# ASU RV – Round 1 vs. Pepperdine DE (Neg)

## 1NC

### 1

#### A. Interpretation – Financial incentives directly increase government expenditures for energy production – R&D is support.

Gielecki et al 1 (Mark, an economist with the Department of Energy, Fred Mayes, and Lawrence Prete, "Incentives, Mandates, and ¶ Government Programs for ¶ Promoting Renewable Energy" http://lobby.la.psu.edu/\_107th/128\_PURPA/Agency\_Activities/EIA/Incentive\_Mandates\_and\_Government.htm-)

Over the years, incentives and mandates for renewable energy have been used to advance different energy policies, such as ensuring energy security or promoting environmentally benign energy sources. Renewable energy has beneficial attributes, such as low emissions and replenishable energy supply, that are not fully reflected in the market price. Accordingly, governments have used a variety of programs to promote renewable energy resources, technologies, and renewable-based transportation fuels. (1) This paper discusses: (1) financial incentives and regulatory mandates used by Federal and State governments and Federal research and development (R&D), (2), (3) and (2) their effectiveness in promoting renewables.¶ A financial incentive is defined in this report as providing one or more of the following benefits:¶ A transfer of economic resources by the Government to the buyer or seller of a good or service that has the effect of reducing the price paid, or, increasing the price received, respectively; ¶ Reducing the cost of production of the good or service; or, ¶ Creating or expanding a market for producers.¶ The intended effect of a financial incentive is to increase the production or consumption of the good or service over what it otherwise would have been without the incentive. Examples of financial incentives are: tax credits, production payments, trust funds, and low-cost loans. Research and development is included as a support program because its effect is to decrease cost, thus enhancing the commercial viability of the good(s) provided.

#### B. Violation – The plan increases research and development, which is not a financial incentive.

#### C. Reasons to Prefer

#### 1. Ground –

Our interpretation is key to Negative ground. Allowing research and development on the topic allows them to say that their technology only leads to energy production in the long-run. That moots the negative of energy production links to K’s and DA’s, since the link doesn’t happen for several years. This is uniquely problematic for R&D aff’s, because R&D is used for undeveloped tech.

#### 2. Limits –

Our interpretation is key to predictable limits. Allowing R&D on the topic let’s them claim advantages off of things not pertaining to production like energy leadership and confidence from a government signal.

#### D. Topicality is a voting issue for both Fairness and Educational reasons.

### 2

#### The 50 states and all relevant U.S. territories should substantially increase grants for solar sail energy research and development in the United States.

#### States can effectively support energy R&D

Milford 12 (Sr. Fellow-Brookings & President-Clean Energy Group, “Leveraging State Clean Energy Funds for Economic Development,”

http://www.brookings.edu/~/media/research/files/papers/2012/1/11%20states%20energy%20funds/0111\_states\_energy\_funds)

Without a doubt the impacts of state project finance are significant and have been vital for the growth of the clean energy industry in the United States. The price of renewable energy technologies like solar and wind has come down in part through the sheer volume of project activity. However, it is becoming clear to many states that to truly grow the clean energy enterprise they must do more than just help bring down the costs of clean energy technologies through project financing. This recognition has resulted in a new generation of state programs, spearheaded by several of the state clean energy funds, that go beyond project finance. All of which points to a new brand of fund activity. Along these lines, increasingly ambitious efforts in a number of states have featured engagement on at least three major fronts: (1) cleantech innovation support through research, development, and deployment (RD&D) funding; (2) financial support for early-stage cleantech companies and emerging technologies, including working capital for companies; and (3) industry development support through business incubator programs, regional cluster promotion, manufacturing and export promotion, supply chain analysis and enhancement, and workforce training programs. On the cleantech innovation front, a few funds such as California’s through its Public Interest Energy Research (PIER) program have supported cleantech RD&D efforts. PIER, for example, funds basic and applied research on topics ranging from work on electricity grid improvement and building and lighting technologies to industrial process improvement, energy storage, renewable technologies, and other areas. In like fashion, a few states have used their CEFs to make equity investments in solar, wind, and bioenergy companies and also provide working capital for expanding growth companies. The Massachusetts Clean Energy Center’s (MassCEC) Investments in the Advancement of Technology program, for example, makes venture capital equity investments in promising early-stage companies that are developing and commercializing new clean energy technologies. And for that matter, some state CEFs have been providing industry development support in a variety of ways, whether through the development of business incubator programs such as those run by the New York State Energy Research and Development Authority (NYSERDA); workforce training programs such as the California Clean Energy Workforce Training Program; or initiatives focused on clean energy industry supply chains such as those maintained by Ohio’s Advanced Energy Fund (AEF). All of which suggests that the next era of state clean energy fund leadership is coming into focus thanks to existing fund experimentation. What is needed now, then, is a new, creative period of expanded CEF focus on clean energy economic development and industry creation to complement and build upon project financing for the installation of clean energy technologies. Such work could not be timelier at this moment of federal gridlock and market uncertainty.

### 3

#### 1. CIR will pass now

LA Times 2/21 (http://www.latimes.com/news/politics/la-pn-labor-and-business-immigration-agreement-20130221,0,5405955.story)

Key business and labor leaders said Thursday that they have hammered out the broad outline of a compromise on one of the hardest issues in reforming the nation's immigration system -- how to handle future needs for foreign workers in the U.S.¶ Although both sides say key details remain to be negotiated, the deal could clear away a significant roadblock to further action in Congress.¶ "For the first time, labor and business have agreed publicly to commit to immigration reform," said Eliseo Medina, secretary-treasurer of the Service Employees International Union, one of the labor groups involved along with the AFL-CIO in the negotiations with the U.S. Chamber of Commerce.¶ A bipartisan group of eight senators who have been crafting an immigration bill plan to meet next week to discuss the issue and have been waiting to see the results of the talks between the business and labor groups.¶ U.S. immigration law: Decades of debate¶ Failure to agree on how to handle future flows of foreign workers into the U.S. was a key factor in scuttling the last effort to reform the nation’s immigration laws, under President George W. Bush in 2007. Critics of the previous big immigration law, the amnesty passed under President Reagan in 1986, say that one of that measure's greatest failings was that it did not deal adequately with future needs, leading to a huge inflow of illegal immigrants in the 1990s and early 2000s.¶ To prevent that from happening again, the agreement worked out by the union and business representatives would create a legal system to allow a certain number of foreign workers to enter the country legally each year. Companies that could not find U.S. workers would be allowed to hire those workers if they first advertised jobs to Americans.

#### 2. Obama’s political capital is key.

Hesson 1/2 (Ted, Immigration Editor at ABC News, Analysis: 6 Things Obama Needs To Do for Immigration Reform, http://abcnews.go.com/ABC\_Univision/News/things-president-obama-immigration-reform/story?id=18103115#.UOTq55JIAho)

On Sunday, President Barack Obama said that immigration reform is a "top priority" on his agenda and that he would introduce legislation in his first year.¶ To find out what he needs to do to make reform a reality, we talked to Lynn Tramonte, the deputy director at America's Voice, a group that lobbies for immigration reform, and Muzaffar Chishti, the director of the New York office of the Migration Policy Institute, a think tank. Here's what we came up with.¶ 1. Be a Leader¶ During Obama's first term, bipartisan legislation never got off the ground. The president needs to do a better job leading the charge this time around, according to Chishti. "He has to make it clear that it's a high priority of his," he said. "He has to make it clear that he'll use his bully pulpit and his political muscle to make it happen, and he has to be open to using his veto power." His announcement this weekend is a step in that direction, but he needs to follow through.¶ 2. Clear Space on the Agenda¶ Political priorities aren't always dictated by the folks in D.C., as the tragic Connecticut school shooting shows us. While immigration had inertia after the election, the fiscal cliff and gun violence have been the most talked about issues around the Capitol in recent weeks. The cliff could recede from view now that Congress has passed a bill, but how quickly the president can resolve the other issues on his agenda could determine whether immigration reform is possible this year. "There's only limited oxygen in the room," Chishti said.

#### Renewables are extremely politicized – causes partisan debate.

Opalka, Editor and Chief, ‘12

[Bill, “Groups Want to Stop Politicizing Green Energy,” EnergyBiz, June 24, http://www.energybiz.com/article/12/06/groups-want-stop-politicizing-green-energy]

The U.S. Partnership for Renewable Energy Finance (US PREF) released a series of white papers at the American Council On Renewable Energy (ACORE)'s Renewable Energy Finance Forum - Wall Street in New York on June 19.¶ The groups say the effort is to rebalance the debate about renewable energy toward a fact-based business analysis instead of the politicized rhetoric that dominates discussions currently.¶ PREF members provided analyses that show how crucial renewable energy is as part of the nation's overall energy mix.¶ “There's never been a more important time for our country to adopt a genuine all-of-the-above energy strategy,” said Neil Auerbach, co-managing partner of Hudson Clean Energy Partners, a private equity firm that invests exclusively in clean energy. “We have the opportunity now to cultivate American business and innovation, support long-term job growth, fortify national security, decrease energy costs, and realize a host of environmental benefits.”¶ A common, bemoaned refrain at renewable energy gatherings is to hear reference to “Republican electrons” from coal and nuclear power and “Democratic electrons” from wind and solar.¶ US PREF cites international competition as a threat to continued U.S. innovation and global leadership.¶ The U.S. invested $48.1 billion in clean energy in 2011. “We are working with the renewable energy, power and technology industry leaders to pursue continued development of the U.S. renewable energy sector. This is an important opportunity to underscore U.S. leadership as we seek technologies to power future global growth and redefine our national energy strategy,” said Jeff Holzschuh, vice chairman at Morgan Stanley.¶ The white papers released by US PREF illustrate how large-scale deployment of renewable electricity sources has produced dramatic cost reductions, while fostering innovation that has increased efficiency across entire supply chains. State and federal policies are working in concert to drive this large-scale deployment and innovation. While federal incentives such as the production and investment tax credits bolster the supply of renewable energy, support for renewable energy demand has been augmented by state renewable portfolio standards (RPS). RPS “demand pull" is now reaching a plateau, however, of 3.25 GW per year of new renewable generating capacity through 2030.¶ To publicize the renewables message, ACORE on June 20 launched EnergyFactCheck.org and @EnergyFactCheck, two new resources designed to address the imbalance in the American debate.¶ “Clean and renewable energy is popular, productive, growing and essential to America’s economy, energy independence and national security.” said ACORE President and CEO Vice Admiral Dennis McGinn. “Unfortunately, misperceptions of clean and renewable energy abound, and opponents of renewables are pushing the occasional bad news as if it’s the only news. They are dominating the conversation through misrepresentation, exaggeration, distraction and millions of dollars in lobbying and advertising.”

#### 4. Immigration reform is key to food security

Fitz 12 (Marshall Fitz is the Director of Immigration Policy at the Center for American Progress, Time to Legalize Our 11 Million Undocumented Immigrants, November 14th, http://www.americanprogress.org/issues/immigration/report/2012/11/14/44885/time-to-legalize-our-11-million-undocumented-immigrants/)

Nowhere is the tension between immigrant labor and the economy more obvious than in agriculture. By most estimates, undocumented immigrants make up more than half of the workers in the agriculture industry. Likewise the U.S. Department of Agriculture has estimated that each farm job creates three “upstream” jobs in professions such as packaging, transporting, and selling the produce, meaning that what happens in the agricultural sector affects the economy as a whole.¶ Agriculture is particularly susceptible to the whims of the labor market, since crops become ripe at a fixed time and must be picked quickly before they rot. Migrant laborers often travel a set route, following the growing season as it begins in places such as Florida and works its way north. Disrupting this flow of pickers can be devastating to local economies and the nation’s food security.¶ After the passage of Georgia’s anti-immigrant law, H.B. 87, for example, the Georgia Agribusiness Council estimated that the state could lose up to $1 billion in produce from a lack of immigrant labor. A survey of farmers conducted by the Georgia Department of Agriculture found 56 percent of those surveyed were experiencing difficulty finding workers—a devastating blow to the state. Even a program by Gov. Nathan Deal (D-GA) to use prison parolees to fill the worker shortage quickly fell apart, with most walking off the job after just a few hours.¶ Creating a process for legalizing these undocumented workers would help stabilize the agricultural workforce and enhance our nation’s food security. It would also diminish the incentive of states to go down the economically self-destructive path that Georgia, Alabama, Arizona, and others have pursued.

#### 5. Food shortages lead to extinction.

Brown, founder of the Worldwatch Institute and the Earth Policy Institute, ‘9

[Lester, “Can Food Shortages Bring Down Civilization?” Scientific American, May]

The biggest threat to global stability is the potential for food crises in poor countries to cause government collapse. Those crises are brought on by ever worsening environmental degradation One of the toughest things for people to do is to anticipate sudden change. Typically we project the future by extrapolating from trends in the past. Much of the time this approach works well. But sometimes it fails spectacularly, and people are simply blindsided by events such as today's economic crisis. For most of us, the idea that civilization itself could disintegrate probably seems preposterous. Who would not find it hard to think seriously about such a complete departure from what we expect of ordinary life? What evidence could make us heed a warning so dire--and how would we go about responding to it? We are so inured to a long list of highly unlikely catastrophes that we are virtually programmed to dismiss them all with a wave of the hand: Sure, our civilization might devolve into chaos--and Earth might collide with an asteroid, too! For many years I have studied global agricultural, population, environmental and economic trends and their interactions. The combined effects of those trends and the political tensions they generate point to the breakdown of governments and societies. Yet I, too, have resisted the idea that food shortages could bring down not only individual governments but also our global civilization. I can no longer ignore that risk. Our continuing failure to deal with the environmental declines that are undermining the world food economy--most important, falling water tables, eroding soils and rising temperatures--forces me to conclude that such a collapse is possible. The Problem of Failed States Even a cursory look at the vital signs of our current world order lends unwelcome support to my conclusion. And those of us in the environmental field are well into our third decade of charting trends of environmental decline without seeing any significant effort to reverse a single one. In six of the past nine years world grain production has fallen short of consumption, forcing a steady drawdown in stocks. When the 2008 harvest began, world carryover stocks of grain (the amount in the bin when the new harvest begins) were at 62 days of consumption, a near record low. In response, world grain prices in the spring and summer of last year climbed to the highest level ever.As demand for food rises faster than supplies are growing, the resulting food-price inflation puts severe stress on the governments of countries already teetering on the edge of chaos. Unable to buy grain or grow their own, hungry people take to the streets. Indeed, even before the steep climb in grain prices in 2008, the number of failing states was expanding [see sidebar at left]. Many of their problem's stem from a failure to slow the growth of their populations. But if the food situation continues to deteriorate, entire nations will break down at an ever increasing rate. We have entered a new era in geopolitics. In the 20th century the main threat to international security was superpower conflict; today it is failing states. It is not the concentration of power but its absence that puts us at risk.States fail when national governments can no longer provide personal security, food security and basic social services such as education and health care. They often lose control of part or all of their territory. When governments lose their monopoly on power, law and order begin to disintegrate. After a point, countries can become so dangerous that food relief workers are no longer safe and their programs are halted; in Somalia and Afghanistan, deteriorating conditions have already put such programs in jeopardy.Failing states are of international concern because they are a source of terrorists, drugs, weapons and refugees, threatening political stability everywhere. Somalia, number one on the 2008 list of failing states, has become a base for piracy. Iraq, number five, is a hotbed for terrorist training. Afghanistan, number seven, is the world's leading supplier of heroin. Following the massive genocide of 1994 in Rwanda, refugees from that troubled state, thousands of armed soldiers among them, helped to destabilize neighboring Democratic Republic of the Congo (number six).Our global civilization depends on a functioning network of politically healthy nation-states to control the spread of infectious disease, to manage the international monetary system, to control international terrorism and to reach scores of other common goals. If the system for controlling infectious diseases--such as polio, SARS or avian flu--breaks down, humanity will be in trouble. Once states fail, no one assumes responsibility for their debt to outside lenders. If enough states disintegrate, their fall will threaten the stability of global civilization itself.

### 4

#### The purposes and possibilities for energy generation are channeled through technological thinking; all Beings can be reduced to an energy source

O’Brien 4 (Mahon, Professor of Philosophy at University College, Cork, Ireland, “Commentary on Heidegger’s ‘The Question Concerning Technology,” Thinking Together. Proceedings of the IWM Junior Fellows' Conference, http://www.iwm.at/publ-jvc/jc-16-01.pdf)

It is a charge which many are wont to make and one which is facilitated by the widespread conviction that it is entirely reasonable to both bracket certain features of Heidegger’s thought with a view to reappropriating them or to distinguish be- tween Sein und Zeit and much of his subsequent work. 50 **With respect to the revelatory capacity of modern technology, Heidegger is not simply bemoaning the loss of the world of yesteryear in misty-eyed sentimentality, this is not a doleful, nostalgic essay – “there is no demonry of technology” to begin with. Rather Heidegger is trying to discover what the exclusive feature of modern technology is which distinguishes it essentially from earlier types. To recapitulate, the difference pertains to the way in which modern technology** reveals**, the manner in which it allows us, and seemingly** compels us, to view the world **we live in and the Earth we live on. 51 Where once a windmill relied on the wind for its operative success or lack of it, now energy is** unlocked **from air currents, “a tract of land is** challenged **into the putting out of coal and ore. The earth now reveals itself as a coal mining district, the soil as a mineral deposit**.” 52 One might object that this is to ignore the various ways in which we tradition- ally, even in our capacity as agriculturalists, challenged the Earth to provide us with a bountiful harvest, a harvest which emerged through human manipulation and contrivance of a technological, though admittedly more primitive and rustic nature. Farmers reaped what they sowed, not what the Earth chanced to grant them through multiple windfalls. How then do we reconcile this claim with Heidegger’s thoughts on technology? That is, where do we draw the line between earlier manifestations of technology, with their concomitant attempt to provide for ourselves in a way that required our very own peculiar intervention, and the modern technological attitude toward the world? In a way, the question will always resist any attempt to demarcate things rigidly – there will always be a penumbra where it is not yet clear if the transition has already been made in any genealogical account. That is not to say however, that along a spectrum we cannot notice degrees of difference which ultimately resolve into a completely new type or kind – a categorically different thing which at one end of the spectrum is easy to set in relief against the other end. Of course, part of Heidegger’s strategy in this essay is to show that such problems stem from our inability to move out from under the shadow of Enframing and some of its more conspicuous offspring such as the instrumental definition of technology. With respect to agriculture for instance: The field that the peasant formerly cultivated and set in order [be- stellte] appears differently than it did when to set in order still meant to take care of and maintain. The work of the peasant does not challenge the soil of the field. In the sowing of the grain it places the seed in the keeping of the forces of growth and watches over its increase. But meanwhile even the cultivation of the field has come under the grip of another kind of setting-in-order, which sets upon [stellt] nature. It sets upon in the sense of challenging it. Agriculture is now the mechanized food industry. 53 **What Heidegger seems very much concerned with is this imposition on the Earth**, that the Earth is set upon in a way which is disturbing from the standpoint of the sheer scale of its intrusiveness, its lack of reverence for that which it dismantles. **We no longer are part of the Earth but look to exploit it as a resource rather than seeing it as our wonderful, at times numinous home. We disassemble the natural configuration and look to manipulate and to disintegrate until something is no longer the structural item it once was but is a collection of forces, reduced to nothing but energy and resource to be exhausted or stock-piled**. There is a difference, not just in degree or intensity here, but in kind – what is revealed through modern technology is very different from what is revealed through older, cruder methods of, among other things, agriculture. For instance, Heidegger would almost certainly insist that there are important differences between the revealing which occurs within traditional planting and harvesting and that which is undertaken in genetic engineering and scientific intensive farming. Another feature which Heidegger believes is unique to the setting-upon which obtains within the essence of modern technology is the fact that it stockpiles materials and resources: The coal that has been hauled out in some mining district has not been supplied in order that it may simply be present somewhere or other. It is stockpiled; that is, it is on call, ready to deliver the sun’s warmth that is stored in it. 54 The world around us is something that we view rather differently, Heidegger argues, than earlier peoples were given to perceive, our perceptual goggles, if you will, have radically different filtration systems.

#### The rapacious drive to secure energy is a symptom of “challenging-forth,” a mindset that renders everything as disposable. Only through rejecting challenging forth and embracing bringing forth can we avoid this hollowing out of Being

Waddington 5 A Field Guide to Heidegger: Understanding 'The Question concerning Technology' more by David Waddington Educational Philosophy and Theory, Vol. 37, No. 4, 2005 http://concordia.academia.edu/DavidWaddington/Papers/538046/A\_Field\_Guide\_to\_Heidegger\_Understanding\_The\_Question\_concerning\_Technology

Most essays on technology focus primarily on practical issues surrounding the use of particular technologies . Heidegger’s essay, however, does not—instead, it focuses on the ways of thinking that lie behind technology. Heidegger (1977, p. 3) thinks that by coming to understand these ways of thinking, humans can enter into a ‘free relationship’ with technology. After dismissing the conventional account of technology, which supposedly states that technology is simply a means to an end, Heidegger commences a discussion on ancient craftsmanship. He suggests that the ancient craftsmanship involves the four Aristotelian causes: material, formal, ﬁnal, and efﬁcient. Intuitively, one might think that the efﬁcient cause of a given craft-item (the craftsman) was the most signiﬁcant of the four. However, although the craftsman has an important role in that she unites the four causes by considering each of them carefully, each of the four causes is equally co-responsible for the particular craft-item that is produced. Heidegger comments, ‘The four ways of being responsible bring something into appearance. They let it come forth into presencing’ (1977, p. 9). Appropriately enough, Heidegger names this process bringing-forth . Notably, bringing-forth is not merely a descriptive genus under which the four causes are subsumed—rather, it is a uniﬁed process, ‘a single leading-forth to which [each of the causes] is indebted’ (Lovitt, 1972, p. 46).Heidegger writes that bringing-forth ‘comes to pass only insofar as something concealed comes into unconcealment’ (1977, p. 11). Thus, instead of the craft-item being created by the craftsman, as one would think, it was revealed or unconcealed .In ‘The Thing’, Heidegger comments on the making of a jug, The jug is not a vessel because it was made; rather, the jug had to be made because it is this holding vessel. The making … lets the jug come into its own. But that which in the jug’s nature is its own is never brought about by its making. (1971, p. 168)Clearly, revealing/unconcealing in the mode of bringing-forth contains strong hints of Platonism. Bringing-forth is the mode of revealing that corresponds to ancient craft. Modern technology, however, has its own particular mode of revealing, which Heidegger calls challenging-forth . Thinking in the mode of challenging-forth is very different from thinking in the mode of bringing-forth: when challenging-forth, one sets upon the elements of a situation both in the sense of ordering (i.e. setting a system upon) and in a more rapacious sense (i.e. the wolves set upon the traveler and devoured him). In bringing-forth, human beings were one important element among others in the productive process; in challenging-forth, humans control the productive process. Efﬁciency is an additional important element of thinking in the mode of challeng-ing forth; the earth, for example, is set upon to yield the maximum amount of ore with the minimum amount of effort. Essentially, challenging-forth changes the way we see the world—as Michael Zimmerman pointedly remarks, ‘To be capable of transforming a forest into packaging for cheeseburgers, man must see the forest not as a display of the miracle of life, but as raw material, pure and simple’ (1977, p. 79).Production in the mode of challenging-forth reveals objects that have the status of standing-reserve . Objects that have been made standing-reserve have been reduced to disposability in two different senses of the word: (1) They are disposable in the technical sense; they are easily ordered and arranged. Trees that once stood chaotically in the forest are now logs that can be easily counted, weighed, piled, and shipped. (2) They are also disposable in the conventional sense; like diapers and cheap razors, they are endlessly replaceable/interchangeable and have little value. For the most part, challenging things forth into standing-reserve is not a laudable activity, and thus it makes sense to wonder what drives human beings to think in this way. Heidegger’s answer to this motivational question is unconventional— instead of suggesting that the origins of this motivation are indigenous to human beings, he postulates the existence of a phenomenon that ‘sets upon man to order the real as standing-reserve’ (1977, p. 19). Heidegger calls this mysterious phenomenon enframing ( Ge-stell in German). The word ‘Ge-stell’ gathers together several meanings of the -stellen family of German verbs: in Ge-stell, humans are ordered ( bestellen ), commanded ( bestellen ), and entrapped ( nachstellen ) (Harries 1994,p. 229). Heidegger thinks that our default state is that of being trapped by Ge-stell; this is what he means when he writes, ‘As the one who is challenged forth in this way, man stands within the essential realm of [Ge-stell]. He can never take up a relationship to it only subsequently’ (1977, p. 24; Sallis, 1971, p. 162). According to Heidegger (1977, p. 25), there are different ‘ordainings of destining’ for human beings. Although the default destining is that of Ge-stell, it is possible to choose an alternate road. Heidegger thinks that human beings have been granted the special role of ‘Shepherds of Being’—we have been granted the power to reveal the world in certain ways (Ballard, 1971, p. 60). Trapped in Ge-stell, we tend to reveal things in the mode of challenging-forth, but we can also choose to reveal things in the mode of bringing-forth. Heidegger comments, ‘Placed between these possibilities, man is endangered from out of destining’ (1977, p. 26). However, by carefully considering the ways of thinking that lie behind technology, we can grasp the ‘saving power’. We can realize that we, the Shepherds of Being, have a choice : we can bring-forth rather than challenge-forth. Thus, once we understand the thinking behind technology, we become free to choose our fate—‘… we are already sojourning in the open space of destining’ (Heidegger, 1977, p. 26).

### Advantage

#### No risk of an asteroid collision - experts conclude

Albanesius 11 (Chloe, East Coast news reporter for PCMag.com, “Asteroid Zips Past Earth, Avoiding Collision”, PC Mag, 6/28/11, http://www.pcmag.com/article2/0,2817,2387734,00.asp/)

The asteroid, which measures about 16 to 65 feet in diameter, was in a "very Earth-like orbit around the Sun," NASA said, but orbital analysis indicated that there was no chance it would actually strike Earth. Given its trajectory, 2011 MD was closest to Earth while it was over the southern Atlantic Ocean. Asteroids of this size only come this close to Earth about once every six years. This particular asteroid was discovered by the LINEAR near-Earth object discovery team observing from Socorro, New Mexico. For a time, astronomy fans might have been able to view it via a modest-sized telescope, according to NASA. Those fearing a real-life space disaster movie here on Earth should stop worrying. NASA said the probability of a near-Earth object (NEO) like 2011 MD actually striking our planet is "essentially zero." "There are no known NEO's on a collision course with the Earth," the agency said. "There is a possibility that an as yet undiscovered large NEO may hit the Earth, but the probability of this happening over the next 100 years is extremely small." In other asteroid news, NASA's Dawn spacecraft will soon begin the first extended visit to a large asteroid. The mission is scheduled to go into orbit around Vesta, the second largest object in the main asteroid belt, on July 16 and start gathering data by early August, NASA said. Vesta is believed to house many of the meteorites that eventually fall to Earth.

#### The probability of extinction is even lower

White and Saunders 03 (Rosalind V. White, Department of Geology at University of Leicester, and Andrew D. Saunders, Professor, Department of Geology, University of Leicester, “Volcanism, impact and mass extinctions: incredible or credible coincidences?”, 12/3, Science Direct) jchen

The fact that kill mechanisms remain a subject for debate, even for a well documented meteorite impact, means that the story is not as clear cut as was previously thought, and even catastrophic events such as meteorite impacts may not be capable of causing mass extinctions without other contributory factors. If the more recent cratering statistics are correct, and the anticipated repeat interval of a Chicxulub-sized impactor is only 30 m.y., then large impacts are much more frequent than major mass extinctions, and it is evident that not all of these large impacts can have caused mass extinctions. There is further evidence to suggest that impacts, alone, do not cause global extinction events. has been proposed that there is a threshold Hypothesized dkill curvesT (e.g., Raup, 1992) relating percentage extinction rates to crater size do not appear to fit observations (Hallam and Wignall, 1997), probably because they do not take into account other Earthbound variables. It effect whereby no extinctions occur until the crater is at least 45 km (Jansa et al., 1990) or even 100 km (Poag, 1997) in diameter. However, the expected frequency of these smaller impacts greatly exceeds the number of significant mass extinctions (Fig. 4), which suggests that the threshold size for an impact being the sole cause of a mass extinction should be set at a much higher level.

#### Ozone stable – and no impact.

Lieberman, Senior Policy Analyst at the Heritage Foundation, ‘7

[Ben, “Ozone: The Hole Truth”, The Washington Times, 9-19, Lexis]

Environmentalists have made many apocalyptic predictions over the last several decades. Virtually none has come to pass. Yet each time, the greens and their political allies proclaim victory, arguing their preventive prescriptions averted disaster. Such is the case with the 1987 Montreal Protocol On Substances That Deplete The Ozone Layer (Montreal Protocol). The lurid predictions of ozone depletion-induced skin cancer epidemics, ecosystem destruction and others haven't come true, for which Montreal Protocol proponents congratulate themselves. But in retrospect, the evidence shows ozone depletion was an exaggerated threat in the first place. As the treaty parties return to Montreal for their 20th anniversary meeting it should be cause for reflection, not celebration, especially for those who hope to repeat this "success story" in the context of global warming. The treaty came about over legitimate but overstated concerns that chlorofluorocarbons (CFCs, a then-widely used class of refrigerants) and other compounds were rising to the stratosphere and destroying ozone molecules. These molecules, collectively known as the ozone layer, shield the Earth from excessive ultraviolet-B radiation (UVB) from the sun. The Montreal Protocol's provisions were tightened in 1990 and again in 1992, culminating with a CFC ban in most developed nations by 1996. So what do we know now? As far as ozone depletion is concerned, the thinning of the ozone layer that occurred throughout the 1980s apparently stopped in the early 1990s, too soon to credit the Montreal Protocol. A 1998 World Meteorological Organization (WMO) report said: "Since 1991, the linear [downward] trend observed during the 1980s has not continued, but rather total column ozone has been almost constant." However, the same report noted that the stratospheric concentrations of the offending compounds were still increasing through 1998. This lends credence to the skeptical view, widely derided at the time of the Montreal Protocol, that natural variations better explain the fluctuations in the global ozone layer. More importantly, the feared increase in ground level UVB radiation has also failed to materialize. Keep in mind that ozone depletion, in and of itself, doesn't really harm human health or the environment. It was the concern that an eroded ozone layer will allow more of the sun's damaging UVB rays to reach the Earth that led to the Montreal Protocol. But WMO concedes no statistically significant long-term trends have been detected, noting earlier this year that "outside the polar regions, ozone depletion has been relatively small, hence, in many places, increases in UV due to this depletion are difficult to separate from the increases caused by other factors, such as changes in cloud and aerosol." In short, the impact of ozone depletion on UVB over populated regions is so small it's hard to detect. Needless to say, if UVB hasn't gone up, then the fears of increased UVB-induced harm are unfounded. Indeed, the much-hyped acceleration in skin cancer rates hasn't been documented. U.S. National Cancer Institute statistics show malignant melanoma incidence and mortality, which had been undergoing a long-term increase that predates ozone depletion, has actually been leveling off during the putative ozone crisis. Further, no ecosystem or species was ever shown to be seriously harmed by ozone depletion. This is true even in Antarctica, where the largest seasonal ozone losses, the so-called Antarctic ozone hole, occur annually. Also forgotten is a long list of truly ridiculous claims, such as the one from Al Gore's 1992 book "Earth in the Balance" that, thanks to the Antarctic ozone hole, "hunters now report finding blind rabbits; fisherman catch blind salmon.

#### Geoengineering solves

The Financial 11 (“Geoengineering the Ozone Layer,” 12/20/2011, <http://finchannel.com/news_flash/World/100633_Geoengineering_The_Ozone_Layer/>, NP)

Ozone Layer Geoengineering can be defined as an experiment that replaces lost ozone molecules at depleted parts of stratospheric ozone layer by injecting oxygen gas using aircrafts. Injected oxygen joins naturally existing ones in similar reaction to become ozone; this reaction is responsible to protect the earth from penetration of harmful Ultra Violet radiations. The stratosphere is a layer of the earth’s upper atmosphere around 9 – 21 miles above sea level, it houses the ozone layer responsible to protect man and the environment from harmful UV rays. A large depleted part of the ozone layer mostly observed over Antarctica is known as the ozone hole. Ozone Layer Geoengineering is a developing research work and has the chunk of potency required to save the ozone layer from depletion ̶ if we artificially need to. OLG is very simple, very achievable, largely sustainable and less risky. Aircraft to convey the oxygen tank will be unmanned, oxygen will be systematically discharged to avoid Ozone Depleting Substances rom eating it up on becoming ozone and the procedure will not result in excesses at the ozone layer because lost molecules are ‘replaced’.

#### No impact to loss of biodiversity – empirically proven.

**Lomborg**, Director of the Copenhagen Consensus Center, **‘1**

[Bjorn, “The Skeptical Environmentalist: Measuring the Real State of the World”,

<http://www.warwickhughes.com/climate/lomborg2.htm>]

Third, that threat of biodiversity loss is real, but exaggerated. Most early estimates used simple island models that linked a loss in habitat with a loss of biodiversity. A rule-of-thumb indicated that loss of 90% of forest meant a 50% loss of species. As rainforests seemed to be cut at alarming rates, estimates of annual species loss of 20,000-100,000 abounded. Many people expected the number of species to fall by half globally within a generation or two. However, the data simply does not bear out these predictions. In the eastern United States, forests were reduced over two centuries to fragments totalling just 1-2% of their original area, yet this resulted in the extinction of only one forest bird. In Puerto Rico, the primary forest area has been reduced over the past 400 years by 99%, yet “only” seven of 60 species of bird has become extinct. All but 12% of the Brazilian Atlantic rainforest was cleared in the 19th century, leaving only scattered fragments. According to the rule-of-thumb, half of all its species should have become extinct. Yet, when the World Conservation Union and the Brazilian Society of Zoology analysed all 291 known Atlantic forest animals, none could be declared extinct. Species, therefore, seem more resilient than expected. And tropical forests are not lost at annual rates of 2-4%, as many environmentalists have claimed: the latest UN figures indicate a loss of less than 0.5%.

#### Prioritize anthropogenic risks first – natural existential risks have low probability and are historically survivable

**Anderson 12** (Ross, writer for The Atlantic, cites Nick Bostrum, professor of philosophy at Oxford, 3/1/12 “We're Underestimating the Risk of Human Extinction,” <http://www.theatlantic.com/technology/archive/2012/03/were-underestimating-the-risk-of-human-extinction/253821/>, NP)

And why shouldn't we be as worried about natural existential risks in the short term? Bostrom: One way of making that argument is to say that we've survived for over 100 thousand years, so it seems prima facie unlikely that any natural existential risks would do us in here in the short term, in the next hundred years for instance. Whereas, by contrast we are going to introduce entirely new risk factors in this century through our technological innovations and we don't have any track record of surviving those. Now another way of arriving at this is to look at these particular risks from nature and to notice that the probability of them occurring is small. For instance we can estimate asteroid risks by looking at the distribution of craters that we find on Earth or on the moon in order to give us an idea of how frequent impacts of certain magnitudes are, and they seem to indicate that the risk there is quite small. We can also study asteroids through telescopes and see if any are on a collision course with Earth, and so far we haven't found any large asteroids on a collision course with Earth and we have looked at the majority of the big ones already.

#### ( ) Risk is super-small and nuclear deflection would save us

Nick Bostrom, PhD, Faculty of Philosophy, Oxford University, March 2002, online: http://www.nickbostrom.com/existential/risks.html, accessed January 21, 2006

There is a real but very small risk that we will be wiped out by the impact of an asteroid or comet [48]. In order to cause the extinction of human life, the impacting body would probably have to be greater than 1 km in diameter (and probably 3 - 10 km). There have been at least five and maybe well over a dozen mass extinctions on Earth, and at least some of these were probably caused by impacts ([9], pp. 81f.). In particular, the K/T extinction 65 million years ago, in which the dinosaurs went extinct, has been linked to the impact of an asteroid between 10 and 15 km in diameter on the Yucatan peninsula. It is estimated that a 1 km or greater body collides with Earth about once every 0.5 million years.[[10]](http://www.nickbostrom.com/existential/risks.html#_ftn10) We have only catalogued a small fraction of the potentially hazardous bodies. If we were to detect an approaching body in time, we would have a good chance of diverting it by intercepting it with a rocket loaded with a nuclear bomb [

#### ( ) A “doomsday” asteroid hits earth once in 10 million years

Ottawa Citizen, 10-4 2002

Astronomers have long been concerned about damage from asteroids, meteors and comets, and since 1998 NASA has worked to identify 90 percent of all large near-Earth objects -- those with a diameter of one kilometre or more -- by 2008. NASA's head of space science, Ed Weiler, told the committee that scientists had identified 619 of the suspected big, dangerous asteroids, which is about half the number astronomers believe are out there. That kind of large asteroid hits Earth a few times every million years, and when it does, causes regional calamity. By contrast, a "doomsday asteroid" five kilometres across -- like the one believed to have wiped out the dinosaurs -- hits once every 10 million years or so.

#### Nuclear war leads to extinction.

Hindustan Times 06 (December 12, “Even small regional nuclear war can have disastrous global affects, say nuclear scientists”)

Washington, Dec 12 --A team of scientists from UCLA, the University of Colorado at Boulder and Rutgers, the State University of New Jersey, have said that even a regional nuclear war could devastate large cities and disrupt the global climate. According to them, even a small-scale, regional nuclear war could produce "as many direct fatalities as occurred during all of World War II", and disrupt the global climate for a decade or more, impacting nearly everyone on Earth. The scientists reviewed the current status of nuclear weapons development, analysed data on modern mega-cities and applied a state-of-the-science climate model. They calculated the local effects of individual "small", Hiroshima-size (15-kiloton) nuclear detonations in urban centers, including potential casualties from the blast and radioactive fallout, said Richard Turco, professor in the UCLA Department of Atmospheric and Oceanic Sciences and a member and founding director of UCLA's Institute of the Environment. In two research articles posted online in the journal Atmospheric Chemistry and Physics Discussions, Turco and Toon, a co-author on the current research, said that even a small-scale, regional nuclear war could produce as many direct fatalities as occurred during all of World War II and disrupt the global climate for a decade or more. The new results represent the first comprehensive quantitative assessment of the consequences of a nuclear conflict between small or emerging nuclear states, said Richard Turco, professor in the UCLA Department of Atmospheric and Oceanic Sciences and a member and founding director of UCLA's Institute of the Environment. They concluded: "Even the smallest nuclear powers today and in the near future may have as many as 50 or more Hiroshima-size weapons in their arsenals, according to the scientists. Moreover, about 40 countries possess enough plutonium and uranium to construct substantial nuclear arsenals." "Considering the relatively small number and sizes of the weapons - perhaps less than one megaton in total yield - the potential devastation would be catastrophic and long-term," Toon said and added: "a single low-yield nuclear detonation in an urban center could lead to more fatalities, in some cases by orders of magnitude, than occurred in major historical wars." Megacities attacked with nuclear devices, through war or terrorism, would likely be abandoned indefinitely, inducing mass migration and long-term economic decline, said Turco. The scientists estimated the quantities of soot - the highly absorbing component of smoke - that would be generated in urban firestorms ignited by nuclear detonations. This effort was led by Toon, professor and chair of the department of atmospheric and oceanic sciences at the University of Colorado at Boulder, together with Turco and University of Colorado student Charles Bardeen. At Rutgers, Alan Robock, professor of environmental sciences and associate director of the Center for Environmental Prediction at Rutgers' Cook College, professor Georgiy Stenchikov and postdoctoral associate Luke Oman (now at Johns Hopkins University) employed a coupled atmosphere-ocean climate model to simulate the effects of the putative smoke emissions in perturbing the global climate system and causing regional climatic anomalies. The amount of soot emitted by firestorms was found to exceed 5 million metric tons in many cases. Because so many people live in megacities, the quantity of black smoke generated per kiloton of explosive yield could be more than 100 times larger than previously estimated for a full-scale superpower nuclear exchange involving thousands of megatons, according to one of the journal papers. While a regional nuclear confrontation among emerging nuclear powers might be geographically constrained, the environmental impacts could spread worldwide, Robock and his colleagues conclude. "We examined the climatic effects of the smoke produced in a regional conflict in the subtropics between two opposing nations, each using 50 Hiroshima-size nuclear weapons to attack the other's most populated urban areas," Robock said. The post-war climate simulations used soot emissions provided by Toon, Turco and Bardeen.

### Solvency

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#### Incentives must be directly tied to energy production—their interpretation unlimits—allows incentives for any economic activity tangentially related to energy production

Tacoa-Vielma, counsellor – Trade in Services Division @ WTO, ‘3

[Jasmin, “ENERGY AND ENVIRONMENTAL SERVICES: Negotiating Objectives and Development Priorities,” unctad.org/en/docs/ditctncd20033\_en.pdf]

Another perceived deficiency relates to the fact that a variety of other services that intervene in the energy value-added chain (from production to sale to final consumers) are found in the whole range of services sectors on the list, e.g. research and development, engineering, construction, management consultancy, environmental, financial and distribution services. These services could be termed "energy-related services" because of their relevance, but not exclusivity, to the energy industry. It has been argued that such dispersion of “energy-related services” makes it difficult to determine existing commitments and to negotiate the totality of the services necessary for the energy industry; that would make sense from an economic viewpoint. However, this situation is not unique to the energy industry, as most economic activities or industries require a variety of services inputs that in many cases are designed or adapted for different end-uses. For example, there are engineering, financial or construction services especially tailored for the energy industry as well as for the telecom industry.4 Having an all-encompassing definition of the energy services sector would certainly facilitate considering the totality of services involved in the industry; however, that should not be equated to a guarantee of complete coverage by GATS commitments.

#### Allows small affs unrelated to the core of the topic

Selivanova, PhD international law – University of Berne, trade expert – Energy Charter Secretariat, Brussels, ‘7

[Yulia, “The WTO and Energy,” <http://ictsd.org/i/publications/129716/>]

There are several problems that are associated with definition of energy services. Firstly, some energy products can be considered either a good or a service (e.g. electricity).70 Furthermore, many services that form part of the energy production chain are in fact not core energy services. Examples of such services are construction, engineering, consulting, etc. There were discussions of merits to distinguish between core and non-core services.71 An activity would be considered as “core” if the service was an essential part of the chain of supply of the sector, i.e. without that service the sector would not be able to function (Tacoa-Vielma, 2003). Non-core services simply support the chain and are closely connected to the process. The problem with this distinction is where to draw the line between the two categories. What makes service an “essential” part of the energy production chain?

#### The aff has to affect both resource extraction and conversion into energy

Australian Government, Department of Climate Change and Energy Efficiency 2011 [“Energy Production and Consumption,” http://www.climatechange.gov.au/government/initiatives/national-greenhouse-energy-reporting/publications/supplementary-guidelines/energy-production-consumption.aspx]

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

1. extraction or capture of energy from natural sources for final consumption by or from the operation of the facility or for use other than in the operation of the facility
2. manufacture of energy by the conversion of energy from one form to another form for final consumption by or from the operation of the facility, or for use other than in the operation of the facility (regulation 2.23(3) NGER Regulations).

#### R&D is indirect – that justifies exploding the topic to Affs like energy sales, liability assumption, providing regulatory services, and even imposing regulations

EIA 92 (Federal Energy Subsidies: Direct and Indirect Interventions in Energy Markets, EIA Service Report, Energy Information Administration, Office of Energy Markets and End Use, November 1992, ftp://ftp.eia.doe.gov/service/emeu9202.pdf, da 1-17-13)

There are also many indirect subsidies. Indirect¶ subsidies consist of Government actions that do not¶ involve direct payments to producers or consumers, but¶ involve other forms of Federal financial commitment¶ which affect the cost of consumption or production of¶ some form of energy. Indirect subsidies include¶ provision of energy or energy services at below-market¶ prices; loans or loan guarantees; insurance services;¶ research and development; and the unreimbursed¶ provision by the Government of environmental, safety,¶ or regulatory services. Listed below are the types of¶ indirect subsidies examined in this report.¶ • Provision of energy and energy services.¶ Government sales of energy or energy services are¶ a subsidy if the price charged is less than the¶ market price. If there are no comparable market¶ prices, then energy sales are subsidized if revenues¶ from sales are less than the cost.¶ • Provision of loans. Loans are a subsidy if the fees¶ and interest rates charged do not compensate the¶ Government for its cost of funds plus some¶ allowance for risk of default. Loan guarantees are¶ not of current practical importance, since the¶ principal source of energy-related loan guarantees,¶ the Rural Electrification Administration, largely¶ guarantees funds provided by the Federal¶ Government.¶ • Tax exempt interest on debt. The interest paid on¶ the debt of publicly owned electric utilities (in common with other State and local government¶ entities) is exempt from Federal taxation. This is a¶ subsidy as it reduces publicly owned utility costs¶ compared with investor-owned utilities.¶ • Assumption of environmental, safety, and health¶ liabilities. The Government may assume actual or¶ potential liabilities of the private sector, sometimes¶ funded (in principle) by a levy on the industry. In¶ principle, there is a subsidy if the expected present¶ value of the cost of the liability exceeds the levy on¶ the industry.¶ • Research and development. The budgetary cost of¶ Government-funded research and development¶ (R&D) is easy to measure. Determining the extent to¶ which Government energy R&D is a subsidy is¶ more problematic: often it takes the form of a direct¶ payment to producers or consumers, but the¶ payment is not tied to the production or¶ consumption of energy in the present. If successful,¶ Federal-applied R&D will affect future energy¶ prices and costs, and so could be considered an¶ indirect subsidy.¶ • Provision of Regulatory Services. Several Federal¶ Government agencies regulate energy industries. In¶ some cases (such as the Federal Energy Regulatory¶ Commission or the Nuclear Regulatory¶ Commission) costs of regulators are defrayed¶ through taxes levied on the regulated industry. In¶ other cases (Mining Safety and Health¶ Administration) regulation is provided at public¶ expense. Unrecovered costs of regulators constitute¶ a (small) subsidy.¶ The issue of subsidy in energy policy analysis extends¶ beyond consideration of actions involving some form of¶ financial commitment by the Federal Government.¶ Subsidy-like effects flow from the imposition of a range¶ of regulations imposed by Government on energy¶ markets. Regulations may directly subsidize a fuel by¶ mandating a specified level of consumption, thereby¶ creating a market which might not otherwise exist. The¶ imposition of oxygenate requirements for gasoline in¶ the winter of 1992, which stimulates demand for¶ alcohol-based additives, is a recent example.¶ Regulations more often explicitly penalize rather than¶ subsidize the targeted fuel. To the extent that¶ regulations on coal emissions raise costs of coal use, the¶ competitive opportunities for alternatives, including¶ renewables, natural gas, and conservation, are¶ enhanced. The additional costs that influence the¶ consumption of coal versus other fuels do not require¶ any exchange of money between the Government and¶ buyers and sellers of energy. However, this in no way¶ diminishes the policy’s potential impact on resource¶ allocation and relative prices of energy products.¶ Much current debate on energy policy focuses on¶ externalities associated with energy use. Many believe¶ there is a large implicit subsidy to energy production¶ and consumption insofar as pollution results in¶ environmental costs not fully charged to those¶ responsible. Failure to internalize “recognized”¶ externalities in the context of current fuel use may¶ result in conventional energy being underpriced¶ compare to other energy sources. Advocates of¶ increased use of renewable energy claim this form of¶ “subsidy” to be central to the continued dominance of¶ fossil fuels as a component of energy supply.¶ In fact, the effort to deal with environmental concerns¶ has become a central feature of Federal energy policy.¶ Substantial costs which were formerly outside the¶ market mechanism have, through the implementation¶ of a series of taxes and regulations, been internalized to¶ energy markets. This report examines these¶ developments as components of the current energy¶ debate regarding the significance of direct and indirect¶ energy subsidies. In that context, a variety of¶ environmental trust funds and components of the Clean¶ Air Act are examined. The report does not address the¶ question of how much and what kind of externalities¶ remain to be addressed through further revision of¶ policy. Such considerations are far beyond the scope of¶ this effort.

#### Precision is vital—turns solvency and research quality

Resnick 1

[Evan Resnick, Journal of International Affairs, 0022197X, Spring 2001, Vol. 54, Issue 2, “Defining Engagement”]

In matters of national security, establishing a clear definition of terms is a precondition for **effective policymaking**. Decisionmakers who invoke critical terms in an erratic, ad hoc fashion risk alienating their constituencies. They also risk exacerbating misperceptions and hostility among those the policies target. Scholars who commit the same error undercut their ability to conduct valuable empirical research. Hence, if scholars and policymakers fail rigorously to define "engagement," they undermine the ability to build an effective foreign policy.

#### Depth outweighs breadth – studies overwhelmingly vote neg – key to education.

TPC, ‘10

[Texas Panhandle P-16 Council, Texas based group of teachers and educators from across the state, 2010, “Breadth vs. Depth of High School Curriculum Content”,

<http://www.panhandlep-16.net/users/0001/docs/Position%20Paper2.pdf>, RSR]

Less breadth and more depth in curriculum better prepares students for future careers and education. This is the position of over one hundred faculty assembled in the Texas Panhandle, and it is also the conclusion of many scholarly studies reviewed for this paper. In fact, there are far too many studies to cite in this paper, so only a few representative studies are used. In a 2008 study entitled “Depth Versus Breadth: How Content Coverage in High School Science Courses Relates to Later Success in College Science Coursework” 1 the researchers noted: “In a comparison of 46 countries, Schmidt et al. (2005) noted that in top-achieving countries, the science frameworks cover far fewer topics than in the United States, and that students from these countries perform significantly better than students in the United States. They conclude that U.S. standards are not likely to create a framework that develops a deeper understanding of the structure of the discipline. By international standards, the U.S. science framework is „unfocused, repetitive, and undemanding‟”. The study went on to say that “the baseline model reveals a direct and compelling outcome: teaching for depth is associated with improvements in later performance”

### States

#### Topic education: The States CP is the topic---jurisdictional questions are key to energy production debates.

Kay, Senior Extension Associate with the Community & Regional Development Institute-Cornell Dept. of Sociology, ‘12

[David, “Energy Federalism: Who Decides?,” http://devsoc.cals.cornell.edu/cals/devsoc/outreach/cardi/programs/loader.cfm?csModule=security/getfile&PageID=1071714]

Questions about energy production and consumption are acquiring renewed urgency in the 21st Century. Some go to the heart of our nation’s system of federalism, as an underlying but ever-present friction mounts over the way in which decision making power has been divided between central and more locally distributed political units. What is at stake? According to one author, “**the choice of regulatory forum** often seems to **determine the outcome of the controversy**. That may explain why Americans have traditionally shed so much metaphorical and genuine blood deciding what are essentially jurisdictional disputes between governmental institutions.” A number of factors have raised these issues into greater prominence. Energy specific influences include the depletion of low cost oil, advances in energy extraction technology, and increased awareness of the link between climate change and energy consumption and production. Another element is the long standing but increasingly hardened absence of a broad based consensus over energy policy at the federal level, despite calls for such a policy that date back to at least the Nixon administration. These have been superimposed on shifting political trends in other areas, including the expanding national political divide. After the crest of federal adoption of new environmental legislation in the 1960’s and 1970’s, powerful and complex cross currents arose. Mostly “conservative” and anti- (or anti-“big”) government forces mobilized in the devolution, deregulation, privatization, and property rights movements. In contrast, “progressive” movements evolved in response to increased globalization (of economic and environmental issues) and personalization (eg. of communications/information technology) by promoting global governance in some arenas and relocalization or local empowerment in others. Several energy examples being played out in New York State, as well as in other states and on the national stage, serve as useful and representative illustrations of the fundamental but insufficiently appreciated tensions raised. The first involves the spread of the controversial hydraulic fracturing technology that is used to extract oil and gas from “unconventional” reserves of shale and other rocks. The second and third involve the generation and distribution of electricity: where the authority to site electricity generating stations is vested, and who has the authority to site transmission lines that move electricity from their mostly rural points of extraction or generation to their mostly urban points of consumption. These are but a few among many examples that highlight the extent to which the proliferating threads of debate about energy federalism are being cinched into an increasingly dense tangle.

#### Education – it’s crucial for policymakers to engage in this key question of agents.

Biering, former Executive Fellow in the California Resources Agency, ‘8

[Brian, 23 J. Envtl. L. & Litig. 35, AG]

Federalism issues aside, the fundamental question policymakers need to resolve is whether it is more appropriate for the states to act now in the area of climate change, or whether the field should be simply left to the federal government to address in its own time.

#### Their interpretation is incoherent – no one person is the federal government. Sole decision maker is wrong and kills education

Rabe, Prof of Public Policy-Ford School at Michigan, 8

[Barry, “States on Steroids: The Intergovernmental Odyssey of American Climate Policy,” Review of Policy Research, Vol. 25, Issue 2, March]

Climate change has conventionally been framed as an issue that would be addressed by an international regime established through negotiation among nation-states. The experience of policy development in the decade following the signing of the Kyoto Protocol indicates that climate change also needs to be examined as a challenge of multilevel governance. The increasingly central role of state governments in American climate policy formation squares with recent experience in other Western democracies that share authority across governmental levels. This paper examines the American experience, considering factors that have contributed to a state-centric policy process and using that body of experience to assess competing strategic choices faced by individual states based on their mix of emission trends and policy adoption rates. In turn, the collective state experience allows for consideration of the varied political feasibility of competing climate policy tools that remain under active review in subnational, national, and international contexts. The paper concludes with a set of scenarios that explore different ways in which a state-centric system may be integrated with expanding involvement at the national level. Most scholarly and journalistic analysis presents the odyssey of climate change policy in the United States as if America was a unitary system of government. This leads to a familiar tale, whereby the federal government signed the Kyoto Protocol in 1997, spurned ratification four years later, and neither the Clinton nor subsequent Bush Administration and respective Congresses have been able to agree to anything beyond climate research funding and voluntary reduction programs. At the same time, conventional analysis has assumed that climate policy would entail bargaining and implementation among nations, culminating in a world climate regime. More than a decade after the signing of Kyoto, it is increasingly evident that climate policy is proving far messier than prevailing depictions had anticipated. The Kyoto process is in tatters, attributable not only to American disengagement but also to an inability of many ratifying nations to honor their commitments. This is reflected in numerous failures to approach pledged emissions reductions, as in the Canadian and Japanese cases, or to successfully implement national or multinational policies, as in the stumbles of the Emissions Trading Scheme in the European Union. There also continues to be enormous uncertainty about engagement by developing nations, at the very point where China is primed to eclipse the United States as the world's leading national source of greenhouse gases. But perhaps the biggest single surprise as climate policy continues to evolve is that in the American case and many others, it is becoming increasingly evident that climate policy constitutes an issue of federalism or multilevel governance. As the recent emergence of California Governor Arnold Schwarzenegger as a claimant to the title of “world leader” in the development of far-reaching climate policy attests, individual units across different federal or multilevel governance systems may have more in common with one another in climate policy than they have with the neighboring units of their overall federation. Indeed, one can see stronger parallels between such jurisdictions as Connecticut and Sweden, Pennsylvania and Germany, New York and New South Wales, and North Carolina and Ontario than exists across many members of the same federation. This paper will focus primarily on the American case, considering more than a decade of state and federal policy experience and attempting to distill lessons that could guide future policy development. First, it will offer an overview of American subnational policy development, attempting to provide a review of the tapestry of policies that have been enacted over the past decade and some of the key factors that have led to such a robust state response in the absence of federal mandates or incentives. Second, this will lead to a consideration of the divergent paths taken by the 50 states, reflected in their carbon dioxide emission trends since 1990 and varied levels of climate policy development. This section will explore the unique contexts facing various states, particularly the differing strategic considerations for them (and for their representatives in Congress) as they consider unilateral policy steps or the possibility of federal policy in the 110th Congress and beyond. Third, the collective state experience offers some possible lessons for future policy development at either subnational or national levels. In particular, we will see that there appears to be a nearly inverse relationship between those policies that policy analysts tend to endorse as holding the greatest promise to reduce emissions in a cost-effective manner and the political feasibility of respective policy options. These patterns could offer significant lessons for the future of climate policy development, outlining both challenges and opportunities for future policy whether enacted at the single-state, multistate, or federal levels. Finally, we look ahead and consider alternative scenarios for future development of American climate policy, building on recent experience to anticipate possible next directions (Selin & VanDeveer, 2007).

#### It’s real world – cooperation and uniformity happening now.

RGM, ‘12

[Renew Grid Magazine, 7-12-12, “Energy Officials Meet To Coordinate Efforts On Utility Policy” http://www.renewgridmag.com/e107\_plugins/content/content.php?content.8672]

State and local energy officials, utility commissioners and regulators met in Washington, D.C., this week to coordinate efforts on environmental protection, energy and utility policy.

The meeting brought together representatives from the National Association of Clean Air Agencies (NACAA), the National Association of Regulatory Utility Commissioners (NARUC) and the xcNational Association of State Energy Officials (NASEO), as well as industry stakholders, federal government representatives and non-governmental groups.

"We heard some great examples of successful partnerships in states to address challenges," says Barry Wallerstein, executive officer of South Coast Air Quality Management and co-president of the NACAA. "We also heard about current and upcoming [u] air rules that will require us to continue this important collaboration."

The meeting was a continuation of a multiyear effort to ensure that state policymakers are working together in the energy and environmental arenas. Session panels included an overview of the Clean Air Act and examinations of the Utility Mercury Air Toxics Standard, the Greenhouse Gas New Source Performance Standards for Power Plants and the Cross-State Pollution Rule. State and local officials from across the country identified different approaches, including alternative compliance strategies, as well as energy efficiency and renewable energy programs, to reduce costs and preserve economic development, while improving environmental health. "This meeting was another step in a process that will allow the expanded use of energy efficiency and renewable resources as response measures to air rules," says David Terry, executive director of the NASEO.

#### Literature checks: policy analysis of state energy policy is critical to the topic because states play a huge role in energy policy.

NREL, ‘11

[National Renewable Energy Laboratory, ““The Role of State Clean Energy Policies”, 6-30-11 http://www.nrel.gov/applying\_technologies/state\_local\_activities/state\_policy\_role.html]

**State policy has been a critical driver in the emergence of clean energy.** In many respects, states are leading the way for clean energy technologies and policies. They have demonstrated both the viability and the modest costs of specific renewable energy policies. As states continue to push the boundaries of what clean energy can offer, there are new challenges including transmission development and a desire to maximize policy effectiveness. In addition, states that may not have been as active in the past are now looking to ramp up support for clean energy technologies. **Many lessons can be learned from states' past experiences**. However, new contexts and differing priorities may require new analysis and nuance to understand how policies developed in one state may impact clean energy markets and goals in another. As a result, **the demand for objective policy analysis at the state level continues to grow**. It's expected to continue as long as states adopt clean energy goals and targets.

#### 2. The perm crowds out state regulations which solve better.

Adler 6 (Law Professor at Case Western, Case Research Paper Series in Legal Studies, Working Paper 06-09)

This article seeks to identify the ways in which federal actions can influence state regulatory choices in the context of environmental policy. The federal government may directly influence state policy choices by preempting state policies or by inducing state cooperation through the use of various incentives and penalties for state action. The federal government may indirectly, and perhaps unintentionally, influence state policy choices as well. Federal policies may encourage greater state regulation by reducing the costs of initiating regulatory action or by placing issues on state policy agendas. Federal regulation may also discourage or even **“**crowd-out” state-level regulatory action by reducing the net benefits of state-level initiatives. The potential for federal regulation to have both positive and negative indirect effects on state regulatory choices suggests that increases in federal regulation can alternatively enhance or reduce state regulatory activity and may, in some instances, even result in a net reduction of regulatory protection for environmental resources.

#### States taking the lead on solar energy – they set a national example

Schoning 8/3/12 (Christian, Star-Ledger, “How N.J. solar energy outshines the other 49 states,” <http://blog.nj.com/njv_guest_blog/2012/08/how_nj_solar_energy_outshines.html>, TGA)

To say that New Jersey has made leaps and bounds in the solar industry is an understatement. In the first quarter of this year, New Jersey has become the largest solar market in America, with the rate of installations even outpacing the much larger, much sunnier California. New Jersey remains second only to California in total megawatts of solar power installed, according to the Solar Energy Industries Association.¶ The solar market, most importantly, brings jobs and a boost to the economy. With unemployment at 9.6 percent - currently fourth-worst in the country - this is crucial. Let's be clear - this is the reason why the cut-happy Christie took solar subsidies off the fiscal chopping block. The solar industry in New Jersey employs nearly 3,000 workers and comprises close to 500 businesses, according to 2011 data from the Solar Foundation. As New Jersey solidifies its mature position in the industry-and continues to do so under sustained support from Trenton-its businesses stand poised to expand to other state markets and to accept workers from places where the solar industry is not welcome.¶ The solar boom in New Jersey has been ushered in by a series of forward-thinking, smart policies of incentives and subsidies. In 2001, when the solar incentives programs were launched, New Jersey had six photovoltaic systems installed in the entire state. As of last week, that number had rocketed to 15,778, with another 4,400 projects in the pipeline.¶ The recent legislation focuses on improving these programs. In a bipartisan manner, it deftly caters to both the utilities and solar owners and installers while addressing the fundamental issue with the current system-namely, that the solar industry would become a victim of its own explosive growth.¶ The same New Yorkers who brand their neighboring state "the armpit of America" are poised to adopt a solar incentive program nearly identical to the one New Jersey has now. Massachusetts, Maryland and Ohio have all incorporated aspects of New Jersey's solar policies into their own solar programs.¶ Pennsylvania looked to New Jersey as its less-developed solar market was hit far worse with the same overloading growth and resulting fall-off of SREC prices, sending the industry to a screeching halt. New Jersey proved once again its leadership position as it decisively forged ahead with adjusting the system. Any hopes for similar action in the Keystone State appear lost in committee in Harrisburg. Succinctly put, New Jersey's solar policies have been immensely successful and have given it a national leadership position on the issue.¶ It is crucial that the United States as a whole take the lead in creating the world's best clean, renewable economy. China has marked renewable energy as the highest priority for its national security and as the mainstay for its insatiable appetite for energy; national security and energy often go hand-in-hand. China is investing in renewables with the same gusto that the U.S. pursued the space race. America electrified the world in the 19th century. We computerized it in the 20th. Why can't we usher in a renewable energy revolution in the 21st?¶ New Jersey is doing its part in leading the solar industry in this country. It is imperative that the Christie Administration continue to support and monitor this industry to keep it thriving. Gov. Christie has many other opportunities he ought to pursue-rejoining the RGGI program he pulled New Jersey out of last year, for example-to advance the renewable energy industry in general. In doing so, we can create jobs, clean our air, set an example at the national level for renewable energy initiatives and maybe, just maybe, work at turning the stereotype of the "Dirty Jerz" on its head.

#### States are labs for future federal energy policies

Rabe 2 (Barry G. University of Michigan, <http://www.pewclimate.org/docUploads/states_greenhouse.pdf>)

All of this activity also provides a laboratory for consideration of next steps in federal policy. Much important federal energy, environmental, and transportation legislation is due for reauthorization and the best of recent state experience could indeed provide models for nation-wide initiatives. If mandatory CO2 reporting has proven feasible in Wisconsin, is it possible for the federal government to establish a national reporting system? If Texas and more than a dozen other states are able to implement renewable portfolio standards and develop significant sources of renewable energy, is the federal government capable of taking such steps? If Massachusetts, New Hampshire, and Oregon can establish regulations to reduce CO2 from electricity generation with little controversy, is it conceivable that the federal government could learn from these initiatives as it contemplates the next round of air quality policy? In fact, current proposals before Congress consider such possibilities, making recent state experience a possible model for future steps by the federal government. Some state policies, such as the July 2002 actions by California and 11 state attorneys general, may actually go a step further and prod new federal policy, thereby reflecting intensified state demand for a federal response to the challenge of climate change.

#### No global economic collapse and it wouldn’t cause conflict.

Drezner 11 (Daniel, Professor of International Politics at the Fletcher School of Law and Diplomacy at Tufts University, 8-12-11, “Please come down off the ledge, dear readers”, Foreign Policy, ¶ http://drezner.foreignpolicy.com/posts/2011/08/12/please\_come\_down\_off\_the\_ledge\_dear\_readers, RSR, (Charts Not Included)]

So, when we last left off this debate, things were looking grim. My concern in the last post was that the persistence of hard times would cause governments to take actions that would lead to a collapse of the open global economy, a spike in general riots and disturbances, and eerie echoes of the Great Depression. Let's assume that the global economy persists in sputtering for a while, because that's what happens after major financial shocks. Why won't these other bad things happen? Why isn't it 1931? Let's start with the obvious -- it's not gonna be 1931 because there's some passing familiarity with how 1931 played out. The Chairman of the Federal Reserve has devoted much of his academic career to studying the Great Depression. I'm gonna go out on a limb therefore and assert that if the world plunges into a another severe downturn, it's not gonna be because central bank heads replay the same set of mistakes. The legacy of the Great Depression has also affected public attitudes and institutions that provide much stronger cement for the current system. In terms of public attitudes, compare the results of this mid-2007 poll with this mid-2010 poll about which economic system is best. I'll just reproduce the key charts below: The headline of the 2010 results is that there's eroding U.S. support for the global economy, but a few other things stand out. U.S. support has declined, but it's declined from a very high level. In contrast, support for free markets has increased in other major powers, such as Germany and China. On the whole, despite the worst global economic crisis since the Great Depression, public attitudes have not changed all that much. While there might be populist demands to "do something," that something is not a return to autarky or anything so drastc. Another big difference is that multilateral economic institutions are much more robust now than they were in 1931. On trade matters, even if the Doha round is dead, the rest of the World Trade Organization's corpus of trade-liberalizing measures are still working quite well. Even beyond the WTO, the complaint about trade is not the deficit of free-trade agreements but the surfeit of them. The IMF's resources have been strengthened as a result of the 2008 financial crisis. The Basle Committee on Banking Supervision has already promulgated a plan to strengthen capital requirements for banks. True, it's a slow, weak-assed plan, but it would be an improvement over the status quo. As for the G-20, I've been pretty skeptical about that group's abilities to collectively address serious macroeconomic problems. That is setting the bar rather high, however. One could argue that the G-20's most useful function is reassurance. Even if there are disagreements, communication can prevent them from growing into anything worse. Finally, a note about the possibility of riots and other general social unrest. The working paper cited in my previous post noted the links between austerity measures and increases in disturbances. However, that paper contains the following important paragraph on page 19: [I]n countries with better institutions, the responsiveness of unrest to budget cuts is generally lower. Where constraints on the executive are minimal, the coefficient on expenditure changes is strongly negative -- more spending buys a lot of social peace. In countries with Polity-2 scores above zero, the coefficient is about half in size, and less significant. As we limit the sample to ever more democratic countries, the size of the coefficient declines. For full democracies with a complete range of civil rights, the coefficient is still negative, but no longer significant. This is good news!! The world has a hell of a lot more democratic governments now than it did in 1931. What happened in London, in other words, might prove to be the exception more than the rule. So yes, the recent economic news might seem grim. Unless political institutions and public attitudes buckle, however, we're unlikely to repeat the mistakes of the 1930's. And, based on the data we've got, that's not going to happen.

#### No chance of a recession – we’re in the clear.

Roubini 12 (Nouriel, doctorate in international economics at Harvard University,

receiving a BA in political economics at Bocconi University, he became an academic at Yale and a practicing economist at the International Monetary Fund (IMF), the Federal Reserve, World Bank, and Bank of Israel. Much of his early research focused on emerging markets. During the administration of President Bill Clinton, he was a senior economist for the Council of Economic Advisers, later moving to the United States Treasury Department as a senior adviser to Timothy Geithner, who in 2009 became Treasury Secretary, and Ian Bremmer, “$200 Oil and the Moscow-Beijing Alliance,” 3/7/12, Foreign Policy,

ttp://www.foreignpolicy.com/articles/2012/03/09/200\_oil\_roubini\_bremmer?page=0,0, RSR)

Really, since 2008, if it's not been one thing, it's been something else. We no longer believe that there's meaningful likelihood that a shock is going to send the world back into recession. That's in part true because of the strengthening of American numbers. Nouriel's right, these are not exciting growth numbers -- this isn't the robust bounce-back that we think is going to power a global economy with the kind of figures you saw before the crisis, but it's a very different environment from the last four years. That's very important in terms of getting consumer confidence back, but it's also very important in terms of the orientation of CEOs to start spending some of the major cash that they've left off the table. I think the answer that they'll start doing it -- and not just in the United States. I don't want to say they're getting ebullient, but they're less fearful about medium and long-term trajectory.

#### The economy is resilient – GDP, employment, personal income, and inflation prove. Prefer our evidence, it assumes skeptics that don’t put the economy into perspective.

Hamilton 9 (Brian, CEO at Sageworks Inc., January, Texas Society of Certified Public Accountants, “The United States Will be Just Fine”, <http://www.tscpa.org/Currents/EconomyCommentary.asp>]

There is probably something in humans and in every generation that makes us think that the problems we face are uniquely difficult. Much has been written about the economy and, if you accept certain assumptions from what you read, you might think that we are in the midst of a global depression. Yet, it is important to put the current economy in perspective. We might even try reviewing and analyzing some objective data. Last quarter, GDP fell at a rate of 0.5%, which means that the total value of goods and services produced in the U.S. fell by a half of one percentage point last quarter over the previous quarter. (1) For the first two quarters of this year, GDP grew by 0.9% and 2.8%, indicating that economic growth is relatively flat this year, but that it is not falling off a cliff. This isn’t the first time GDP has fallen and it won’t be the last. A decrease in GDP after almost 6 years of increases is not positive, but almost predictable. No economy grows indefinitely and consistently; there are always temporary lapses. In fact, if you consider the media coverage of the economy over the past year and the consequent way people have been scared, it is remarkable that anyone is buying anything. Some would say that we cannot only look at GDP, so let’s look at other factors. Interest rates remain at historically low levels. (2) This means that if you want to borrow money, you can borrow money inexpensively as a bus iness or as a person. Loan volume in the country, according to the FDIC and contrary to what you read about the credit crisis, actually increased last quarter compared to the same quarter last year. (3) Someone is getting loans and they are not paying excessive interest rates for them. How about employment? According to the Bureau of Labor Statistics, unemployment sits at 6.7%. At this time last year, unemployment was 4.7%. The decrease in employment is not favorable, but historically an unemployment rate of 6.7% is not close to devastating. The 50-year historical rate of unemployment is 5.97%. (4) Most economists agree that the natural rate of unemployment, which is the lowest rate due to the fact that people change jobs or are between jobs, is around 4%. So, today we sit at 2.7% above that rate. Once again, the very recent trend is not good but it is certainly not horrifying. I have noticed many recent media references to the Great Depression (the period of time between late 1929 and around 1938 or so, depending upon the definitions used and personal inclinations). It might be illuminating to note that by 1933, during the height of the Depression, the unemployment rate was 24.9%. During that same time period, GDP was falling dramatically, which created a devastating impact on the country. Americans have good hearts and empathize (as they should) with those who are unemployed, yet it would be easy to go too far in our assumptions on how the working population is currently affected in aggregate. If 6% of the people are unemployed, approximately 94% of the people are working. We should always shoot for full employment, but why would we view our efforts as poor when we don’t quite make that mark? A good student might try to get straight A’s, but getting an occasional “B” or “C” won’t end the world. Look at personal income today Personal income is income received by individuals from all sources, including employers and the government. Personal income rose last quarter compared to a year ago according to the Bureau of Economic Analysis. Compared to five years ago, personal income has risen by 32.1% . Even considering that inflation was 18.13% over this period, people are generally making more money than they used to. This is another one of those statistics that can easily get bent to fit a story. You often hear things like “personal income fell last month by 23%”, but writers tend to leave larger and more important statistics out. In this case, wouldn’t you be more interested in trends over a quarter or a year? using isolated statistics to fit your view is something that has become accepted and rarely challenged. Next, there is inflation The inflation rate measures the strength of the dollar you hold today as compared to a year ago. The inflation rate is currently 3.66%. Over the past 50 years, the inflation rate has averaged about 4.2% . Inflation remains well within control. Yet, would you be surprised to read a story next month citing an X% jump in inflation over the last day, month? I wouldn’t be. (Ironically, the one thing about the economy that is alarming from a historical standpoint is our national debt, which gets some but not enough media coverage. We now owe $10.6 trillion and have become a debtor nation over the past several decades. We now depend on the goodwill and investments of outside countries, while we continue to spend more than we make). Now, the skeptics reading this will undoudebtly point to other (I believe, far lesser) statistics that validate their gloomy view of the economy and the direction of the country. I ask the reader: if people are employed, are making good wages, can borrow inexpensively, hold a dollar that is worth largely what it was worth a year or five years ago, and live in a country where the value of goods and services is rising, tell me exactly where the crisis is? There is no doubt that the economy has slowed, but slowness does not equal death. It is true that the financial markets are a mess (and the depreciation of the value of equities is both scary and bad), but analysts typically go too far in ascribing the fall of the financial markets with the fall of a whole economy. The markets are an important component of the economy, but the markets are not the totality of the economy. No one can say whether conditions will worsen in the future. However, we have learned that the United States economy has been tremendously resilient over the past 200 years and will probably remain so, as long as the structural philosophies that it has been built upon are left intact. Americans are hard-working and innovative people and the country will be just fine.

## 1NR

### Politics

#### Turns solvency - Reforms key to energy development -- skilled labor shortage crushes aff otherwise

**COC, ‘9**

[COMPETE – Council on Competitiveness, “Mobilizing a World-Class Energy Workforce,” Dec., http://www.compete.org/images/uploads/File/PDF%20Files/CoC\_-\_Pillar\_6\_Handout\_-\_Mobilizing\_a\_World-Class\_Energy\_Workforce,\_Dec09.pdf]

**America currently lacks an energy workforce of sufficient size and capabilities to meet the needs of a sustainable, secure energy system**.1 **With increasing demand come abundant job opportunities in both traditional and emerging energy industries. Unfortunately, U.S. workers are neither aware nor sufficiently prepared to take them**. Moreover, **with an aging population and the retirement of the baby boomers well under way, there is an inadequate pipeline of replacement workers, technicians and managers to succeed them.** Bridge the Skills Gap and Build the Talent **The Council Recommends that:** • The U.S. Government offer full scholarships to U.S. graduates who commit to a minimum period of service in an energy-related career in the governmental, academic or non-profit sectors. • Congress establish a CompetePass program that will allow eligible participants to redeem the passes at U.S. Department of Labor (DOL) one-stop training centers. • **The U.S. Government grant green cards to foreign students receiving undergraduate and advanced degrees in scientific and engineering disciplines from U.S. institutions. The United States stands to lose half of its electric power industry workforce within the next five to ten years due to retirement**. America’s oil and gas workforce averages 50 years in age; half are likely to retire soon. Workers in these conventional energy sector jobs, from power plant operators to transmission line and pipeline workers, are retiring at a much faster rate than they are being replaced. The introduction of any new energy technologies will not compensate for this workforce shortage. For example, **in the nuclear industry, the fact that there has been no new construction of a nuclear facility in the United States in over 30 years has led to the atrophy of skills, the loss of technicians, the dearth of American students in nuclear engineering and a national security risk for the primarily nuclear-powered U.S. Navy**. 2 **The development, installation and maintenance of new technologies require skills at all levels of educational training. Many of these jobs, such as building new power plants, cannot be exported and will remain in the United States.** So-called “green collar” jobs could fill this gap over time and provide for significant domestic employment growth, but **capitalizing on this opportunity will require government being proactive in developing programs to provide the necessary skills**. Government should provide a 21st century education to match the 21st century job opportunities, requirements and needs. **There is growing global competition for scientific and engineering talent today, and the U.S. pipeline of students is slowing**.3 The private sector, where the overwhelming majority of careers will be, knows best the current opportunities that are not being met. **Executives cite the lack of scientific, engineering and skilled talent as among the most serious challenges facing their businesses today**.4 **They know what skills will be required and can assist in developing the workforce of the future by working closely with educational institutions as well as within their own organizations**.

**C. Open immigration key to US aging transition – solves global aging.**

**Haas, '7** (Political Science Professor -- Duquesne, International Security, Summer)

**The more the U**nited **S**tates **maintains its enviable demographic position** (compared with the other great powers) **and relatively superior ability to pay for the costs of its elderly** population, **the more it will** be able both to **preserve its own position of international power dominance and** to **help other states address their aging** (and other) **problems** when it is in U.S. interests to do so. A critical implication of these facts is that such domestic policies as means-testing Social Security and Medicare payments, raising the retirement age to reflect increases in life expectancies, **maintaining largely open immigration policies to help keep the United States’ median age relatively low,** encouraging individual behaviors that result in better personal health, **and** perhaps above all **restraining the rising costs of its health-care system are critical international security concerns.** A defining political question of the twenty-first century for U.S. international interests is whether U.S. leaders have sufficient political will and wisdom to implement these and related policies. **The more proactive U.S. leaders are in minimizing** the scope of its **aging** population **and** the **costs associated** with it, **the more protected U.S. international interests will be. To ignore these costs, or even to delay** implementing various **reforms designed to limit their size, will jeopardize the level of global influence and security that the U**nited **S**tates enjoys today.

**Multiple nuclear wars.**

**Jackson & Howe, 11** (Senior Fellow – CSIS & Senior Associate – CSIS, http://csis.org/files/publication/110104\_gai\_jackson.pdf)

**A number of demographic storms are now brewing in different parts of the developing world**. The moment of maximum risk still lies ahead—just a decade away, in the 2020s. Ominously, this is the same decade when the developed world will itself be experiencing its moment of greatest demographic stress. Consider China, which may be the first country to grow old before it grows rich. For the past quarter-century, **China has been “peacefully rising,” thanks** in part **to a one-child**-per-couple **policy** that has lowered dependency burdens and allowed both parents to work and contribute to China’s boom. **By** the **2020**s, however, **the huge Red Guard generation**, which was born before the country’s fertility decline, **will move into retirement**, **heavily taxing the** resources of their children and **the state.** **China’s coming age wave**—by 2030 it will be an older country than the United States—**may weaken the t**wo pillars of the current **regime’s legitimacy**: rapidly rising GDP and social stability. Imagine workforce growth slowing to zero while tens of millions of elders sink into indigence without pensions, without health care, and without large extended families to support them. **China could careen toward social collapse**—**or**, in reaction, toward an **authoritarian clampdown**. The arrival of China’s age wave, and the turmoil it may bring, will coincide with its expected displacement of the United States as the world’s largest economy in the 2020s. According to “power transition” theories of global conflict, this moment could be quite perilous. By the 2020s, **Russia**, along with the rest of Eastern Europe, **will be in the midst of an extended population decline** as steep or steeper than any in the developed world. The Russian fertility rate has plunged far beneath the replacement level even as life expectancy has collapsed amid a widening health crisis. Russian men today can expect to live to 60—16 years less than American men and marginally less than their Red Army grandfathers at the end of World War II. By 2050, Russia is due to fall to 16th place in world population rankings, down from 4th place in 1950 (or third place, if we include all the territories of the former Soviet Union). Prime Minister Vladimir Putin flatly calls Russia’s demographic implosion “the most acute problem facing our country today.” **If the problem is not solved, Russia will weaken progressively, raising the nightmarish specter of a** failing or **failed state with nuclear weapons**. Or **this cornered bear may lash out** in revanchist fury rather than meekly accept its demographic fate. Of course, **some regions** of the developing world **will remain extremely young** in the 2020s. Sub-Saharan Africa, which is burdened by the world’s highest fertility rates and is also ravaged by AIDS, will still be racked by large youth bulges. So will a scattering of impoverished and chronically unstable Muslim-majority countries, including Afghanistan, the Palestinian territories, Somalia, Sudan, and Yemen. **If the correlation between extreme youth and violence endures, chronic unrest and state failure could persist** in much of sub-Saharan Africa and parts of the Muslim world through the 2020s, or even longer if fertility rates fail to drop. Meanwhile, many fast-modernizing countries where fertility has fallen very recently and very steeply will experience a sudden resurgence of youth in the 2020s. It is a law of demography that, when a population boom is followed by a bust, it causes a ripple effect, with a gradually fading cycle of echo booms and busts. In the 2010s, a bust generation will be coming of age in much of Latin America, South Asia, and the Muslim world. But by the 2020s**, an echo boom will follow**—dashing economic expectations and perhaps **fueling political violence, religious extremism, and ethnic strife**. These echo booms will be especially large in Pakistan and Iran. In Pakistan, the decade-overdecade percentage growth in the number of people in the volatile 15- to 24-year-old age bracket is projected to drop from 32 percent in the 2000s to just 10 percent in the 2010s, but then leap upward again to 19 percent in the 2020s. In Iran, the swing in the size of the youth bulge population is projected to be even larger: minus 33 percent in the 2010s and plus 23 percent in the 2020s. **These echo booms will be occurring in countries whose social fabric is already strained by rapid development**. **One country teeters on the brink of chaos, while the other aspires to regional hegemony. One already has nuclear weapons, while the other seems likely to obtain them**.

#### The leaked plan boosts chances of passage – gives Obama and Republicans the opportunity to move to the middle and look like they’re compromising

Robinson 2/20 (Eugene, Washington Post Writers Group, Obama’s decoy plan could deliver a winner on immigration reform, http://www.newsobserver.com/2013/02/20/2695035/obamas-decoy-plan-could-deliver.html)

WASHINGTON — Republicans spent the weekend trumpeting shock and outrage over President Obama’s leaked “backup plan” on immigration. In dysfunctional Washington, this means that prospects for comprehensive reform – including what amounts to an amnesty for the undocumented – are getting brighter.¶ “Dead on arrival” was the verdict from Sen. Marco Rubio, R-Fla., who has taken on the thankless task of leading his party back within shouting distance of reasonable on the immigration issue. The president’s plan, obtained by USA Today, would leave the nation with “unsecured borders and a broken legal immigration system for years to come,” Rubio charged.¶ Sen. Rand Paul, R-Ky., said the White House proposal – which hasn’t actually been proposed – shows that Obama is “really not serious” about reform. Rep. Paul Ryan, R-Wis., said Obama’s plan “tells us that he’s looking for a partisan advantage and not a bipartisan solution.”¶ Translation: Things are looking up!¶ Here’s the state of play: In the November election, Obama carried both the nation’s largest minority – Hispanics – and its fastest-growing minority – Asian-Americans – by nearly 3-to-1. Rubio, the son of Cuban immigrants, has been trying to explain to his party that immigration is a “threshold” issue for communities with fresh memories of arrival. Mitt Romney’s notion of reform, which he summed up as “self-deportation,” communicated hostility rather than empathy. Voters returned the favor.¶ So a bipartisan group of eight senators, led by Rubio, has been working to develop a comprehensive reform package that would provide some kind of legal status for the 11 million migrants who are here without papers.¶ The outlines of a solution are obvious. There would be a clear path to citizenship for those who were brought here as children. There would be provisional legal status, and a route to permanent legal status, for those who came as adults. There would be measures to tighten security along the border with Mexico. There would probably be some kind of guest-worker program for those who seek only to come for seasonal employment. And there would be changes to streamline the legal immigration system, especially for high-tech workers and potential entrepreneurs.¶ The problem is that Republicans have spent years demonizing undocumented immigrants as a way of appealing to xenophobic, jingoistic sentiment. So how can members of Congress switch from “these people are a plague” to “these people are welcome to stay” without facing the ire of the party’s activist base?¶ Enter the president’s draft proposal, which administration officials described as a “backup” plan that Obama may put forward if Congress is not able to reach agreement.

#### Immigration reform is still on track - leaks happen often in Washington

Reuters 2/20 (Obama says Immigration leak won't hurt reform talkshttp://www.reuters.com/article/2013/02/21/us-usa-immigration-obama-idUSBRE91K03L20130221)

(Reuters) - President Barack Obama denied on Wednesday that the leak of a backup immigration bill being drafted by the White House would hurt Senate negotiations on immigration reform and he confidently predicted Congress would pass legislation.¶ Republicans involved in a bipartisan Senate group working on an immigration overhaul package responded with criticism when details of the administration's plan surfaced in weekend news reports, despite Obama's promise to withhold his legislative proposals while lawmakers crafted their own.¶ ¶ "It certainly didn't jeopardize the entire process. The negotiations are still moving forward," Obama told San Antonio's KWEX television station, an affiliate of the Spanish-language network Univision, in an interview at the White House. He dismissed such news leaks as a common occurrence in Washington.¶ However, Obama reiterated a warning that he would be prepared to submit his own immigration bill if efforts in Congress fail.¶ Seeking to ease tensions with Republicans, Obama on Tuesday reached out directly to three U.S. senators - Marco Rubio, John McCain and Lindsey Graham - part of a "Gang of Eight" Republicans and Democrats working on an immigration deal.¶ The White House, meanwhile, denied it had intentionally leaked its own "Plan B" for revamping U.S. immigration laws.¶ Obama emphasized in last week's State of the Union address the importance of creating a clear path to citizenship for the estimated 11 million immigrants in the United States illegally.

**No support for asteroid deflection – budgetary constraints and distant threat.**

**Dearing, ‘11** – Matthew T., MA in physics and science writer (no date, cites April 7, 2011. Dynamic Patterns Research. <http://research.dynamicpatterns.com/2011/04/12/protecting-the-planet-requires-heroes-money-and-citizen-scientists/>)

Many of us while growing up and listening to our bedtime stories learned to not freak out and run screaming through the streets if we thought that the “sky is falling.” As little chickens, we were taught at an early age that it was best to be brave, calm, and rational, else be considered a crazed lunatic. This childhood behavioral bias infiltrated adulthood in the relationship between professional astronomers, policy-makers and national budget-number crunchers. When a scientist expresses probabilistic concerns about the impending doom of our planet from a cataclysmic change of a major impact event, say, in the next 100, 1,000, or 10,000 years, it requires just too much risk of political capital and tax-payer dollars to divert significant budget resources to something that might only be a concern for our uber-great grandchildren. The simultaneous efforts of two Hollywood studios in the late nineties of the last century tried to get something stirring in our cultural awareness with their mega-disaster flicks, Armageddon and Deep Impact. These features did bring us through the box office (which was certainly their primary goal!), but they did not push us en masse to the round table to prepare for the ultimate defensive plan for our planet. Combating Earth-bound asteroids, or “near-earth objects” (NEOs), is an unsolved problem, and one that citizen scientists largely ignore because it’s assumed that this issue must be only approached via the domain that has access to the massive amounts of taxpayer dollars and the international collaborations between those nations who can liberally spend all of that money. It’s this requirement of essentially unlimited funds that is the sticking point to making serious progress on defending against an event that may, or may not, happen in the upcoming budget cycle.

#### Solar sails require political capital to jump-start --- even with operational viability

Gilster 7 (Paul, Technology Columnist – News & Observer, “Reflections on Space Policy in Washington”, Centauri Dreams, 11-15, <http://www.centauri-dreams.org/?p=1580>)

Ponder the solar sail itself as seen through the prism of NASA. Work at Marshall Space Flight Center has progressed to the point that the solar sail is close to or at the status of operational viability. In other words, it wouldn’t take much to launch and deploy an actual sail mission in terms of technology. But without the needed funding, such missions don’t happen, which is why space policy can be so difficult to sort out, and so frustrating. That’s one price you pay for democracy, and while I certainly would never want to live under any other form of government, it does account for the fact that our ventures into space sometimes seem to proceed by fits and stars rather than in a stable continuum.

#### Top priority

Slater 2/20 (Wayne, senior political writer for Dallas news, http://www.dallasnews.com/news/politics/headlines/20130220-conservative-evangelical-christians-sign-on-for-immigration-overhaul-pitch.ece)

In his recent State of the Union speech, President Barack Obama made immigration reform a top priority for his second term. Both members of Congress and the White House have advanced ideas for providing a pathway to legal status, creating a guest-worker program and further securing the border.

#### Their authors exaggerate their impact.

Farley, Assistant Professor at the Patterson School of Diplomacy and International Commerce at the University of Kentucky, ‘11

[Robert, “Over the Horizon: Iran and the Nuclear Paradox," 11-16, [www.worldpoliticsreview.com/articles/10679/over-the-horizon-iran-and-the-nuclear-paradox](http://www.worldpoliticsreview.com/articles/10679/over-the-horizon-iran-and-the-nuclear-paradox)]

But states and policymakers habitually overestimate the impact of nuclear weapons. This happens among both proliferators and anti-proliferators. Would-be proliferators seem to expect that possessing a nuclear weapon will confer “a seat at the table” as well as solve a host of minor and major foreign policy problems. Existing nuclear powers fear that new entrants will act unpredictably, destabilize regions and throw existing diplomatic arrangements into flux. These predictions almost invariably turn out wrong; nuclear weapons consistently fail to undo the existing power relationships of the international system. The North Korean example is instructive. In spite of the dire warnings about the dangers of a North Korean nuclear weapon, the region has weathered Pyongyang’s nuclear proliferation in altogether sound fashion. Though some might argue that nukes have “enabled” North Korea to engage in a variety of bad behaviors, that was already the case prior to its nuclear test. The crucial deterrent to U.S. or South Korean action continues to be North Korea’s conventional capabilities, as well as the incalculable costs of governing North Korea after a war. Moreover, despite the usual dire predictions of nonproliferation professionals, the North Korean nuclear program has yet to inspire Tokyo or Seoul to follow suit. The DPRK’s program represents a tremendous waste of resources and human capital for a poor state, and it may prove a problem if North Korea endures a messy collapse. Thus far, however, the effects of the arsenal have been minimal. Israel represents another case in which the benefits of nuclear weapons remain unclear. Although Israel adopted a policy of ambiguity about its nuclear program, most in the region understood that Israel possessed nuclear weapons by the late-1960s. These weapons did not deter Syria or Egypt from launching a large-scale conventional assault in 1973, however. Nor did they help the Israeli Defense Force compel acquiescence in Lebanon in 1982 or 2006. Nuclear weapons have not resolved the Palestinian question, and when it came to removing the Saddam Hussein regime in Iraq, Israel relied not on its nuclear arsenal but on the United States to do so -- through conventional means -- in 2003. Israeli nukes have thus far failed to intimidate the Iranians into freezing their nuclear program. Moreover, Israel has pursued a defense policy designed around the goal of maintaining superiority at every level of military escalation, from asymmetrical anti-terror efforts to high-intensity conventional combat. Thus, it is unclear whether the nuclear program has even saved Israel any money. The problem with nukes is that there are strong material and normative pressures against their use, not least because states that use nukes risk incurring nuclear retaliation. Part of the appeal of nuclear weapons is their bluntness, but for foreign policy objectives requiring a scalpel rather than a sledgehammer, they are useless. As a result, states with nuclear neighbors quickly find that they can engage in all manner of harassment and escalation without risking nuclear retaliation. The weapons themselves are often more expensive than the foreign policy objectives that they would be used to attain. Moreover, normative pressures do matter. Even “outlaw” nations recognize that the world views the use of nuclear -- not to mention chemical or biological -- weapons differently than other expressions of force. And almost without exception, even outlaw nations require the goodwill of at least some segments of the international community. Given all this, it is not at all surprising that many countries eschew nuclear programs, even when they could easily attain nuclear status. Setting aside the legal problems, nuclear programs tend to be expensive, and they provide relatively little in terms of foreign policy return on investment. Brazil, for example, does not need nuclear weapons to exercise influence in Latin America or deter its rivals. Turkey, like Germany, Japan and South Korea, decided a long time ago that the nuclear “problem” could be solved most efficiently through alignment with an existing nuclear power. Why do policymakers, analysts and journalists so consistently overrate the importance of nuclear weapons? The answer is that everyone has a strong incentive to lie about their importance. The Iranians will lie to the world about the extent of their program and to their people about the fruits of going nuclear. The various U.S. client states in the region will lie to Washington about how terrified they are of a nuclear Iran, warning of the need for “strategic re-evaluation,” while also using the Iranian menace as an excuse for brutality against their own populations. Nonproliferation advocates will lie about the terrors of unrestrained proliferation because they do not want anyone to shift focus to the manageability of a post-nuclear Iran. The United States will lie to everyone in order to reassure its clients and maintain the cohesion of the anti-Iran block. None of these lies are particularly dishonorable; they represent the normal course of diplomacy. But they are lies nevertheless, and serious analysts of foreign policy and international relations need to be wary of them. Nonproliferation is a good idea, if only because states should not waste tremendous resources on weapons of limited utility. Nuclear weapons also represent a genuine risk of accidents, especially for states that have not yet developed appropriately robust security precautions. Instability and collapse in nuclear states has been harrowing in the past and will undoubtedly be harrowing in the future. All of these threats should be taken seriously by policymakers. Unfortunately, as long as deception remains the rule in the practice of nuclear diplomacy, exaggerated alarmism will substitute for a realistic appraisal of the policy landscape.