate cause of all war- creates priming that psychologically structures escalation

**Scheper-Hughes and Bourgois ‘4**

(Prof of Anthropology @ Cal-Berkely; Prof of Anthropology @ UPenn)

(Nancy and Philippe, Introduction: Making Sense of Violence, in Violence in War and Peace, pg. 19-22)

This large and at first sight “messy” Part VII is central to this anthology’s thesis. It encompasses everything from the routinized, bureaucratized, and utterly banal violence of children dying of hunger and maternal despair in Northeast Brazil (Scheper-Hughes, Chapter 33) to elderly African Americans dying of heat stroke in Mayor Daly’s version of US apartheid in Chicago’s South Side (Klinenberg, Chapter 38) to the racialized class hatred expressed by British Victorians in their olfactory disgust of the “smelly” working classes (Orwell, Chapter 36). In these readings violence is located in the symbolic and social structures that overdetermine and allow the criminalized drug addictions, interpersonal bloodshed, and racially patterned incarcerations that characterize the US “inner city” to be normalized (Bourgois, Chapter 37 and Wacquant, Chapter 39). Violence also takes the form of class, racial, political self-hatred and adolescent self-destruction (Quesada, Chapter 35), as well as of useless (i.e. preventable), rawly embodied physical suffering, and death (Farmer, Chapter 34). Absolutely central to our approach is a blurring of categories and distinctions between wartime and peacetime violence. Close attention to the “**little” violences** produced in the **structures**, habituses, and mentalites of everyday life shifts our attention to pathologies of class, race, and gender inequalities. More important, it interrupts the voyeuristic tendencies of “violence studies” that risk publicly humiliating the powerless who are often forced into complicity with social and individual pathologies of power because suffering is often a solvent of human integrity and dignity. Thus, in this anthology we are positing a violence continuum comprised of a multitude of “small wars and invisible genocides” (see also Scheper- Hughes 1996; 1997; 2000b) conducted in the normative social spaces of public schools, clinics, emergency rooms, hospital wards, nursing homes, courtrooms, public registry offices, prisons, detention centers, and public morgues. The violence continuum also refers to the **ease** with which humans are capable of **reducing the socially vulnerable into expendable nonpersons** and assuming the license - even the duty - to kill, maim, or soul-murder. We realize that in referring to a violence and a genocide continuum we are flying in the face of a tradition of genocide studies that argues for the absolute uniqueness of the Jewish Holocaust and for vigilance with respect to restricted purist use of the term genocide itself (see Kuper 1985; Chaulk 1999; Fein 1990; Chorbajian 1999). But we hold an opposing and alternative view that, to the contrary, it is absolutely necessary to make just such existential leaps in purposefully linking violent acts in normal times to those of abnormal times. Hence the title of our volume: Violence in War and in Peace. If (as we concede) there is a moral risk in overextending the concept of “genocide” into spaces and corners of everyday life where we might not ordinarily think to find it (and there is), an even greater risk lies in failing to sensitize ourselves, in misrecognizing protogenocidal practices and sentiments daily enacted as normative behavior by “ordinary” good-enough citizens. Peacetime crimes, such as prison construction sold as economic development to impoverished communities in the mountains and deserts of California, or the evolution of the criminal industrial complex into the latest peculiar institution for managing race relations in the United States (Waquant, Chapter 39), constitute the “small wars and invisible genocides” to which we refer. This applies to African American and Latino youth mortality statistics in Oakland, California, Baltimore, Washington DC, and New York City. These are “**invisible” genocides** not because they are secreted away or **hidden from view**, but quite the opposite. As Wittgenstein observed, the things that are hardest to perceive are those which are right before our eyes and therefore taken for granted. In this regard, Bourdieu’s partial and unfinished theory of violence (see Chapters 32 and 42) as well as his concept of misrecognition is crucial to our task. By including the normative everyday forms of violence hidden in the minutiae of “normal” social practices - in the architecture of homes, in gender relations, in communal work, in the exchange of gifts, and so forth - Bourdieu forces us to reconsider the broader meanings and status of violence, especially the links between the violence of everyday life and explicit political terror and state repression, Similarly, Basaglia’s notion of “peacetime crimes” - crimini di pace - imagines a direct relationship between wartime and peacetime violence. Peacetime crimes suggests the possibility that war crimes are merely ordinary, everyday crimes of public consent applied systematic- ally and dramatically in the extreme context of war. Consider the parallel uses of rape during peacetime and wartime, or the family resemblances between the legalized violence of US immigration and naturalization border raids on “illegal aliens” versus the US government- engineered genocide in 1938, known as the Cherokee “Trail of Tears.” Peacetime crimes suggests that everyday forms of state violence make a certain kind of domestic peace possible. Internal “stability” is purchased with the currency of peacetime crimes, many of which take the form of professionally applied “strangle-holds.” Everyday forms of state violence during peacetime make a certain kind of domestic “peace” possible. It is an easy-to-identify peacetime crime that is usually maintained as a public secret by the government and by a scared or apathetic populace. Most subtly, but no less politically or structurally, the phenomenal growth in the United States of a new military, postindustrial prison industrial complex has taken place in the absence of broad-based opposition, let alone collective acts of civil disobedience. The public consensus is based primarily on a new mobilization of an old fear of the mob, the mugger, the rapist, the Black man, the undeserving poor. How many public executions of mentally deficient prisoners in the United States are needed to make life feel more secure for the affluent? What can it possibly mean when incarceration becomes the “normative” socializing experience for ethnic minority youth in a society, i.e., over 33 percent of young African American men (Prison Watch 2002). In the end it is essential that we recognize the existence of a **genocidal capacity** among otherwise good-enough humans and that we need to exercise a defensive **hypervigilance** to the less dramatic, **permitted, and even rewarded everyday acts of violence that render participation in genocidal acts and policies possible** (under adverse political or economic conditions), perhaps more easily than we would like to recognize. Under the violence continuum we include, therefore, all expressions of radical social exclusion, dehumanization, depersonal- ization, pseudospeciation, and reification which normalize atrocious behavior and violence toward others. A constant self-mobilization for alarm, a state of constant hyperarousal is, perhaps, a reasonable response to Benjamin’s view of late modern history as a chronic “state of emergency” (Taussig, Chapter 31). We are trying to recover here the classic anagogic thinking that enabled Erving Goffman, Jules Henry, C. Wright Mills, and Franco Basaglia among other mid-twentieth-century radically critical thinkers, to perceive the symbolic and structural relations, i.e., between inmates and patients, between concentration camps, prisons, mental hospitals, nursing homes, and other “total institutions.” Making that decisive move to recognize the continuum of violence allows us to see the capacity and the willingness - if not enthusiasm - of ordinary people, the practical technicians of the social consensus, to enforce genocidal-like crimes against categories of rubbish people. There is no primary impulse out of which **mass violence and genocide** are born, it is **ingrained** in the **common sense of everyday social life**. The mad, the differently abled, the mentally vulnerable have often fallen into this category of the unworthy living, as have the very old and infirm, the sick-poor, and, of course, the despised racial, religious, sexual, and ethnic groups of the moment. Erik Erikson referred to “pseudo- speciation” as the human tendency to classify some individuals or social groups as less than fully human - a prerequisite to genocide and one that is carefully honed during the unremark- able peacetimes that precede the sudden, “seemingly unintelligible” outbreaks of mass violence. Collective denial and misrecognition are prerequisites for mass violence and genocide. But so are formal bureaucratic structures and professional roles. The practical technicians of everyday violence in the backlands of Northeast Brazil (Scheper-Hughes, Chapter 33), for example, include the clinic doctors who prescribe powerful tranquilizers to fretful and frightfully hungry babies, the Catholic priests who celebrate the death of “angel-babies,” and the municipal bureaucrats who dispense free baby coffins but no food to hungry families. Everyday violence encompasses the implicit, legitimate, and routinized forms of violence inherent in particular social, economic, and political formations. It is close to what Bourdieu (1977, 1996) means by “symbolic violence,” the violence that is often “nus-recognized” for something else, usually something good. Everyday violence is similar to what Taussig (1989) calls “terror as usual.” All these terms are meant to reveal a public secret - the hidden links between violence in war and violence in peace, and between war crimes and “peace-time crimes.” Bourdieu (1977) finds domination and violence in the least likely places - in courtship and marriage, in the exchange of gifts, in systems of classification, in style, art, and culinary taste- the various uses of culture. Violence, Bourdieu insists, is everywhere in social practice. It is misrecognized because its very everydayness and its familiarity render it invisible. Lacan identifies “rneconnaissance” as the prerequisite of the social. The exploitation of bachelor sons, robbing them of autonomy, independence, and progeny, within the structures of family farming in the European countryside that Bourdieu escaped is a case in point (Bourdieu, Chapter 42; see also Scheper-Hughes, 2000b; Favret-Saada, 1989). Following Gramsci, Foucault, Sartre, Arendt, and other modern theorists of power-vio- lence, Bourdieu treats direct aggression and physical violence as a crude, uneconomical mode of domination; it is less efficient and, according to Arendt (1969), it is certainly less legitimate. While power and symbolic domination are not to be equated with violence - and Arendt argues persuasively that violence is to be understood as a failure of power - violence, as we are presenting it here, is more than simply the expression of illegitimate physical force against a person or group of persons. Rather, we need to understand violence as encompassing all forms of “controlling processes” (Nader 1997b) that assault basic human freedoms and individual or collective survival. Our task is to recognize these gray zones of violence which are, by definition, not obvious. Once again, the point of bringing into the discourses on genocide everyday, normative experiences of reification, depersonalization, institutional confinement, and acceptable death is to help answer the question: What makes mass violence and genocide possible? In this volume we are suggesting that mass violence is part of a continuum, and that it is socially incremental and often experienced by perpetrators, collaborators, bystanders - and even by victims themselves - as expected, routine, even justified. The preparations for mass killing can be found in social sentiments and institutions from the family, to schools, churches, hospitals, and the military. They harbor the early “warning signs” (Charney 1991), the “**priming**” (as Hinton, ed., 2002 calls it), or the “genocidal continuum” (as we call it) that push **social consensus** toward **devaluing** certain forms of human life and lifeways from the refusal of social support and humane care to vulnerable “social parasites” (the nursing home elderly, “welfare queens,” undocumented immigrants, drug addicts) to the militarization of everyday life (super-maximum-security prisons, capital punishment; the technologies of heightened personal security, including the house gun and gated communities; and reversed feelings of victimization).

**This desire to advance our nuclear energy industry creates radioactive wastelands – the impacts effect those on the periphery most – rhetoric of clean nuclear technology is tainted by the larger colonialist military-industrial complex**

**Kuletz** lecturer in American studies at the University of Canterbury **1998** Valerie, The Tainted Desert p 15

The United States has paid a **high price** for “winning” the Cold War and for its use of nuclear energy in the pursuit of global **economic and military superiority**. But the actual price of the Cold War, and of “national competitiveness,” hasn’t even begun to be tallied. An exploration of the nuclear waste crisis reveal the **inequitable distribution of payment**, weighing most **heavily on the disenfranchised**, and thus contributes to a more accurate assessment of what “**collateral” damage** has been inflicted in the pursuit of **capitalist political hegemony.** The so-called “price” for “freedom” is paid for by those with the least power, the least chance to benefit from U.S. control of global order and the wealth it brings. If we look beneath the rhetoric of progress so common in the postwar twentieth century – a rhetoric that equates nuclear technology with unlimited clean power – we find a familiar triad: the military, science, and industry. These comprise the institutions that have most benefited from nuclearism and whose interlocking desires have resulted in, among other things, the emergence of a nuclear wasteland in the interdesert region populated by communities with **far less prestige, privilege, and power.**

#### And case outweighs is the link – racism structures American foreign policy – produces global warfare and obscures its causes in neutrality

Rodriguez 7 (Dylan, Professor, Dept. of Ethnic Studies @ University of California Riverside, November Kritika Kultura, Issue 9, “AMERICAN GLOBALITY AND THE U. S. PRISON REGIME: STATE VIOLENCE AND WHITE SUPREMACY FROM ABU GHRAIB TO STOCKTON TO BAGONG DIWA”, Available online at http://www.ateneo.edu/ateneo/www/UserFiles/121/docs/kkissue09.pdf,)

Variable, overlapping, and mutually constituting white supremacist regimes have in fact been **fundamental** to the formation and movements of the United States, from racial chattel slavery and frontier **genocide** to recent and current modes of neoliberal land displacement and (domestic-to-global) warfare. Without exception, these regimes have been differently **entangled with the state’s changing paradigms, strategies,** and technologies of human incarceration and punishment (to follow the prior examples: the plantation, the reservation, the neoliberal sweatshop, and the domestic-to-global prison). **The historical nature of these entanglements is** widely acknowledged, although explanations of the **structuring relations** of force tend to either isolate or **historically compartmentalize** the **complexities of historical white supremacy**. For the theoretical purposes of this essay, white supremacy may be understood as a **logic of social organization** that produces regimented, institutionalized, and militarized conceptions of hierarchized “human” difference, enforced through coercions and violences that are **structured by genocidal possibility** (**including** physical **extermination** and curtailment of people’s collective capacities to socially, culturally, or biologically reproduce). As a historical vernacular and philosophical apparatus of domination, white supremacy is simultaneously premised on and consistently innovating **universalized conceptions of the white** (European and euroamerican) **“human**” vis-à-vis the rigorous production, penal discipline, and frequent social, political, and biological neutralization or extermination of the (non-white) sub- or **non-human**. To consider white supremacy as essential to American **social formation** (rather than a freakish or extremist deviation from it) **facilitates a discussion** of the modalities through which this **material logic** of **violence overdetermines** the social, political, economic, and cultural structures that **compose American globality** and constitute the common sense that is organic to its **ordering**.

**Their exclusion of the impact of nuclear power on indigenous people is not a mistake – it is an active obliteration of history – this active amnesia blocks efforts to prevent extermination – you should prioritize indigenous peoples in your impact calculus**

**Kato** Department of Political Science U of Hawaii **1993** Masahide Alternatives v18 p 339

In delineating the notion of “nuclear war,” both of these discourses share an intriguing leap: from the bombings of Hiroshima and Nagasaki to the “possible” nuclear explosions in an indefinite-yet-ever-closer-to-the-present future. Thus any nuclear explosions after World War II do not qualify as nuclear war in the cognitive grid of conventional nuclear discourse. Significantly, most nuclear explosions after World War II took place in sovereign territories of the Fourth World and Indigenous Nations. This critical historical fact has been contained in the domain of nuclear testing. Such obliteration of the history of undeclared nuclear warfare by nuclear discourse does not merely posit the deficiency of the discourse. Rather, what it does is reveal the late capitalist form of domination, whereby an **ongoing extermination** process of the periphery is **blocked** from constituting itself as historical fact.

### AT: Perm Do Both

#### Permutation co-opts the alt – reaffirms the discoursive hegemony of the 1AC and prevents critical interrogaton of failed methods

Scrase and Ockwell 10 (J. Ivan - Sussex Energy Group, SPRU (Science and Technology Policy Research), Freeman Centre, University of Sussex, David G - Tyndall Centre for Climate Change Research, SPRU, Freeman Centre, University of Sussex, “The role of discourse and linguistic framing effects in sustaining high carbon energy policy—An accessible introduction,” Energy Policy: Volume 38, Issue 5, May 2010, Pages 2225–2233)

This perspective begins by seeing politics as a struggle for ‘**discursive hegemony’** in which actors seek to achieve ‘discursive closure’ by securing support for their definition of reality ([Hajer, 1995](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib14)). The notion of ‘**story-lines’** is useful here. These **narratives employ symbolic references that imply** a **common understanding of an issue** ([Hajer, 1995](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib14); [Rydin, 1999](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib24)). Essentially, the assumption is that actors do not draw on a comprehensive discursive system; instead this is **evoked through story-lines**. By uttering a specific word or phrase, for example, ‘global warming’, **a whole story-line is in effect re-invoked**; one that is subtly different, for example, to that of the ‘anthropogenic greenhouse effect’ or ‘climate change’. ‘Global warming’ implies a story-line where the whole earth will get hotter in the future; ‘climate change’ suggests something less certain and uniform (see [Whitmarsh, 2009](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib33)); ‘anthropogenic greenhouse effect’ is perhaps the most technically correct term, and it directly attributes the warming effect to human activity. Story-lines are therefore much more than simply ‘arguments’. The meanings and connotations of familiar story-lines are often recognised at an almost **subconscious level**. They can thus act to **define policy problems while obscuring underpinning interests, values and beliefs.** They can add credibility to the claims of certain groups and render those of other groups less credible. They therefore act to create social order within a given domain by serving as devices through which actors are positioned and ideas defined and linked together. Institutional arrangements are important in structuring discourses, forming routine understandings. Complex research findings or logical arguments are often reduced to an eye-catching visual representation or **memorable one-liners**. These gloss over real complexities and uncertainties, and entail significant loss of meaning. This allows considerable flexibility in interpretation, which helps recruit people with differing views into a ‘**discourse coalition’**. It also **avoids confrontation** or even the necessity for direct social contact between coalition members ([Hajer, 1995](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib14)). In this view, to shape policy, **a new discourse** must **dominate** in public and policy discussions, **and penetrate the routines of policy practice** through institutionalisation within laws, regulations and organisations ([Hajer, 1993](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib13); [Nossiff, 1998](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib19); [Healey, 1999](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib16)). In terms of policy change then, **promoting a new story-line** is a difficult task, involving **dismantling** those promoted by those actors who were able to achieve prominence for their claims and viewpoint originally ([Rydin, 1999](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib24)) and which may have become **embedded in institutions**. For example, it took over a decade for the issue of acid rain to impact on UK air pollution policy. A discourse coalition formed around the issue that promoted a story-line highlighting the negative international environmental impacts of emissions from coal-fired power stations, particularly trees dying in Scandinavian countries, and the related need for tighter pollution controls in Europe. In the UK the acid rain discourse coalition first had to confront the institutionally entrenched British discourse on air pollution. This was dominated by local and national concerns with urban air pollution and health effects, which left little room for the consideration of new ideas related to the international environmental impacts of industrial emissions ([Hajer, 1995, p. 268](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib14)).

#### That forces the alt to take a backseat to dominant ways of expressing energy knowledge

Scrase and Ockwell 10 (J. Ivan - Sussex Energy Group, SPRU (Science and Technology Policy Research), Freeman Centre, University of Sussex, David G - Tyndall Centre for Climate Change Research, SPRU, Freeman Centre, University of Sussex, “The role of discourse and linguistic framing effects in sustaining high carbon energy policy—An accessible introduction,” Energy Policy: Volume 38, Issue 5, May 2010, Pages 2225–2233)

All too often, however, the subjective roles of specialist knowledge, ideas, values, beliefs, and **underlying interests** are **ignored in policy discussions**. As [Adams et al. (2003, p.1915)](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib1) put it: ‘…policy debates are often **flawed** because of the **assumption** that the **actors involved share an understanding of the problem that is being discussed**. They tend to ignore the fact that the assumptions, knowledge, and understandings that **underlie** the definition of [policy] problems are frequently uncertain and contested.’ In this way the ideas of certain actors are often **dismissed** as they fail to fit with **dominant ways of expressing knowledge claims within institutional contexts**. For example, in the aftermath of Chernobyl, Cumbrian sheep farmers’ knowledge about the physical properties of the soil in the Lake District was ignored by government scientists. This led to an ill-informed and ineffective policy response, while creating antagonism and fostering distrust of officials and experts ([Wynne, 1996](http://www.sciencedirect.com/science/article/pii/S0301421509009471#bib34)). Recognising the ways in which values, beliefs and ideas are shaped and drawn upon in the construction of policy problems and solutions makes it possible to reach a **better understanding** of the policy process. It is an arena that involves the interplay of different and often competing ‘knowledge claims’ of various actors. Sometimes these conflicts are between the different types of knowledge (‘knowledges’) of lay or local actors and those of experts, but they can equally constitute contests within local or specialist communities.

## warming

### famine

**Lack of infrastructure and distribution networks are a huge alt cause**

**Khosla 7** (Vinod, Founder – Sun Microsystems and Khosla Ventures, “Food versus Fuel” or the “Salve for Africa”?, [http://www.khoslaventures.com/presentations/FOODvFUEL.pdf](http://www.khoslaventures.com/presentations/FOODvFUEL.pdf" \t "_blank))

Despite its misplaced pessimism about corn-ethanol, the excerpted section does note that the advent of cellulosic ethanol would mitigate the purported prices rises; as production capacity for cellulosic ethanol ramps up, it will be competitive, even without further improvements in technology. Cellulosic ethanol will act as price-ceiling on corn ethanol, much as corn ethanol can do for oil today. Nonetheless, **the pessimism that the world’s poor starve because we don’t produce enough food is absurd**. The Food and Agriculture Organization (FAO) notes that **there is more food per-capita today than ever before – the lack of infrastructure, income, and distribution networks are the real causes of hunger, and not corn prices** (indeed, the U.S exports just 17% of its corn production, and the majority of even this exported crop is used for livestock feed). Instead of rebelling against corn ethanol, the developing world (and Africa in particular) has been pushing the western world for agricultural subsidy reductions in the West, noting that their farmers cannot compete (and earn income) against such heavily discounted products. Critics conjure up images of starving children as innocent byproducts of corn ethanol; meanwhile, the EU actually pays farmers not to grow food (and thus to reduce supply). The (subsidized) low prices of agricultural products like corn have made foreign farmers in poor countries uneconomic producers. According to the New York Times (Aug 18, 2007), “CARE, the big global charity, had decided to stop selling subsidized American farm products in poor African countries because the program was inefficient and undercut local farmers.” Corn ethanol, by helping make corn more economic to grow and hence reducing corn subsidies, is actually helping the poor.

### at: methane release

#### No impact to methane release

Dorrite 7 (Dan, “Killer in Our Midst”, http://www.killerinourmidst.com/methane%20catastrophe.html)

First, methane itself is, like carbon dioxide, an asphyxiating gas, depriving aerobic organisms of needed oxygen. When released in the ocean, it would have impaired the metabolism of aerobic marine organisms, and, in sufficient concentrations, would have caused death. Although, upon reaching the atmosphere, methane could have had similar effects on non-marine organisms, its concentrations would have been unlikely to do much harm, because methane is lighter than air and would have been easily dispersed by winds.

#### Too weak to cause extinction

Hoyle 99 – former Director of The Institute of Astronomy at Cambridge (Fred, Chandra Wickramasinghe, Professor at Cardiff University and Honorary Professor at the University of Buckingham, July, “ON THE CAUSE OF ICE-AGES,” http://abob.libs.uga.edu/bobk/ccc/ce120799.html)

The wavelength 13.5mm is important in two respects. In the energy distribution of radiation emitted at ground and sea-level it marks the halfway point, one-half of the energy being at wavelengths shorter than 13.5mm and one-half at wavelengths longer. It also marks a division in the effectiveness of the blocking of greenhouse gases. Shortward of 13.5mm the blocking is comparatively weak, longward of 13.5mm it is strong, excepting for a partial window from 17.5mm to about 20mm. Shortward of 13.5mm there is a broad weak absorption from water vapour with its minimum in the region of 10mm, together with narrow bands from 03 and CH4. Of these, some current fuss is being made about CH4. But blocking by methane is somewhat shortward of 8mm, which is so far out on the short wavelength tail of the Earth's reradiated spectrum as also to be of no great consequence. Thus the Planck maximum for a reradiated spectrum of, say, an effective temperature 290K is at 17.6mm with respect to energy, and at 12.7mm with respect to maximum photon emission. Thus methane makes its contribution in a region of the reradiated spectrum where there is only 10 percent of the energy, for which reason fluctuations in atmospheric methane can produce only minor effects, like those produced by fluctuations of CO2. The gas that can produce major effects, and towards which one must therefore look for an understanding of large shifts of the Earth's climate, is water vapour.

### no warming impact

#### Previous temperature spikes disprove the impact

Singer 11, PhD physics – Princeton University and professor of environmental science – UVA, consultant – NASA, GAO, DOE, NASA, Carter, PhD paleontology – University of Cambridge, adjunct research professor – Marine Geophysical Laboratory @ James Cook University, and Idso, PhD Geography – ASU

(S. Fred, Robert M. and Craig, “Climate Change Reconsidered,” 2011 Interim Report of the Nongovernmental Panel on Climate Change)

Research from locations around the world reveal a significant period of elevated air temperatures that immediately preceded the Little Ice Age, during a time that has come to be known as the Little Medieval Warm Period. A discussion of this topic was not included in the 2009 NIPCC report, but we include it here to demonstrate the existence of another set of real-world data that do not support the IPCC‘s claim that temperatures of the past couple of decades have been the warmest of the past one to two millennia. In one of the more intriguing aspects of his study of global climate change over the past three millennia, Loehle (2004) presented a graph of the Sargasso Sea and South African temperature records of Keigwin (1996) and Holmgren et al. (1999, 2001) that reveals the existence of a major spike in surface air temperature that began sometime in the early 1400s. This abrupt and anomalous warming pushed the air temperatures of these two records considerably above their representations of the peak warmth of the twentieth century, after which they fell back to pre-spike levels in the mid-1500s, in harmony with the work of McIntyre and McKitrick (2003), who found a similar period of higher-than-current temperatures in their reanalysis of the data employed by Mann et al. (1998, 1999).

### 2NC Impact Run

#### Ice age is the terminal impact- negative 100 degrees Celsius means everyone dies- not a question of who turns who

#### Outweighs all impacts

**Whitehouse 12** – science adviser to the Global Warming Policy Foundation (David, 01/11, “Could rising CO2 levels help prevent the next ice age?” http://www.publicserviceeurope.com/article/1338/could-rising-co2-levels-help-prevent-the-next-ice-age)

That the trees no longer completely canopy this land is due to mankind as we cleared the forests. That the ice is no longer here is due to global warming. Without doubt, we live in an interglacial period – a warm time between ice ages. There have been many during the current great glaciation. Some have these periods have been warmer than today, many shorter than our current interglacial's duration. The return of the ice would, short of a giant meteor strike, be the biggest disaster to face humanity. Vast swathes of the northern Hemisphere would be frozen. Northern Europe, Asia, Canada and the United States would have extensive regions rendered uninhabitable. Mankind would have to move south. There would be no choice as no technology could stop the ice or allow our high populations to life amongst it. Some believe the return of the ice will not happen for thousands of years, other that the signs could be visible within decades. But could it be that the greenhouse gasses being pumped into the atmosphere, that many believe are responsible for a recent warming of the planet, might counteract the forces bringing us a new glaciation? Could it be that greenhouse gasses might actually stave off the return of the ice and save the lives of tens of millions, if not civilisation itself? A recent study by scientists at Cambridge University and published in the Journal Nature Geoscience suggests that the carbon dioxide might extend the current interglacial until carbon dioxide levels fall. They believe that the atmospheric concentration of CO2 must be about 240 parts per million before glaciation could start. Currently, it is about 390 ppm. In a 1999 essay, Sir Fred Hoyle said: "The renewal of ice-age conditions would render a large fraction of the world's major food-growing areas inoperable and so would inevitably lead to the extinction of most of the present human population. We must look to a sustained greenhouse effect to maintain the present advantageous world climate. This implies the ability to inject effective greenhouse gases into the atmosphere, the opposite of what environmentalists are erroneously advocating."

#### Ice age coming now- 2022 is the solar peak. These are cycles in the atmosphere inevitably will occur- Co2 keeps up artificially alive- ice age is a question of *when* and not *if*- we are 600 years overdue

**Boyle ‘12** (Popular Science (Rebecca, 01/08, “Human CO2 Emissions Could Avert the Next Ice Age, Study Says,” http://thegwpf.org/science-news/4714-human-co2-emissions-could-avert-the-next-ice-age-study-says.html)

Earth could be entering a new Ice Age within the next millennium, but it might not, the deep freeze averted by warming from increased carbon dioxide emissions. Humans could be thwarting the next glacial inception, a new study says. Even in the comparatively long time scales of Earth history, we’re kind of overdue for another ice age — our current Holocene era has lasted about 11,600 years, roughly 600 years longer than the average interglacial (between-ice-age) periods of the past. If atmospheric CO2 levels were lower, the next ice age might have started sometime within the next 1,000 years, according to researchers from University College London and Cambridge University. Their conclusion is based in part on abrupt temperature changes in the overall temperature contrast between Greenland and Antarctica, according to a Cambridge news release. The North Atlantic would cool rapidly while Antarctica warms, fluctuations that would only happen if expanding ice sheets were calving icebergs huge enough to impact ocean circulation. These temperature see-saws can therefore be used to pinpoint the activation of a new ice age, a “glacial inception.” Chronis Tzedakis from UC London and colleagues examined our present conditions, including temperature averages and solar radiation strength, and found a close analogue to the present, an era called Marine Isotope Stage 19, or about 780,000 years ago. The eras have a similar astronomical configuration and climate, although their CO2 trajectories are pretty different (ours is on the rise). A phenomenon called insolation was a key factor here. Insolation is the seasonal and latitudinal distribution of solar radiation, which changes a tiny bit over tens of thousands of years due to tiny variations in Earth’s orbit around the sun. These little differences are one of the factors that can help trigger a cooling event, cascading toward an ice age. The insolation minimum in the MIS19 era was similar to our own, so it’s a valid analogy, the researchers say. The team applied their glacial inception fingerprinting method to MIS19, looking at ice core samples, plankton remains and debris that would have floated on the encroaching ice, and determined at what point the glacial inception would have started. Then they compared that time frame to the Holocene time frame. “Taking the [current era] to MIS19c analogy to its logical conclusion implies that the current interglacial would be nearing its end,” the researchers write. If, that is, atmospheric CO2 levels were comparable to the MIS19 era. Which they aren't. This shows that while insolation is an important ingredient, apparently it’s not as potent an ice age determinant as CO2. “The current insolation forcing and lack of new ice growth mean that orbital-scale variability will not be moderating the effects of anthropogenically induced global warming,” the authors conclude.

#### It’ll happen quickly and soon

**Scotsman 8** – Edinburgh news, cites the German Research Centre for Geosciences (08/01, “Last Ice Age happened in less than year say scientists,” http://www.scotsman.com/news/international/last-ice-age-happened-in-less-than-year-say-scientists-1-1083252)

THE last ice age 13,000 years ago took hold in just one year, more than ten times quicker than previously believed, scientists have warned. Rather than a gradual cooling over a decade, the ice age plunged Europe into the deep freeze, German Research Centre for Geosciences at Potsdam said. Cold, stormy conditions caused by an abrupt shift in atmospheric circulation froze the continent almost instantly during the Younger Dryas less than 13,000 years ago – a very recent period on a geological scale. The new findings will add to fears of a serious risk of this happening again in the UK and western Europe – and soon. Dr Achim Brauer, of the GFZ (GeoForschungs Zentrum) German Research Centre for Geosciences at Potsdam, and colleagues analysed annual layers of sediments, called "varves", from a German crater lake. Each varve records a single year, allowing annual climate records from the region to be reconstructed.

#### Turns their war impacts by 2014

**Aym 10** – Salem-News Contributor based in Chicago, cites The Pulkovo Astronomical Observatory (Terrance, 12/06, “Earth may be entering a new Ice Age, Food shortages may lead to regional warfare,” http://www.iceagenow.com/Earth\_may\_be\_entering\_a\_new\_Ice\_Age.htm)

6 Dec 10 - Astrophysicist Habibullo Abdussamatov, head of space research at St. Petersburg's Pulkovo Astronomical Observatory in Russia, recently pronounced his belief that Earth will enter a little Ice Age as early as 2014, says this article by Terrence Aym. Such a period of cooling could last as long as two centuries and be ruinous, Aym warns. "Whereas global warming would be a good thing, a mini-Ice Age could be disastrous: growing seasons would be shortened, more energy must be extended to stay warm, and food shortages may lead to breakouts of regional warfare." The last little ice age occurred between 1650 and 1850 and "accounted for many crop failures, outbreaks of famines and mass migrations," says Aym.

#### Their sources exaggerate to secure funding

**Roche 3** (Dr Roche, whose PhD in agricultural science is from University College, Dublin, The Daily News (New Plymouth, New Zealand), September 25, 2003

"The point is further highlighted when you look at the concern of people for the global environment. All countries considered the global environment to be in a significantly worse state than either their national or local environment. He identified three sources of our negative perception -- researchers, environmental organisations and the media." Dr Roche said researchers were arguably the most important communicators of environmental pessimism because they were generally people with academic credentials and therefore seen as credible. "We are always researching negative aspects of the environment. After all, there is no point in researching something we know is OK. Therefore, we only hear bad stories about the environment, never good. "However, research also contributes to our fear of global demise in a much more sinister way. The constant need to attract scarce funding often forces researchers to release preliminary data before it is full analysed, thereby giving a false impression of the size of the problem and it also encourages scientists to release more scary scenarios than actually exist." Dr Roche said the environmental movements themselves were also an outlet for the pessimistic environmental story. "Environmental organisations are well funded and therefore have a vested interest in research results and resultant political decisions. In other words, if research was to show there was no environmental problem, people funding the environmental organisations would find some other way to spend their money. It is in their interest to 'offer up scary scenarios'." On the media's role in negative perceptions, Dr Roche said everyone had heard the pessimistic stories -- the loss of rainforests and other wildlife habitats, the rapid extinction of species, the depletion of natural resources, the benefits of organic food, the increased incidence of cancer (often blamed on modern ways of producing food), global warming, famine, floods and other major weather events on the increase.

### 2NC Link Run

#### Every Co2 particle is a life

Watts ’12 (Anthony Watts, American meteorologist, president of IntelliWeather Inc., editor of the blog, Watts Up With That?, and founder of the Surface Stations Project, “Increased CO2 Emissions Will Delay Next Ice Age”, <http://wattsupwiththat.com/2012/01/08/increased-co2-emissions-will-delay-next-ice-age/>, January 8, 2012)

Sir Fred Hoyle Vindicated (Via Dr. Benny Peiser of the GWPF) According to new research to be published in Nature Geoscience (embargoed until 1800 GMT/10AM PST, Sunday 8 January 2012), the next ice age could set in any time this millennium were it not for increases in anthropogenic CO2 emissions that are preventing such a global disaster from occurring. The new research confirms the theory developed by the late Sir Fred Hoyle and Professor Chandra Wickramasinghe in the 1990s that without increased levels of CO2 emissions into the atmosphere ‘the drift into new ice-age conditions would be inevitable.’ [...] The problem for the present swollen human species is of a drift back into an ice-age, not away from an ice-age. Manifestly, we need all the greenhouse we can get, even to the extent of the British Isles becoming good for the growing of vines…. The renewal of ice-age conditions would render a large fraction of the world’s major food-growing areas inoperable, and so would inevitably lead to the extinction of most of the present human population. Since bolide impacts cannot be called up to order, we must look to a sustained greenhouse effect to maintain the present advantageous world climate. This implies the ability to inject effective greenhouse gases into the atmosphere, the opposite of what environmentalists are erroneously advocating.

#### Best studies go neg

**Amos ‘12** (Jonathon Amos, Science correspondent, BBC News, “CO2 'drove end to last ice age',” <http://www.bbc.co.uk/news/science-environment-17611404>, April 4, 2012)

A new, detailed record of past climate change provides compelling evidence that the last ice age was ended by a rise in temperature driven by an increase in atmospheric carbon dioxide. The finding is based on a very broad range of data, including even the shells of ancient tiny ocean animals. A paper describing the research appears in this week's edition of Nature. The team behind the study says its work further strengthens ideas about global warming. "At the end of the last ice age, CO2 rose from about 180 parts per million (ppm) in the atmosphere to about 260; and today we're at 392," explained lead author Dr Jeremy Shakun. "So, in the last 100 years we've gone up about 100 ppm - about the same as at the end of the last ice age, which I think puts it into perspective because it's not a small amount. Rising CO2 at the end of the ice age had a huge effect on global climate." The study covers the period in Earth history from roughly 20,000 to 10,000 years ago. This was the time when the planet was emerging from its last deep chill, when the great ice sheets known to cover parts of the Northern Hemisphere were in retreat. The key result from the new study is that it shows the carbon dioxide rise during this major transition ran slightly ahead of increases in global temperature. This runs contrary to the record obtained solely from the analysis of Antarctic ice cores which had indicated the opposite - that temperature elevation in the southern polar region actually preceded (or at least ran concurrent to) the climb in CO2. This observation has frequently been used by some people who are sceptical of global warming to challenge its scientific underpinnings; to claim that the warming link between the atmospheric gas and global temperature is grossly overstated. But Dr Shakun and colleagues argue that the Antarctic temperature record is just that - a record of what was happening only on the White Continent. By contrast, their new climate history encompasses data from all around the world to provide a much fuller picture of what was happening on a global scale. This data incorporates additional information contained in ices drilled from Greenland, and in sediments drilled from the ocean floor and from continental lakes. These provide a range of indicators. Air bubbles trapped in ice, for example, will record the past CO2 concentrations in the atmosphere. Past temperatures can also be inferred from ancient planktonic marine organisms buried in the sediments. That is because the amount of magnesium they would include in their calcite skeletons and shells was dependent on the warmth of the water in which they swam. "Our global temperature looks a lot like the pattern of rising CO2 at the end of the ice age, but the interesting part in particular is that unlike with these Antarctic ice core records, the temperature lags a bit behind the CO2," said Dr Shakun, who conducted much of the research at Oregon State University but who is now affiliated to Harvard and Columbia universities. "You put these two points together - the correlation of global temperature and CO2, and the fact that temperature lags behind the CO2 - and it really leaves you thinking that CO2 was the big driver of global warming at the end of the ice age," he told BBC News.

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### impact calc

#### Nuke war causes extinction

Sandberg et al in ‘8 (Anders, (PhD in Neuroscience and Postdoc Research Fellow @ Future of Humanity Institute), Jason G. Matheny, (Dept. Health Policy and Management @ Johns Hopkins School of Public Helath), and Milan M. Cirkovic, (Senior Research Associate @ Research Observatory of Belgrade, Bulletin of the Atomic Scientists, “How can we reduce the risk of human extinction?” 9-9,http://www.thebulletin.org/web-edition/features/how-can-we-reduce-the-risk-of-human-extinction)

Such remote risks may seem academic in a world plagued by immediate problems, such as global poverty, HIV, and climate change. But as intimidating as these problems are, they do not threaten human existence. In discussing the risk of nuclear winter, Carl Sagan emphasized the astronomical toll of human extinction: A nuclear war imperils all of our descendants, for as long as there will be humans. Even if the population remains static, with an average lifetime of the order of 100 years, over a typical time period for the biological evolution of a successful species (roughly ten million years), we are talking about some 500 trillion people yet to come. By this criterion, the stakes are one million times greater for extinction than for the more modest nuclear wars that kill "only" hundreds of millions of people. There are many other possible measures of the potential loss--including culture and science, the evolutionary history of the planet, and the significance of the lives of all of our ancestors who contributed to the future of their descendants. Extinction is the undoing of the human enterprise. There is a discontinuity between risks that threaten 10 percent or even 99 percent of humanity and those that threaten 100 percent. For disasters killing less than all humanity, there is a good chance that the species could recover. If we value future human generations, then reducing extinction risks should dominate our considerations. Fortunately, most measures to reduce these risks also improve global security against a range of lesser catastrophes, and thus deserve support regardless of how much one worries about extinction. These measures include: \* Removing nuclear weapons from hair-trigger alert and further reducing their numbers;

#### Indo-Pak escalation and nuclear use is the most likely scenario

Kapur ‘8 [S. Paul Kapur is Associate Professor in the Department of National Security Affairs at the U.S. Naval Postgraduate School and a Faculty Affiliate at Stanford University’s Center for International Security and Cooperation. , “Ten Years of Instability in a Nuclear South Asia”, International Security, Vol. 33, No. 2 (Fall 2008), pp. 71–94]

As noted above, nuclear weapons facilitated provocative Pakistani behavior in the wake of the 1998 tests, thereby triggering major Indo-Pakistani crises such as the Kargil conºict and the 2001–02 standoff. Significantly, the effect of these crises has not been limited to the past; they have had a profound effect on current Indian strategic thinking, inspiring an aggressive shift in India’s conventional military posture. This could increase the likelihood of serious IndoPakistani conflict in years to come. India has long enjoyed conventional military superiority over Pakistan. 58 This advantage has been mitigated, however, by India’s peacetime deployment of offensive forces deep in the interior of the country, far from the IndoPakistani border. As a result, Indian forces were slow to mobilize against the Pakistanis, requiring several weeks before launching a large-scale offensive. 59 This gave Pakistan time to prepare its defenses and ward off any impending Indian attack. It also allowed the international community to bring diplomatic pressure to bear on India’s civilian leadership, thereby preventing it from launching military action. Many Indian military leaders believe that this mobilization problem prevented India from acting decisively during the 2001–02 crisis. By the time Indian forces were prepared to move against Pakistan, the Pakistanis were able to ready their defenses, making a potential Indian attack far more costly. Most important, the Indians’ slowness enabled the United States to pressure the Indian government, convincing it to abandon plans to strike Pakistan. Thus, in the words of a prominent Indian defense writer, Operation Parakram demonstrated that India’s “mobilization strategy was completely ºawed.”60 In addition, the government’s restraint caused rancor within the armed forces. Senior ofªcers believed that civilian leaders misused the military, ordering it to undertake a long and costly deployment and then opting for retreat, leaving the Pakistanis unpunished. As a senior U.S. defense ofªcial stationed in New Delhi puts it, Indian commanders “were frustrated.... They really wanted to go after Pakistan but couldn’t.”61 To prevent a recurrence of Parakram’s failures, the Indians began to formulate a new “Cold Start” military doctrine, which will enable India to rapidly launch a large-scale attack against Pakistan. The doctrine will augment the offensive capabilities of India’s traditionally defensive holding formations located close to the Indo-Pakistani border. It also will eventually shift offensive forces from their current locations in the Indian hinterland to bases closer to Pakistan. Within 72 to 96 hours of a mobilization order, Cold Start would send three to ªve division-sized integrated battle groups (IBGs) consisting of armor, mechanized infantry, and artillery roughly 20–80 kilometers into Pakistan along the breadth of the Indo-Pakistani border. The IBGs would aggressively engage Pakistani forces and seize a long, shallow swath of Pakistani territory. Cold Start seeks to achieve three goals: to inºict signiªcant attrition on enemy forces; to retain Pakistani territory for use as a postconºict bargaining chip; and, by limiting the depth of Indian incursions, to avoid triggering a Pakistani strategic nuclear response. Indian military planners hope that these doctrinal changes, coupled with India’s growing conventional military capabilities, 62 will result in a more nimble force that is able to prevent a repetition of Operation Parakram’s shortcomings. 63 Cold Start is currently in its nascent stages. 64 The doctrine’s continued development and implementation, however, will likely have two major effects. First, it will probably exacerbate regional security-dilemma dynamics. Pakistan has always been a deeply insecure state, militarily outmatched by India, lacking strategic depth, and suffering from domestic instability. The Pakistanis could previously expect India’s lengthy mobilization schedule to mitigate its military advantages. In the future, however, this may not be the case**.** As a result, Pakistan will have to maintain a higher state of readiness, 65 and will face incentives to offset Indian strategic advances through increased arms racing and asymmetric warfare. Such behavior could trigger aggressive Indian responses, which would further heighten Pakistani insecurity. These dynamics could undermine recent improvements in Indo-Pakistani relations and increase the probability of crises between the two countries. Second, Indian doctrinal changes increase the likelihood that Indo-Pakistani crises will escalate rapidly, both within the conventional sphere and from the conventional to the nuclear level. In the conventional realm, Cold Start will enable Indian forces to attack Pakistan quickly, pushing an Indo-Pakistani dispute from the level of political crisis to outright conflict before the Indian government can be deterredfrom launching an offensive. Vijay Oberoi explains that the decision to attack Pakistan would require “a certain amount of political will. But [Cold Start] makes that political will more likely to be there, since now we can mobilize before world opinion comes down on political leaders and prevents them from acting.”66 In the nuclear realm, India’s Cold Start doctrine would likely force Pakistan to rely more heavily on its strategic deterrent. Brig. Gen. Khawar Hanif, Pakistan’s defense attaché to the United States, argues that Cold Start will create a “greater justification for Pakistani nuclear weapons” and may increase the danger of nuclear use. “The wider the conventional asymmetry,” he maintains, “the lower the nuclear threshold between India and Pakistan. To the extent that India widens the conventional asymmetry through military spending and aggressive doctrinal changes, the nuclear threshold will get lower.” Maj. Gen. Muhammad Mustafa Khan, director-general (analysis) of Pakistan’s Inter-Services Intelligence agency, similarly argues that Cold Start “is destabilizing; it is meant to circumvent nuclear deterrence and warning time,” and “it is entirely Pakistan-speciªc.” “This will force us to undertake countermeasures,” he continues, “and if it becomes too threatening we will have to rely on our nuclear capability.”67 Thus Cold Start may erode the firebreak between conventional and nuclear conflict on the subcontinent. The Indians reportedly anticipate such an outcome at the tactical level and are preparing to fight through Pakistani battlefield nuclear strikes. 68 Indian strategists dismiss the possibility of a Pakistani nuclear response against India proper, however. Rather, they maintain that India can calibrate its attack, stopping short of Pakistan’s strategic nuclear thresholds and waiting for international diplomatic intervention to end the conºict. As Gurmeet Kanwal explains, “We war-game this all the time, and we do not trip their [strategic] red lines.” According to Arun Sahgal, Cold Start “will give Pakistan no option but to bring down its nuclear thresholds. But this shouldn’t really worry us. We don’t think Pakistan will cross the nuclear Rubicon.”

### uniqueness run

#### Reform will pass now – Obama has put it on the fast track in both houses, but Congress can still botch it if a politically divisive issue comes up – that’s the Star-Telegram evidence – here are more warrants

#### Top Dems

Reuters 2/3 ["Reid predicts Congress will pass immigration legislation" -- news.yahoo.com/reid-predicts-u-congress-pass-immigration-legislation-172812947.html]

The top Senate Democrat on Sunday predicted that Congress will pass and send to President Barack Obama legislation overhauling the U.S. immigration system, saying "things are looking really good."¶ Obama last week expressed hope Congress can get a deal done on immigration, possibly in the first half of the year.¶ The president is proposing to give the roughly 11 million U.S. illegal immigrants - most of whom are Hispanics - a pathway to citizenship, a step that many Republicans have long fought.¶ Obama's fellow Democrats control the Senate, but Republicans control the House of Representatives.¶ Appearing on the ABC program "This Week," Senate Majority Leader Harry Reid was asked whether immigration legislation can win House passage.¶ "Well, it's certainly going to pass the Senate. And it would be a bad day for our country and a bad day for the Republican Party if they continue standing in the way of this. So the answer is yes," Reid said.¶ Obama choose Reid's home state of Nevada, with a sizable Hispanic population, as the site for a major speech last Tuesday pushing Congress to pass an immigration bill.¶ Hispanic voters were crucial in helping Obama beat Republican nominee Mitt Romney - who advocated "self-deportation" of illegal immigrants - in Nevada in November.¶ "It has to get done," Reid said of immigration legislation.¶ "It's really easy to write principles. To write legislation is much harder. And once we write the legislation, then you have to get it passed. But I think things are looking really good," Reid added.¶ After years on the back burner, immigration reform has suddenly looked possible as Republicans, chastened by the fact that more than 70 percent of Hispanic voters backed Obama in the November election, appear more willing to accept an overhaul.

#### Urgency and momentum

Seldin 2/6 [Jeff, journalist, "Battle for US immigration reform gathers steam" Voice of America -- www.voanews.com/content/battle-for-us-immigration-reform-moves-on-ahead-of-state-of-the-union/1598101.html]

U.S. President Barack Obama is expected to make immigration reform a priority in his State of the Union Address. But already, talk of tackling this controversial issue is gaining momentum.¶ There are an estimated 11-million illegal immigrants in the United States with more still hoping to cross the border.¶ Claudia Hernandez came here as a child, and like many in her situation, she feels she belongs in the U.S. ¶ "I have been here more than half of my life, and I respect the United States. This is my country," she said.¶ Only days into his second term, President Obama began the push for change.¶ "The time has come for common-sense, comprehensive immigration reform," he stated. "The time is now."¶ Already, Congress has begun to hold hearings.¶ And a bipartisan group of senators, including former Republican presidential candidate John McCain, is pushing ahead with a plan of its own.¶ "We have been too content for too long to allow individuals to mow our lawn, serve us food, clean our homes and even watch our children while not affording them any of the benefits that make our country so great," McCain said.¶ The bi-partisan plan calls for tighter border controls as well as a path to citizenship, something President Obama insists upon.¶ That worries Jim Gilchrist. He founded the Minuteman Project, a citizen's group that helps guard the border.¶ "If we are going to grant amnesty to 15 to 30-million people, who are here illegally now, we are going to be granting amnesty to 300 million," he added. "Who will follow them over the next several decades."¶ Other activists and lawmakers say proposals to secure the borders don't go far enough - even though the United States spends more money on immigration enforcement than on all other federal law enforcement activities combined.¶ In the meantime, the pressure is on - both President Obama and Congress.¶ Janet Murguia heads La Raza, the largest U.S. Hispanic civil rights and advocacy group. "The reality is that Hispanic and Latin voters went to the polls on election day with the economy on their minds, but with immigration reform in their hearts," she said.¶ With the State of the Union address as a platform, advocates on all sides of the issue are hoping something gets done, all too aware such hopes have been dashed before.

#### Obama has the upper hand now

Reuters 2/4 www.reuters.com/article/2013/02/04/us-usa-immigration-idUSBRE9130V620130204

Obama is expected to use his February 12 State of the Union speech to Congress - a major annual address by the president in which he lays out his legislative priorities for the year - to keep the heat on Republicans, who appear more willing to accept an immigration overhaul after they were chastened by Latino voters' rejection in the November election.¶ But differences have emerged since Obama and a bipartisan Senate working "group of eight" rolled out their proposals last week aimed at the biggest U.S. immigration revamp in decades.¶ Obama wants to give America's 11 million illegal immigrants a clear process to achieve citizenship, including payment of fines, criminal background checks and going to the "back of the line" behind legal applicants. He has vowed to introduce his own bill if Congress fails to act in a timely fashion.¶ But top Republicans want to defer citizenship until the county's borders are deemed more secure - a linkage that Obama and most of his fellow Democrats would find hard to accept.¶ Obama's aides are confident the president has enough leverage to avoid giving ground - not least because they believe that if the reform effort fails in Congress, voters are more likely to blame the Republicans and they would suffer in the 2014 midterm congressional elections.

#### GOP getting on board

Merrills and Coffey 24 [Andrew, Justin, lawyers @ Ogletree Deakins, "Post-election immigration reform - What's at issue?" Lexology -- www.lexology.com/library/detail.aspx?g=fec318c5-d79a-4a70-8b8d-3ed17e59f65d]

The prospect of comprehensive immigration reform appears to be gaining momentum. On January 28, a bipartisan group of eight senators announced a broad proposal for immigration reform. Meanwhile, a similar bipartisan effort is underway in the House and, as this issue was going to press, it was expected that President Obama would announce his proposal for comprehensive immigration reform.¶ The Senate Proposal¶ The Senate proposal has four basic elements: (1) a path to legalization for illegal immigrants; (2) increased border security; (3) increased employer verification requirements; and (4) increased employment-based immigration. Illegal immigrants would pay monetary penalties to legalize but would not be eligible for permanent resident status until other enforcement-related measures are in place (such as increased border security).¶ The proposal would also increase certain types of employment-based immigration and allow individuals who have an advanced degree in science, technology, engineering, or mathematics from a U.S. university to obtain permanent resident status. The proposal includes increased fines and criminal penalties for employers that knowingly employ unauthorized workers.¶ Highlights of the proposal include:¶ Increased border security (additional unmanned drones, surveillance equipment, and border agents);¶ Entry-exit system to monitor visa overstays;¶ A commission to provide a recommendation as to whether increased border security measures have been completed;¶ A government registry for illegal immigrants who must pass background checks, pay fines, and back taxes in order to obtain temporary legal status (when increased border security measures are completed they can apply for permanent resident status behind others who have already applied);¶ A quicker path to legalization for foreign nationals that were brought to the United States as children;¶ A reduction in the immigrant visa backlogs for both family-based and employment-based immigration;¶ Permanent resident status for individuals who have an advanced degree in science, technology, engineering, or mathematics from U.S. universities;¶ Electronic verification of employment authorization and identity for new hires;¶ Increased fines and criminal penalties for employers that knowingly employ unauthorized workers;¶ Increased employment-based immigration where it can be demonstrated that employment of a foreign national would not displace U.S. workers;¶ Creation of an agricultural worker program;¶ Increased or decreased immigration for lower-skilled workers as needed depending on economic conditions; and¶ Permanent resident status for long-term employees who have contributed to the community and to the workplace.¶ Reaction from the White House¶ Initial reaction from the White House to the Senate’s proposal has been positive; and with a similar bipartisan effort underway in the House, the prospect of comprehensive immigration reform seems a possibility. President Obama has made comprehensive immigration reform a priority, referencing the idea in recent speeches including his inaugural address.¶ With approximately 70 percent of Latinos voting for Obama in the past election, Republicans appear to have become more receptive to a comprehensive overhaul of immigration laws. Latinos accounted for approximately 11 percent of the electorate in 2012 (up from eight percent in 2008) and this community has been especially important in key swing states, such as Florida, Colorado, Nevada, and New Mexico. More than two-thirds of exit polls were in favor of comprehensive immigration reform.¶ The perception is that Republicans have alienated the Latino community, the fastest-growing demographic group in the country, on the immigration issue. Immigration policy, largely overlooked during President Obama’s first term, has now re-emerged as a key issue as Republicans scurry to rebound from their election performance, motivated by the need to repair the electoral damage through comprehensive immigration reform.¶ The fact that Latinos cast significantly fewer votes for Mitt Romney than they had for previous Republican presidential candidates has led to an ostensible shift in the GOP’s position on immigration, forcing Republicans to reconsider their opposition to reform. In fact, following the election, many Republican Congressional Leaders (including House Speaker John Boehner), well aware of the election results, the polls, and demographic trends, have stepped forward to show support for comprehensive immigration reform.

### at: pc not key

#### Framing argument – immigration reform will pass only if Obama uses capital – overcomes all current roadblocks

Des Moines Register 1-22-13 www.desmoinesregister.com/article/20130122/OPINION03/301220049/0/NEWS/?odyssey=nav%7Chead&nclick\_check=1

Taken as an agenda for his second term, Monday’s inaugural address included references to immigration, climate change, gay rights, voting rights and safe schools. Achieving those things will require the president mounting his bully pulpit to put heat on Congress to pass comprehensive immigration reform, protections for the rights of gays and lesbians, gun control, environmental regulation and expansion of renewable forms of energy.¶ President Obama again demonstrated his gift of oratory on Monday. He delivered a well-crafted inaugural address with inspiring themes woven throughout and a call to action for our generation to achieve the ideals of previous generations.¶ But Obama should have learned in his first term that it is not enough to state lofty goals in great speeches. It takes hard work, perseverance and tough-mindedness to deal with members of Congress who may not want him to succeed.

**Capital key to ensure comprehensive bill**

**Chazan 1-24** [Jackie, former news producer and editor, "Citizenship for undocumented immigrants gains favor" Examiner -- www.examiner.com/article/citizenship-for-undocumented-immigrants-gains-favor]

A new poll released Wednesday, shows an increase in support for a path to citizenship for undocumented immigrants which, interestingly, has been fueled by Republicans.¶ The Associated Press-GfK poll released on Wednesday shows 62 percent Americans favor allowing undocumented immigrants to eventually gain citizenship, up from 50 percent in 2010. More than half of Republicans – 53 percent - now favor a path to citizenship, up 22 percentage points from 2010.¶ Congress is expected to take up an immigration reform package this year. A path to citizenship remains one of the most contentious issues of reform. Democrats support it and Republicans do not, although, Sen. Marco Rubio (R-Fla.) proposal allows undocumented immigrants to apply for legal status but provides no special pathway to citizenship.¶ President Barack **Obama made immigration reform a centerpiece** of his re-election campaign, garnishing a plurality of votes in the November election from Latino voters.¶ Democrats have opened up a 41 percent to 34 percent lead over Republicans as the party most trusted to deal with immigration. That's a significant shift from October 2010, when Republicans led Democrats on that question by a margin of 46 percent to 41 percent.¶ Republican leaders have increasingly recognized the need for a shift in party stance on the issue, as Latino power grows in the United States. Whether Latino voters will convert electoral clout into meaningful, comprehensive immigration legislation has yet to be seen.¶ “I think the republicans are ready to do something on immigration,” former Republican presidential candidate, Rick Santurum said on ABC’s This Week. “You saw Marco Rubio’s plan which is pretty far down the road. It looks a lot like what President Bush put forward four years ago.”¶ But just because Republicans were prepared to talk about immigration policies doesn’t mean they are in complete agreement with Democrats on what policies to enact, Santorum cautioned. “They’re willing to do it but they’re not willing to give the President everything he wants.” Santorum said, “because I think they believe the rule of law still matters in this country and that we have to respect those who did it the right way who waited in line and did — and made sacrifices and that they shouldn’t be treated the same as people who broke the law and came here.”

### 2NC – Link

#### Plan is massively unpopular – congress has historically targeted backlash against the president on anything that touches reprocessing, fights over Bush programs prove Obama would have to spend PC on the plan instead of CIR negotiations

#### Plan sparks a battle in Congress

#### Financial support for reprocessing is uniquely unpopular in the current climate – perceived as Obama trying to replay past fights –

Oelrich 12. [Ivan, Ph.D. is the Senior Fellow for the Strategic Security Program at the Federation of American Scientists, “Prospects for a Plutonium Economy in the United States” in the report: The Future of Nuclear Power in the United States -- Federation of American Scientists -- February -- http://www.fas.org/pubs/\_docs/Nuclear\_Energy\_Report-lowres.pdf]

The United States began a demonstration fast reactor at Clinch River, Tennessee, ¶ near Oak Ridge. When the cost exploded several fold, Congress cancelled the program in ¶ 1983. But only in the United States was the parallel reprocessing program also cancelled. ¶ Presidents Ford and Carter actually made opposition to reprocessing a government policy, ¶ primarily **because of fears that widespread reprocessing would increase the risks of nuclear ¶ weapon proliferation**. President Reagan rescinded the ban, allowing commercial reprocessing. **But Congress did not reinstate government** financial support, and industry showed no ¶ interest in restarting reprocessing.

#### Plan is perceived as not Yucca mountain—angers Congressional republicans

Wald ’12

(Matthew L., “Moving From Square One on Nuclear Waste”, New York Times, 6-7-2012, <http://green.blogs.nytimes.com/2012/06/07/moving-from-square-one-on-nuclear-waste/>)

The idea that the proposed Yucca Mountain nuclear waste repository in Nevada is dead has not gone down well in Congress, where some Republicans are trying to allocate new money to the Nuclear Regulatory Commission so it can revive its evaluation of the site’s suitability. But at a Senate subcommittee hearing on Thursday, some supporters of the civilian power industry said it was time to move on.

#### It’s perceived as going against Congressional objectives

NTI ’12

(“U.S. Reluctant to Permit South Korean Fuel Reprocessing, Envoy Says”, Global Security Newswire, 3-8-2012, <http://www.nti.org/gsn/article/south-korea-not-expecting-us-permit-fuel-reprocessing-envoy-says/>)

Were the Obama administration to allow pyroprocessing rights in a new atomic trade deal, Congress is not likely to ratify the pact as it would go against U.S. efforts to curb the spread of technologies that can be used in nuclear weapons development, the envoy said.

#### Costs political capital – risks, startup cost, and public safety, their evidence doesn’t assume changing congressional concerns

Alex Trembath, Policy Fellow in AEL’s New Energy Leaders Project, 11 [“Nuclear Power and the Future of Post-Partisan Energy Policy,” Lead Energy, Feb 4, http://leadenergy.org/2011/02/the-nuclear-option-in-a-post-partisan-approach-on-energy/]

Nuclear power is unique among clean energy technologies in that Democrats tend to be more hesitant towards its production than Republicans. Indeed, it has a reputation for its appeal to conservatives -Senators Kerry, Graham and Lieberman included provisions for nuclear technology in their ultimately unsuccessful American Power Act (APA) with the ostensible goal of courting Republican support. The urgency with which Democrats feel we must spark an energy revolution may find a perfect partner with Republicans who support nuclear power. But is there anything more than speculative political evidence towards its bipartisan viability?¶ If there is one field of the energy sector for which **certainty of political will** **and government policy is essential**, it is nuclear power. High up front costs for the private industry, extreme regulatory oversight and public wariness necessitate a committed government partner for private firms investing in nuclear technology. In a new report on the potential for a “nuclear renaissance,” Third Way references the failed cap-and-trade bill, delaying tactics in the House vis-a-vis EPA regulations on CO₂, and the recent election results to emphasize the difficult current political environment for advancing new nuclear policy. The report, “The Future of Nuclear Energy,” makes the case for political certainty:¶ “It is difficult for energy producers and users to estimate the relative price for nuclear-generated energy compared to fossil fuel alternatives (e.g. natural gas)–an essential consideration in making the major capital investment decision necessary for new energy production that will be in place for decades.”¶ Are our politicians willing to match the level of certainty that the nuclear industry demands? Lacking a suitable price on carbon that may have been achieved by a cap-and-trade bill removes one primary policy instrument for making nuclear power more cost-competitive with fossil fuels. The impetus on Congress, therefore, will be to shift from demand-side “pull” energy policies (that increase demand for clean tech by raising the price of dirty energy) to supply-side “push” policies, or industrial and innovation policies. Fortunately, there are signals from political and thought leaders that a package of policies may emerge to incentivize alternative energy sources that include nuclear power.¶ One place to start is the recently deceased American Power Act, addressed above, authored originally by Senators Kerry, Graham and Lieberman. Before its final and disappointing incarnation, the bill included provisions to increase loan guarantees for nuclear power plant construction in addition to other tax incentives. Loan guarantees are probably the most important method of government involvement in new plant construction, given the high capital costs of development. One wonders what the fate of the bill, or a less ambitious set of its provisions, would have been had Republican Senator Graham not abdicated and removed any hope of Republican co-sponsorship.¶ But **that was last year. The** **changing of the guard in Congress makes this a whole different game**, and the once feasible support for nuclear technology on either side of the aisle must be reevaluated. A New York Times piece in the aftermath of the elections forecast **a difficult road ahead for nuclear energy policy**, but did note Republican support for programs like a waste disposal site and loan guarantees.¶ Republican support for nuclear energy has roots in the most significant recent energy legislation, the Energy Policy Act of 2005, which passed provisions for nuclear power with wide bipartisan support. Reaching out to Republicans on policies they have supported in the past should be a goal of Democrats who wish to form a foundational debate on moving the policy forward. There are also signals that key Republicans, notably Lindsey Graham and Richard Lugar, would throw their support behind a clean energy standard that includes nuclear and CCS.¶ Republicans in Congress will find intellectual support from a group that AEL’s Teryn Norris coined “innovation hawks,” among them Steven Hayward, David Brooks and George Will. Will has been particularly outspoken in support of nuclear energy, writing in 2010 that “it is a travesty that the nation that first harnessed nuclear energy has neglected it so long because fads about supposed ‘green energy’ and superstitions about nuclear power’s dangers.”¶ The extreme reluctance of Republicans to cooperate with Democrats over the last two years is only the first step, as any legislation will have to overcome Democrats’ traditional opposition to nuclear energy. However, here again there is reason for optimism. Barbara Boxer and John Kerry bucked their party’s long-time aversion to nuclear in a precursor bill to APA, and Kerry continued working on the issue during 2010. Jeff Bingaman, in a speech earlier this week, reversed his position on the issue by calling for the inclusion of nuclear energy provisions in a clean energy standard. The Huffington Post reports that “the White House reached out to his committee [Senate Energy] to help develop the clean energy plan through legislation.” This development in itself potentially mitigates two of the largest obstacle standing in the way of progress on comprehensive energy legislation: lack of a bill, and lack of high profile sponsors. Democrats can also direct Section 48C of the American Recovery and Reinvestment Act of 2009 towards nuclear technology, which provides a tax credit for companies that engage in clean tech manufacturing.¶ Democrats should not give up on their policy goals simply because they no longer enjoy broad majorities in both Houses, and Republicans should not spend all their time holding symbolic repeal votes on the Obama Administration’s accomplishments. The lame-duck votes in December on “Don’t Ask, Don’t Tell,” the tax cut deal and START indicate that at least a few Republicans are willing to work together with Democrats in a divided Congress, and that is precisely what **nuclear energy** needs moving forward. It **will require an aggressive push from the White House**, and a concerted effort from both parties’ leadership, but the road for forging bipartisan legislation is not an impassable one.

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#### There ev is from the election last fall – doesn’t assume a new congress and new agenda – it’s also not predictive, doesn’t say that new plants will be constructed, if anything it proves that Obama would get drawn in because he’s already attached himself to nuclear

#### Nuclear reactors are shutting down and the renaissance is stalled

Biello 2/5/13- David is the associate editor for environment and energy at Scientific American, [*Is Nuclear Power Doomed to Dwindle?*](http://blogs.scientificamerican.com/observations/2013/02/05/is-nuclear-power-doomed-to-dwindle/)*,* http://blogs.scientificamerican.com/observations/2013/02/05/is-nuclear-power-doomed-to-dwindle/

The [nuclear reactor](http://www.scientificamerican.com/article.cfm?id=reactivating-nuclear-reactors-to-fight-climate-change) near Crystal River north of Tampa Bay will never fission again. Duke Energy has decided to [shutter the troubled nuclear power plant](http://www.duke-energy.com/news/releases/2013020501.asp), which has been shut down since 2009 thanks to a crack in the dome that shields the reactor. Attempts to repair the initial crack had caused other cracks to form and the company estimated that fixing those cracks would cost another $1.5 billion minimum, possibly much more.

As a result, the reactor will instead be mothballed while Florida electricity customers can expect to foot a $1.6 billion bill from 2017 to 2037 to repay the utility for its investment in the [nuclear power plant](http://www.scientificamerican.com/report.cfm?id=nuclear-future), according to a plan worked out by state regulators. [The full tear-down](http://www.scientificamerican.com/article.cfm?id=how-to-tear-down-a-nuclear-reactor) will most likely wait for 40 to 60 years, according to a company statement, in part to avoid [adding to that cost](http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/decommissioning.html).

What will replace the reactor’s 860-megawatts worth of power? Electricity generated by [natural gas turbines](http://www.scientificamerican.com/article.cfm?id=a-spin-on-efficiency-with-better-turbines), according to Duke. In fact, cheap natural gas may sound the death knell for the nation’s dwindling number of nuclear reactors, now down to 102.

The Kewaunee nuclear power plant in Wisconsin will also [close this year](http://dom.mediaroom.com/2012-10-22-Dominion-To-Close-Decommission-Kewaunee-Power-Station) and plans for [new nuclear power plants in Texas](http://www.scientificamerican.com/article.cfm?id=nuclear-power-reborn) and Maryland have been scrapped. At the same time, costs have continued to rise for two reactors under construction in Georgia—the nation’s first new nuclear reactor approved in more than three decades. Critics argue that the [new reactors at the Vogtle Power Plant](http://www.scientificamerican.com/article.cfm?id=first-new-nuclear-reactor-in-us-since-1978-approved) involve too much risk for taxpayers given the $8 billion in loan guarantees that have been extended to Southern Company and partners to build them (though the loans have not been finalized or accepted as of yet). “They [the U.S. Department of Energy] are socializing the risk and privatizing the profits for big power companies,” charged Sara Barczak of the [Southern Alliance for Clean Energy](http://www.cleanenergy.org/index.php?/Take-Action.html?form_id=51&item_id=51) in a conference call with reporters.

The woes facing nuclear reactors are not confined to the U.S. New reactors in France and Finland are behind schedule and over budget and Germany plans to phase out its nuclear fleet in coming years. Meanwhile, the politicians of Cumbria in northwest England voted to reject a planned [repository for nuclear waste](http://www.scientificamerican.com/article.cfm?id=presidential-commission-seeks-volunteers-to-store-nuclear-waste) in their county. Paired with decisions by energy company Centrica to abandon plans to build new reactors in the U.K. and a new government report highlighting nuclear industry incompetence,[nuclear energy may be “finished in the U.K.](http://www.monbiot.com/2013/02/04/out-of-steam/),” according to nuclear power proponent and environmental columnist George Monbiot of [The Guardian](http://www.guardian.co.uk/profile/georgemonbiot).

[Nuclear power has more steam](http://www.scientificamerican.com/article.cfm?id=china-goes-nuclear-to-avoid-coal-burning) in countries such as China, which continues to push forward with a massive construction program in a bid to [cut down on coal](http://www.scientificamerican.com/article.cfm?id=china-goes-nuclear-to-avoid-coal-burning) burning. Last week, Westinghouse lowered the top of the containment dome on its first [new AP1000 reactor](http://www.scientificamerican.com/article.cfm?id=new-nuclear-designs-balance-safety-and-cost) in Sanmen. But even 80 large nuclear power plants will do little to restrain China’s now world-leading greenhouse gas emissions (and air pollution) from all of the country’s coal burning. And Japan’s greenhouse gas emissions have surged in the wake of the decision to shut down that country’s nuclear fleet after the [multiple meltdowns at Fukushima Daiichi](http://www.scientificamerican.com/podcast/episode.cfm?id=fukushima-we-listen-back-12-03-11).

U.S. greenhouse gas emissions have been falling in recent years, dropping by nearly 5 percent from power plants alone in 2011, according to [Environmental Protection Agency data](http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb85257359003fb69d/715f5837da2615ef85257b09005ea7af!OpenDocument). Yet, if natural gas power plants begin to replace low carbon but aging nuclear power plants as well as high CO2 coal-fired ones in this country, CO2 emissions will not fall as far as fast—more fallout from the [stalled nuclear renaissance](http://www.scientificamerican.com/article.cfm?id=will-nuclear-power-reach-critical-mass).

#### Nuclear power plants being closed in SQ as a response to Crystal River shutdown

Reuters 2/7/13 - *Retired Duke reactor may signal more U.S. nuclear shutdowns, http://in.reuters.com/article/2013/02/06/us-utilities-duke-nuclear-idINBRE91519A20130206*

A decision by Duke Energy Corp to retire rather than repair its damaged Crystal River reactor in Florida may signal the shutdown of other older U.S. nuclear plants as weak natural gas prices make significant investment in them uneconomical. While energy analysts said the circumstances surrounding Duke's decision were unique to that plant, decade-low electric prices, especially in deregulated states where the market sets power rates, make it difficult to support costly upgrades on reactors when building gas-fired units is much cheaper. "It is a tough economic environment in the electricity market due to the glut of natural gas, particularly for those that operate in a deregulated environment," said Tony Pietrangelo, chief nuclear officer of industry trade group Nuclear Energy Institute (NEI). Profit margins for nuclear operators in deregulated markets have decreased over the last few years due to lower power prices and weaker growth in demand since the recession, he told Reuters. Duke, the largest U.S. power company, said on Tuesday that it would retire the Crystal River reactor, which has been shut since 2009, due to rising repair costs and uncertainty about how long it would take to fix a series of cracks in the walls of the reactor containment building. One Duke report found the repair bill for the 860-megawatt (MW) reactor might exceed $3 billion and take up to eight years. By comparison, it would cost about $1 billion to build a similar-sized gas-fired plant in about three years. Duke said it is considering the construction of a new combined cycle gas plant, among other alternatives, to replace the power produced by Crystal River for its more than 1.6 million customers in Florida. "You can buy replacement power much more cheaply today than in the past, and you can install replacement capacity very cheaply, in the form of a combined-cycle plant," said Sanford C. Bernstein senior analyst Hugh Wynne. Nuclear plants were extremely profitable when gas prices soared in the mid-2000s. The situation reversed course, though, as gas prices began to slump due to a boom in shale production that drove supplies to record highs. The average gas price sank to a 13-year low in 2012. "Gas prices have gotten so low they are challenging the nuclear portfolio," said UBS energy analyst Julien Dumoulin-Smith. "It's getting tougher for nuclear to compete."