### 2nc overview

**Counterplan solves 100% of the case, the only evidence they have is about why incentives are key to reach cost parity they have no evidence that those incentives should be guaranteed and extended beyond that. Once the tech reaches cost parity incentives aren’t needed because the tech is already competitive.**

**Even if they win that the tech normally wouldn’t be competitive either way that doesn’t assume the cp, 1nc hayward evidence indicates that including termination of incentives cause companies to innovate and lower prices so that they stay afloat after incentives are removed causes better tech than the aff and widespread adoption.**

### 2nc wind ptc solvency

#### **Counterplan solves for certainty while avoiding budgetary concerns – their solvency author**

Wiser, 2007 (Ryan; Scientist – Lawrence Berkeley National Laboratory, “Wind Power and the Production Tax Credit: An Overview of Research Results” Testimony Prepared for a Hearing on ‘Clean Energy: From the Margins to the Mainstream’ Senate Finance Committee, 3/29, <http://eetd.lbl.gov/EA/EMP/reports/wiser-senate-test-4-07.pdf>)

Finally, since many of the design and extension options discussed in this testimony would, if addressed, likely lead to increased renewable generation development and a correspondingly higher PTC budgetary impact, it is worth considering how to contain the cost of the policy within acceptable limits while still achieving as many policy goals as possible. One way to potentially accomplish this goal is to gradually reduce the level of the PTC over the extension period, presumably in concert with renewable technologies becoming more mature and cost-competitive. For example, a 10-year PTC extension might start at current levels ($15/MWh not adjusted for inflation) for projects built during the first year of the extension, but then decline in value over the extension period, such that projects built later in the 10-year period would receive a reduced PTC. The long-term nature of such an extension would provide the industry with the certainty that it seeks, while the declining incentive level would help contain the cost to the Treasury. Though such an approach deserves consideration, one caution is that wind power costs have risen substantially in recent years, and care is therefore warranted so as not to reduce the PTC to a level that is unable to support new project development (assuming, again, that increased renewable energy development is the goal of the PTC).

### 2nc CP solvency

#### Performance-based incentives solve without picking winners – substantially boosts innovation more than the plan

**Jenkins, 12** – Director of Energy and Climate Policy at the Breakthrough Institute (Jesse, Congressional Testimony before the Senate Committee on Energy and Natural Resources, 5/22, <http://www.energy.senate.gov/public/index.cfm/files/serve?File_id=31b79a1a-83a0-4ae6-8c80-30fe754ad0ea>)

Several policies could be structured to meet these criteria, including:

• Competitive deployment incentives could be created for various clean tech segments of similar maturity, with incentives for each segment falling steadily over time to demand and reward continual innovation and price improvements.20

• Steadily improving performance‐based standards could create both market demand and spur consistent technology improvement.21

• “Top-runner” programs competitively establish performance standards or financial incentive levels based on the leading industry performers in each market segment, forcing other firms to steadily innovate to stay competitive in the market.22

• Demanding federal procurement opportunities could be created to drive both market opportunities and ensure steady improvement of each successive generation of product, particularly when advanced energy technology products align with strategic military needs.23

• Reverse auction incentives could be established for varying technologies to drive industry competition and innovation.24

If structured to adhere to these criteria, a new era of advanced energy deployment policies will neither select “winners and losers” a priori, nor create permanently subsidized industries. Rather, these policies will provide opportunity for all emerging advanced energy technologies to demonstrate progress in price and performance, foster competitive markets within a diverse energy portfolio, and put these segments on track to full subsidy independence.

#### The CP’s cost reduction conditions pressure companies to innovate – this is the only way to ensure continued innovation and making new energy competitive. Otherwise, natural gas will out-compete the plan despite the incentives, causing a market bust

**Jenkins et al, 12** - Director of Energy and Climate Policy at the Breakthrough Institute (Jesse, “Beyond Boom & Bust: PUTTING CLEAN TECH ON A PATH TO SUBSIDY INDEPENDENCE” April,

<http://assets.nationaljournal.com/Beyond%20Boom%20and%20Bust_Embargoed_4_17.pdfhttp://assets.nationaljournal.com/Beyond%20Boom%20and%20Bust_Embargoed_4_17.pdf>)

These and other clean energy technologies, however, must continue to improve substantially. Costs overall remain higher than fossil competitors, and as the emergence of low-cost shale gas demonstrates, the energy sources that clean technologies are competing against are not standing still. After three decades of private and public-sector collaboration to develop cost-effective technologies to extract natural gas from shale deposits, the “shale revolution” has unlocked large new supplies of domestic natural gas and slashed spot market prices to one-fifth of the peak levels reached in 2008. 85 Solar, wind, nuclear and other zero-carbon energy must now redouble efforts to reduce costs to stay competitive in North American electricity markets (see Part 2 above).

Fortunately, energy technology experts at the International Energy Agency 86 point to numerous remaining technical opportunities to achieve significant cost reductions and performance improvements across a range of clean tech segments, from wind and solar power to enhanced geothermal energy systems, advanced nuclear designs, and improved vehicle technologies and fuels. Successful competition with fossil fuels is possible in the near- to medium-term—the steady process of innovation is the key.

Still, the reality is that until technological innovation and cost declines can secure independence from ongoing subsidy, clean tech segments will remain continually imperiled by the threat of subsidy expiration and political uncertainty. Meanwhile, public tolerance for significant energy subsidies or the internalization of higher prices for energy is limited. 87 If clean energy technologies scale up without corresponding declines in price, this limited tolerance will eventually be expended, leading to another market bust. This means that the simple, perpetual extension of today’s clean energy subsidies and policies, with its somewhat passive approach to innovation, offers no sustainable path beyond a cycle of clean tech boom and bust.

It is true that the federal government has historically devoted greater total subsidies to fossil energy sources than to clean energy sources 88—a fact that changed only recently with the large temporary increase in federal clean tech spending documented in this report 89—and that fossil sectors continue to enjoy subsidies to this day. It is long-past time to end subsidies for mature fossil energy technologies as well. If subsidies for clean tech sectors must phase out as these sectors mature, there is little rationale for perpetual subsidization of well-established fossil energy production methods and technologies.

At the same time, subsidies for clean tech markets in the United States are many times greater than US fossil fuel subsidies when considered per unit of energy generated, meaning that the wholesale termination of all energy subsidies would not automatically make clean energy technologies cost competitive.

Policy makers who may disagree about the appropriate role of government in the energy sector should therefore seek neither across the board cuts to energy subsidies nor their simple maintenance. Rather, they must engage in serious-minded, innovation-centered reform.

For their part, clean tech companies and investors would do well to lead this energy policy reform effort. While many clean tech entrepreneurs deserve credit for achieving innovation and technology improvements under existing subsidy regimes that should better reward their efforts, others have obtained subsidies without facing pressure to reduce costs or improve performance. Embracing innovation-focused policy reform will ensure US firms are well positioned to outcompete international challengers, as well. Simple deployment subsidies or policies to create demand, for example, still allow foreign competitors to undercut domestic manufacturers and seize larger and larger market shares, as Chinese solar PV companies have proven in the last three years. 90 Only steady innovation can keep US firms at the leading edge of clean tech sectors, and a supportive policy regime will be essential.

Businesses and policy makers alike must therefore understand that the true economic rewards in clean energy industries will come not from producing technology for subsidy-created markets that vacillate wildly with the public mood and the political cycle but rather by producing cheap and reliable clean energy technologies that can compete on cost with both international competitors and conventional fossil fuels.

The coming collapse of US clean tech policies thus presents a critical opportunity for intelligent energy policy reform. With the US clean energy policy system set to be effectively wiped clean in the coming years, American business and policy makers must now unite to craft a coordinated new set of limited but direct federal strategies optimized to drive innovation and make clean energy subsidy independent over time. With such a strategy in place, the United States also has the potential to successfully make clean energy technologies cheap enough for widespread export to energy-hungry markets throughout the world.

#### Increasing incentives alone leads to technological stagnation – conditioning incentives on performance will drive innovation and will spur Moore’s law in the energy sector

**Stepp, 12 -** Senior Policy Analyst with the Information Technology and Innovation Foundation (ITIF) specializing in climate change and clean energy policy (Matthew, “Clean Tech Headed for Stagnation,”, 5/14, <http://theenergycollective.com/node/84873>)

But even if much of this funding continues, the nascent clean tech industry is on a potential path of stagnation. In absence of long-term, significantly larger subsidies (which are politically unlikely), government support for clean energy R&D are central to developing and deploying competitive clean tech. In other words, clean tech growth nationwide (and globally) will be determined not by subsidies, but by innovation that can lead to technologies that are better and cheaper than fossil fuels.

Yet, our policy choices often don’t reflect this reality. According to ITIF’s Energy Innovation Tracker, the U.S. is investing roughly $6 billion in clean energy R&D in FY2012 – on average a third what leading experts think the U.S. should be investing. In fact, the bulk of the federal government’s historic investment in clean energy – nearly three quarters of the $150 billion – is going to the deployment of existing technologies that are not cost-competitive with fossil fuel sources of energy. While these deployment incentives expand domestic supply chains and are spurring incremental innovations, the policies are acting like blunt force tools propping up lower-risk technologies while playing little role in incenting innovation and technologies to put clean energy on a path to subsidy independence. By not orienting the significant federal investment in clean tech towards spurring innovation while grossly underfunding R&D, the U.S. is failing to jump start and accelerate the clean tech innovations needed to create a robust, long-term sustainable industry. Even if the expiring tax incentives are extended as is, the long-term stagnation of the industry will still occur due to a lack of innovation. If we want a global clean tech revolution driven by the marketplace, we need to bring the equivalent of “Moore’s law” (the prediction that computing power would double every 24 months while costs would fall by half) to clean energy. Nothing less will work.

But it’s not too late to avert both the short-term clean tech bust and long-term innovation stagnation if federal policymakers and clean energy advocates truly make innovation less like empty rhetoric and more its core goal. This means fully funding key clean energy innovation R&D programs even in a time of budget austerity. Consistent support for innovation is absolutely necessary – just ask the fossil fuel industry which continues to reap the benefits of a century’s worth of government largesse deficits or not – and cutting innovation programs does more harm than good to the deficit and economy.

Policymakers must also reform clean tech deployment subsidies to link early stage tech development with commercialization. Simply extending expiring or expired subsidies and tax incentives are simply not enough and will only continue to marginally grow the industry. It’s surely not a long-term solution to continue deploying technologies carte blanche even if they don’t hold the promise of competitiveness. A group re-think on clean tech subsidy programs is critical. It’s for “smart” deployment policies that work to pull transformative innovations, rather than just extend incremental innovations of costly energy technologies.

### AT: Perm – do both

**Doesn’t solve- providing the plan’s guarantee of incentives cancels out any benefit to conditioning separate incentives based on cost. The plan’s guarantee eliminates any reason the industry would have to reform because they get the plan regardless of whatever measures they take to become cost competitive- that’s Jenkins and Hayward – the credibility of the condition depends upon the possibility of termination**

#### All of our solvency turns are disads to the permutation – diminishing subsidies conditioned on performance are vital to innovation

**Jenkins, 12** – Director of Energy and Climate Policy at the Breakthrough Institute (Jesse, Congressional Testimony before the Senate Committee on Energy and Natural Resources, 5/22, <http://www.energy.senate.gov/public/index.cfm/files/serve?File_id=31b79a1a-83a0-4ae6-8c80-30fe754ad0ea>)

Whatever form it takes, a new suite of advanced energy deployment policies must simultaneously drive market demand and continual innovation.

By and large, today’s energy subsidies do not do enough to support America’s innovators, and they have not yet succeeded in driving down the costs of advanced energy technologies far enough to compete with conventional fuels. For example:

• Many of today’s clean energy subsidies are focused primarily on supporting the deployment of existing energy technologies at current prices, and most provide no clear pathway to subsidy independence. The federal renewable electricity PTC, for example, has provided the same level of subsidy to wind power since initial enactment in 1992. Subsidy levels increase each year at the rate of inflation, keeping per MWh subsidy levels constant in real dollar terms and providing no clear incentive for continual cost declines or pathway to eventual subsidy independence.

• If not designed with care, deployment policies can also lock out more promising but higher risk technologies from markets, slowing their development. This is a challenge in particular for the renewable portfolio standard and clean energy standard policies given serious consideration by this Committee. These policies typically encourage deployment of the lowest-cost qualifying energy technology available—generally wind power or biomass, or in the case of a proposed CES, natural gas-fired plants. Yet if designed in this manner, RPS or CES policies may do little to drive down the price of other advanced energy technologies, such as solar or advanced nuclear reactor designs, that may have higher costs now but hold the potential to become much cheaper in the long-run.

• Intermittent and haphazard policy support can also wreak havoc with the business confidence necessary for the long-term investments required to develop new and improved products. The PTC for wind power, for example, was first enacted in 1992, but has since expired three times, and has been renewed a total of seven times, often with less than a month to spare before pending expiration. Other clean tech subsidies, including key tax credits for solar, biofuels, energy efficient products, and other segments have experienced similarly erratic expirations. The market effects are chilling, and many private firms are forced to focus principally on ramping-up production for subsidized markets while they last, rather than pioneering next-generation designs and manufacturing processes for the long-term. The intermittent nature of many advanced energy support policies thus slows the pace of innovation in these sectors and actually prolongs the amount of time these sectors remain reliant on public subsidy.

The United States can do better than this. Deployment subsidies and policies should be reformed and designed from the beginning to better support innovative U.S. firms and reward companies for developing, producing, and improving advanced technologies that can ultimately compete on price with both fossil fuels and international competitors alike. Each dollar of federal support today should be optimized to move maturing advanced energy technology sectors towards eventual subsidy independence as soon as possible.

### AT: permanency key

**The argument that their evidence makes as to why there needs to be a long term incentive for wind power is market certainty**

**1). CP doesn’t link to this argument only reason why certainty is key is so that the tech can get over initial startup risks for investors, once the technology has established price parity with other sources and is feasible via innovation there is no more risk for the tech which means there is no more need for the incentive this means that investors will always perceive the incentive as certain as long as there is risk.**

**2). we also worded the cp text well on this issue the cp text says that the incentives are only diminishing as they become competitive the issue with the squo isolated in their evidence Is that they have to be constantly renewed. The cp fixes that issue by making it only an issue of the readiness of the tech**

**3). All of our innovation arguments links turn this argument- the industry will collapse because of stagnation in tech development they never get tech to be competitive which collapses investment**

### 2nc heg overview

**Disad outweighs the risk of a solvency deficit- collapse of competitiveness eviscerates hegemony- that is the only thing keeping in check our rivals and nationalistic rivalries- those escalate to nuclear war and extinction**

**Heg is a controlling impact- deters any sort of conflict escalation functions as impact defense to their impacts**

**Faster timeframe- the net benefit is based on investor confidence collapse comes quickly, and spreads globally**

**Turns the aff all of our solvency arguments are reason why they would collapse investor confidence which short circuits the deployment of the technology**

### 2nc link

**1nc sweezey evidence- continual subsidies give no incentive to innovate they will never have to compete on a level playing field- this collapses investor confidence and bursts the energy bubble**

### 1nc – solvency

#### Governments don’t have ready access to information necessary to direct energy markets

**Gordon, 8** - professor emeritus of mineral economics at the Pennsylvania State University (Richard, “The Case against Government Intervention in Energy Markets Revisited Once Again” CATO Policy Analysis, 12/1, <http://www.cato.org/pubs/pas/pa-628.pdf>)

A key aspect of the modern economic theory of intervention is skepticism about whether governments in fact have the ability and desire to remedy market failures and increase efficiency. As a result, theories of government failure have proliferated. Columbia economist Jagdish Bhagwati has neatly summed up the standard uses of market-failure arguments as the “puppet government approach.” 91 The old-fashioned textbook government possesses far more prescience and acceptance of economic principles than do actual governments. Real governments lack the competence and the motivation to increase efficiency. Moreover, intervention is expensive to design and operate properly. Thus, the inefficiencies must be great for regulation to be desirable.

A remarkable article by Ronald Coase, “The Problem of Social Cost,” is the critical source of the last point and a much more modern appraisal of intervention. 92 In the essay, Coase dealt with a much-discussed but badly dated analysis of “externalities” by A.C. Pigou, a longtime professor of economics at Cambridge University. Externalities are the incidental effects of economic actions on people who are not directly involved. These can be harmful, as with pollution and noise, or beneficial, as with pollination of plants by bees.

Coase emphasized two defects of Pigou’s analysis. First, Pigou presumed that government intervention always was needed, but Coase provided numerous examples of how cures to externality problems were secured privately. Second, Pigou asserted that, when confronting positive externalities (where by definition the costs to society were lower than the costs to the private producers or consumer), a subsidy to the producer or consumer was appropriate. Conversely, negative externalities should be taxed. Coase showed that this also was wrong; subsidizing the abatement of a detrimental externality would produce the same result as a Pigouvian tax. Coase’s insights proved remarkably impervious to criticism. Two potential problems, however, are evident. First, Coase tacitly assumes that the beneficiaries of the tax are not so different from the beneficiaries of the subsidy that demands shift. Second, an implicit further condition of optimum externality response is that the response should ensure that only firms whose total social value exceeds their total social costs should survive. The correct social policy requires additional measures to attain this goal. 93

Coase is well aware that the choice of policy response affects the welfare of those involved. By example, he shows that those harmed by the externality are not always the ones whom it is appropriate to compensate. In some cases, these victims knowingly moved near an existing externality-producing entity, about which the newcomer should have been aware.

Coase moves so tersely through the arguments that many commentators overlooked or misunderstood his discussion of why private action may not resolve the externality problem. 94 Coase argued that when a large number of people are involved, the transaction costs associated with providing for a remedy could prove to be so steep that private action would be difficult to implement. However, he presented two objections to the presumption that such high transaction costs justified government action. First, with sufficiently high transaction costs, even if the government can act more cheaply than private groups, the total costs of intervention will still exceed the benefits. High enough transaction costs can be a barrier to both private and public externality remedies. Second, even if this is not true, a public solution is not necessarily preferable to a private solution. Given the limitations of governments, the inefficiencies of a private solution may be less than those of a public one. In a follow-up article, “The Lighthouse in Economics,” Coase showed that the traditional assertion that lighthouses were a clear example of a good that had to be supplied by government was historically invalid. In the United Kingdom, the government took over lighthouses only after a private association successfully established a system of lighthouses. 95

George Stigler observed that Coase’s analysis applied to all market failures. 96 Stigler stressed that with low enough transaction costs, market failures could all be overcome privately. Coase’s caveats about the implications of high transactions also apply to all interventions.

While Coase seems never to have made the links explicit, these arguments are closely related to another celebrated contribution to the literature—Paul Samuelson’s 1954 analysis of the justification of government action. 97 Samuelson employed the concept of “publicness,” in which a good could not be made available exclusively to individuals; if one person received it, everyone did. Everyone in society then would benefit from the private consumption of a public good. Private solutions, however, would fail to adequately recognize all of these benefits. Thus, the government should provide the goods.

Coase’s analysis can be restated as indicating that it is only when publicness was involved that government intervention to address externalities might be justified. Coase can then be credited with creating a different and superior theory of government action: it is only when transaction costs are high (but not by a degree to render action unprofitable)that government intervention might be desirable.

The advantage of Coase’s approach is that it leads to a consideration of critical problems that the Samuelson analysis ignores. First, considerable evidence exists that politicians have motivations far different from attaining an efficient supply of public goods. 98 Second, the Coase problem of attaining an optimum is formidable. Governments often lack the competence to identify and optimally correct inefficiencies. Both these difficulties are extensively reviewed in the economics literature, but the bad-motivation argument is stressed more than the limited-ability concern. 99

The adoption of inappropriate objectives is the subject of a very rich literature that examines the motivations of political actors. The starting point is Schumpeter’s observation that, in a democracy, political actors are primarily engaged in a competition for votes. 100 As numerous subsequent observers have noted, one key way to secure votes is to legislate an (economically) inefficient policy—in which a few beneficiaries each receive gains large enough for them to note—by creating losses for many others that are too small for any to notice. 101

Some observers, notably Harvard economist Joseph Kalt, have examined the proposition that, in some cases, action arises only from an ideological preference for intervention by legislators whose constituents lack significant interest in an issue. 102 Kalt and collaborators have found statistical support for this proposition. 103 A simpler possibility is that politicians instinctively believe that if a problem arises which receives extensive attention, they can—and should—intervene. The problem of determining and satisfying demands for public goods is more loosely treated in the literature. Economists Ludwig von Mises, F. A. Hayek, and Ronald Coase have all argued that, among other things, governments cannot readily secure the information needed for efficient intervention. 104

Coase’s treatment is far less extensive, but also far more general, than those of Mises or Hayek. Their extended writings on socialist calculation, nevertheless, should have made clear the difficulties of optimally devising plans for any kind of government spending. The debate was started by an assertion by Mises that a socialist state could not be efficient because it lacked information about the demands for commodities. 105 In the most celebrated response, Oscar Lange 106 replied that this problem could be resolved by establishing planning boards to measure demands and set prices appropriate for those demands. Hayek answered Lange by noting that this was a much more cumbersome approach than an unregulated marketplace. 107 Mises asserted that the solution would break down for producers’ goods because of concentration of ownership in state monopolies.

#### Government financial intervention causes corruption, dependency, price instability and distorts private investment away from more promising solutions – turns the case

**Loris and Spencer, 11** - Nicolas D. Loris is a Policy Analyst and Jack Spencer is Research Fellow in Nuclear Energy in the Thomas A. Roe Institute for Economic Policy Studies at The Heritage Foundation (“Obama's Department of Energy Should Not Be the Green Banker”, 10/11, <http://www.thecuttingedgenews.com/index.php?article=52893pageid=16pagename=Opinion>)

Although the status of many loan guarantees is either conditional or recently closed, the first loans granted by DOE illustrate some of the problems with the program. The solar company Solyndra received one of the first stimulus loan guarantees—a $535 million loan. During a visit to the plant in 2010, President Obama said, “Companies like Solyndra are leading the way toward a brighter and more prosperous future.” In 2010, Solyndra closed one of its facilities and canceled its initial public offering. In August 2011Solyndra filed for Chapter 11 bankruptcy and laid off its 1,100 workers. The company is now under criminal and congressional investigations into how it secured the loan guarantee, and Solyndra owes the taxpayers $527 million.

Solyndra is not the only “green” company having financial troubles. First Wind Holdings, another loan guarantee recipient, withdrew its initial public offering. In these instances, the reason for providing financing was unclear because they were not economically viable endeavors. When the government makes decisions best left to the market, it increases the opportunity for and likelihood of crony capitalism, corruption, and waste.

Loan guarantees artificially make even dubious projects appear more attractive and lower the risk of private investment. For instance, private investors sunk $1.1 billion into Solyndra. Much of the private financing came after the Department of Energy announced Solyndra was one of 16 companies eligible for a loan guarantee in 2007. Private investors look at loan guarantees as a way to substantially reduce their risk. Even if a project seems to be a loser but has a huge upside (especially if complemented with other policies like a federal clean energy standard), private companies can invest a smaller amount if the government will back the loan. If the project fails, they still lose money, but the risk was worth it. Without the loan guarantee, these projects would probably not have been pursued, and that is why they fail.

Subsidizing Winners

In other cases, private financing was available so there was no need for preferential financing. For instance, Nordic Windpower received private funding in 2007, two years before the company received its loan guarantee. Google invested $100 million in Shepherds Flat Wind Farm. Although that investment was made after the loan guarantee, Google determined it to be a worthwhile investment. If that is the case, then the project should not need a loan guarantee.

Even if a project with a federally backed loan is successful, attributing the project’s success to the loan guarantee is a huge assumption. Venture capitalists and other investors, who have much more expertise and knowledge than government bureaucrats in making investment decisions, are in a better position to determine which ideas and businesses have the most potential. Without the loan guarantee, projects with the least promise would either not attract investment or simply fail, freeing capital for risky, but more promising ventures. In contrast, a government loan guarantee program ensures that the public pays for the failures while the private sector reaps the benefits of any successes.

Loan Guarantees Distort the Market

Proponents of loan guarantees who argue that these programs come at minimal cost and are not subsidies ignore the fact that CEDA loans cause the same harm as direct government subsidies by distorting normal market forces and encouraging dependence on the government. By subsidizing a portion of the actual cost of a project through a loan guarantee, the government is allocating resources away from more-valued uses to less-valued uses. In essence, these guarantees and loans direct labor and capital away from more competitive projects.

Pull Quote: CEDA loans cause the same harm as direct government subsidies by distorting normal market forces and encouraging dependence on the government.

A loan guarantee program signals to the energy producer that the project does not need to be competitive. Rather, the green bank simply has to like it. This reduces the incentive for the energy investor or business to manage risk, innovate, and increase efficiency, and it crowds out other innovative energy projects that do not receive loan guarantees. While a loan guarantee or a below-market loan may be good for the near-term interests of the individual recipient, it is not good for taxpayers or long-term competitiveness.

Loan guarantees also encourage more government dependence. If the government moves to more actively subsidizing clean energy technology through CEDA, investors will wait to determine who the government winners will be before they spend more of their own money on innovative ideas, expanding their businesses, or hiring more employees. As Darryl Siry, former head of marketing at Tesla Motors (a loan guarantee recipient), said, “The existence of an 800-pound gorilla putting massive capital behind select start-ups is sucking the air away from the rest of the venture-capital ecosystem…. Being anointed by DOE has become everything for companies looking to move ahead.”

#### The plan creates a clean energy bubble that props up an industry – it will collapse and turn the case

**Tracinski, 12** – editor at Real Clear Politics (Robert, “The Global Warming Bubble”, 3/6, <http://www.realclearmarkets.com/articles/2012/03/06/the_global_warming_bubble_99552.html>)

The failure of the solar panel maker Solyndra has been followed by the bankruptcies of a variety of other government-subsidized green energy firms, such as Beacon Energy, which makes an energy storage device needed to smooth out the energy production of erratic "renewable" sources, and battery maker Ener1.

But maybe we're just not subsidizing green power enough, because surely you've heard--probably from Tom Friedman--that China is beating us to the future with its support for green energy. But China's solar energy firms are also heading into a slump and laying off workers. Part of the reason for the solar slump in China is that they were counting on generous subsidies for their product from the West, particularly Europe. In effect, the Chinese were manufacturing solar panels in order to cash in on subsidies from Western taxpayers. But now the subsidies are drying up.

That leads us to the most interesting of these stories. Germany is phasing out its solar subsidies, but the economically revealing part is why they are eliminating the subsidies. As Bjorn Lomborg explains:

"Subsidizing green technology is affordable only if it is done in tiny, tokenistic amounts. Using the government's generous subsidies, Germans installed 7.5 gigawatts of photovoltaic capacity last year, more than double what the government had deemed 'acceptable.' It is estimated that this increase alone will lead to a $260 hike in the average consumer's annual power bill."

At the end of last year, I wrote (in my own newsletter) about the marginal economics of the welfare state. Many welfare-state policies seem to work so long as they are implemented on a small scale but fail when they are expanded to cover a larger portion of the population. The Medicare program, for example, takes advantage of the fact that it can dictate lower prices for medical services, because it only needs to pay the marginal costs (the relatively low cost of treating one additional patient in an existing hospital), while non-Medicare patients are billed at higher rates to cover big capital expenditures (the cost of building the hospital in the first place). But if the government starts paying for all health care, it suddenly has to pay a lot more to fund those capital expenditures.

Something similar applies to green technology. It can be sustained only as a token or showpiece designed to distract attention from all of the coal, natural gas, and nuclear power stations that actually keep the lights on. The Chevy Volt, for example, is openly billed by GM as a "loss leader": they're losing money on it for the sake of all of the good "green" PR they hope to get. But the moment you try to use these technologies to generate a noticeable portion of a nation's electricity, the costs rise to ruinous levels.

Thus, as Lomborg explains:

"Solar power is at least four times more costly than energy produced by fossil fuels. It also has the distinct disadvantage of not working at night, when much electricity is consumed.

"In the words of the German Association of Physicists, 'solar energy cannot replace any additional power plants.' On short, overcast winter days, Germany's 1.1 million solar-power systems can generate no electricity at all. The country is then forced to import considerable amounts of electricity from nuclear power plants in France and the Czech Republic."

The same applies to wind energy, too, for the same reason. Just as the sun doesn't shine consistently every day, so the wind does not blow consistently. The natural fluctuation of wind power means that every megawatt of wind power requires an equal amount of conventional, fossil-fuel-powered generation to prevent power dips on the electric grid. Which is to say that solar panels and windmills are really just ornaments. They are monuments to greener-than-thou environmental vanity.

That these forms of renewable energy are capable of generating only minimal amounts of power is no accident. Ten years ago, I published an article by Jack Wakeland which examined the growth of "renewable energy" and concluded that every time an "alternative" power source grew large enough to produce energy on a truly industrial scale, environmentalists turned against it, as they have done with hydro-electric dams, geothermal plants, and even wind farms. So the fact that green energy is capable of generating only a small fraction of the power needed to fuel an industrial civilization is no accident. In effect, the inability to generate industrial-scale power is what makes green energy green.

But what that means is that green energy is doomed as an economic proposition. It has all of the hallmarks of an economic bubble. As with the Internet, housing, and higher-education bubbles, green energy is fiercely believed in, not just as an investment but as a superior lifestyle and a positive social good. And as with housing and education, it is propped up by government tax breaks, loan guarantees, and massive subsidies, all of which support a growing edifice of economically unproductive activity. But this artificial stimulation eventually expands the industry beyond the point where it can be sustained, either economically or politically, and the bubble bursts.

### 1nc – solvency

#### Governments don’t have ready access to information necessary to direct energy markets

**Gordon, 8** - professor emeritus of mineral economics at the Pennsylvania State University (Richard, “The Case against Government Intervention in Energy Markets Revisited Once Again” CATO Policy Analysis, 12/1, <http://www.cato.org/pubs/pas/pa-628.pdf>)

A key aspect of the modern economic theory of intervention is skepticism about whether governments in fact have the ability and desire to remedy market failures and increase efficiency. As a result, theories of government failure have proliferated. Columbia economist Jagdish Bhagwati has neatly summed up the standard uses of market-failure arguments as the “puppet government approach.” 91 The old-fashioned textbook government possesses far more prescience and acceptance of economic principles than do actual governments. Real governments lack the competence and the motivation to increase efficiency. Moreover, intervention is expensive to design and operate properly. Thus, the inefficiencies must be great for regulation to be desirable.

A remarkable article by Ronald Coase, “The Problem of Social Cost,” is the critical source of the last point and a much more modern appraisal of intervention. 92 In the essay, Coase dealt with a much-discussed but badly dated analysis of “externalities” by A.C. Pigou, a longtime professor of economics at Cambridge University. Externalities are the incidental effects of economic actions on people who are not directly involved. These can be harmful, as with pollution and noise, or beneficial, as with pollination of plants by bees.

Coase emphasized two defects of Pigou’s analysis. First, Pigou presumed that government intervention always was needed, but Coase provided numerous examples of how cures to externality problems were secured privately. Second, Pigou asserted that, when confronting positive externalities (where by definition the costs to society were lower than the costs to the private producers or consumer), a subsidy to the producer or consumer was appropriate. Conversely, negative externalities should be taxed. Coase showed that this also was wrong; subsidizing the abatement of a detrimental externality would produce the same result as a Pigouvian tax. Coase’s insights proved remarkably impervious to criticism. Two potential problems, however, are evident. First, Coase tacitly assumes that the beneficiaries of the tax are not so different from the beneficiaries of the subsidy that demands shift. Second, an implicit further condition of optimum externality response is that the response should ensure that only firms whose total social value exceeds their total social costs should survive. The correct social policy requires additional measures to attain this goal. 93

Coase is well aware that the choice of policy response affects the welfare of those involved. By example, he shows that those harmed by the externality are not always the ones whom it is appropriate to compensate. In some cases, these victims knowingly moved near an existing externality-producing entity, about which the newcomer should have been aware.

Coase moves so tersely through the arguments that many commentators overlooked or misunderstood his discussion of why private action may not resolve the externality problem. 94 Coase argued that when a large number of people are involved, the transaction costs associated with providing for a remedy could prove to be so steep that private action would be difficult to implement. However, he presented two objections to the presumption that such high transaction costs justified government action. First, with sufficiently high transaction costs, even if the government can act more cheaply than private groups, the total costs of intervention will still exceed the benefits. High enough transaction costs can be a barrier to both private and public externality remedies. Second, even if this is not true, a public solution is not necessarily preferable to a private solution. Given the limitations of governments, the inefficiencies of a private solution may be less than those of a public one. In a follow-up article, “The Lighthouse in Economics,” Coase showed that the traditional assertion that lighthouses were a clear example of a good that had to be supplied by government was historically invalid. In the United Kingdom, the government took over lighthouses only after a private association successfully established a system of lighthouses. 95

George Stigler observed that Coase’s analysis applied to all market failures. 96 Stigler stressed that with low enough transaction costs, market failures could all be overcome privately. Coase’s caveats about the implications of high transactions also apply to all interventions.

While Coase seems never to have made the links explicit, these arguments are closely related to another celebrated contribution to the literature—Paul Samuelson’s 1954 analysis of the justification of government action. 97 Samuelson employed the concept of “publicness,” in which a good could not be made available exclusively to individuals; if one person received it, everyone did. Everyone in society then would benefit from the private consumption of a public good. Private solutions, however, would fail to adequately recognize all of these benefits. Thus, the government should provide the goods.

Coase’s analysis can be restated as indicating that it is only when publicness was involved that government intervention to address externalities might be justified. Coase can then be credited with creating a different and superior theory of government action: it is only when transaction costs are high (but not by a degree to render action unprofitable)that government intervention might be desirable.

The advantage of Coase’s approach is that it leads to a consideration of critical problems that the Samuelson analysis ignores. First, considerable evidence exists that politicians have motivations far different from attaining an efficient supply of public goods. 98 Second, the Coase problem of attaining an optimum is formidable. Governments often lack the competence to identify and optimally correct inefficiencies. Both these difficulties are extensively reviewed in the economics literature, but the bad-motivation argument is stressed more than the limited-ability concern. 99

The adoption of inappropriate objectives is the subject of a very rich literature that examines the motivations of political actors. The starting point is Schumpeter’s observation that, in a democracy, political actors are primarily engaged in a competition for votes. 100 As numerous subsequent observers have noted, one key way to secure votes is to legislate an (economically) inefficient policy—in which a few beneficiaries each receive gains large enough for them to note—by creating losses for many others that are too small for any to notice. 101

Some observers, notably Harvard economist Joseph Kalt, have examined the proposition that, in some cases, action arises only from an ideological preference for intervention by legislators whose constituents lack significant interest in an issue. 102 Kalt and collaborators have found statistical support for this proposition. 103 A simpler possibility is that politicians instinctively believe that if a problem arises which receives extensive attention, they can—and should—intervene. The problem of determining and satisfying demands for public goods is more loosely treated in the literature. Economists Ludwig von Mises, F. A. Hayek, and Ronald Coase have all argued that, among other things, governments cannot readily secure the information needed for efficient intervention. 104

Coase’s treatment is far less extensive, but also far more general, than those of Mises or Hayek. Their extended writings on socialist calculation, nevertheless, should have made clear the difficulties of optimally devising plans for any kind of government spending. The debate was started by an assertion by Mises that a socialist state could not be efficient because it lacked information about the demands for commodities. 105 In the most celebrated response, Oscar Lange 106 replied that this problem could be resolved by establishing planning boards to measure demands and set prices appropriate for those demands. Hayek answered Lange by noting that this was a much more cumbersome approach than an unregulated marketplace. 107 Mises asserted that the solution would break down for producers’ goods because of concentration of ownership in state monopolies.

#### Government financial intervention causes corruption, dependency, price instability and distorts private investment away from more promising solutions – turns the case

**Loris and Spencer, 11** - Nicolas D. Loris is a Policy Analyst and Jack Spencer is Research Fellow in Nuclear Energy in the Thomas A. Roe Institute for Economic Policy Studies at The Heritage Foundation (“Obama's Department of Energy Should Not Be the Green Banker”, 10/11, <http://www.thecuttingedgenews.com/index.php?article=52893pageid=16pagename=Opinion>)

Although the status of many loan guarantees is either conditional or recently closed, the first loans granted by DOE illustrate some of the problems with the program. The solar company Solyndra received one of the first stimulus loan guarantees—a $535 million loan. During a visit to the plant in 2010, President Obama said, “Companies like Solyndra are leading the way toward a brighter and more prosperous future.” In 2010, Solyndra closed one of its facilities and canceled its initial public offering. In August 2011Solyndra filed for Chapter 11 bankruptcy and laid off its 1,100 workers. The company is now under criminal and congressional investigations into how it secured the loan guarantee, and Solyndra owes the taxpayers $527 million.

Solyndra is not the only “green” company having financial troubles. First Wind Holdings, another loan guarantee recipient, withdrew its initial public offering. In these instances, the reason for providing financing was unclear because they were not economically viable endeavors. When the government makes decisions best left to the market, it increases the opportunity for and likelihood of crony capitalism, corruption, and waste.

Loan guarantees artificially make even dubious projects appear more attractive and lower the risk of private investment. For instance, private investors sunk $1.1 billion into Solyndra. Much of the private financing came after the Department of Energy announced Solyndra was one of 16 companies eligible for a loan guarantee in 2007. Private investors look at loan guarantees as a way to substantially reduce their risk. Even if a project seems to be a loser but has a huge upside (especially if complemented with other policies like a federal clean energy standard), private companies can invest a smaller amount if the government will back the loan. If the project fails, they still lose money, but the risk was worth it. Without the loan guarantee, these projects would probably not have been pursued, and that is why they fail.

Subsidizing Winners

In other cases, private financing was available so there was no need for preferential financing. For instance, Nordic Windpower received private funding in 2007, two years before the company received its loan guarantee. Google invested $100 million in Shepherds Flat Wind Farm. Although that investment was made after the loan guarantee, Google determined it to be a worthwhile investment. If that is the case, then the project should not need a loan guarantee.

Even if a project with a federally backed loan is successful, attributing the project’s success to the loan guarantee is a huge assumption. Venture capitalists and other investors, who have much more expertise and knowledge than government bureaucrats in making investment decisions, are in a better position to determine which ideas and businesses have the most potential. Without the loan guarantee, projects with the least promise would either not attract investment or simply fail, freeing capital for risky, but more promising ventures. In contrast, a government loan guarantee program ensures that the public pays for the failures while the private sector reaps the benefits of any successes.

Loan Guarantees Distort the Market

Proponents of loan guarantees who argue that these programs come at minimal cost and are not subsidies ignore the fact that CEDA loans cause the same harm as direct government subsidies by distorting normal market forces and encouraging dependence on the government. By subsidizing a portion of the actual cost of a project through a loan guarantee, the government is allocating resources away from more-valued uses to less-valued uses. In essence, these guarantees and loans direct labor and capital away from more competitive projects.

Pull Quote: CEDA loans cause the same harm as direct government subsidies by distorting normal market forces and encouraging dependence on the government.

A loan guarantee program signals to the energy producer that the project does not need to be competitive. Rather, the green bank simply has to like it. This reduces the incentive for the energy investor or business to manage risk, innovate, and increase efficiency, and it crowds out other innovative energy projects that do not receive loan guarantees. While a loan guarantee or a below-market loan may be good for the near-term interests of the individual recipient, it is not good for taxpayers or long-term competitiveness.

Loan guarantees also encourage more government dependence. If the government moves to more actively subsidizing clean energy technology through CEDA, investors will wait to determine who the government winners will be before they spend more of their own money on innovative ideas, expanding their businesses, or hiring more employees. As Darryl Siry, former head of marketing at Tesla Motors (a loan guarantee recipient), said, “The existence of an 800-pound gorilla putting massive capital behind select start-ups is sucking the air away from the rest of the venture-capital ecosystem…. Being anointed by DOE has become everything for companies looking to move ahead.”

#### The plan creates a clean energy bubble that props up an industry – it will collapse and turn the case

**Tracinski, 12** – editor at Real Clear Politics (Robert, “The Global Warming Bubble”, 3/6, <http://www.realclearmarkets.com/articles/2012/03/06/the_global_warming_bubble_99552.html>)

The failure of the solar panel maker Solyndra has been followed by the bankruptcies of a variety of other government-subsidized green energy firms, such as Beacon Energy, which makes an energy storage device needed to smooth out the energy production of erratic "renewable" sources, and battery maker Ener1.

But maybe we're just not subsidizing green power enough, because surely you've heard--probably from Tom Friedman--that China is beating us to the future with its support for green energy. But China's solar energy firms are also heading into a slump and laying off workers. Part of the reason for the solar slump in China is that they were counting on generous subsidies for their product from the West, particularly Europe. In effect, the Chinese were manufacturing solar panels in order to cash in on subsidies from Western taxpayers. But now the subsidies are drying up.

That leads us to the most interesting of these stories. Germany is phasing out its solar subsidies, but the economically revealing part is why they are eliminating the subsidies. As Bjorn Lomborg explains:

"Subsidizing green technology is affordable only if it is done in tiny, tokenistic amounts. Using the government's generous subsidies, Germans installed 7.5 gigawatts of photovoltaic capacity last year, more than double what the government had deemed 'acceptable.' It is estimated that this increase alone will lead to a $260 hike in the average consumer's annual power bill."

At the end of last year, I wrote (in my own newsletter) about the marginal economics of the welfare state. Many welfare-state policies seem to work so long as they are implemented on a small scale but fail when they are expanded to cover a larger portion of the population. The Medicare program, for example, takes advantage of the fact that it can dictate lower prices for medical services, because it only needs to pay the marginal costs (the relatively low cost of treating one additional patient in an existing hospital), while non-Medicare patients are billed at higher rates to cover big capital expenditures (the cost of building the hospital in the first place). But if the government starts paying for all health care, it suddenly has to pay a lot more to fund those capital expenditures.

Something similar applies to green technology. It can be sustained only as a token or showpiece designed to distract attention from all of the coal, natural gas, and nuclear power stations that actually keep the lights on. The Chevy Volt, for example, is openly billed by GM as a "loss leader": they're losing money on it for the sake of all of the good "green" PR they hope to get. But the moment you try to use these technologies to generate a noticeable portion of a nation's electricity, the costs rise to ruinous levels.

Thus, as Lomborg explains:

"Solar power is at least four times more costly than energy produced by fossil fuels. It also has the distinct disadvantage of not working at night, when much electricity is consumed.

"In the words of the German Association of Physicists, 'solar energy cannot replace any additional power plants.' On short, overcast winter days, Germany's 1.1 million solar-power systems can generate no electricity at all. The country is then forced to import considerable amounts of electricity from nuclear power plants in France and the Czech Republic."

The same applies to wind energy, too, for the same reason. Just as the sun doesn't shine consistently every day, so the wind does not blow consistently. The natural fluctuation of wind power means that every megawatt of wind power requires an equal amount of conventional, fossil-fuel-powered generation to prevent power dips on the electric grid. Which is to say that solar panels and windmills are really just ornaments. They are monuments to greener-than-thou environmental vanity.

That these forms of renewable energy are capable of generating only minimal amounts of power is no accident. Ten years ago, I published an article by Jack Wakeland which examined the growth of "renewable energy" and concluded that every time an "alternative" power source grew large enough to produce energy on a truly industrial scale, environmentalists turned against it, as they have done with hydro-electric dams, geothermal plants, and even wind farms. So the fact that green energy is capable of generating only a small fraction of the power needed to fuel an industrial civilization is no accident. In effect, the inability to generate industrial-scale power is what makes green energy green.

But what that means is that green energy is doomed as an economic proposition. It has all of the hallmarks of an economic bubble. As with the Internet, housing, and higher-education bubbles, green energy is fiercely believed in, not just as an investment but as a superior lifestyle and a positive social good. And as with housing and education, it is propped up by government tax breaks, loan guarantees, and massive subsidies, all of which support a growing edifice of economically unproductive activity. But this artificial stimulation eventually expands the industry beyond the point where it can be sustained, either economically or politically, and the bubble bursts.

### China

**Alt Causes**

**Lieberthal 07 –** Michigan University Professor, (Kenneth, Jan, “China’s March on the 21st Century,” <http://www.aspeninstitute.org/atf/cf/%7BDEB6F227-659B-4EC8-8F84-8DF23CA704F5%7D/CMTCFINAL052307> )

Even in view of the above factors, however, too much can go wrong in the coming years to war-rant optimism about the future of U.S.-China relations. Indeed, on balance, left to the natural course of events, U.S.-China relations are more likely to sink into confrontation and antagonism rather than enhance constructive engagement. Given the importance of the relationship and the extent their fundamental interests are compatible,why should mutual antagonism be regarded as the more likely natural outcome?

First, there are always unanticipated developments that could plunge the relationship into a long-term, downward spiral. The list ofpotentially disruptive events is unfortunately long and not very improbable. The types ofissues include the following.

• Cross-Strait military conflict that draws in the United States and results in a major U.S.- China war. Cross-Strait relations have stabilized considerably over the past two years, and Beijing has put into place a policy that seeks to deter Taiwan’s independence for many years to come rather than to force its unification with the Mainland. Still,there is very little mutu- al trust and understanding across the Strait. The most likely path to cross-Strait conflict is miscalculation. Should such conflict begin, the chances of American military participation are high, and once U.S.and PRC forces engage each other in hostilities, the likelihood of serious escalation is higher still.

• A crisis in Northeast Asia that goes seriously awry. Sino-Japanese diplomatic relations are poor and mutual threat perceptions have grown. Both Japan and China are rapidly chang- ing their roles in Asia, and for the first time must figure out how to deal with each other at a time when both are strong and robust. A major crisis could well produce fundamental dam- age to U.S.-China relations and implicate America in the Japanese foreign policy agenda to a greater extent than might otherwise be wise. System collapse in North Korea could also lead to serious trouble,potentially producing not only chaos but also civil war in the North,with U.S.and Chinese forces drawn into a deadly and fluid situation. The outcome could produce entirely new levels of stress and division in U.S.-China relations and Northeast Asia more generally.

• Large-scale political unrest in China, perhaps growing out of a financial or environmental crisis. Ifthe government reasserts control,in such circumstances it is likely to do so through violent means.Given current social strains,the scale of unrest and ofthe resulting repression would likely dwarf those of 1989 (when demonstrators were primarily intellectuals). China is and will for the coming two decades undergo four simultaneous,tension-inducing transi- tions at unprecedented speed and scale:urbanization,marketization,privatization,and glob- alization. The underlying strains are inevitably system-wide, deep, and pervasive. Massive breakdown followed by large scale repression could make constructive engagement with China politically unsustainable in the United States.

All three ofthe above types ofproblems would likely arise against Beijing’s preferences,but each could put U.S.-China relations into a steep downward spiral.

**If they win alt causes don’t matter, then they agree with the theory that issues don’t spillover**

**Lieberthal 07 –** Michigan University Professor, (Kenneth, Jan, “China’s March on the 21st Century,” <http://www.aspeninstitute.org/atf/cf/%7BDEB6F227-659B-4EC8-8F84-8DF23CA704F5%7D/CMTCFINAL052307> )

Second, the current U.S.-China relationship is not fragile. Indeed, it has become extraordinarily wide ranging, complex, and deeply embedded in the political and economic systems of both societies. Structurally, the financial, economic, and trade relationship is the most well-developed leg of our current bilateral engagement. It has produced a situation of such deep interdependence that only a very traumatic crisis could significantly change this in the short run. However, such disruption would palpably affect the standards of living in both countries. Despite well-known frictions, therefore, neither side is prepared to damage itself by taking steps to fundamentally disentangle this economic interdependence. China has shown, moreover, that economic cooperation with the United States is sufficiently important to warrant serious concessions when necessary to keep this part of our relationship in reasonably good working order.

The existing U.S.-China engagement extends far beyond classic foreign policy and economic spheres. Indeed, almost every major agency in the U.S. government has serious programs and fre-quent contacts with its Chinese counterpart. This includes such bodies as the Department of Education, Housing and Urban Development, the Department of Energy, the Center for Disease Control,the Environmental Protection Agency, and so forth. In short, the overall U.S.-China relationship is mature: even very significant problems in any one issue area will not disrupt the entire relationship, and a very solid base already exists for future cooperative efforts. Considerable interests in each country have gelled around the specific forms of engagement that the two countries have developed.

Relations resilient – constant cooperation will only increase

Wenzhao, 09 – Senior Researcher at the Institute of American Studies of the Chinese Academy of Social Sciences

(Tao, 2/17/09, “Positive signs ahead for Sino-US relations,” China Daily, http://www.chinadaily.com.cn/cndy/2009-02/17/content\_7482140.htm)

The direction of Sino-US relations under Barack Obama's presidency is drawing increasing attention as the new US administration takes shape. The new president made remarks about China during his election campaign and wrote for the US Chamber of Commerce in China an article on the prospect of Sino-US ties in his term of office. In January, newly assigned Secretary of State Hillary Clinton also deliberated on US foreign policy in a Senate hearing. Obama acknowledges that common interests exist between China and the US and welcomes a rising China. He realizes China's remarkable achievement in the past 30 years has driven economic development in neighboring nations and believes its emergence as a big power is irreversible and the US should cooperate to deal with emerging challenges. The US and China have had effective and smooth cooperation on a wide range of economic and security issues, from anti-terror, nonproliferation and climate change to the restructuring of the extant international financial system. This is expected to be the new administration's mainstream China policy and dominate the future of Sino-US relations. As multilateralism believers, both President Obama and Vice-President Joe Biden advocate international cooperation instead of unilateral action to deal with international challenges and resolve disputes. Fruitful cooperation between China and the US on the Korean Peninsula nuclear issue clearly indicates constructive bilateral and multilateral cooperation on sensitive issues can help ease strained regional situations. The new US administration has expressed its wishes to continue to promote a stable Korean Peninsula and to improve ties with the Democratic People's Republic of Korea. The new administration has also expressed expectations for cooperation with China on other international issues, such as the Iranian nuclear and Darfur challenges. China now plays a crucial role in the world's political landscape and we look forward to cooperative ties with it, Clinton recently said. Ever-deepening economic and trade ties, as the cornerstone of bilateral relations, are expected to continue to develop during Obama's tenure.

**Even if they solve relations – cooperation is impossible**

**Bremmer and Roubini 09** – Bremmer, IR prof, Columbia. Faculty member at Stanford’s Hoover Institution. Senior Fellow, World Policy Institute. PhD in pol sci, Stanford and Roubini, professor of economics at New York University's Stern School of Business and chairman of RGE Monitor , Wall Street Journal, (Ian and Noureil, September 1, 2009 “The Yin and Yang of U.S.-China Relations” <http://online.wsj.com/article/SB10001424052970204731804574384601554931882.html>) Jacome

American and Chinese officials said all the right things during this summer’s inaugural round of their Strategic and Economic Dialogue. President Barack Obama pledged to “forge a path to the future that we seek for our children.” Chinese State Councilor Dai Bingguo wondered aloud whether America and China can “build better relations despite very different social systems, cultures and histories.” He answered his own question, in English, with a “Yes we can.” According to Nouriel Roubini and Ian Bremmer, President of the Eurasia Group and author of the groundbreaking book entitled “The Fat Tail: The Power of Political Knowledge for Strategic Investing“, China and the U.S. indeed can, “but they probably won’t“. In an article in the Wall Street Journal, the political scientists argue that although Mr. Obama will visit China in November, when it comes to international burden-sharing, Washington is focused on geopolitical headaches while China confines its heavy-lifting to geoeconomic challenges. “The two sides have good reason to cooperate, but there’s a growing gap between what Washington expects from Beijing and what the Chinese can deliver.“ As excerpted from the Wall Street Journal: Many of the issues that create conflict in U.S.-Chinese relations are well known: an enormous bilateral trade deficit, disputes over the value of China’s currency, protections for U.S. intellectual property, the dollar’s role as international reserve currency, conflicts over human rights, naval altercations, protectionist threats from both sides, and disagreements over how best to handle North Korea’s Kim Jong Il. But there are other, less obvious obstacles to partnership. First, both governments remain largely focused on formidable domestic challenges. Mr. Obama knows his political fortunes depend largely on the resilience of the U.S. economy and its ability to generate jobs. He’s occupied for the moment with a high-stakes poker game with lawmakers in his own party over ambitious health-care and energy-reform plans. China’s leadership faces competing internal demands from those who want to stimulate the economy toward another round of export-driven growth and others who want to shift quickly toward greater dependence on domestic consumption. Given the trade deficit, Washington would like Beijing to focus on the latter, but China won’t move as fast as the U.S. would like, in part because the leadership recognizes that the loss of millions of manufacturing and construction jobs in recent months could fuel further turmoil in a country that already sees tens of thousands of large-scale protests each year. Second, there’s the bureaucratic problem. For the past several years, former U.S. Treasury Secretary Henry Paulson chaired a strategic dialogue with Chinese Vice Premier Wang Qishan. Washington and Beijing have now expanded the scope of talks to include the State Department and China’s foreign ministry. Leaving aside the difficulties in building trust between U.S. and Chinese negotiators, State and Treasury don’t coordinate well on strategy, and there’s no guarantee that China’s foreign and finance ministries will work seamlessly together either. The new formula for talks is bureaucratic infighting squared. The third reason the U.S. and China won’t build a durable strategic partnership is that Beijing has little appetite for the larger geopolitical role Washington would like it to play. Why should Beijing accept the risks that come with direct involvement in conflicts involving Iran and Iraq, Afghanistan and Pakistan, Israelis and Palestinians, Somalia and Sudan, and other sources of potential turmoil? It has more immediate problems at home. On many issues where the U.S. wants China’s support—on Iran’s nuclear program, for example—Beijing’s interests don’t coincide with Washington’s. Even in East Asia, China has good reason to avoid the heavy lifting on security, because the U.S. naval presence limits the risk that Japan, India, and other states will spend much more money on their militaries. It’s not as though Beijing is enjoying a free ride. China’s more than $2 trillion in foreign currency reserves gives its leadership enormous clout as international lender of last resort. Its considerable contribution to global stability is mainly in financing Washington’s spiraling debt. By righting its own economy, China can be the primary engine of near-term global growth. Isn’t that service enough, Chinese officials ask, at a time when economic crises aggravate so many international problems? The one tangible result of this summer’s Strategic and Economic dialogue, a “memorandum of understanding” on climate change, reveals the larger problem. It’s valuable to have an agreement in principle, but there were no hard choices on the primary bone of contention—carbon emissions. That’s a problem that will generate friction in months to come. Whenever U.S. and Chinese officials get together these days, they trigger a new round of speculation that the world’s most important bilateral relationship might soon become its most valuable strategic alliance. It’s wrong to entirely dismiss the value of effective speeches and positive political symbolism. But as U.S. and Chinese negotiators move from words to work, they’re going to be pulling in different directions.

### Warming

**Warming tipping points inevitable – too late**

**NPR 9** (1/26, Global Warming Is Irreversible, Study Says, All Things Considered, http://www.npr.org/templates/story/story.php?storyId=99888903)

Climate change is essentially irreversible, according to a sobering new scientific study.

As carbon dioxide emissions continue to rise, the world will experience more and more long-term environmental disruption. The damage will persist even when, and if, emissions are brought under control, says study author Susan Solomon, who is among the world's top climate scientists.

"We're used to thinking about pollution problems as things that we can fix," Solomon says. "Smog, we just cut back and everything will be better later. Or haze, you know, it'll go away pretty quickly."

That's the case for some of the gases that contribute to climate change, such as methane and nitrous oxide. But as Solomon and colleagues suggest in a new study published in the Proceedings of the National Academy of Sciences, it is not true for the most abundant greenhouse gas: carbon dioxide. **Turning off the carbon dioxide emissions won't stop global warming**.

"People have imagined that if we stopped emitting carbon dioxide that the climate would go back to normal in 100 years or 200 years. What we're showing here is that's not right. It's essentially an irreversible change that will last for more than a thousand years," Solomon says.

This is because the oceans are currently soaking up a lot of the planet's excess heat — and a lot of the carbon dioxide put into the air. The carbon dioxide and heat will eventually start coming out of the ocean. And that will take place for many hundreds of years.

Solomon is a scientist with the National Oceanic and Atmospheric Administration. Her new study looked at the consequences of this long-term effect in terms of sea level rise and drought.

**It’s too late—deal with it**

**Dickinson 9** (Pete, Global warming: Is it too late?, 26 August 2009, http://www.socialistalternative.org/news/article19.php?id=1142, AMiles) Note – paper cited is by Susan Solomon - atmospheric chemist working for the National Oceanic and Atmospheric Administration – Gian-Kasper Plattnerb- Group, Institute of Geophysics and Planetary Physics, UCLA - Reto Knuttic - Institute for Atmopsheric and Climate Science, PhD

New research is claiming that concentrations of carbon dioxide (the main greenhouse gas, CO2) will remain high for at least 1,000 years, even if greenhouse gases are eliminated in the ne xt few decades. The climate scientists who produced this work assert that the effects of global warming, such as high sea levels and reduced rainfall in certain areas, will also persist over this time scale. (The findings are in a paper published in February in the Proceedings of the National Academy of Sciences by researchers from the USA, Switzerland and France, www.pnas.org/cgi/doi/10.1073/pnas.0812721106 ) Most previous estimates of the longevity of global warming effects, after greenhouse gases were removed, have ranged from a few decades to a century, so this new analysis could represent a development with very serious implications, including political ones. For example, those campaigning for action on climate change could be disheartened and climate sceptics could opportunistically say that nothing should be done **because it is now too late.** The authors of the paper make various estimates of CO2 concentrations based on the year emissions are cut, assumed to be from 2015 to 2050. They make optimistic assumptions, for instance, that emissions are cut at a stroke rather than gradually, and that their annual rate of growth before cut-off is 2%, not the 3% plus witnessed from 2000-05. They then estimate what the effects would be on surface warming, sea level rise and rainfall over a 1,000-year period using the latest climate models. The results of the melting of the polar ice caps are not included in the calculations of sea levels, only the expansion of the water in the oceans caused by the surface temperature increase so, as the authors point out, the actual new sea level will be much higher. The best-case results for surface warming, where action is taken in 2015 to eliminate emissions, show that over 1,000 years the temperature rises from 1.3 to 1.0 degree centigrade above pre-industrial levels. The worst case, where action is delayed to 2050, predicts surface temperatures will increase from just under to just over four degrees by 2320 and then remain approximately constant for the rest of the millennium. High levels of CO2 persist in the atmosphere because, over long timescales, reduction of the gas is dependent on the ability of the oceans to absorb it, but there are limits to this due to the physics and chemistry of deep-ocean mixing. On the other hand, the amount of heat in the atmosphere that can be absorbed by the sea, the key way surface temperatures are decreased, is limited by the same scientific laws. As a result, carbon concentrations cannot fall enough to force temperatures down while there is simultaneously reduced cooling due to limited heat loss to the oceans.

**Past emissions overwhelm**

**Adve 8** Adve, One World South Asia News, 2008 [Nagraj Adve, April 23 2008, One World South Asia, “Can we avoid ‘dangerous’ global warming?”, < http://southasia.oneworld.net/Article/can-we-avoid-2018dangerous2019-global-warming/>]

As a consequence, the Earth’s average temperature has risen about 0.8 degrees C since the Industrial Revolution, reaching 14.5 degrees C in 2005. This seemingly mild rise has already caused lands to be nibbled by rising sea levels in the Sunderbans and the Gujarat coast, the 2005 floods in Bombay which killed a thousand people, Himalayan glaciers to recede, and rainfall patterns to change. According to the UN, 66 million people were affected by floods this year in South Asia alone. What used to seem ‘natural’ phenomena are not natural any more, as Bill McKibben lamented in The End of Nature nearly 20 years ago. The problem, as Paul Brown explains in Global Warming: The Last Chance for Change, is that there’s more warming in the pipeline. There’s a lag of about 25-30 years between greenhouse gases being emitted and the full effects of their warming. So the recent climate chaos is actually the consequence of emissions in the late 1970s. The full effects of more recent emissions, including from China’s coal-based power stations that some are suddenly and rightly concerned about, will be felt in the years to come. We are committed, Brown writes, to a further 0.7 degrees C. That would add up to 1.5 degrees C above pre-industrial levels. At 1.5 degrees, 18% of the world’s species will die, and 400 million more people worldwide will be exposed to water stress. It gets worse. As the Earth gets warmer, it will trigger off certain ‘feedbacks’, which could be understood as the Earth’s systems themselves contributing to warming: as Arctic ice melts, there will be less of it to reflect heat, warming further, melting more, and so on.

**Prefer our evidence**

**Nordhaus & Shellenberger, 07** Break Through: From the Death of Environmentalism to the Politics of Possibility, Ted & Michael, Managing Directors of American Environics, A social values research and strategy firm 220-221

The continuing insistence by environmentalists that reducing carbon emissions is the only rational response to global warming reduces the multiplicity of global warming's possible meanings to humankind's intrusion (pollution) on nature. But there is no single meaning of global warming. Does global warming mean (a) *we're all gonna die!;* (b) we'll be growing bigger and sweeter tomatoes in northern California; (c) humans will survive but find themselves living like prehistoric cave dwellers; (d) we are being punished for our sins against nature; (e) we need better light bulbs and hybrid cars; (f) we must unite the human race around a vision for a clean-energy future; (g) *finally we can build those nuclear power plants we've always wanted!;* (h) we need a cap-and-trade system for carbon emissions; (i) we must prepare for the worst and hope for the best; (j) the Rapture is on its way; (k) none of the above; or (1) all of the above? Environmentalists reduce climate science to a single, essential meaning (our greenhouse gas emissions are warming the earth) and an obvious solution (we need to reduce our greenhouse gas emissions). This reduction of a complex phenomenon limits our policy options and, as important, prevents us from fully understanding the problems at hand. Even if humans had stopped emitting greenhouse gases starting in 1988, when NASA scientist James Hansen announced to Congress that global warming had arrived, all of the changes today resulting from global warming - the melting of Greenland's ice sheet, the slowing of the North Atlantic Gulf Stream, warmer ocean surfaces, and more intense hurricanes - would still be under way. There is so much carbon dioxide and other greenhouse gases in the atmosphere that even if humans stopped emitting new greenhouse gases tomorrow, the planet would continue to heat up for several more decades and probably longer. As surely as the science of climatology tells us that the warming of the earth is caused by humans, it also tells us that a dramatically warmer and transformed climate is almost certainly inevitable. Environmental leaders claim to be simply representing the climate science, and yet they have consistently down played or ignored this aspect of climate science because they did not find it useful to advance the politics, policies, and meanings of global warming that they believed to be most important. They have done so out of the belief that acknowledging the inevitability of both future warming and future impacts would undermine their case for prevention. The reticence among environmental leaders and scientists to acknowledge the irrevocable reality of climate change gives the lie to the presumption that addressing the climate crisis is as simple as dispassionately and objectively translating the science of climate change into public policies.