### Warming

#### Warming is not inevitable – taking action now can lessen the impact

**Washington et al 9** [Warren M. Washington, 1 Reto Knutti, 2 Gerald A. Meehl, 1 Haiyan Teng, 1 Claudia Tebaldi, 3 David Lawrence, 1 Lawrence Buja, 1 and Warren G. Strand - National Center for Atmospheric Research, Boulder, Colorado, USA. and Institute for Atmospheric and Climate Science, ETH, Zurich, Switzerland. “How much climate change can be avoided by mitigation?”, GEOPHYSICAL RESEARCH LETTERS, VOL. 36, L08703, doi:10.1029/2008GL037074, 2009, Chetan]

**Avoiding the most serious climate change impacts will require informed policy decisions**. **This in turn will require information regarding the reduction of greenhouse gas emissions required to stabilize climate** in a state not too much warmer than today. **A new low emission scenario is simulated in a global climate model to show how some of the impacts from climate change can be averted through mitigation**. **Compared to a non-intervention reference scenario, emission reductions** of about 70% by 2100 are required to **prevent roughly half the change in temperature and precipitation that would otherwise occur.** By 2100, **the resulting stabilized global climate would ensure preservation of considerable Arctic sea ice and permafrost areas. Future heat waves would be 55% less intense, and sea level rise from thermal expansion would be about 57% lower than if a non-mitigation scenario was followed**

### 2AC – Multi Plank CP

#### Federal oversight is necessary to maintain a stable NRC and nuclear industry regulatory processes

Fertel 5 [Marvin Fertel - Senior Vice President and Chief Nuclear Officer Nuclear Energy Institute “Nuclear Power's Place In A National Energy Policy,” April 28th, 2005, Lexis (CQ Congressional Testimony), Chetan]

Congressional oversight also can play a key role in maintaining and encouraging the stability of the NRC's regulatory process. Such stability is essential for our 103 operating nuclear plants and equally critical in licensing new nuclear power plants. Congress played a key role several years ago in encouraging the NRC to move toward a new oversight process for the nation's nuclear plants, based on quantitative performance indicators and safety significance. Today's reactor oversight process is designed to focus industry and NRC resources on equipment, components and operational issues that have the greatest importance to, and impact on, safety. The NRC and the industry have worked hard to identify and implement realistic security requirements at nuclear power plants. In the three-and-a-half years since 9/11, the NRC has issued a series of requirements to increase security and enhance training for security programs. The industry complied-fully and rapidly. In the days and months following Sept. 11, quick action was required. Orders that implemented needed changes quickly were necessary. Now, we should return to the orderly process of regulating through regulations. The industry has spent more than $1 billion enhancing security since September 2001. We've identified and fixed vulnerabilities. Today, the industry is at the practical limit of what private industry can do to secure our facilities against the terrorist threat. NRC Chairman Nils Diaz and other commissioners have said that the industry has achieved just about everything that can be reasonably achieved by a civilian force. The industry now needs a transition period to stabilize the new security requirements. We need time to incorporate these dramatic changes into our operations and emergency planning programs and to train our employees to the high standards of our industry-and to the appropriately high expectations of the NRC. Both industry and the NRC need congressional oversight to support and encourage this kind of stability. CONCLUSION Electricity generated by America's nuclear power plants over the past half-century has played a key part in our nation's growth and prosperity. Nuclear power produces over 20 percent of the electricity used in the United States today without producing air pollution. As our energy demands continue to grow in years to come, nuclear power should play an even greater role in meeting our energy and environmental needs. The nuclear energy industry is operating its reactors safely and efficiently. The industry is striving to produce more electricity from existing plants. The industry is also developing more efficient, next-generation reactors and exploring ways to build them more cost-effectively. The public sector, including the oversight committees of the U.S. Congress, can help maintain the conditions that ensure Americans will continue to reap the benefits of our operating plants, and create the conditions that will spur investment in America's energy infrastructure, including new nuclear power plants.

#### That is the biggest obstacle to investment – ANY reduction in stability kills new plant construction

Fertel 4 [Marvin Fertel - Senior Vice President and Chief Nuclear Officer Nuclear Energy Institute “U.S. Senate Committee on Environment & Public Works Hearing Statements”, May 20th, 2004, <http://epw.senate.gov/hearing_statements.cfm?id=221804>, Chetan]

More pertinent to the jurisdiction of this subcommittee is the prospect that companies would pursue new nuclear plants would be greatly enhanced by continuity and stability in the regulatory processes and regulatory environment at the NRC. Regulatory uncertainty is the largest perceived risk with new nuclear plant construction, so any reduction in stability of the regulatory process will damage industry and financial community prospects for new nuclear plants. Regulatory stability and continuity also are vital for the continued success of current nuclear plants. As I have previously noted, that fleet continues to operate at high levels of safety and efficiency, and the NRC should regulate the industry commensurate to this excellent record of performance

### 2AC – Reduce Restrictions CP

#### Nuclear power solves desalination – prevents global water wars that cause extinction

Gray 9 [Johns Gray - Arizona State Law Journal, “Choosing the Nuclear Option: The Case for a Strong Regulatory Response to Encourage Nuclear Energy Development”, Spring 2009, 41 Ariz. St. L.J. 315, lexis, Chetan]

Another example deals with perhaps the only resource more precious than oil and gas: Water. Utilizing nuclear power plants for water desalinization would provide a solution to the world's water supply shortage. By some estimates, fifty percent of the global population, mostly in Asia and Africa, already lack a sufficient water supply, and studies suggest this figure will grow substantially by 2025. n85 As the global population continues to increase, the earth's usable water supply remains, at best, constant; at worst, continued pollution of the earth's precious fresh [\*331] water actually decreases usable water supply even as demand increases. n86 Similar to oil and natural gas, the apocalyptic impact of water shortage occurs long before supply actually falls to zero. As water supply decreases, countries could be willing to fight for the few remaining drops, creating a slew of water wars across Asia and Africa. n87 These wars will not solve the underlying resource competition, however. Conflicts eventually become larger, more frequent, and more likely to become global.

#### Plan solves meltdowns

**Wheeler 10** – Workforce Planning Manager with Entergy; Producer “This Week in Nuclear” Podcast (John, 11/21 “Small Modular Reactors May Offer Significant Safety & Security Enhancements.” http://thisweekinnuclear.com/?p=1193)

They are smaller, so the amount of radioactivity contained in each reactor is less. So much less in fact, that even if the worst case reactor accident occurs, the amount of radioactive material released would not pose a risk to the public. In nuclear lingo we say SMRs have a smaller “source term.”  This source term is so small we can design the plant and emergency systems to virtually eliminate the need for emergency actions beyond the physical site boundaries.  Then, by controlling access to the site boundary, we can eliminate the need for off-site protective actions (like sheltering or evacuations). These smaller reactors contain less nuclear fuel.  This smaller amount of fuel (with passive cooling I’ll mention in a minute) slows down the progression of reactor accidents.  This slower progression gives operators more time to take action to keep the reactor cool.  Where operators in large reactors have minutes or hours to react to events, operators of SMRs may have hours or even days. This means the chance of a reactor damaging accident is very, very remote. Even better, most SMRs are small enough that they cannot over heat and melt down. They get all the cooling they need from air circulating around the reactor. This is a big deal because if SMRs can’t melt down, then they can’t release radioactive gas that would pose a risk to the public.  Again, this means the need for external emergency actions is virtually eliminated. Also, some SMRs are not water cooled; they use gas, liquid salt, or liquid metal coolants that operate at low pressures.  This lower operating pressure means that if radioactive gases build up inside the containment building there is less pressure to push the gas out and into the air.  If there is no pressure to push radioactive gas into the environment and all of it stays inside the plant, then it poses no risk to the public. SMRs are small enough to be built underground. This means they will have a smaller physical footprint that will be easier to defend against physical attacks.  This provides additional benefits of lower construction costs because earth, concrete and steel are less costly than elaborate security systems in use today, and lower operating costs (a smaller footprint means a smaller security force).

#### AND - Status quo facilities risk terrorist attacks

**Early et al 9** – assistant professor in the Political Science and Public Administration & Policy Departments at the University at Albany, State University of New York, Former Research Fellow at Harvard’s Belfer Center for Science and International Affairs (Bryan, with Matthew Fuhrmann and Quan Li, 4/30. “Atoms for Terror: The Determinants of Nuclear/Radiological Terrorism.” Social Science Research Network. http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=1397210)

Second, nuclear facilities present targets of opportunity for terrorist groups. Attacking structures that produce or house radioactive materials, such as nuclear power plants, could cause large-scale radiological contamination or, at least, generate that fear in the public.23 Such attacks may appeal to groups that seek mass-casualties or publicity. Indeed, numerous groups have plotted to target nuclear plants. For example, al-Qaeda possessed ―diagrams of American nuclear power plants‖ and considered using commercial airliners to strike nuclear reactors as part of the 9/11 attacks.24 On a smaller scale, the North African terrorist group Salafia Jihadia plotted to launch a suicide attack against a French nuclear power plant in May 2003.25 The more extensive a state’s civilian nuclear infrastructure, the more potential targets terrorist groups can plan and execute attacks against.

#### SMR’s solve

Carelli, et al. 10 (M.D. (Westinghouse, Science & Technology Center), P. Garone (Politecnico di Milano, Department of Management, Economics and Industrial Engineering), G. Locatelli (Politecnico di Milano, Department of Management, Economics and Industrial Engineering), M. Mancini (Politecnico di Milano, Department of Management, Economics and Industrial Engineering), C. Mycoff (Westinghouse, Science & Technology Center), P. Trucco (Politecnico di Milano, Department of Management, Economics and Industrial Engineering), M.E. Ricotti (Politecnico di Milano, Department of Energy, CeSNEF-Nuclear Engineering Division) , “Economic features of integral, modular, small-to-medium size reactors”, Progress in Nuclear Energy, Vol. 52, 2010)

Even the technological choices on the design phase can directly affects the economics of NPPs. An integral and modular approach to the design of the nuclear reactors offers the unique possibility to exploit a simpliﬁcation of the plant. This can lead to a reduction of the type and number of components. As an example, the complete integration of all the primary components inside the Reactor Pressure Vessel (RPV) reached by IRIS design (Carelli et al., 2004) avoids large, high pressure piping. This positively affects also the safety of the plant, allowing a dramatic increase of the safety level, via a reduction of the number of safety systems and a simpliﬁcation of the remaining ones. The integration concept increases also the compactness of the plant (volume over power ratio), with a reduction of the containment volume. A further positive effect is that also the security of the NPP is improved, with a small imprinting of the plant on the ground and a limited area of its skyline, leading e.g. to a reduction of terrorist air attack probability. Moreover, the plant lifetime can be increased and the plant quality of performance kept all along its lifetime, since e.g. radiation damage on the RPV is practically avoided by the inherent shielding provided by the large water thickness between the RPV and the core. Considering all these aspects, for a given size, the multiple SMRs option might decrease the Levelized Unit Electricity Cost (LUEC).

#### Even a failed terrorist attack causes extinction

Sid-Ahmed 4, political analyst 04 (Mohamed, Managing Editor for Al-Ahali, “Extinction” August 26-September 1, Issue no. 705, http://weekly.ahram.org.eg/2004/705/op5.htm)

**What would be the consequences of a nuclear attack by terrorists? Even if it fails, it would further exacerbate the negative features of the** new and frightening **world in which we are now living**. Societies would close in on themselves, police measures would be stepped up at the expense of human rights, **tensions between civilisations and religions would rise and ethnic conflicts would proliferate**. It would also speed up the arms race and develop the awareness that a different type of world order is imperative if humankind is to survive. But the still more critical scenario is **if the attack succeeds. This could lead to a third world war, from which no one will emerge victorious.** Unlike a conventional war which ends when one side triumphs over another, this war will be without winners and losers. **When nuclear pollution infects the whole planet, we will all be losers**.

#### US-lead development of nuclear power solves poverty – clean, affordable energy is key

**Robinson and Orient 4** - Professor of Chemistry and Founder of Oregon Institute of Science and Medicine AND \*\* executive director of the Association of American Physicians and Surgeons (Arthur and Jane, 6/14. The New American, “Science, Politics and Death.” <http://www.thenewamerican.com/node/358>)

Easily usable energy is the currency of human progress. Without it, stagnation, regression and untold human deaths will result. The lamentations of the popular press notwithstanding, there is no shortage of energy. Scientists define everything that man can perceive in the natural world as forms of "energy," including all physical objects. These forms of energy differ, however, in how easily mankind can make use of them by means of current technology. Nuclear power plants convert mass into electrical energy. This converted "nuclear energy" is, by far, the safest, cleanest and least expensive energy source available with current technology. Its use improves the standard of living, increases the quality and length of human life, and maximizes technological progress. The United States was once the world leader in the production of useful energy. Had that American leadership continued, our country and our world would be very different. Technological miracles that are only dreams today would have already taken place. Moreover, very large portions of the world's poor and underdeveloped people would have been able to lift themselves from poverty - provided they had a laboratory of liberty in which to do so - and to escape the horrible conditions in which they lead lives of desperation, constantly at the edge of death. Many people strongly desire to help humanity. They spend their lives in efforts to increase the quantity and quality of human life. Most other people, even though they do not work actively toward these goals, share the same values. They passively support things that improve human life. Those who understand energy production and its link to technological progress and who have positive humanitarian values support nuclear power. They are also in favor of hydrocarbon power derived from coal, oil and natural gas, and of hydroelectric power. Their interest in solar power, biofuel power, wind power and other alternatives is less because those methods cannot yet generate large quantities of inexpensive useful energy.

#### Ongoing poverty outweighs nuclear war and genocide—only our impact evidence is comparative

Spina 00 (Stephanie Urso, Ph.D. candidate in social/personality psychology at the Graduate School of the City University of New York, Smoke and Mirrors: The Hidden Context of Violence in Schools and Society, p. 201)

This sad fact is not limited to the United States. Globally, 18 million deaths a year are caused by structural violence, compared to 100,000 deaths per year from armed conflict. That is, **approximately every five years, as many people die because of relative poverty as would be killed in a nuclear war that caused 232 million deaths**, and **every single year, two to three times as many people die from poverty throughout the world as were killed by the Nazi genocide of the Jews over a six-year period**. This is, in effect, **the equivalent of an ongoing, unending, in fact accelerating, thermonuclear war or genocide**, perpetuated on the weak and the poor every year of every decade, throughout the world. (See James Gilligan, Violence: Reflections on a National Epidemic, New York: Vintage Books, 1997, 196).

### 2AC – Elections DA (Obama Good)

#### Romney will maintain relations Russia.

Business Insider, 9/1/**2012** (Romney Could Screw Up US Relations With Russia, p. <http://www.businessinsider.com/mitt-romneys-foreign-policy-chops-come-into-light-2012-9>)

At the same time, the potential impact of a Romney presidency should not be exaggerated. Mr Romney is not an ideological politician, and he will have solid reasons to maintain a working relationship with Russia. These include reliance on Russian transit corridors to support US forces in Afghanistan to 2015 and beyond, Russia's veto in the UN Security Council, and its potential to act as interlocutor between the US and rogue states. Finally, there is a significant element of uncertainty that stems from the lack of clarity about what Mr Romney, who has often changed his position, actually stands for. In particular, the extent of the influence on him of several competing Republican foreign policy schools (neo-conservativism, populist isolationism, realism, liberal internationalism) is unclear.

#### Even if relations are low it wouldn’t trigger nuclear conflict

Podvig 11 [Pavel Podvig – “INSTRUMENTAL INFLUENCES Russia and the 2010 Nuclear Posture Review”, Nonproliferation Review, Vol. 18, No. 1, March 2011, Chetan]

Indeed, **the 2010 Russian military doctrine substantially narrowed the role of nuclear weapons;** the 2000 version treated nuclear weapons as instruments to support the military security of Russia and its allies as well as to support international stability **and** peace. The 2010 doctrine preserved the deterrence role of nuclear weapons, but maintaining the nuclear arsenal is seen as just one of a range of measures that aim at preventing a nuclear war, along with diplomatic and other non-military measures. The new Russian military doctrine also substantially narrowed **the range of circumstances in which Moscow would consider using nuclear weapons**. In the 2000 version of the doctrine, Russia reserved the right to use nuclear weapons in response to an aggression against it or its allies that used nuclear weapons or other weapons of mass destruction (WMD). Russia also reserved the right to use nuclear weapons in response to a conventional aggression ‘‘in situations critical to national security of the Russian Federation.’’ 33 The 2010 doctrine also lists nuclear (or other WMD) aggression against Russia or its allies as a situation that would justify a nuclear response; however, it states that the conventional **aggression that would trigger a nuclear response would have to be directed against Russia and would have to ‘‘threaten the very existence of the state’’**\*a much more limited set of circumstances. 34

#### Romney will win --- he is leading in key swing state polls undecided voters will break for Romney.

**Chambers** **9/19**/2012 (Dean, Mitt Romney likely win in presidential election shown by three key polls, Examiner, p. <http://www.examiner.com/article/mitt-romney-likely-win-presidential-election-shown-by-three-key-polls>)

Rasmussen Reports has released today, three key polls that show Mitt Romney's likely win in this year's presidential election over President Obama. The Rasmussen Reports Presidential Daily Tracking Poll released today shows Romney leading 47 percent to 46 percent over Obama. Rasmussen's Daily Swing State Tracking Poll of 11 key swing states won by President Obama in 2008 shows Romney leading them by the exact same percentages. The latest Rasmussen poll of New Hampshire released today shows Romney leading there 48 percent to 45 percent. New Hampshire is a key swing state that could make a difference with its four electoral votes, and George W. Bush would have reached 270 electoral voters in 2000 without having won this state. New Hampshire had narrowly favored Obama in many polls over the last few months and while the analysis conduced here by this columnist has consistently predicted Mitt Romney will win the state (based in part on knowledge of local politics in the state having lived in New England for years), most projected have shaded New Hampshire blue and predicted it will go for Obama. This Rasmussen survey is key in that it likely shows movement in New Hampshire in the direction of Mitt Romney. In the instance of an incumbent president who enjoys just about 100 percent name recognition and is seeking reelection, most of the undecided voters are likely to swing to the challenger by election day. This is especially true when the challenger remains still less known to the public than the incumbent, as is true with former Massachusetts Governor Mitt Romney. By election day, those other nine percent not favoring Romney or Obama in the Rasmussen Daily Tracking poll are likely include less than one percent voting for third party candidates and five or six percent of those nine will likely vote for Mitt Romney. That would indicate a popular vote win by Romney of about 53 percent to 46 percent, or the reverse of Obama's win in 2008. This would lead to an electoral college total of more than 300 electoral votes for Romney. The 11 swing states tracked by Rasmussen in it's swing state tracking poll show Romney leading 47 percent to 46 percent, where some weeks ago the two candidates were tied at 45 percent in the Rasmussen tracking poll of these 11 key swing states. President Obama won these same states collectively by a 53 percent to 46 percent margin in 2008. Now he is seven percent behind that finish now in these states. Romney is likely to capture most of the undecided votes and could win these states collectively by at least a 52 percent to 47 percent margin. That would likely lead to Romney winning Colorado, Florida, Iowa, Nevada, New Hampshire, North Carolina, Ohio, Virginia and Wisconsin while having a competitive chance in Michigan and Pennsylvania. If President Obama can only win Michigan and Pennsylvania among those 11 swing states, he can not be reelected to the presidency. As these polls stand today, the election of Mitt Romney as our next president looks likely.

#### Incentives for SMR’s now non-uniques the link – cp apply to the reduce restrictions CP

**WNN 12** (World Nuclear News, 5/22. “SMR vendors apply for government funds.” <http://www.world-nuclear-news.org/NN-SMR_vendors_apply_for_government_funds-2205124.html>)

The DoE announced in March 2012 that a total of $450 million would be available to support the development and licensing for up to two SMR designs over five years. The funding, through cost sharing agreements with private industry, is expected to provide a total investment of about $900 million. The deadline for applications was 21 May. In its call for applications, the DoE said that the funding program was "to promote the accelerated commercialization of SMR technologies that offer affordable, safe, secure and robust sources of nuclear energy that can help meet the nation's economic, energy security and climate change objectives." It requested that applicants "provide their plans for attaining design certifications and licences in order to identify the most viable candidates for accelerated commercialization."

#### Overwhelming public support for nuclear energy - multiple polls

WNA 12(WNA is the World Nuclear Association. “US Nuclear Power Policy” August, 2012. http://www.world-nuclear.org/info/inf41\_US\_nuclear\_power\_policy.html)

**Public opinion regarding nuclear power has generally been fairly positive, and has grown more so as people have had to think about security of energy supplies. Different polls show** continuing increase **in public opinion favorable to nuclear power in the USA. More than three times as many strongly support nuclear energy than strongly oppose it**. Two-thirds of self-described environmentalists favor it. A May 2008 survey (N=2925) by Zogby International showed 67% of Americans favored building new nuclear power plants, with 46% registering strong support; 23% were opposed[10](http://www.world-nuclear.org/info/inf41_US_nuclear_power_policy.html#References). Asked which kind of power plant they would prefer if it were sited in their community, 43% said nuclear, 26% gas, 8% coal. Men (60%) were more than twice as likely as women (28%) to be supportive of a nuclear power plant. A March 2010 Bisconti-GfK Roper survey showed that strong public support for nuclear energy was being sustained, with 74% in favor of it[11](http://www.world-nuclear.org/info/inf41_US_nuclear_power_policy.html#References). In particular, **87% think nuclear will be important in meeting electricity needs in the years ahead, 87% support license renewal for nuclear plants, 84% believe utilities should prepare to build more nuclear plants,** 72% supported an active federal role in encouraging investment **in "energy technology that reduces greenhouse gases", 82% agree that US nuclear plants are safe and secure, 77% would support adding a new reactor at the nearest nuclear plant, and 70% say that USA should definitely build more plants in the future.** Only 10% of people said they strongly opposed the use of nuclear energy. In relation to recycling used nuclear fuel, 79% supported this (contra past US policy), and the figure rose to 85% if "a panel of independent experts" recommended it. Although 59% were confident that used reactor fuel could be stored safely at nuclear power plant sites, 81% expressed a strong desire for the federal government to move used nuclear fuel to centralized, secure storage facilities away from the plant sites until a permanent disposal facility is ready. Half of those surveyed considered themselves to be environmentalists. A February 2011 Bisconti-GfK Roper survey showed similar figures, and that 89% of Americans agree that all low-carbon energy sources – including nuclear, hydro and renewable energy – should be taken advantage of to generate electricity while limiting greenhouse gas emissions. Just 10% disagreed. Also some **84% of respondents said that they associate nuclear energy "a lot" or "a little" with reliable electricity;** 79% associate nuclear energy with affordable electricity; 79% associate nuclear energy with economic growth and job creation; and 77% associate nuclear energy and clean air. A more general March 2010 Gallup poll (N=1014) on energy showed 62% in favor of using nuclear power, including 28% strongly so, and 33% against, the most favorable figures since Gallup began polling the question in 1994. However, only 51% of Democrat voters were in favor[12](http://www.world-nuclear.org/info/inf41_US_nuclear_power_policy.html#References). An early March 2011 Gallup poll just before the Fukushima accident showed 57% in favor and 38% against, and in March 2012 (N=1024) still 57% in favor with 40% against (men: 72%-27%, women 42%-51%). **Regarding plant safety, the polls showed consistent 56-58% positive views over 2009-12, but men-women split similar. A survey conducted in September 2011** by Bisconti Research Inc. with GfK Roper **showed that although support for nuclear power decreased following the Fukushima accident** and compared with a year earlier (a survey carried out in March 2010 by Bisconti Research found 74% of Americans favored nuclear power), **62%** of the 1000 **adults** surveyed in the latest poll **were supportive of utilizing nuclear power** while 35% expressed opposition. The survey found that **82% of Americans believed that lessons had been learned from** Fukushima and 67% of respondents considered US nuclear power plants safe (the same level as reported one month before the nuclear accident in Japan occurred). Also **85% of said that an extension of commercial operation should be granted to those plants that comply with federal safety standards**, and 59% believed more nuclear power plants should definitely be built in the future, while 75% contend that “Electric utilities should prepare now so that new nuclear power plants could be built if needed in the next decade.” Finally, further expansion of the site of the nearest already operating nuclear power plant is supported by 67% and opposed by 28%. By February 2012 support had increased slightly to 64% supported using nuclear power, while 33% opposed it. Some 81% of respondents believed that nuclear energy will be important in meeting the USA's future electricity needs (compared with 80% in September), and 82% thought the USA should "take advantage of all low-carbon energy sources, including nuclear, hydro and renewable energy." Significantly, 74% believed that nuclear power plants operating in the USA are safe, up from 67% in both 2011 surveys. However, a Harris survey in February 2012 (N=2056) showed that only 40% of US adults believed that the benefits of nuclear outweigh its risks, while 41% thought the reverse. A similar poll conducted in 2011 before the Fukushima accident occurred, indicated that 42% thought that the benefits outweighed the risks, while 37% believed the opposite. In a 2009 poll, 44% thought the benefits outweighed the benefits, while 34% thought they did not. The southern states had the highest percentage of people believing the benefits outweigh the risks (at 43%), compared with 33% in the East and 41% in the Midwest and West. Some 42% of Americans thought that the benefits of using coal outweighed the risks (up from 38% positive in 2011), while 40% said the risks outweighed the benefits.

#### More than half the country support nuclear expansion – its key to job growth

Whitman 8-13 [Christine Todd Whitman CASEnergy Co-Chair, Former EPA Administrator and New Jersey Governor, “Nuclear Power Garners Bipartisan Support”, August 13th, 2012, <http://energy.nationaljournal.com/2012/08/finding-the-sweet-spot-biparti.php>, Chetan]

The energy policy that I’ve seen garner consistent support from the left and the right over the years is also one with which I’m deeply familiar. This policy involves building a diverse portfolio of low-carbon energy sources, featuring a renewed investment in nuclear energy. And it’s not just policymakers from both sides of the aisle who support nuclear energy – it’s everyday energy consumers as well. According to a Gallup poll conducted in March of this year, nearly 60 percent of Americans support the use of nuclear energy to meet our nation’s electricity needs, and a majority support expanding America’s use of nuclear power. Next-generation nuclear energy projects are underway in Georgia, South Carolina and Tennessee, thanks in part to steady popular support, as well as support from President Obama, bipartisan congressional leaders and other policymakers at the federal and state levels. An additional 10 combined construction and operating licenses for 16 plants are under review by the Nuclear Regulatory Commission. This support is founded in the fact that nuclear energy, safely managed, provides an efficient, reliable source of energy. In fact, nuclear power is the only baseload source of carbon-free electricity. It provides nearly two-thirds of the nation’s low-carbon electricity, and will continue to be an important source of energy well into the future given the advent of innovative large and small reactor designs. The use of nuclear energy prevents more than 613 million metric tons of carbon dioxide every year – as much CO2 as is emitted by every passenger car in America. Bipartisan support for nuclear energy also stems from the boost that it provides to local job markets and to local and state economies. As nuclear energy expands and as more than half of the industry workforce approaches retirement, the industry offers growing opportunities for well-paying careers. The industry already supports more than 100,000 jobs, and the combination of retirements and the construction of new facilities could create as many as 25,000 new jobs in the near term. What’s more, the construction of a nuclear facility spurs the creation of other local jobs in industries ranging from manufacturing to hospitality. The industry generates between $40 and $50 billion in revenue and electricity sales, or some $470 million in total economic output and $40 million in labor wages at each U.S. facility every year. That’s a powerful economic engine and a positive impact that leaders are embracing. As America refocuses on cleaner energy policies that help boost our economy, nuclear power is becoming a clear and critical part of a secure, sustainable energy portfolio. We need electricity and we want clean air; with nuclear energy we can have both. It’s a source of power that leaders on both sides of the aisle can support.

#### SMRs address the only public concern about nuke power

Worthington 11 [David Worthington – Contributing Editor to SmartPlanet, “Small nuclear reactors: America’s energy future?” December 18th, 2011, <http://www.smartplanet.com/blog/intelligent-energy/small-nuclear-reactors-americas-energy-future/11412>, Chetan]

Small Modular Reactor (SMR) concepts could help make future nuclear power plants in the United States safer and easier to construct while helping to recycle stockpiles of existing uranium fuel waste. The general idea behind SMRs is to cluster together many small reactors to match the output of obsolete coal or nuclear facilities. Steam output from many modules would power a common generator to produce electricity. Each module would be equipped with its own containment assembly that’s housed in a pre-fabricated unit. Think of it as a nuclear assembly line. A module would be small enough to be shipped to a new reactor build by rail or truck rather than assembly components inside of a containment dome onsite. All-in-one fabrication would streamline nuclear power plant construction by several years, said Steve Rus, executive director for nuclear technologies at Black & Veatch. SMRs would be housed in a steel and concrete embedment that resides below grade. B&V has had a sizeable nuclear business since World War II. Small modular reactor designs are also supported by the Obama administration, which sees nuclear power as a way to reduce carbon emissions. However, the public is understandably warier of nuclear power post Fukushima, and would need some reassurances of its safety. The SMR addresses the greatest perceived danger - nuclear meltdowns – a threat that has loomed since the dawn of the nuclear era. It doesn’t require active cooling systems to prevent a meltdown, and would theoretically shut down safely without any outside intervention. Traditional active cooling systems at large scale reactors utilize water pumps and back-up power systems to control residual or decay heat after a reaction is stopped. An external power source and/or coolant are eventually necessary within a matter of days. Recent third generation+ reactor designs incorporate passive cooling technologies with traditional active cooling techniques, but that approach only buys more time until there’s meltdown conditions. Several reactors at Tokyo Electric Power’s Fukushima plants melted down when diesel back-up systems failed and mainland power lines were destroyed in the wake of twin natural disasters. It was reliant on active cooling, and its engineers hadn’t envisioned a tsunami striking far inland. A module reactor’s passive cooling system could theoretically survive that scenario, and non-water cooling systems could further increase margins of safety. “The concept is these could go on almost indefinite periods in passive manner with no intervention relative to the cooling of core and decay/residual heat. Potentially, it could never require any additional intervention,” Rus said. The initial SMRs will continue to utilize water for cooling and uranium fuel, but sodium and lead bismuth alloys could foreseeably replace water in fourth generation models – provided they pass Nuclear Regulatory Commission (NRC) review, Russ said. The NRC’s regulators are very familiar with light water reactors, but alternative fuel sources would require different cooling methods, Rus said. Thorium is arguably safer than uranium both in the risk of accidents and for nuclear nonproliferation. “The coolant form is different than water, therefore there’s natural benefits in the way it cools reactor,” Rus explained. A sodium coolant would be liquid under normal operating conditions, but solidify and encase the reactor upon a cold shutdown. Molten salt is also a potential future fuel source. Aside from the NRC’s institutional history, uranium’s other advantage is that there’s also an abundance of fuel in the form of nuclear waste that is being sequestered at nuclear facilities around the United States. Spent fuel rods could become a source of energy for newer generation reactors, Rus suggested. “More than 90 percent of the energy is still in that fuel. One thing that has to come to life is recycling. After reprocessing, waste is significantly less, and then there ultimately needs to be a way to address that waste.”

#### Recent events don’t change the outcome of the election.

**Farhi**, 7/6/**2012** (Paul – reporter for the Washington Post, Do campaigns really change voters’ minds?, The Washington Post, p. <http://www.washingtonpost.com/opinions/do-campaigns-really-change-voters-minds/2012/07/06/gJQAEljyRW_story.html>)

By this reasoning, developments in the final months of the campaign rarely make much of a difference. Absent the start or conclusion of a war, a massive economic shock or the mythical “October surprise,” the vast majority of voters don’t zig or zag in the run-up to Election Day. According to Campbell, the candidates leading in the Gallup poll in late September have won in 14 of the past 15 elections.

#### Plan not key --- the state of the economy will outweigh.

New York Times, 3/13/**2012** (Muddled Economic Picture Muddles the Political One, Too, p. <http://www.nytimes.com/2012/03/14/us/politics/economy-plays-biggest-role-in-obama-re-election-chances.html?_r=1>)

The final major economic turning point of President Obama’s first term seems to have arrived. The question is which way the economy will turn. Job growth has picked up nicely in the last few months, raising the prospect that the American economy is finally in the early stages of a recovery that will gather strength over time. But with gas prices rising, the government cutting workers and consumers still deep in debt, some forecasters predict that economic growth — and with it, job growth — will slow in coming months. Politically, the difference between the two situations is vast. In one, Mr. Obama will be able to campaign on a claim, as he has recently begun to do, that the country is back on track. In another, he will be left to explain that recoveries from financial crises take years, and to argue that Republicans want to return to the Bush-era policies that created the crisis — as he tried to argue, unsuccessfully, in the 2010 midterm election. His approval rating has slipped again in some polls recently, with higher gas prices possibly playing a role. As a result, the economic numbers over the next couple of months, including an unemployment report on April 6, will have bigger political implications than the typical batch of data. The Federal Reserve acknowledged the uncertainty in its scheduled statement on Tuesday, suggesting the economy had improved somewhat but still predicting only “moderate economic growth.” Economists say the economy’s near-term direction depends relatively little on Mr. Obama’s economic policies. The standoff over Iran’s nuclear program, the European debt crisis and other events will most likely affect the economy more. But many American voters are still likely to make their decision based on the economy. Historically, nothing — not campaign advertisements, social issues or even wars — has influenced voters more heavily than the direction of the economy in an election year. “If you could know one thing and you had to predict which party was going to win the next presidential election,” Lynn Vavreck, a political scientist at the University of California, Los Angeles, said, “you couldn’t do better than knowing the change in economic growth.”

#### Energy is not a key election issues --- other issues outweigh.

**The Washington Post**, 6/27/**2012** (Energy ads flood TV in swing states, p. <http://www.washingtonpost.com/politics/energy-ads/2012/06/27/gJQAD5MR7V_story.html>)

Energy issues don’t spark much excitement among voters, ranking below health care, education and the federal budget deficit — not to mention jobs and the economy. And yet those same voters are being flooded this year with campaign ads on energy policy. Particularly in presidential swing states, the airwaves are laden with messages boosting oil drilling and natural gas and hammering President Obama for his support of green energy. The Cleveland area alone has heard $2.7 million in energy-related ads. The disconnect between what voters say they care about and what they’re seeing on TV lies in the money behind the ads, much of it coming from oil and gas interests. Those funders get the double benefit of attacking Obama at the same time they are promoting their industry. Democrats also have spent millions on the subject, defending the president’s record and tying Republican candidate Mitt Romney to “Big Oil.” Overall, more than $41 million, about one in four of the dollars spent on broadcast advertising in the presidential campaign, has gone to ads mentioning energy, more than a host of other subjects and just as much as health care, according to ad-tracking firm Kantar Media/Cmag. In an election focused heavily on jobs and the economy, all of this attention to energy seems a bit off topic. But the stakes are high for energy producers and environmentalists, who are squared off over how much the government should regulate the industry. And attention has been heightened by a recent boom in production using new technologies such as fracking and horizontal drilling, as well as a spike in gas prices this spring just as the general election got underway. When asked whether energy is important, more than half of voters say yes, according to recent polls. But asked to rank their top issues, fewer than 1 percent mention energy.

#### Tax credits are uncontroversial and do not trigger perceptions of spending.

Rigby 9, 1/5/2009 (Elizabeth – Assistant Professor of Political Science at the University of Houston, Research Affiliate at the National Center for Children and Families at Columbia University, Tax Credits vs. Spending: Why Progressives Should Care How the Stimulus is Delivered, Huffington Post, p. <http://www.huffingtonpost.com/elizabeth-rigby/tax-credits-vs-spending-w_b_155389.html>)

Described as a move to placate wary Republicans who shudder at an ungodly price tag nearing $800 billion, Obama has indicated that nearly half of the package will take the form of tax credits to individuals and businesses. As a political strategy, this tax-cut-heavy proposal seems smart, as evidenced by Republican leader Mitch McConnell's assessment of the proposal as "the sort of thing we could have bipartisan agreement on." But, from a progressive perspective, does the use of tax credit represent a political compromise that will limit the potential for the stimulus to seed more substantial policy change? Or is this truly a policy design that everyone should embrace? To answer these questions, I identify the key differences between tax credit and direct spending policy designs. These differences illustrate what is gained and what is lost by taking a tax-focused approach, as well as the details that progressives should attend to in order to make full use of this political opportunity. Before highlighting differences, I should note that tax credits operate like spending programs in many ways. Most importantly, they must be paid for through higher taxes elsewhere or equivalent cuts in spending to make up for forgone tax revenue. For this reason, I prefer the term "tax expenditures," which better captures the (albeit indirect) spending resulting from policy. Of course we know that, despite their budgetary similarity to direct spending programs, tax expenditures remain more political popular, easier to enact, and more sustainable over time. This is the result of a set of key differences, described below. #1: Tax Expenditures have Hidden Costs As described by Christopher Howard in his book, The Hidden Welfare State, the forgone taxes from tax expenditures do not show up in the normal government budgeting and policy review process. As a result, tax expenditures can provide governmental benefits without increasing the measure of government spending and by (ironically) seeming to reduce the total size of government. Not surprisingly, this slight of hand is popular with policymakers from both political parties who enjoy distributing benefits with little attention to their costs, making them much easier to enact and protecting the benefits from later cuts. #2: Tax Expenditures have Hidden Beneficiaries Since tax expenditures are distributed through the tax system, citizens can claim a benefit without needing to apply for or enroll in a government program. As a result, these benefits typically come with little stigma of the sort attached to Food Stamp or unemployment insurance receipt. This feature explains the paradox of wealthy conservatives who express disdain for those accepting welfare while happily claiming their mortgage and employer health insurance tax deductions each year. And it also helps explain why calls to cut government largess rarely focus on eliminating benefits delivered through the tax system and focus instead on cuts to programs that can be more easily attacked as handouts for the undeserving. #3: Tax Expenditures Bypass the Appropriations Process Unlike spending programs which must be first authorized and then go through appropriations to receive actual funding, tax expenditures are created and funded by the same committee in each chamber of Congress. This cuts in half the number of veto points (times that an organized opposition can kill a proposed bill) and makes tax expenditures easier to pass. Further, the absence of an annual appropriations requirement produces a virtual entitlement program in which all eligible tax filers who claim the credit receive the benefit without the waiting lists or capped spending seen in most spending programs. And finally, by avoiding the appropriations stage, tax expenditure proposals pass through the Congressional process avoiding most of the earmarking that produces the "legislative pork" abhorred by most Americans. Since tax expenditures are typically legislated by formula rather than earmark, they remain "cleaner" with less waste. #4: Tax Expenditures are Automatic Policy Tools As defined by Lester Salamon in his tome, The Tools of Government, automatic policy tools use an existing administrative structure rather than requiring a new administrative agency or infrastructure. As a result, a new tax expenditure policy can more quickly reach their designated target -- in this case the American economy. In fact, Obama's advisors have expressed a desire to get the stimulus into Americans' pockets quickly and noted a potential strategy in which they will make the individual-level credit retroactive to the 2008 tax year and adjust withholding formulas so that our paychecks will start reflecting the decrease in payroll taxes right away. That quick turnout-around is not possible for a new spending program that requires a more complex implementation structure. #5: Tax Expenditures are Indirect Policy Tools Again as defined by Salamon, indirect policy tools are characterized by the separation between the entity authorizing and financing the tax expenditure (in this case the federal government) and the entity that will actually carry out the services the expenditures provide. As a result, government has little control over how, when, and where government funds are spent. This is seen as an advantage by those wary of government intervention and trusting of the market, but as a disadvantage by those wanting to target the stimulus package to particular ends (such as spending rather than saving or to food assistance versus more fungible aid). In the longer term, reliance on indirect policy tools can also decrease public support for governmental solutions to social problems. This effect is illustrated in Jacob Hacker's The Divided Welfare State, which illustrates how our nation's heavy reliance on private pension and health benefits creates incentives for private actors to block significant public expansions in these areas. He notes how indirect support in the form of tax expenditures (and subsidies) from the government to private businesses and actors can facilitate the organization and advocacy of these groups who stand in the way of later public service expansion. Implications for the Stimulus and Beyond Considering these features, it is likely that Obama's use of tax expenditures for nearly half of the stimulus package is likely to ease enactment of the program by making bipartisan agreement easier due to the hidden costs (#1), the potential for quick and efficient implementation due to the automatic nature of program (#4), the lack of government administration (#5), and the ability to enact a tax expenditure package without opening up the door to earmarks and pork that would raise the overall price tag (#3). In essence, this is as "small" as "big government" can be. As a result, the part of the stimulus delivered this way is likely to be less controversial and more efficiently administered. Yet, these key differences between tax expenditures and spending programs highlight two other factors of importance to those concerned about progressive policy priorities. First, the use of tax expenditures makes the distributional consequences of the policy (i.e. who gets what) all the more important since the hidden nature of the costs (#1) and beneficiaries (#2), as well as lack of annual appropriation requirements (#3) will likely allow for any benefits to be sustained over time unlike many welfare, health, and social service programs that are being cut as we speak. This creates a real possibility for policy benefiting low-income and middle-class Americans; but, the degree to which the opportunity is seized depends on the details of the tax expenditures package (rather than the use of tax expenditures themselves). And secondly, the pairing of tax expenditures with spending programs can overcome most progressive concerns of the tax expenditure approach -- as long as the spending is really done right! For example, although the indirect nature of a tax-focused approach (#5) will dilute the governmental investment throughout our (still) large economy, the other half of the stimulus package comprised of direct spending programs can focus on those areas of aid and investment that we do not want the market alone to determine. For example, investments in already established spending programs that provide unemployment insurance, food stamps, and health care to those in financial crisis can assure that basic needs are met in ways that the more indirect nature of the tax expenditures just can not. Similarly, since even successful tax expenditures are rarely perceived as governmental assistance, it is the spending programs in the stimulus that will determine public perceptions regarding the capability of government to address a crisis and put us back on the right track. The bureaucratic bungling of a billion dollar package could damn our hopes of large-scale reform for decades, while a careful and competent set of spending priorities enacted without waste and corruption could help rebuild support for public programs that will pay dividends later on. The use of tax expenditures to distribute nearly half of the aid, can actually make it easier for the federal government to spend enough money to stimulate our economy while also cutting in half the size of spending programs that must be carefully administered devoid of waste, fraud, and abuse that would limit later efforts to build on the initial investment.

### 2AC – Clean Energy DA

#### SMRs spur renewable development, and integrate all energy sources into the grid

Ruth et al 11 [Mark Ruth, Mark Antkowiak, and Scott Gossett – The Joint Institute for Strategic Energy Analysis: on behalf of the U.S. Department of Energy’s National Renewable Energy Laboratory, the University of Colorado-Boulder, the Colorado School of Mines, the Colorado State University, the Massachusetts Institute of Technology, and Stanford University - A Report Prepared for the United States Department of Energy, “Nuclear and Renewable Energy Synergies Workshop: Report of Proceedings”, December 2011, <http://www.nrel.gov/docs/fy12osti/52256.pdf>, Chetan]

The U.S. Energy Freedom Center represents the end-state vision of the Initiative that closes the nuclear and carbon fuels cycles. The Center is planned as an SMR development and demonstration complex that will utilize nuclear process heat to produce hydrocarbon, synthetic, and alternative fuels, and will spawn energy related manufacturing and other supply chain vendors in the surrounding region. Together, the Center and surrounding manufacturing facilities are intended to create sustainable manufacturing and energy production jobs in the “regional energy corridor.” 2.5 Small Reactors for Energy Supply: Islanded Generation and Load Management Philip O. Moor of High Bridge Associates, with the help of his colleague Bruce Alatary, introduced the advantages that SMRs provide for the challenges and threats of the modern power system. Moor stated that one of the challenges is that mismatches between generation and load cause frequency mismatches and require a variety of sources to generate and store power (Moor and Alatary 2011). Another challenge that Moor identified is managing disruptions. The current power system includes baseload generation, spinning reserve with rapid ramp up, and other fast-start units like simple gas turbines. Any disruption to this electricity supply chain can be costly and require long recovery times. These disruptions include natural threats like earthquakes and severe weather, as well as manmade threats such as vandalism, cyberattacks, and terrorism. Furthermore, existing energy storage options only provide short-term solutions for grid disruptions. Moor defined the Smart Grid as a collective term for communication and control enhancements to the electricity grid using digital information and advanced controls technology. It dynamically optimizes grid operations and resources to get power where it is needed, when it is needed, while minimizing peaks and spinning reserve requirements. Moor identified the challenge of protection from increased susceptibility to cyberattack due to advanced computer technology. Moor advocated for SMRs as an alternative, non-fossil fuel generation source to enhance system reliability. SMRs offer secure multi-year operation that can be run independent of the grid if desired. Like other nuclear options, SMR operations are free of greenhouse gas emissions. Like other nuclear power technologies, thermal energy from SMRs can be used for ancillary purposes like district heating and industrial process heat to enhance cycle efficiency. In addition, SMRs are compatible with renewable resources like wind, solar, biomass, and tidal power. SMRs could also form the basis of a localized or “islanded” grid that is isolated from the larger power grid either geographically or by design. Moor described hypothetical micro-grids based on paired SMRs with backup diesel generators used to guarantee power to essential services. He stated that while water-cooled SMRs require automated systems, liquid-metal cooled and gascooled SMRs inherently follow load. Thus they have advantages in an islanded grid. When electricity demand is low, the SMR could provide energy to ancillary services like water purification, district heating, and hydrogen production.

#### Nuke power key to lower electricity prices

Nestle 12 – has longstanding professional experience in the area of energy policy due to his work with the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) (Uwe, February. “Does the use of nuclear power lead to lower electricity prices? An analysis of the debate in Germany with an international perspective” Energy Policy, Volume 41, Pages 152–160)

The call for an increased use of nuclear power is heard in many countries—even after the nuclear accidents in Fukushima, Japan. Supporters of nuclear power argue that this will reduce electricity prices, compared to using less nuclear energy. Furthermore they claim that lower prices will boost economic activity and thus lead to more jobs. In this line of argument the effect of extended nuclear plant life spans on electricity prices is politically of the utmost importance. Electricity price levels finally are not only a matter of concern for single households but in particular for sectors. For the relatively few companies for which higher prices could lead to competitive disadvantages in international trade it might be decisive. In 2000, the German Federal Government signed a contract with the nuclear industry to phase out nuclear energy by 2022. In the amendment of the nuclear power act in 2001 this timetable to phase out nuclear energy entered into force. Only few years later, the discussion on the future of nuclear energy in Germany restarted. One of the major arguments was that prices would be lower if the phase out of nuclear energy is delayed. Electricity prices depend on a variety of factors, one factor might be the availability of nuclear power in the energy mix of a country. It is difficult to predict how these factors interact. In Germany different approaches for assessing the impact of extended nuclear plant life spans are used. Scientific reports on this issue for the Government, industry, or other interest groups often reverts to complex models that represent the electricity market. On the basis of certain assumptions they try to predict the electricity price for decades ahead. In these models nuclear plant life span is one assumption that can be varied. In contrast to such exact quantitative approaches indicators can be used for either revealing general tendencies or for scrutinising the predictions of complex electricity market models. In 2009 and 2010 a number of studies were undertaken using complex theoretical electricity market models. They all concluded that extended nuclear plant life spans will lead to reduced prices for electricity, an increase in GDP, and more jobs. One of these studies was commissioned by the German Federal Government. In October 2010 its results were used to justify delaying the nuclear phase out in Germany from 2022 – as decided in 2000 and 2001 – to at least 2036.

#### Solves the economy

Perry 12 (Mark, Prof of Economics @ Univ. of Michigan, "America's Energy Jackpot: Industrial Natural Gas Prices Fall to the Lowest Level in Recent History," http://mjperry.blogspot.com/2012/07/americas-energy-jackpot-industrial.html)

Building petrochemical plants could suddenly become attractive in the United States. Manufacturers will "reshore" production to take advantage of low natural gas and electricity prices. Energy costs will be lower for a long time, giving a competitive advantage to companies that invest in America, and also helping American consumers who get hit hard when energy prices spike. After years of bad economic news, the natural gas windfall is very good news. Let's make the most of it." The falling natural gas prices also make the predictions in this December 2011 study by PriceWaterhouseCoopers, "Shale gas: A renaissance in US manufacturing?"all the more likely: U.S. manufacturing companies (chemicals, metals and industrial) could employ approximately one million more workers by 2025 because of abundant, low-priced natural gas. Lower feedstock and energy cost could help U.S. manufacturers reduce natural gas expenses by as much as $11.6 billion annually through 2025. MP: As I have emphasized lately, America's ongoing shale-based energy revolution is one of the real bright spots in an otherwise somewhat gloomy economy, and provides one of the best reasons to be bullish about America's future. The shale revolution is creating thousands of well-paying, shovel-ready jobs in Texas, North Dakota and Ohio, and thousands of indirect jobs in industries that support the shale boom (sand, drilling equipment, transportation, infrastructure, steel pipe, restaurants, etc.). In addition, the abundant shale gas is driving down energy prices for industrial, commercial, residential and electricity-generating users, which frees up billions of dollars that can be spent on other goods and services throughout the economy, providing an energy-based stimulus to the economy. Cheap natural gas is also translating into cheaper electricity rates, as low-cost natural gas displaces coal. Further, cheap and abundant natural gas is sparking a manufacturing renaissance in energy-intensive industries like chemicals, fertilizers, and steel. And unlike renewable energies like solar and wind, the natural gas boom is happening without any taxpayer-funded grants, subsidies, credits and loans. Finally, we get an environmental bonus of lower CO2 emissions as natural gas replaces coal for electricity generation. Sure seems like a win, win, win, win situation to me.

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