# 1NC

## Topicality

### 1NC FIT

#### A. Financial incentives are distinct from feed-in tariffs, and the aff adds restrictions

Brady, 4 **-** A Thesis In The Department of Political Science Presented in Partial Fulfillment of the Requirements for the Degree of Master of Arts (Public Policy and Public Administration) at Concordia University Montreal, Quebec, Canada (Jonathan, “Wind Boom, Wind Bust: An Examination of the Conditions and Policies that Led to Gennany's Wind Industry and Canada's Lack Thereof,” December, <http://spectrum.library.concordia.ca/8274/1/MR20699.pdf>)

Government employed regulatory and financial incentives have played a salient role in this rapid growth of wind energy production. The most successful regulatory incentive in stimulating wind energy production and decreasing technology costs has been a form of regulatory pricing legislation known as feed-in tariffs or feed-in laws. The chief idea behind them is that national governments establish the price of the wind energy and allow the market to determine capacity and generation. More specifically, national governments oblige electric utility companies to enable wind-generating producers (i.e. owners and operators of wind turbines) to connect to the electric grid, and purchase any electricity generated by wind turbines at a fixed minimum share of the retail price of electricity - at least 85 percent? These prices and payments are guaranteed over a specific period of time - usually no less than five years. The costs of higher payments for wind energy are either covered by an additional per kilowatt-hour (kWh) charge on all consumers according to their level of use, or by a charge on those customers of utilities required to purchase wind generated electricity (EWEA 2004b; EWEA 2004c; Hvelplund 2002; Sawin 2004). Financial incentives such as tax credits and/or production subsidies have also been useful in sparking investment interest in the wind industry. These regulatory and financial incentives, in tandem or individually, represent national government's means of stimulating private sector investment into the wind industry. It has been the private sector's enthusiastic response to these incentives that have driven this remarkable wind boom (i.e. expansive growth in wind energy production and wind industry development) during the last decade.

#### B. Negative Interpretation is Superior

1-Limits-Our interpretation provides a clear bright line with a large list of core affirmative mechanisms like grants, loans, loan guarantees, and tax credits. Their interpretation explodes the topic by allowing indirect incentives like regulations.

2-Ground-Their interpretation makes the topic bidirectional. Our interpretation makes regulations and mandates core negative ground. Creating a fair balance of affirmative and negative ground is important for manageable research burdens and clash.

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### Energy Link --- 1nc

#### ---The affirmative’s view of energy collapses the political by obfuscating structures of consumption. Energy policy becomes a rigged game requiring the annihilation of the environment, poverty and exploitation of billions.

Hillyard et. al. 12

Hildyard Lohmann & Sexton 2012-Nicholas, founder and Director of The Corner House, Larry, author of the book “Carbon Trading: A Critical Conversation on Climate Change, Privatization and Power” & works at the British NGO The Corner House, Sarah, a director of The Corner House, Energy Security For What? For Whom? The Corner House, http://www.thecornerhouse.org.uk/resource/energy-security-whom-what

In sum, encouraging a rational debate about “energy security” necessitates understanding what is meant not only by the phrase, but also by its composite parts. The term “energy,” despite its apparent simplicity, presents particular challenges. During the past two centuries, the vernacular, varied, lower-case “energies” of commons regimes have been joined by a new, abstract, upper-case Energy evolved in industrialised societies. Exploring the difference between “energies” and Energy is crucial to understanding the international politics of “energy security”. Abstract, monolithic, seemingly limitless Energy is something that only became possible with fossil-fuelled productivism and the machines, networks and institutions that came with it. This Energy, like lowercase “energies”, can deliver the basic necessities of life, at least to some, lending a certain plausibility to politicians’ claims that their worries about “energy security” centre on keeping the lights on and homes warm. But its underlying logic is different. Upper-case Energy is a transformation and commensuration of specific energies into a general capacity to maximise the ability of human bodies to make stuff. As the First Law of Thermodynamics (developed at the same time as industrial capitalism) recognises, any form of energy can be transformed into others and used to do work (but cannot be created or destroyed). Just as the invention of an absolute Time independent of daylight variations and traditional holidays helped discipline early industrial workers into the regular rhythm of a long working day, so too the subsequent development of an abstract Energy was key to intensifying their productivity further and harnessing them to the pace of the machine. For this upper-case Energy, survival is incidental except insofar as it supports the production imperative. Whereas specific “energies” know their limits, of Energy there can never be too much. Other things being equal, the more there is, the more can be produced, and the more money business can make, without limit. Lower-case “energies” and Big-E Energy are not only different: they are also, in many senses, enemies to each other. In order that fragmented “energies” do not become an obstacle to the mobilisation of economic value, they have to be folded into abstract Energy under the care of dedicated disciplines and institutions (bureaucrats, engineers, statisticians, laboratories, economics departments, inventors, investors, armies). Obsessed with quantitative growth for growth’s sake, Energy tends to treat the right of all to a warm home (or a cool one in hotter climes), cooked food, electric light as a nuisance. It heralds a world that is not only unequal, but also unable to respect the common right to subsistence. Nowhere is this clearer than in the case of agrofuels, whose “interchangeability” with oil under the rubric of a unitary Energy makes routine the replacement of subsistence agriculture with industrial cropping aimed at fuelling cars and airplanes. It is also plain in India’s development plans, which call for US$100 billion to be spent on a burgeoning number of large Energy projects – coal, oil, hydropower and renewables – that will serve above all to boost the profits of industrialists but leave less than 2 per cent for the household use of the 700 million who lack modern services. And it can be seen in South Africa’s policy of providing some of the cheapest electricity in the world to smelting companies while many township residents are forced to pirate electricity illegally because the price is out of their reach. Well over a century into the era of electrification, more than a billion people, about one-quarter of the world’s population, have no access to electricity or other non-biotic forms of energy (and many will never have under fossil-fuelled capitalism). If fossil-fuelled capitalism has defined what we mean by energy, then merely to use the word uncritically is to make a commitment to certain assumptions about scarcity, foreclose certain alternatives and cover up some of the most important issues that need to be discussed. Paradoxically, having a serious discussion about “energy security” requires taking a therapeutic step back from the modern concept of Energy itself. For example, the seemingly innocent query “How can we have energy security in a post-fossil world?” is not so much a question as an ultimatum. The question implies that however we organise our societies in future, it will have to be on the model that fossil capitalism built, with its threats to the right to survive of both humans and nonhumans (and the associated threats to “security” itself, on a commons understanding). A more fruitful question would be: “Is the world that is defined (in part) by the modern concept of Energy the world that we want?” It is just such questions that policymakers and social movements must ask when initiating any discussion of energy security.

#### **---The affs assumption that there is both an energy market and that energy can swap inputs within this regime passes on a problematic educational practice which precludes understanding and/or changing our relationship with energy production in favor of a shallow centralized technocratic solution---the alternative is for the judge as an intellectual to endorse educational practices that contest these dominant frames**

Ruggero 2009

Colin Ruggero Currently a PhD Candidate at the New School for Social research, engaged as an activist and living in Philadelphia. “Radical Green Populism: Climate Change, Social Change and the Power of Everyday Practices” http://www.anarchiststudies.org/node/309

Green Titans The predominant energy systems of the past 100 years are part of an energy regime, a particular configuration of material, social, economic, political and psychological patterns and institutions. This particular regime is typified by its complex, centralized, and gigantic physical technologies and the technocracy, commodification, and hierarchy that support and reinforce their primacy. There is constant reciprocity among these factors, each one deepening the strength and logic of the others. Enter renewable energy systems. Renewable energy systems are ushering in the same, large-scale, centralized and complex forms as their predecessors. The technophilic awe inspired by massive coal plants and nuclear reactors in previous decades is replicated in visions of vast wind farms, huge tidal capture systems, lonely desert solar arrays, a complex hydrogen infrastructure, and so on. The old energy regime is maintained in that we are simply exchanging our sources, in the same extra-large form, while leaving the basic social configuration intact. The unique opportunity to question our relationship with energy offered by the decline of fossil fuels is lost in a seamless swap of inputs. There is, however, a critical problem raised by the incorporation of renewable technologies into this regime. The commodification process not only alienates the user/consumers from the energy production process but also the resources consumed in that process. While the physical technologies of the past did rely on organic sources, these were discrete inputs, that is, non-renewable sources. A commodified renewable energy not only maintains the alienation of the production process, but also its resources, in this case the Earth’s renewable, organic and omnipresent resources. The problem is not that the seemingly ceaseless march of commodification continues into the realm of basic ecosystems, but that the economic logic of commodification stands to erect barriers around these most pervasive of resources, these renewable energy commons. Some might argue that by their very nature these resources cannot be appropriated or privatized and, thus, are not susceptible to the same capitalist economic logic as fossil fuels. To be sure, it is true that, for example, wind resources are not technically excludable, in that you cannot prevent others from using them, and that they are not technically rival, in that one person’s use does not affect the ability of others to do the same. However, when government grants, investment portfolios and sheer technophilia support the development of wind farms over distributed, small, home-based turbines, the cost incentives for research effectively privatizes the commons. It is privatization through economies of scale, appropriation through (unbalanced) competition. Given the obvious seriousness of climate change and depth of the problems with the dominant discourse discussed here, how can radicals best approach the issue of climate change without losing focus, becoming (or remaining) ineffective or betraying a commitment to a wider project of social change? Many radical communities are already acting in ways that have the potential to threaten and sever these deep roots of both the climate change problem and the dominant solution discourse. Articulating a Radical Response Again, this hegemonic order influences what is perceived as a ‘conceivable’ response to environmental problems. For example, reigning 'green' energy discourse is focused on change of inputs rather than changes in our relationship with energy; environmental degradation is pigeonholed as a problem of pollution and resource scarcity as opposed to tackling *how we see ourselves in relation to the non-human world.* Thus, the problem of climate change, despite being so big as to be a perfect metaphor for the complexity of environmental problems on the whole, is reduced to one of trading pollution rights and carbon-free energy inputs. This is the reigning ‘flavor’ of green education, one that maintains the normative framework of the energy regimes of the past. Consequently, what needs to be emphasized is the importance of carefully articulating the ‘flavor’ of radical environmental education. The way in which this education frames environmental problems and prevailing solution options must be understood as a foundational element of the larger radical solution scheme. Those seeking change must develop and disseminate discourse that offers the tools necessary to conceive of different modes of life, that is, a counter-hegemonic radical green articulation*. Armed with the language of an alternative discourse,* anyone becomes capable of describing (to themselves most importantly) how their daily practices and internalized values are bound up in the ‘growth = wealth = good life’ hegemony. In this way, careful articulation or framing of environmental problems and solution schemes can not only encourage a more positive direction in environmental discourse, but offers the ability to incorporate other social problems as well. Issues of access to/affordability of more ‘green’ ways of life are necessarily linked with the social and economic systems that are hegemonic in their framing of those problems. Radicals must articulate approaches to dealing with climate change that account for these disparities, proposing solution schemes that are simultaneously grand enough to envision deep changes in hegemonic social relations and radical visions of the future while remaining grounded in day-to-day realties. For example, mainstream schemes include massive hydrogen or electric grids to support a revamped vehicle fleet. This disproportionately affects those capable of making the investment necessary to upgrade and those who rely primarily on personal forms of transportation. Alternatively, an expansion and modernization of public transportation systems and the promotion and support of human-powered options (i.e. walking, bicycling) have the potential to benefit a much wider swath of society.

## **Politics**

### **1nc politics link**

#### Obama pushing immigration reform first even with fiscal issues and it will pass – GOP electoral incentives and Hastert rule circumvention

Stien and Foley 1/2/13 (\*Sam, Political Reporter at the Huffington Post, based in Washington, D.C. Previously he has worked for Newsweek magazine, the New York Daily News and the investigative journalism group Center for Public Integrity. He has a masters from the Columbia University Graduate School of Journalism and is a graduate of Dartmouth College, \*Elise, reporter for the Huffington Post in Washington,

D.C. She previously worked at The Washington Independent., “Obama's Immigration Reform Push To Begin This Month” <http://www.huffingtonpost.com/2013/01/02/obama-immigration-reform_n_2398507.html>)

WASHINGTON -- Despite a bruising fiscal cliff battle that managed to set the stage for an even more heated showdown that will likely take place in a matter of months, President Barack Obama is planning to move full steam ahead with the rest of his domestic policy agenda. An Obama administration official said the president plans to push for immigration reform this January. The official, who spoke about legislative plans only on condition of anonymity, said that coming standoffs over deficit reduction are unlikely to drain momentum from other priorities. The White House plans to push forward quickly, not just on immigration reform but gun control laws as well. The timeframe is likely to be cheered by Democrats and immigration reform advocates alike, who have privately expressed fears that Obama's second term will be drowned out in seemingly unending showdowns between parties. The just-completed fiscal cliff deal is giving way to a two-month deadline to resolve delayed sequestration cuts, an expiring continuing resolution to fund the government and a debt ceiling that will soon be hit. With those bitter battles ahead, the possibility of passing other complicated legislation would seem diminished. "The negative effect of this fiscal cliff fiasco is that every time we become engaged in one of these fights, there's no oxygen for anything else," said a Senate Democratic aide, who asked for anonymity to speak candidly. "It's not like you can be multi-tasking -- with something like this, Congress just comes to a complete standstill." It remains unclear what type of immigration policies the White House plans to push in January, but turning them into law could be a long process. Aides expect it will take about two months to write a bipartisan bill, then another few months before it goes up for a vote, possibly in June. A bipartisan group of senators are already working on a deal, although they are still in the early stages. Rep. Zoe Lofgren (D-Calif.) will likely lead on the Democratic side in the House. While many Republicans have expressed interest in piecemeal reform, it's still unclear which of them plan to join the push. Lofgren expressed hope that immigration reform would be able to get past partisan gridlock, arguing that the election was seen as something of a mandate for fixing the immigration system and Republicans won't be able to forget their post-election promises to work on a bill. "In the end, immigration reform is going to depend very much on whether Speaker [John] Boehner wants to do it or not," Lofgren said. Advocates have vowed to keep pushing for reform. As part of their efforts, they plan to remind Republican members of Congress about their presidential nominee's defeat among Latino and Asian voters, a majority of whom support a fix to the immigration system. "They can procrastinate as long as they want, but they're going to have a serious day of reckoning next election cycle," said Angela Kelley, vice president for immigration policy and advocacy at the Center for American Progress. "We're going to have a lot of near-death experiences with this issue, but I'm pretty confident it's never going to go completely to a flatline." Good news for immigration advocates may have come Tuesday night, when Boehner broke the so-called "Hastert Rule" and allowed the fiscal cliff bill to come for a vote without support from a majority of his Republican conference. Given opposition to immigration reform by many Tea Party Republicans, the proof that Boehner is willing to bypass them on major legislation is a good sign, the Democratic aide said. "If something is of such importance that the GOP establishment [is] telling Boehner, 'You must do this. You need to get this off the table soon,'" the Democratic aide said, the speaker could break the Hastert Rule again. "He already did it with this fiscal issue, so I would not be surprised if when it came down to it he puts up a bill that he just allows to go through with a combination of Democratic and Republican votes, without worrying about a majority of the majority," the aide continued. Frank Sharry, executive director of the pro-immigration reform group America's Voice, also said he thinks the House could pass an immigration bill in the same way it did last night, relying on support from both parties. He's hopeful that the fiscal cliff fight could even make them happy to work out legislation in a more standard way. "I never thought I'd say this, but after bruising battles over the future of the American and world economy, the chance to legislate through regular order on immigration reform might have leaders in both parties working together and singing 'Kumbaya,'" Sharry said.

#### Plan sparks massive controversy---renewable energy before the election causes an all-out war

Leone 12 Steve is the Associate Editor of Renewable Energy World. "Part 2: Political Reality and the Way Forward for Renewable Energy," April 3, http://www.renewableenergyworld.com/rea/news/article/2012/04/part-2-political-reality-and-the-way-forward-for-renewable-energy

In Washington, it’s hard enough to craft legislation even in relatively amicable times. In the tense atmosphere on the Hill today, meaningful legislation takes a ringside seat, and the game becomes theater. That’s where we are now. In one corner is the House budget, essentially the Republican Party’s line in the sand that’s been drawn over the size of the federal government. A key component of this is the federal government’s more limited role in supporting a clean energy future. In the other corner is the White House and the Democrat-controlled Senate, which has vowed to stonewall any legislation that it says caters to the super-wealthy and the entrenched fossil fuels industry. Like two tired boxers in the ring, they’re content to leave it in the hands of the judges — in this case the voters, who will in many ways determine the force with which our federal government pursues a national policy built on clean energy. But the real prospects for any meaningful legislation is likely to come after the election, when the rhetoric cools and when political capital comes due. Until then, most industry observers don’t expect much chance of any real federal renewable energy legislation passing through a divided Congress. That means no Clean Energy Standard, no revival of the 1603 Treasury grant program, no extension of the Production Tax Credit until the end of the year at the earliest. There are just too few vehicles that can be used to pass any of the measures, and too little trust between key negotiators to find find common ground. One of the last best hopes — the transportation bill — included an amendment that addressed some of these concerns. Ultimately, the amendment went nowhere, and the renewable industry was left looking months down the road to when something could get resolved. The question now is will it be too late. For 1603 to be brought back to life, it would require a major shift in thinking, especially in the House. The PTC has a better shot, but international players in the wind industry are already indicating that they’ll get out of the market if the credit tied to energy produced expires. Will they wait around until the end of the year to see if it can be revived? It’s increasingly looking like the answer may be no.

#### Obama’s political capital is key to reform passage

Dade 12/7/12 (Corey, staffwriter for NPR, “Black, Latino Groups: It's Our Turn, Mr. President” <http://www.npr.org/2012/12/05/166573082/black-latino-groups-its-our-turn-mr-president>)

Spending 'Political Capital' For Latinos, the November election has sparked momentum for their top issue, immigration. Congressional Republicans have since embraced immigration reform as a priority. Bipartisan talks are under way in the House on legislation that could be introduced early next year. Obama has said Congress should "seize the moment," yet Latino leaders insist that voters have given the president a mandate to lead the effort. Some Latino leaders believe Obama should have fought more aggressively to push the DREAM Act through Congress in 2010. (The bill would have established a path to citizenship for young people brought to the United States as children who attend college or serve in the military.) Latinos also criticized the Obama administration, before it changed its policy, for deporting a record 1.1 million people in three years. "Not only the president but others have said in the past, 'How much political capital do we need to spend on this issue?' Everybody understands now that you need to spend all of it," says Rep. Luis Gutierrez, D-Ill. "With the same vigor and energy that Latino people voted for this president, he should do this."

#### Comprehensive immigration reform is key to the economy and highly skilled workers

Farrell 12/13/12 (Chris, a contributing editor for Bloomberg Businessweek. From 1986-97, he was on the magazine's staff, as a corporate finance staff and department editor and then as an economics editor. Farrell wrote Right on the Money: Taking Control of Your Personal Finances and Deflation: What Happens When Prices Fall? Among Farrell's many awards are a National Magazine Award, two Loeb Awards, and the Edward R. Murrow Award. Farrell is a graduate of the London School of Economics and Stanford University. “Obama’s Next Act: Immigration Reform” <http://www.businessweek.com/articles/2012-12-13/obamas-next-act-immigration-reform>)

Washington won’t get much of a reprieve from verbal pyrotechnics once the drama of the fiscal cliff is over. Up next: major immigration reform. President Obama has made it clear that a comprehensive overhaul of the nation’s badly frayed immigration system is a second-term priority. Many Republican lawmakers are convinced the big takeaway from the 2012 election results is that conservatives need to rethink their hard-line stance on immigration—including illegal immigrants. Here’s what Washington should do before tackling the tough job of rewriting the immigration laws: Create a quicksilver path to citizenship for the 11 million to 12 million undocumented workers in the U.S. (excluding the small number convicted of violent crimes or multiple felonies). The shift in status acknowledges that these foreign-born newcomers, like previous generations of immigrants, overcame significant obstacles to come to the U.S. to make a better life for their families. Illegal immigrants are neighbors heading off to work, sending their kids to school, and attending church. Their everyday lives would vastly improve by moving from the shadows of society into the mainstream. More important from a public-policy perspective, the change would give a boost to the economy’s underlying dynamism. “What you’re doing in the short run is making it easier for workers to move between jobs, a relatively small effect,” says Gordon Hanson, a professor of economics at the University of California at San Diego. “The larger effect from eliminating uncertainty for these immigrants is creating incentives for them to make long-term investments in careers, entrepreneurship, education, homes, and community.” Let’s state the obvious: A rapid transformation of illegal immigrants into legal immigrants isn’t in the cards. Amnesty—let alone citizenship—is an anathema to large parts of the electorate. Too bad, since the scholarly evidence is compelling that immigrants—documented or not, legal or illegal—are a boon to the net economy. “Competition fosters economic growth,” says Michael Clemens, senior fellow at the Center for Global Development in Washington. The economic return from attracting skilled immigrants to the U.S. is well known. Foreign-born newcomers account for some 13 percent of the population, yet they are responsible for one-third of U.S. patented innovations. The nation’s high-tech regions such as Silicon Valley, the Silicon Hills of Austin, Tex., and Boston’s Route 128 rely on immigrant scientists, engineers, entrepreneurs, and employees. Better yet, economist Enrico Moretti at the University of California at Berkeley calculates that a 1 percent increase in the share of college-educated immigrants in a city hikes productivity and wages for others in the city. Less appreciated is how much the economy gains from the efforts of less-skilled immigrants, including illegal workers. Throughout the country, foreign-born newcomers have revived beaten-down neighborhoods as immigrant entrepreneurs have opened small businesses and immigrant families have put down stakes. Immigrant workers have played a vital role keeping a number of industries competitive, such as agriculture and meatpacking. Cities with lots of immigrants have seen their per capita tax base go up, according to David Card, an economist at UC Berkeley. Despite the popular impression that a rising tide of immigrants is associated with higher crime rates, research by Robert Sampson of Harvard University and others offer a compelling case that it’s no coincidence that the growing ranks of immigrants tracks the reduction in crime in the U.S. But don’t newcomers—legal and illegal—drive down wages and job opportunities for American workers? Not really. A cottage industry of economic studies doesn’t find any negative effect on native-born wages and employment on the local level. On the national level the research shows the impact on native-born Americans doesn’t drift far from zero, either positively or negatively. “In both cases, immigrants are more likely to complement the job prospects of U.S.-born citizens than they are to compete for the same jobs as U.S.-born citizens,” Giovanni Peri, an economist at the University of California at Davis, writes in Rationalizing U.S. Immigration Policy: Reforms for Simplicity, Fairness, and Economic Growth. The counterintuitive results reflect a numbers of factors. Immigrants expand the size of the economic pie by creating new businesses, new jobs, and new consumers. Middle-class families find it easier to focus on careers with affordable immigrant labor offering gardening, child care, and other services. Many illegal immigrants aren’t fluent in English, so they don’t compete for the same jobs as native-born workers. Another factor behind the lack of direct competition is the higher educational level of native-born Americans. In 1960 about half of U.S.-born working-age adults hadn’t completed high school, while the comparable figure today is about 8 percent. The real downside concern is on the fiscal side of the immigrant ledger. Yes, more taxes would go into Social Security, Medicare, and the like with legalization, but more people would qualify for Medicaid, welfare, and other benefits. At the local level, many school districts are strained financially from educating immigrant children, legal and illegal. That said, the prospect of fiscal costs would diminish as newly legalized immigrant workers move freely around the country seeking jobs, entrepreneurs are comfortable expanding their payrolls, and immigrant parents push their children to live the American Dream. “Over time, as entrepreneurs emerge and families are better able to get their kids through high school and college, you’re reducing the long-run fiscal claim of the group,” says Hanson. There is no economic evidence that making roughly 6 percent of the workforce illegal will benefit the economy. Plenty of research supports the opposite case. A fast track to legality offers Washington a rare twofer: a just move that’s economically efficient.

#### Economic collapse causes great power war.

Royal 2010 (Jedediah, Director of Cooperative Threat Reduction at the U.S. Department of Defense, “Economic Integration, Economic Signaling and the Problem of Economic Crises,” in Economics of War and Peace: Economic, Legal and Political Perspectives, ed. Goldsmith and Brauer, pg. 213-215)

Less intuitive is how periods of economic decline may increase the likelihood of extern conflict. Political science literature has contributed a moderate degree of attention to the impact of economic decline and the security and defense behavior of interdependent states. Research in this vein has been considered at systemic, dyadic and national levels. Several notable contributions follow. First, on the systemic level, Pollins (2008) advances Modelski and Thompson’s (1996) work on leadership cycle theory, finding that rhythms in the global economy are associated with the rise and fall of a pre-eminent power and the often bloody transition from one pre-eminent leader to the next. As such, exogenous shocks such as economic crisis could usher in a redistribution of relative power (see also Gilpin, 1981) that leads to uncertainty about power balances, increasing the risk of miscalculation (Fearon, 1995). Alternatively, even a relatively certain redistribution of power could lead to a permissive environment for conflict as a rising power may seek to challenge a declining power (Werner, 1999). Seperately, Pollins (1996) also shows that global economic cycles combined with parallel leadership cycles impact the likelihood of conflict among major, medium and small powers, although he suggests that the causes and connections between global economic conditions and security conditions remain unknown. Second, on a dyadic level, Copeland’s (1996, 2000) theory of trade expectations suggests that ‘future expectation of trade’ is a significant variable in understanding economic conditions and security behavious of states. He argues that interdependent states are likely to gain pacific benefits from trade so long as they have an optimistic view of future trade relations, However, if the expectations of future trade decline, particularly for difficult to replace items such as energy resources, the likelihood for conflict increases, as states will be inclined to use force to gain access to those resources. Crisis could potentially be the trigger for decreased trade expectations either on its own or because it triggers protectionist moves by interdependent states. Third, others have considered the link between economic decline and external armed conflict at a national level. Blomberg and Hess (2002) find a strong correlation between internal conflict and external conflict, particularly during periods of economic downturn. They write, The linkages between internal and external conflict and prosperity are strong and mutually reinforcing. Economic conflict tends to spawn internal conflict, which in turn returns the favor. Moreover, the presence of a recession tends to amplify the extent to which international and external conflict self-reinforce each other. (Blomberg & Hess, 2002. P. 89) Economic decline has been linked with an increase in the likelihood of terrorism (Blomberg, Hess, & Weerapana, 2004), which has the capacity to spill across borders and lead to external tensions. Furthermore, crises generally reduce the popularity of a sitting government. ‘Diversionary theory’ suggests that, when facing unpopularity arising from economic decline, sitting governments have increase incentives to fabricate external military conflicts to create a ‘rally around the flag’ effect. Wang (1996), DeRouen (1995), and Blomberg, Hess, and Thacker (2006) find supporting evidence showing that economic decline and use of force are at least indirectly correlated. Gelpi (1997), Miller (1999), and Kisangani and Pickering (2009) suggest that the tendency towards diversionary tactics are greater for democratic states than autocratic states, due to the fact that democratic leaders are generally more susceptible to being removed from office due to lack of domestic support. DeRouen (2000) has provided evidence showing that periods of weak economic performance in the United States, and thus weak Presidential popularity, are statistically linked to an increase in the use of force. In summary, recent economic scholarship positively correlated economic integration with an increase in the frequency of economic crises, whereas political science scholarship links economic decline with external conflict at systemic, dyadic and national levels. This implied connection between integration, crisis and armed conflict has not featured prominently in the economic-security debate and deserves more attention.

## **Counterplan**

The fifty states and all relevant territories should establish Public Utility Commissions which shall establish feed in tariff programs for each electric utility.

The cp allows states to wiggle through federal preemption---solves the case

Gleason 12 (Jennifer Gleason, Environmental Law Alliance Worldwide “Available Paths for Designing Strong State Feed-in Tariffs1”https://www.elaw.org/system/files/model.FIT\_.paths\_.feb29.pdf)

\*purpa = public utility regulatory policies act

A state can implement a FIT under PURPA and require separate payment for RECs generated along with the purchased electricity. This can be accomplished two ways. The state could proceed without requiring utilities to procure specific amounts of electricity from particular sources or it can require this procurement (as above under the more straightforward implementation under PURPA). Possible language for a state law implementing a FIT under the first scenario: Renewable Energy Certificates Along with the purchase of electricity from qualified facilities at the utility’s avoided cost as required under PURPA, each electric utility must purchase the associated renewable energy certificate. The electric utility will pay:  $X for each renewable energy certificate that accompanies electricity generated from wind;  $Y for each renewable energy certificate that accompanies electricity generated from solar photovoltaic systems with installed capacity up to and including 30kW; and  $Z for each renewable energy certificate that accompanies electricity generated from solar photovoltaic systems with installed capacity up to and including 1 MW. [Under this scenario avoided cost would be the traditional calculation of avoided cost that would be set for any available electricity that the utility could purchase. A cap could be set by simply stating that these prices for RECs apply until a utility has X MW of electricity from each of the sources the state wants to include.] [Note that generators would need to be qualified facilities.] Possible language for a state law implementing a FIT under the second scenario: The Public Utility Commission shall establish a feed-in tariff program for each electric utility. [Omitting other provisions of a FIT, not relating to setting rates.] Renewable Energy Capacity Requirements On or before [X date], each electric utility shall procure electricity equivalent to five percent of the electricity sold by the utility to retail electricity customers from wind energy, two percent of the electricity sold by the utility to retail electricity customers from solar photovoltaic systems with installed capacity up to and including 30kW, and two percent of the electricity sold by the utility to retail electricity customers from solar photovoltaic systems with installed capacity up to and including 1 MW.12

#### States solve and are modeled

Rabe 6 (Barry G. Rabe is a professor of public policy at the Gerald R. Ford School of Public Policy at the University of Michigan. “Second Generation Climate Policies in the American States: Proliferation, Diffusion and Regionalization” http://208elmp02.blackmesh.com/sites/default/files/paperrabe1.pdf)

Much of the existing infrastructure of state climate programs has been individually tailored to the needs of a particular state. However, there is increasing evidence that some policies enacted in one state ultimately are being replicated in one or more additional states. There is, in fact, precedent in other policy arenas for such “policy diffusion” to spread across the nation and become, in effect, a de facto national policy (Mossberger 2000). Under such circumstances, it may be possible for the states to simply negotiate inter-state differences and implement these inter-related programs. There may also be some tipping point at which diffusion reaches sufficient numbers of states that the federal government concludes that it should respond by drawing from these state models and establishing some version of this on a national basis. In the late 1980s, for example, the Reagan Administration actively opposed a federal role in increasing energy efficiency standards for a wide range of household appliances. After more than two dozen states responded with some form of state-specific regulation, the Congress and President Reagan negotiated a federal bill that drew heavily on state experience but preempted all existing state laws in the process. There are several areas in which enactment of a climate policy in one jurisdiction has already been duplicated elsewhere. In 2000, Nebraska enacted carbon sequestration legislation, designed to promote changes in agricultural practice that could result in less use of fossil fuels in farming and increase the capacity of state-grown crops to sequester carbon through growing plant material. Shortly thereafter, three other states adopted essentially identical legislation, although there was virtually no contact between officials in the respective states during this period. However, the policy tool that appears to be diffusing most rapidly is the renewable portfolio standard (RPS), which has been establish in 22 states and the District of Columbia as of mid-2005. The first RPS was enacted in 1991 in Iowa, with little if any attention to greenhouse gas impacts. Subsequently, the pace of adoption has intensified, with four new RPS programs approved in 2005 and three existing ones significantly expanded during that period.

A national FiT does NOT require a federal policy---cp is MORE THAN ENOUGH

Energy Trend 11 (“Feed-In Tariff: Does the United States Need a National Policy?” http://www.energytrend.com/US\_FeedinTariff)

Adopting an American FIT Policy The adoption of a national feed-in tariff in the US does not have to involve a full-scale feed-in tariff. Neither does a FIT preclude RPS, but works in tandem with RSP and other programs. Last year, Jay Inslee (D-WA) introduced a national FIT bill modeled after Germany's successful policy. In July 2010, H.R.5883 - Renewable Energy Jobs and Security Act- made its way to the House Ways and Means Committee. The bill has yet to resurface. Until policy makers catch up to the desires of informed US people, it seems states, such as California, Wisconsin, and local municipalities like Gainesville, Florida, will need to continue taking the lead in enacting FIT strategies at the local level. When visiting Gainesville in February 2009, Murray Cameron, vice president of the European Photovoltaic Industry Association, stated Germany's road to success with feed-in tariffs began at the local level.

## China da

### China DA 1NC

China assuming leadership role in clean energy-exploiting weak US incentives policy

Bloomberg Business Week 4/11/12

http://www.businessweek.com/printer/articles/42246?type=bloomberg

U.S. government policies are creating a “boom-and-bust” in renewable energy investment, threaten a lead the nation regained over China for the technologies last year, the Pew Charitable Trusts said. U.S. investment reached $48.1 billion in 2011, largely in wind and solar power, the Washington-based research group said today in a report based on Bloomberg New Energy Finance data. Those funds trumped the $45.5 billion China allocated to renewables, for lead for the U.S. since 2008. The jump to the top of the G-20 ranking followed developers' efforts to finish projects before incentives expire. With China taking on long-term renewable energy targets and an American tax-break for wind lapsing in 2012, the U.S. again risks losing its edge, said Phyllis Cuttino, Pew’s clean energy director. “China is sending that important policy signal which the United States is failing to do to investors,” Cuttino said in an interview. “Even though China has fallen to number two, it seems as though investment there is going to continue at a very significant level for the foreseeable future. They are going to continue to be a dynamic clean-energy hub for the world.” The U.S. doesn’t have any comparable targets to China’s goals of installing a total of 160 gigawatts of wind power and 50 gigawatts of solar power by 2020, she said. At the same time, a production tax credit benefiting wind producers expires at the end of the year. That’s a threat to the wind industry and has prompted Vestas Wind Systems A/S (VWS), the world’s largest wind turbine maker, to say 1,600 U.S. factory jobs are at risk. Germany, Italy “In the absence of long-term policy, it’s hard to see how the U.S. can grow significantly in the future,” Cuttino said. “The boom-and-bust cycle of U.S. energy policy sends a very different signal to investors” from China. U.S. President Barack Obama took office three years ago pledging to generate jobs in the wind and solar industries. Since then, carbon cap-and-trade legislation has stalled and lawmakers have attacked assistance to renewables after solar manufacturer Solyndra LLC filed for bankruptcy in September. Globally, the installed capacity for renewable power now totals 565 gigawatts, 133 of it in China, 93 in the U.S. and 61 in Germany, according to today’s report. Cuttino said Pew had expected an increased deployment of renewables in 2011, with investment falling, and was surprised spending rose. “This sector is like the little engine that could -- it just keep growing somewhere, somehow,” she said. Germany ranked third for investment in clean energy in 2011, with $30.6 billion, followed by Italy on $28 billion, India on $10.2 billion and the U.K. with $9.4 billion, Pew said.

#### FIT crowds out china leadership

Gipe 10 (Paul Gipe, Contributor “NREL: Feed-in Tariffs Legal in US When Certain Conditions Met” http://www.renewableenergyworld.com/rea/news/article/2010/02/nrel-feed-in-tariffs-legal-in-us-when-certain-conditions-met)

Other Exemptions Hempling notes that Hawaii, Alaska, and most of Texas are exempt from the Federal Power Act. Long-Term Solutions While the use of RECs or SBC funds to pay for the portion of feed-in tariffs above avoided-cost is administratively more complex and consequently more costly than simply setting a tariff and putting the cost in the rate base, it can be done. Regulatory commissions and the utilities themselves are fully capable of administering such funds — and in fact do so — in several states. While such a system can work, FIT analysts feel that such an approach treats renewable energy differently than other utility-owned conventional generation that is put into the rate base. It sets renewables apart as costs to the system (and subsequently to ratepayers) as opposed to renewables being treated as integral parts of the utility system as they are in Ontario and Germany. That the principle federal law governing renewable energy, PURPA, treats renewable energy in this second-class way shouldn't be surprising, considering that the law passed more than three decades ago. Even then the first major wind farms were not erected in California until several years later when the PUC created the world's first feed-in tariff, California's famous Interim Standard Offer Contract No. 4. It’s All in How You Look at It The answer to the bigger question of whether U.S. law will continue to treat renewable energy as a burdensome addition to the existing utility system remains to be seen. Unless these legal precedents in the U.S. are clarified or revised, many feel that the U.S.' competitive position will continue to erode in comparison to countries such as China, India, Germany, and Japan that look at renewable energy differently.

Chinese lead in renewable energy markets key to economic growth strategy

CNET News 12/1/10 LaMonica

Ernst & Young: China clear leader in renewable energy

<http://news.cnet.com/8301-11128_3-20024232-54.html>

Driven by a surge in wind power installations, China is building on its lead in Ernst & Young's ranking of top renewable energy countries. Wind investment in China this quarter is nearly half of global spending, ensuring that one out of every two wind turbines to go live this year will be in China, according to consultants at Ernst & Young which does a quarterly "country attractiveness" index. The U.S. will see a jump in large solar installations before the end of year because developers are rushing to start projects before the end of the year. In place of a tax credit subsidy, renewable energy projects can now get a grant but that policy may not be renewed. Federal policy uncertainty and the financial markets have hurt the U.S. wind industry which is second in the global wind index. Low natural gas prices have also made solar and wind projects harder to finance. The Ernst & Young report noted that South Korea, which is a large consumer of energy, has risen significantly based on a national policy and well developed supply chain. Beyond solar and wind, China has elevated clean technology to a national strategic level, making it core to its future economic growth, said Ben Warren, the infrastructure advisory leader at Ernst & Young's UK Energy and Environmental, in a statement. "Since reaching top spot in our Index in September, China has opened up a healthy gap from other markets. Cleantech, including renewable energy, represents a significant part of the country's future economic growth plans," he said. "The Chinese solar industry is also fast becoming of great importance in the global market place." The report highlighting China's advances in renewable energy and green tech comes two days after Energy Secretary Steven Chu calling China's push into new energy technologies a "Sputnik moment" for the U.S. He said the U.S. needs to invest in clean energy research and development for economic reasons. As "significant" up-and-coming entrants in clean energy, the Ernst & Young report cites South Korea, Romania, Egypt, and Mexico for their energy technology programs.

#### Nuclear war with Russia

Sharavin 2001

Alexander Sharavin, Director of the Institute of Military and Political Analysis, WHAT THE PAPERS SAY, October 3, 2001, pg. online

China's economy is among the fastest-growing economies in the world. It remains socialistic in many aspects, i.e. extensive and highly expensive, demanding more and more natural resources. China's natural resources are rather limited, whereas the depths of Siberia and the Russian Far East are almost inexhaustible. Chinese propaganda has constantly been showing us skyscrapers in free trade zones in southeastern China. It should not be forgotten, however, that some 250 to 300 million people live there, i.e. at most a quarter of China's population. A billion Chinese people are still living in misery. For them, even the living standards of a backwater Russian town remain inaccessibly high. They have absolutely nothing to lose. There is every prerequisite for "the final throw to the north." The strength of the Chinese People's Liberation Army (CPLA) has been growing quicker than the Chinese economy. A decade ago the CPLA was equipped with inferior copies of Russian arms from late 1950s to the early 1960s. However, through its own efforts Russia has nearly managed to liquidate its most significant technological advantage. Thanks to our zeal, from antique MiG-21 fighters of the earliest modifications and S-75 air defense missile systems the Chinese antiaircraft defense forces have adopted Su-27 fighters and S-300 air defense missile systems. China's air defense forces have received Tor systems instead of anti-aircraft guns which could have been used during World War II. The shock air force of our "eastern brethren" will in the near future replace antique Tu-16 and Il-28 airplanes with Su-30 fighters, which are not yet available to the Russian Armed Forces! Russia may face the "wonderful" prospect of combating the Chinese army, which, if full mobilization is called, is comparable in size with Russia's entire population, which also has nuclear weapons (even tactical weapons become strategic if states have common borders) and would be absolutely insensitive to losses (even a loss of a few million of the servicemen would be acceptable for China). Such a war would be more horrible than the World War II. It would require from our state maximal tension, universal mobilization and complete accumulation of the army military hardware, up to the last tank or a plane, in a single direction (we would have to forget such "trifles" like Talebs and Basaev, but this does not guarantee success either). Massive nuclear strikes on basic military forces and cities of China would finally be the only way out, what would exhaust Russia's armament completely. We have not got another set of intercontinental ballistic missiles and submarine-based missiles, whereas the general forces would be extremely exhausted in the border combats. In the long run, even if the aggression would be stopped after the majority of the Chinese are killed, our country would be absolutely unprotected against the "Chechen" and the "Balkan" variants both, and even against the first frost of a possible nuclear winter.

## Solvency

### Solvency

Fits don’t solve renewable energy---

1. No support

Cory 9 (Karlynn Cory, Toby Couture, and Claire Kreycik “Feed-in Tariff Policy: Design, Implementation, and RPS Policy Interactions” http://www.nrel.gov/docs/fy09osti/45549.pdf)

Second, in contrast to other financial incentives for renewables, FITs do not decrease a developer’s up-front costs. Policy makers enact investment tax credits, grants, and rebates to reduce the high, up-front capital costs of RE installations. As seen in the U.S. context, grants and rebates can be integral in increasing the market penetration of small, customer-sited projects. Unlike production incentives or FITs, grants and rebates do not require a long-term policy and financial commitment to a specific project, allowing for flexible support based on changes in the market (Wiser and Pickle 1997). However, these mechanisms may not be effective at spurring broad market adoption, and they have often failed to provide stable conditions for market growth (Lantz and Doris 2009).

1. Price determination and complexity

Cory 9 (Karlynn Cory, Toby Couture, and Claire Kreycik “Feed-in Tariff Policy: Design, Implementation, and RPS Policy Interactions” http://www.nrel.gov/docs/fy09osti/45549.pdf)

As with most policies, the FIT policy has some notable challenges. The first is the up-front administrative requirement: Detailed analysis is required to properly set the payment level at the outset. The payment level must ensure revenues will be adequate to cover project costs. If the FIT payments are set too low, then little new RE development will result. And if set too high, the FIT may provide unwarranted profits to developers. To achieve the right balance across a wide range of technologies and project sizes, many levels of differentiation are used. However, if the FIT policy is too complex with too many bonuses, exemptions, and qualifications, it may hinder program implementation. And as costs change and markets shift due to technological innovation and increasing market maturity, the FIT policy needs periodic revision to reflect evolving costs and market conditions.

1. Too narrow and no rps---their solvency author concludes the plan text’s picking of solar and wind means they can’t solve

Kofetsky 2008, "DEUTSCHLAND OBER ALLES: WHY GERMAN REGULATIONS NEED TO CONQUER THE DIVIDED U.S. RENEWABLE-ENERGY FRAMEWORK TO SAVE CLEAN TECH (AND THE WORLD)", https://docs.google.com/viewer?a=v%26pid=gmail%26attid=0.1%26thid=13955f78a3a8375d%26mt=application/pdf%26url=https://mail.google.com/mail/u/0/?ui%3D2%26ik%3Db62fd2ee4a%26view%3Datt%26th%3D13955f78a3a8375d%26attid%3D0.1%26disp%3Dsafe%26zw%26sig=AHIEtbRX3GpQtnAMY29zWdsBnFGFuWibbA

Reforms to the U.S. renewable-energy framework should build on the prior success of both state portfolio standards and the German Renewable Energy Act. Specifically, the United States should first implement a feed-in tariff to expand clean-tech equipment distribution and allow for innovation and economies of scale.301 The United States should then add a renewable portfolio standard. The cumulative effect of these measures will give both utilities and their customers an incentive to champion broad clean-tech development and therefore draw innovators and investors to the space. The feed-in tariff implemented in the United States must contain a broad definition of renewable energy. Specifically, the tariff should define renewable energy as those processes generating electricity from hydrodynamic, wind, solar radiation, or geothermal energies; or gas from landfills, sewage treatment plants, mines, or biomass; or any other means which (1) consumes no tangible resource as fuel, or (2) produces no waste product which itself is not a productive resource in contemporary commerce.302 This definition would be broad enough to encompass all existing clean tech, as well as to leave the door open for significant future innovation.303 The broad definition would also allow for a maximum adoption rate304 and avoid the myopic favoring of one technology over another.305 Cumulatively, these factors make the cleantech industry more attractive to investors, which is ultimately a boon for innovation.

#### Renewables don’t solve---

#### Substitutability

Fridley- Energy Analysis Program, Lawrence Berkeley National Laboratory-10

<http://www.postcarbon.org/report/127153-energy-nine-challenges-of-alternative-energy>

Ideally, an alternative energy form would integrate directly into the current energy system as a “drop-in” substitute for an existing form without requiring further infrastructure changes. This is rarely the case, and the lack of substitutability is particularly pronounced in the case of the electrification of transportation, such as with electric vehicles. Although it is possible to generate the electricity needed for electrified transportation from wind or solar power, the prerequisites to achieving this are extensive. Electric-car development would require extensive infrastructure changes, including: . Retooling of factories to produce the vehicles . Development of a large-scale battery industry. Development of recharging facilities . Deployment of instruments for the maintenance and repair of such vehicles . A spare-parts industry . “Smart-grid” monitoring and control software and equipment . Even more generation and transmission facilities to supply the additional electricity demand The development of wind and solar-power electricity also requires additional infrastructure; wind and solar electricity must be generated where the best resources exist, which is often far from population centers. Thus, extensive investment in transmission infrastructure to bring it to consumption centers is required. Today, ethanol can be blended with gasoline and used directly, but its propensity to absorb water and its high oxygen content make it unsuitable for transport in existing pipeline systems, 6 and an alternative pipeline system to enable its widespread use would be materially and financially intensive. While alternative energy forms may provide the same energy services as another form, they rarely substitute directly, and these additional material costs need to be considered.

#### Intermittency

Fridley- Energy Analysis Program, Lawrence Berkeley National Laboratory-10

<http://www.postcarbon.org/report/127153-energy-nine-challenges-of-alternative-energy>

5. intermittency Modern societies expect that electrons will flow when a switch is flipped, that gas will flow when a knob is turned, and that liquids will flow when the pump handle is squeezed. This system of continuous supply is possible because of our exploitation of large stores of fossil fuels, which are the result of millions of years of intermittent sunlight concentrated into a continuously extractable source of energy. Alternative energies such as solar and wind power, in contrast, produce only intermittently as the wind blows or the sun shines, and even biomass-based fuels depend on seasonal harvests of crops. Integration of these energy forms into our current system creates challenges of balancing availability and demand, and it remains doubtful that these intermittent energy forms can provide a majority of our future energy needs in the same way that we expect energy to be available today.One indication of intermittency challenges in electric power generation is the capacity factor, or the average percentage of time in a year that a power plant is producing at full rated capacity. As shown in table 18.2, photovoltaic systems produce at full capacity only 12 to 19 percent of the time over the course of a year, compared to an average of 30 percent for wind systems. In contrast, a coal-thermal plant will typically run at full capacity 70 to 90 percent of the time, while nuclear power operates at over a 90 percent capacity factor in the United States. Our current electricity system is dominated by large baseload coal- and nuclear-power generation. The integration of intermittent energy forms such as solar and wind is increasingly seen as a matter of expanding transmission capacity and grid interconnections to extend the area over which these variations are felt, as well as implementing more complex operations controls. Thisapproach in effect relies on strengthening and expanding the large centralized energy production and distribution model that has characterized the fossil-fuel era, but may not necessarily be suitable for a future of renewable energy generation. The key to evening out the impact of intermittency is storage; that is, the development of technologies and approaches that can store energy generated during periods of good wind and sun for use at other times. Many approaches have been proposed and tested, including compressed-air storage, batteries, and the use of molten salts in solar-thermal plants. The major drawbacks of all these approaches include the losses involved in energy storage and release, and the limited energy density that these storage technologies can achieve.

#### c. Energy Density

Fridley- Energy Analysis Program, Lawrence Berkeley National Laboratory-10

<http://www.postcarbon.org/report/127153-energy-nine-challenges-of-alternative-energy>

The consequence of low energy density is that larger amounts of material or resources are needed to provide the same amount of energy as a denser material or fuel. Many alternative energies and storage technologies are characterized by low energy densities, and their deployment will result in higher levels of resource consumption. As shown in figure 18.1, the main alternatives under development to supplant gasoline use in cars are dramatically lower in energy density than gasoline itself. Lithium-ion batteries—the focus of current research for electric vehicles—contain only 0.5 MJ per kilogram of battery compared to 46 MJ per kilogram for gasoline. Advances in battery technology are being announced regularly, but they all come up against the theoretical limit of battery density of only 3 MJ per kilogram. Low energy density will present a significant challenge to the electrification of the car fleet and will raise challenges of adequate material supply: Today, the advanced Tesla Roadster has a lithium-ion battery pack weighing 900 pounds, which delivers just 190 MJ of energy. In contrast, a 10-gallon tank of gasoline weighs 62 pounds and delivers 1,200 MJ of energy. To provide the equivalent energy to a typical gasoline car, an electric-car battery pack would need to consume resources weighing 5,700 pounds, nearly the weight of the last Hummer model. The more dense an energy form is, the less land is needed for its deployment. Because many alternative energies are far less energy dense than fossil fuels, largescale deployment will incur considerable land costs. For example, a single 1,000-megawatt coal-fired power plant requires 1 to 4 square kilometers (km2 ) of land, not counting the land required to mine and transport the coal. In contrast, 20–50 km2 , or the size of a small city, would be required to generate the equivalent amount of energy from a photovoltaic array or from a solar-thermal system. For wind, 50–150 km2 would be needed; for biomass, 4,000–6,000 km2 of land would be needed. The sprawling city of Los Angeles, in comparison, covers 1,200 km2 . The land-use issue is thus a problem not only of biofuels production; siting of alternative energy projects will likely be a constant challenge because of the inherent high land footprint.

#### Timeframe

Fridley- Energy Analysis Program, Lawrence Berkeley National Laboratory-10

<http://www.postcarbon.org/report/127153-energy-nine-challenges-of-alternative-energy>

Closely related to the issue of scalability and timing is commercialization, or the question of how far away a proposed alternative energy source stands from being fully commercialized. Often, newspaper reports of a scientific laboratory breakthrough are accompanied by suggestions that such a breakthrough represents a possible “solution” to our energy challenges. In reality, the average time frame between laboratory demonstration of feasibility and full large-scale commercialization is twenty to twenty-five years. Processes need to be perfected and optimized, patents developed,demonstration tests performed, pilot plants built and evaluated, environmental impacts assessed, and engineering, design, siting, financing, economic, and other studies undertaken. In other words, technologies that are proved feasible on the bench top today will likely have little impact until the 2030s. This reality is reflected in the key message of the now-famous Hirsch Report, which noted that to properly mitigate the economic impacts of peak oil, we would have needed to start fundamentally redesigning our national energy infrastructure twenty years in advance of the peak. 5

## Warming

#### No impact – recent data proves CO2 escapes

Taylor 11 (James, is a senior fellow for environment policy at the Heartland Institute and managing editor of Environment & Climate News. “New NASA Data Blow Gaping Hole In Global Warming Alarmism” <http://www.forbes.com/sites/jamestaylor/2011/07/27/new-nasa-data-blow-gaping-hold-in-global-warming-alarmism/>)

NASA satellite data from the years 2000 through 2011 show the Earth’s atmosphere is allowing far more heat to be released into space than alarmist computer models have predicted, reports a new study in the peer-reviewed science journal Remote Sensing. The study indicates far less future global warming will occur than United Nations computer models have predicted, and supports prior studies indicating increases in atmospheric carbon dioxide trap far less heat than alarmists have claimed. Study co-author Dr. Roy Spencer, a principal research scientist at the University of Alabama in Huntsville and U.S. Science Team Leader for the Advanced Microwave Scanning Radiometer flying on NASA’s Aqua satellite, reports that real-world data from NASA’s Terra satellite contradict multiple assumptions fed into alarmist computer models. “The satellite observations suggest there is much more energy lost to space during and after warming than the climate models show,” Spencer said in a July 26 University of Alabama press release. “There is a huge discrepancy between the data and the forecasts that is especially big over the oceans.” In addition to finding that far less heat is being trapped than alarmist computer models have predicted, the NASA satellite data show the atmosphere begins shedding heat into space long before United Nations computer models predicted. The new findings are extremely important and should dramatically alter the global warming debate. Scientists on all sides of the global warming debate are in general agreement about how much heat is being directly trapped by human emissions of carbon dioxide (the answer is “not much”). However, the single most important issue in the global warming debate is whether carbon dioxide emissions will indirectly trap far more heat by causing large increases in atmospheric humidity and cirrus clouds. Alarmist computer models assume human carbon dioxide emissions indirectly cause substantial increases in atmospheric humidity and cirrus clouds (each of which are very effective at trapping heat), but real-world data have long shown that carbon dioxide emissions are not causing as much atmospheric humidity and cirrus clouds as the alarmist computer models have predicted. The new NASA Terra satellite data are consistent with long-term NOAA and NASA data indicating atmospheric humidity and cirrus clouds are not increasing in the manner predicted by alarmist computer models. The Terra satellite data also support data collected by NASA’s ERBS satellite showing far more longwave radiation (and thus, heat) escaped into space between 1985 and 1999 than alarmist computer models had predicted. Together, the NASA ERBS and Terra satellite data show that for 25 years and counting, carbon dioxide emissions have directly and indirectly trapped far less heat than alarmist computer models have predicted. In short, the central premise of alarmist global warming theory is that carbon dioxide emissions should be directly and indirectly trapping a certain amount of heat in the earth’s atmosphere and preventing it from escaping into space. Real-world measurements, however, show far less heat is being trapped in the earth’s atmosphere than the alarmist computer models predict, and far more heat is escaping into space than the alarmist computer models predict.

No extinction

Barrett, professor of natural resource economics – Columbia University, ‘7

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

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

#### Ocean ecosystem resilient –

#### A. deep-sea floor checks.

SOUTH BEND TRIBUNE, October 19, ‘95, p. A10

Rough estimates for the number of species on the deep-sea floor have now soared to 10 million or even 100 million, hundreds of times larger than the old projections of 200,000 species for all types of marine life. The new figures also contrast starkly with the sum of the earth's plants, animals and microbes that scientists have so far named, about 1.4 million species in all. And they match the 10 million to 100 million that experts had projected as possible totals for the number of terrestrial species. "It's changing our whole view about biodiversity," said Dr. P. John D. Lambshead, a marine biologist at the Natural History Museum in London who studies the abundance of deep ocean species. "The quantity of life we've found is incredible," he added in an interview. "All sorts of ecologic theories that looked good, based on terrestrial models, suddenly fall apart. We're having to change all our ideas."

#### B. massive size of oceans checks snowball and ensures slow timeframe.

Bjørn Lomborg, Director, Environmental Assessment Institute, THE SKEPTICAL ENVIRONMENTALIST, ‘1 p. 189

But the oceans are so incredibly big that our impact on them has been astoundingly insignificant - the oceans contain more than 1,000 billion liters of water. The UN’s overall evaluation of the oceans concludes: “The open sea is still relatively clean. Low levels of lead, synthetic compounds and artificial radionuclides, though widely detectable, are biologically insignificant. Oil slicks and litter are common among sea leans, but are, at present, a minor consequences to communities of organisms living in ocean waters.

### -Econ Growth

#### No war from economic decline

Deudney 1999

Daniel, Asst Prof of Poli Sci at Johns Hopkins, Contested Grounds: Security and Conflict in the New Environmental Politics

The international consequences of these domestic changes may be increased conflict and war. If authoritarian regimes are more war-prone because of their lack of democratic control, and if revolutionary regimes are war-prone because of their ideological fervor and lack of socialization into international norms and processes, then a world political system containing more such states is likely to be more violent. **The historical record from previous economic depressions supports the general proposition that widespread economic stagnation** and unmet economic expectations **contributes to international conflict. Although initially compelling, this scenario has flaws** as well. First, **the pessimistic interpretation of the relationship between environmental sustainability and economic growth is** arguably **based on unsound economic theory. Wealth formation is not so much a product of cheap natural resource availability as of capital formation via savings and more efficient ways of producing. The fact that so many resource-poor countries, like Japan, are very wealthy, while many countries with more extensive resource endowments are poor, demonstrates that there is no clear and direct relationship between abundant resource availability and economic well-being**. Environmental constraints require an end to economic growth based on growing raw material through-puts, rather than an end to growth in the output of goods and services. **Second, even if economic decline does occur, interstate conflict may be dampened, not stoked.** In the Neo-Malthusian scenario, domestic political life is an intervening variable connecting environmentally induced economic stagnation with interstate conflict. How societies respond to economic decline may in large measure depend upon the rate at which such declines occur. A compensating factor here is the possibility that **as people get poorer they will be less willing to spend increasingly scarce resources for military capabilities. In this regard, the experience of economic depressions over the last two centuries may not be relevant, because such depressions were characterized by underutilized production capacity and falling resource prices. In the 1930s increased military spending had a stimulative effect, but in a world in which economic growth had been retarded by environmental constraints military spending would exacerbate the economic problem**

## Water

### -Water

#### ---Potential for conflict induces cooperation, not war

Selby 3/1/05 (Janis a professor at the University of Sussex and sits on the Department of International Relations and Politics. March 1st, 2005. Third World Quarterly. “The Geopolitics of Water in the Middle East: fantasies and realties” <http://dx.doi.org/10.1080/0143659042000339146>

Others reject the water wars thesis, but still maintain that water has important geopolitical implications—not in fomenting conflict, but in nurturing co-operation. According to such ‘liberal functionalist’ arguments, functional co-operation between states over ‘low-political’ issues like water can foster greater understanding, trust and in turn co-operation over ‘highpolitical’ areas of policy making. In line with such thinking, it is often argued that water co-operation between states like Bahrain and Saudi Arabia, or between Israel and Jordan, has laid the groundwork for fuller cooperation between these countries. It is asserted that ‘water scarcity has invariably been a platform for cooperation in the region’. And it is consistently speculated—especially of relations between Israel and the Arab states—that ‘water can catalyse and lubricate the peace process. and soften the transition to regional cooperation’; that water could ‘induce ever increasing co-operation. . .between otherwise hostile riparians, in essence ‘‘leading’’ peace talks’; and that ‘moves towards settlement of water disputes could promote efforts at achieving wider peace objectives’. As with the advocates of the water wars thesis, the guiding premise here is that water is, or can be, of significant geopolitical weight. As with our CIA analyst, the implicit assumption is that water shapes, or can be employed to help reshape, the geopolitics of the entire Middle East.

#### War undermines their access – states will cooperate

Leslie 2k (Jacques Leslie, award-winning author, writer for Harper’s, the Atlantic Monthly, etc, July 2000, Harper’s Magazine

So, until now, water conflicts have simmered but rarely boiled, perhaps because of the universality of the need for water. Almost two fifths of the world's people live in the 214 river basins shared by two or more countries; the Nile links ten countries, whose leaders are profoundly aware of one another's hydrologic behavior. Countries usually manage to cooperate about Water, even in unlikely circumstances. In 1957, Cambodia, Laos, Thailand, and South Vietnam formed the Mekong Committee, which exchanged information throughout the Vietnam War. Through the 1980s and into the 1990s, Israeli and Jordanian officials secretly met once or twice a year at a picnic table on the banks of the Yarmuk River to allocate the river's water supply; these so-called picnic-table summits occurred while the two nations disavowed formal diplomatic contact. Jerome Delli Priscoli, editor of a thoughtful trade journal called Water Policy and a social scientist at the U.S. Army Corps of Engineers, believes the whole notion of water conflict is overemphasized: \Water irrigation helped build early communities and bring those communities together in larger functional arrangements. Such community networking was a primary impetus to the growth of civilization. Indeed, water may actually be one of humanity's great learning grounds for building community.... The thirst for water may be more persuasive than the impulse toward conflict."

#### ---Technology solves

Selby 5 (Jan, professor at the University of Sussex and sits on the Department of International Relations and Politics. March 1st, 2005. Third World Quarterly. “The Geopolitics of Water in the Middle East: fantasies and realties” <http://dx.doi.org/10.1080/0143659042000339146>)

In most popular political and also environmental discourse the Middle East’s water problems are usually represented in thoroughly naturalistic terms. So conceived, water scarcities and associated ecological stresses are essentially a function of imbalances in the relationship between natural resource and population levels. Across the Middle East, so the standard narrative goes, water resources are finite and limited. Populations, meanwhile, are high and growing—in the Arab states, for instance, at an average annual rate of 2.7% between 1975 and 2000.14 And it follows from this that many Middle Eastern states are facing situations of ‘water stress’,15 overstepping the ‘thresholds’ and ‘carrying capacities’ of their delicate natural resource bases, to potentially disastrous ecological, economic and political effect. As Malin Falkenmark writes, typifying this way of thinking, ‘unfortunately, water resources are finite; future increases in population therefore imply increased water competition’.16 Only by reducing population growth are water crises and conflicts likely to be averted. But such a remedial step is, for understandable reasons, exceedingly remote; and thus the Malthusian spectre of over-population, disease, famine and conflict looms on the horizon. This, even if not always quite so bluntly stated, is the underlying premise of those doom-laden prophecies on the coming ‘water wars’. The problem with such naturalistic neo-Malthusianism is that it is simply wrong about the causes of water crisis. Naturalistic discourse presents us with a world comprising just humans and nature, where nature is static and unyielding, where the human relationship with nature is limited to its consumption, and where there are in consequence insurmountable limits to these consumptive—indeed exploitative—relations. But nature and natural resources do not just sit around waiting to be consumed. Resources, to the contrary, are material social constructs and products, brought into being through economic and technological development, through the fact that humans are producers and not just consumers of ‘nature’ (a ‘nature’, we might add, that no longer really exists).17 Water resources such as deep-lying aquifers that would not even have been thought of as ‘resources’ a century ago are today commonly characterised as ‘natural water resources’. New technologies and changing economies bring new resources into being, and even change our conceptions of what counts as ‘nature’. As for population growth, here neo-Malthusianism is equally misguided. Populations are not just environmental burdens, they are also what Julian Simon called the ‘ultimate resource’. Population growth has been a key positive factor in the development and expansion of capitalism and in stimulating economic growth. Thus to understand when and why population growth can become a problem, one needs to look elsewhere, at the failure of particular states and societies to make productive use of their expanding population, and the particular reasons for this. In both these regards the Middle East’s water problems cannot be adequately explained in naturalistic terms. For, as David Harvey observes, to ‘declare a state of ecoscarcity is in effect to say that we have not the will, wit or capacity to change our state of knowledge, our social goals, cultural modes, and technological mixes, or our form of economy, and that we are powerless to modify either our material practices or ‘‘nature’’ according to human requirements’

**Empirically, water doesn’t cause war**

**Lawfield 10** – Thomas Lawfield is an MA candidate at the University for Peace. Water Security: War or Peace? Thomas Lawfield May 03, 2010 http://www.monitor.upeace.org/innerpg.cfm?id\_article=715

In reality, water does not cause war. The arguments presented above, although correct in principle, have little purchase in empirical evidence. Indeed, as one author notes, there is only one case of a war where the formal declaration of war was over water.[20] This was an incident between two Mesopotamian city states, Lagash and Umma, over 2,500 years BC, in modern day southern Iraq. Both the initial premises and arguments of water war theorists have been brought into question. Given this, a number of areas of contestation have emerged: "Questioning both the supply and demand side of the water war argument [...] Questioning assumptions about the costs of water resources [...and] Demonstrating the cooperative potential of the water resource."[21] Why then is water not a cause of war? The answer lies in two factors: first, the capacity for adaptation to water stresses and, second, the political drawbacks to coupling water and conflict. First, there is no water crisis, or more correctly, there are a number of adaptation strategies that reduce stress on water resources and so make conflict less likely. Unlike the water war discourse, which perceives water as finite in the Malthusian sense, the capacity for adaptation to water stress has been greatly underestimated. For instance, I will discuss in particular a trading adaptation known as ‘virtual water’, which refers to the water used to grow imported food. This water can be subtracted from the total projected agricultural water needs of a state, and hence allows water scarce states to operate on a lower in-country water requirement than would otherwise be expected.[22] This means that regions of the world that are particularly rich in water produce water intense agricultural products more easily in the global trade system, while other water scarce areas produce low intensity products.[23] The scale of this water is significant - Allan famously pointed out that more embedded water flows into the Middle East in the form of grain than flows in the Nile.[24] In addition, there are significant problems around the hegemonic doctrine of the water crisis. Many authors point to relatively low water provision per capita by states, and suggest that this will increase the likelihood of a state engaging in war with a neighbouring state, to obtain the water necessary for its population. This is normally a conceptual leap that produces the incorrect corollary of conflict, but is also frequently a problem of data weaknesses around the per capita requirements. For instance, Stucki cites the case of the Palestinians being under the worst water stress, with a per capita provision being in the region of 165m³/year.[25] Unfortunately, such an analysis is based on false actual provision data in this region. Based on the authors work on water provision in Lebanese Palestinian refugee camps, the actual provision is over 90m³/month. Such a figure is highly likely to be representative of other camps in the region.[26] If this example is representative of trends to exaggerate water pressures in the region, then we should be sceptical about claims of increasing water stress. Furthermore, given that many water systems have a pipe leakage rate of fifty per cent, combined with a seventy per cent loss of agricultural water, significant efficiency enhancements could be made to existing infrastructure. Combined with desalination options in many water shortage prone states, there is an overall capacity for technological and market driven solutions to water scarcity.[27]

**Even if they win the war scenario, water isn’t the root cause – politics is
Lawfield 10** – Thomas Lawfield is an MA candidate at the University for Peace. Water Security: War or Peace? Thomas Lawfield May 03, 2010 http://www.monitor.upeace.org/innerpg.cfm?id\_article=715

Second, water wars are not caused by water, but rather an inability of politics. Barnett makes the case clear by arguing that water war would be a ‘failure of politics’ rather than the outcome of justified demands for essential resources.[28] In this way, it is not scarcity that is the driver in the Malthusian sense, but a political, and politicised issue. This is most noticeable where conflict occurs in areas where there are both political tensions and water resources challenges. For example, there are absurd and exaggerated claims of a linkage between Israel’s water management and surrounding states. In reality, conflict in this region is strongly influenced by political circumstance that speaks to a wider discourse around Israel’s position in the Near East. That environmental constraints and pressures are woven into wider discourses of politics is no indication that they are the cause of conflict, but rather more that they are an important contextual factor that may be mobilised for political reasons. For instance, in 2000 Lebanon started building a small pumping station on the Wazzani river which is used by downstream Israel. This rapidly became a media issue in Israel, probably due to the heightened security discourse surrounding water. Claims were made that the action was comparable to the 1964 diversion of the Hasbani, an Arab coalition move to harm the Israeli economy. However, the story diminished even faster than it emerged, when officials on both sides showed their dismay at the emerging media frenzy.[29] There are two key trends to note from this example: first, that wider discussions around water wars influence the articulation of war in reality, and second the water component of the conflict is not significant, rather it acts as a trigger for the utilisation of wider political narratives. In essence, water is merely a tool for political ends. Third, war over water is illogical. States are not inherently belligerent, but act in self interested, utility-maximising ways. Rather, they engage in conflict if they stand to gain more than they loose. In the case of water, the costs of military engagement far outweigh the costs of cooperative engagement. For instance, Baskin points out that it would cost more for Israel to engage in war for the water resources of the West Bank than it would to buy the equivalent of the West Banks aquifers from elsewhere.[30] Water war protagonists also present the weak argument that there is a unique situation in the Middle East of the possibility of state territories changing, with water related land grabs. ‘Victory may bring land that offers more resources – either water or oil.’[31] This is not the case. State territories have been extremely stable for over a hundred years – conflict that attempts to enlarge boundaries would problematise the very existence and legitimacy of the state itself. By contrast, if they stand to gain by establishing cooperative relationships with other states in the international system, they will. It is difficult to see how good water management, which frequently demands cooperation, can be conducted through the use of conflict. That said, there are incidences of water related conflict on the intrastate level. For instance, in summer 2000, clashes involving thousands of farmers and police occurred in the Huang He river basin, China over government policy changes that meant a local dam runoff would no longer supply irrigation water for farmers but instead be used for urbanisation. In addition, in Pakistan there have been clashes between farmers in Punjab and Sind province over control of the Indus. But these are not resource pressure issues – rather water acts as one of many other triggers in a wider problem of social injustice and political discourses.

### -Food

**Won’t go to war over food**

**Chang 2/21**/11 Gordon G Chang, Graduated Cornell Law School “Global Food Wars” http://blogs.forbes.com/gordonchang/2011/02/21/global-food-wars/

In any event, food-price increases have apparently been factors in the unrest now sweeping North Africa and the Middle East. The poor spend up to half their disposable income on edibles, making rapid food inflation a cause of concern for dictators, strongmen, and assorted autocrats everywhere. So even if humankind does not go to war over bad harvests, Paskal may be right when she contends that climate change may end up altering the global map. This is not the first time in human history that food shortages looked like they would be the motor of violent geopolitical change. Yet amazing agronomic advances, especially Norman Borlaug’s Green Revolution in the middle of the 20th century, have consistently proved the pessimists wrong. In these days when capitalism is being blamed for most everything, it’s important to remember the power of human innovation in free societies—and the efficiency of free markets.

**Supply and demand means farmers will make more food – empirically true**

**Zubrin 5/13**/11 — Dr. Robert Zubrin Fellow with the Center for Security Policy B.A. in Mathematics from the University of Rochester (1974), and a masters degree in Aeronautics and Astronautics, a masters degree in Nuclear Engineering, and a Ph.D. in Nuclear Engineering “WHY IT’S WRONG TO AGREE WITH THE MALTHUSIANS ABOUT ETHANOL”

 http://www.ilcorn.org/daily-update/182-why-it-rsquo-s-wrong-to-agree-with-the-malthusians-about-ethanol/

In fact, Lester Brown is wrong about the alleged famine-inducing potential of the ethanol program for exactly the same reason he has been repeatedly wrong about the alleged famine-inducing potential of population growth. There is not a fixed amount of grain in the world. Farmers produce in response to demand. The more customers, the more grain. Not only that, but the larger the potential market, the greater the motivation for investment in improved techniques. This is why, despite the fact that the world population has indeed doubled since Lester Brown, Paul Ehrlich, and the other population control zealots first published their manifestos during the 1960s, people worldwide are eating much better today than they were then. In the case of America’s corn growing industry, the beneficial effect of a growing market has been especially pronounced, with corn yields per acre in 2010 (165 bushels per acre) being 37 percent higher than they were in 2002 (120 bushels per acres) and more than four times as great as they were in 1960 (40 bushels per acre.)

**Tech development solves**

**Thompson 5/13/11 –** Dr. Robert L. Thompson is a senior fellow for The Chicago Council on Global Affairs and professor emeritus at the University of Illinois at Urbana-Champaign. “Proving Malthus Wrong, Sustainable agriculture in 2050” http://scienceblogs.com/tomorrowstable/2011/05/proving\_malthus\_wrong\_sustaina.php

Tools available today, including plant breeding and biotechnology, can make presently unusable soils productive and increase the genetic potential of individual crops - enhancing drought and stress tolerance, for example - while also producing gains in yields. Existing tools can also internalize plants' resistance to disease, and even improve a plant's nutritional content - meaning consumers can get more nutritional value without increasing their consumption. Furthermore, modern high-productivity agriculture minimizes farmers' impact on the environment. Failure to embrace these technologies will result in further destruction of remaining forests. Adoption of technologies that produce more output from fewer resources has been hugely successful from an economic standpoint: prior to the price spike in 2008, there was a 150-year downward trend in the real price of food. The jury is still out on whether the long-term downward trend will resume, prices will flatten out on a new higher plateau, or they will trend upward in the future. The key is investing in research in the public and private sectors to increase agricultural productivity faster than global demand grows. Long ago, British scholar Thomas Malthus predicted that the human population would eventually outgrow its ability to feed itself. However, Malthus has been proven wrong for more than two centuries precisely because he underestimated the power of agricultural research and technology to increase productivity faster than demand. There is no more reason for Malthus to be right in the 21st century than he was in the 19th or 20th - but only if we work to support, not impede, continued agricultural research and adoption of new technologies around the world.

### -China

#### ---No risk of Sino/American war.

Rosecrance et al 2010

Richard, Political Science Professor @ Cal and Senior Fellow @ Harvard’s Belfer Center and Former Director @ Burkle Center of IR @ UCLA, and Jia Qingguo, PhD Cornell, Professor and Associate Dean of School of International Studies @ Peking University, “Delicately Poised: Are China and the US Heading for Conflict?” Global Asia 4.4, http://www.globalasia.org/l.php?c=e251

Will China and the US Go to War? If one accepts the previous analysis, the answer is “no,” or at least not likely. Why? First, despite its revolutionary past, China has gradually accepted the US-led world order and become a status quo power. It has joined most of the important inter-governmental international organizations. It has subscribed to most of the important international laws and regimes. It has not only accepted the current world order, it has become a strong supporter and defender of it. China has repeatedly argued that the authority of the United Nations and international law should be respected in the handling of international security crises. China has become an ardent advocate of multilateralism in managing international problems. And China has repeatedly defended the principle of free trade in the global effort to fight the current economic crisis, despite efforts by some countries, including the US, to resort to protectionism. To be sure, there are some aspects of the US world order that China does not like and wants to reform. However, it wishes to improve that world order rather than to destroy it. Second, China has clearly rejected the option of territorial expansion. It argues that territorial expansion is both immoral and counterproductive: immoral because it is imperialistic and counterproductive because it does not advance one’s interests. China’s behavior shows that instead of trying to expand its territories, it has been trying to settle its border disputes through negotiation. Through persistent efforts, China has concluded quite a number of border agreements in recent years. As a result, most of its land borders are now clearly drawn and marked under agreements with its neighbors. In addition, China is engaging in negotiations to resolve its remaining border disputes and making arrangements for peaceful settlement of disputed islands and territorial waters. Finally, even on the question of Taiwan, which China believes is an indisputable part of its territory, it has adopted a policy of peaceful reunification. A country that handles territorial issues in such a manner is by no means expansionist. Third, China has relied on trade and investment for national welfare and prestige, instead of military conquest. And like the US, Japan and Germany, China has been very successful in this regard. In fact, so successful that it really sees no other option than to continue on this path to prosperity. Finally, after years of reforms, China increasingly finds itself sharing certain basic values with the US, such as a commitment to the free market, rule of law, human rights and democracy. Of course, there are still significant differences in terms of how China understands and practices these values. However, at a conceptual level, Beijing agrees that these are good values that it should strive to realize in practice. A Different World It is also important to note that certain changes in international relations since the end of World War II have made the peaceful rise of a great power more likely. To begin with, the emergence of nuclear weapons has drastically reduced the usefulness of war as a way to settle great power rivalry. By now, all great powers either have nuclear weapons or are under a nuclear umbrella. If the objective of great power rivalry is to enhance one’s interests or prestige, the sheer destructiveness of nuclear weapons means that these goals can no longer be achieved through military confrontation. Under these circumstances, countries have to find other ways to accommodate each other — something that China and the US have been doing and are likely to continue to do. Also, globalization has made it easier for great powers to increase their national welfare and prestige through international trade and investment rather than territorial expansion. In conducting its foreign relations, the US relied more on trade and investment than territorial expansion during its rise, while Japan and Germany relied almost exclusively on international trade and investment. China, too, has found that its interests are best served by adopting the same approach. Finally, the development of relative pacifism in the industrialized world, and indeed throughout the world since World War II, has discouraged any country from engaging in territorial expansion. There is less and less popular support for using force to address even legitimate concerns on the part of nation states. Against this background, efforts to engage in territorial expansion are likely to rally international resistance and condemnation. Given all this, is the rise of China likely to lead to territorial expansion and war with the US? The answer is no

#### ---Economic interdependence and changing ideology makes war over Taiwan unlikely.

Ross 2004

Robert, Professor of Political Science @ Boston College, Chinese Foreign Policy in Transition, pg. 147

China’s ability to wreak havoc is not new to East Asia. Since 1949 the United States has had to cope with U.S.-Chinese conflicts of interest. In many respects, it is easier to deal with these conflicts today than ever be¬fore. Indochina is no longer an issue. China is collaborating with South Korea to encourage North Korean moderation. Even the conflict with Taiwan has become more manageable. Taiwan now has a stable government, a prosperous economy, and a vastly improved military. The mainland’s ability to challenge Taiwan’s security is less today than ever before. Moreover, the mainland is no longer allied with a global superpower that can shield it in a conflict with the United States over Taiwan. Nor is it an antagonist in a polarized East Asian balance of power. Participation in the global economy and a stake in regional stability encourage China to avoid confrontations with the United States over Taiwan.

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**Empirics in recent politics prove—China rise will not cause war or gut heg, it won’t even be expansionist**

**Legro 7** (JeffreyW. Legro is Professor and Chair in theWoodrow Wilson Department of Politics and Co-Director of the Governing America in a Global Age Program at the Miller Center of Public Affairs, University of Virginia (legro@ virginia.edu). The author thanks Robert Ross, Tang Shiping, BrantlyWomack, and Zhu Feng for helpful comments and Daniel AaronWeir for excellent research assistance. “Article: What China Will Want: The Future Intentions of a Rising Power” <http://www.apsanet.org/imgtest/POPSept07Legro.pdf> //Donnie)

Empirically, states do not always expand their foreign policy as power increases (nor do they limit it as power declines). Historical anomalies are common.47 In the First World War, America emerged as the dominant power in international relations, but its involvement and goals *did not* expand, but contracted in the interwar period. China in the Qing era *did not* alter its isolationist ideas to deal with the encroaching and threatening European powers even though the security situation indicated mounting dangers. And in terms of power trajectories, Britain and the United States *did not* go to war with each other at the turn of the twentieth century, even as the United States surpassed Britain as the dominant international power.48 National strategy can rarely be understood by reference to external conditions alone. Nor have ideas followed the balance of power in lockstep. China has been consistently weaker than the dominant powers of world politics since at least the late nineteenth century, yet its ideas have varied between separation in Qing China to integration in Republican and contemporary China to revisionism during Mao (see figure 2).49 We might view China’s power trajectory, not static position as being most important, but that trajectory has been rising (with fits and starts) since the communists seized control of the mainland. China’s ideas, however, have made shifts between revisionism and integration. And contrary to the “rising China” thesis—i.e., that foreign policy ambitions grow with relative power— China was most revisionist when it was at one of its weakest points in terms of relative power—i.e., afterMao came to power. Scholars have attempted to modify the power view to take into consideration such anomalies. One notion is that states are shaped not just by raw power, but also by “intentions.”50 Power transition scholars have long noted that “national satisfaction with the status quo” is as important as transitions. In both instances these factors are viewed as distinct from, and not reducible to, power. They clearly imply that we cannot understand and predict what states will do without knowing how they think about appropriate action.51 Yet they do not address the key issue of when such thinking is likely to change—or not.

**No instability from rise**

**Kang 5** (David Kang Government Department Dartmouth College “ Why China’s Rise Will be Peaceful:

Hierarchy and stability in the East Asian region” <http://www.ou.edu/uschina/SASD/SASD2005/2005readings/Kang-prediction.pdf> //Donnie)

However, China has already been growing rapidly for almost three decades, and there is little evidence that the region is devolving into balancing, nor that China’s rise is causing undue alarm in the region.5 Surely, given the anticipatory nature of the pessimistic arguments -- that states prepare for future contingencies today – China’s growth should already have prompted a reaction from East Asian states. Stability is also not the result of the United States as an offshore balancer that attenuates regional conflicts and balances Chinese power, and which East Asian states welcome. 6 Only Taiwan – and perhaps Japan – clearly rely on a U.S. security umbrella to balance Chinese power. There is a spectrum of relations between the U.S. and China, and while no state is completely allied with China, many states are at least accommodating its rise (Figure 1). States such as Vietnam, Thailand, the Philippines, and even South Korea could be much more focused on aligning with the U.S., but they have chosen not to do so. Indeed, the case of East Asia belies the notion that some states are “too small to balance.” With a potential offshore balancer in the U.S., even small states have a choice about whether or not to balance rising power. If Taiwan, with only 22 million people and close geographic proximity to China, can balance because of a U.S. umbrella, then all the other states in East Asia could, as well. If my argument is right, the direction of state’s alignments will move towards China and away from the U.S., even though they may remain hesitant to clearly choose one side or the other. //Figure 1 here// China’s expected emergence as the most powerful state in East Asia has been accompanied with more stability than pessimists believed because China is increasingly becoming the regional hierarch. 7 On the one hand, China has provided credible information about its capabilities and intentions to its neighbors. On the other hand, East Asian states actually believe China’s claims, and hence do not fear -- **and instead seek to benefit from** – China’s rise. This shared understanding about China’s preferences and limited aims short-circuits the security dilemma.8 One need only to imagine the consequences of Japan attempting to undertake such a role to realize how important is this social understanding about China’s position in East Asia. Furthermore, the U.S. may not be the key to stability in East Asia. **If the U.S. withdraws significantly from the region, East Asia will not become as dangerous or unstable** as the balance of power perspective expects, because other nations will accommodate China's central position in East Asia, rather than balance against it.9 A hierarchic system is one that involves a dominant power that does not fold secondary states under its wing in empire, and yet also does not cause other states to balance against it. Although much of the literature emphasizes that a rising power poses potential costs, just as importantly a rising power also offers potential benefits to secondary states. While a rising power may demand concessions or territory from the secondary state, it may also offer benefits from a growing economy and lower defense spending if relations between the two are warm. 10 Balancing a rising power puts the balancer in a better position to avoid potential costs, if there is conflict. However, balancing will also be more likely to limit the benefits of cooperation with the rising power, and potentially raise costs through added defense expenditures and creating conflict where there may be none to begin with. By contrast, aligning with the rising power puts the smaller state in a more vulnerable position relative to the rising power, but also increases the probability of its enjoying the benefits the rising power can provide.11 Thus, a secondary state’s decision will depend in part on the tradeoff between the costs and benefits the rising power potentially provides. Most Asian states see China’s threat as relatively low, but also see the benefits of having warm relations with it as relatively high.

**They won’t use their military in power struggles**

**Siebels 10** (Dirk, is a**Senior Consultant at Xiphias Consulting**Demographic info

“Containing China? How the U.S. and its allies should deal with the new East Asian security environment” <http://www.xiphiasconsulting.com/fileadmin/reports/east_asia/containing_china_position_paper.pdf> //Donnie)

Overall, economic growth allows China to spend more money on its military in absolute terms, but neither is it militarising its economy nor **is it increasingly using military power to solve disputes**. The rise of China has the potential to create many challenges for East Asia and beyond, but the use of force in conflicts over territory is unlikely to be the leading cause of regional instability. Diplomatic repercussions of increased military spending are most likely bigger than the actual military impact. Moreover, the country is increasingly contributing to U.N. peacekeeping missions, currently deploying about 2,000 troops, mostly military observers, engineers and medical personnel.

### -Ogwalla

#### They should have kept this as an addon, no reverse causal evidence they will REPLENISH the aquifer, just that they can reduce the water they take from it, all of their impact evidence is in the context of CURRENT depletion

Ag counts for 90 percent of the water---unsuitable farming overwhelms the aff

Real Periodicals 11 (Citing Ag Policy Specialist Manjula Guru,“The Ogallala under threat” http://www.readperiodicals.com/201007/2068233971.html

The 111 million-acre Ogallala Aquifer is threatened by both contamination - from fertilizer and pesticide run-off, animal waste and possibly enormous amounts of radioactive waste buried underground - and overuse. About 90 percent of the water drawn from the Ogallala is used to sustain agricultural production in the eight states it underlies. According to Scientific American, "This is the breadbasket of America - the region that supplies at least one fifth of the total annual U.S. agricultural harvest." It is one of the most fecund farming areas in the world because of irrigation, yet rainfall and snowmelt aren't able to recharge an amount equal to yearly withdrawals. In addition to agriculture, local industries place additional strain on the underground source. The economies of Lea County, N.M., and Andrews County, Texas, are largely driven by oil and gas. The quest for alternative energy sources has tossed a third thirsty player into the mix, whose survival will depend heavily on the Ogallala. A mile-and-a-half stretch of border straddled by Lea and Andrews counties has come to be known as "Nuclear Alley" for the burgeoning nuclear industry taking hold there. [ILLUSTRATION OMITTED] Between agriculture, oil, gas and the planned nuclear facilities, the demands on the southern extent of the Ogallala Aquifer will only increase. Given the typically low rate of rainfall and this increased level of consumption in Nuclear Alley, the possibility of meaningful recharge of the aquifer is bleak. According to Agricultural Policy Specialist Manjula V. Guru, "[Ogallala] water is being used faster than it is being replenished, and the result is predicted by many to be serious eco-centric pressure on the area in the not so distant future. ... Pumping the Ogallala is still a one-time experiment, unrepeatable and irreversible." Left alone, natural processes would replenish this massive water table. Scientific American estimates it would take 6,000 years -a hiccup in geological time, but mighty long in human terms.

#### Biod is empirically unnecessary

Jablonski 1 (Prof @ Department of Geophysical Sciences, University of Chicago “Lessons from the past: Evolutionary impacts of mass extinctions” May 16. http://www.pnas.org/content/98/10/5393.full)

Mass extinctions have never entirely reset the evolutionary clock: even the huge losses at the end of the Permian, which appear to have permanently restructured marine and terrestrial communities, left enough taxa and functional groups standing to seed the recovery process without the origin of new phyla ([39](#ref-39)). One key to understanding the past and future evolutionary role of extinctions will involve the factors that permit the persistence of certain biological trends or patterns—e.g., net expansion or contraction of clades or directional shifts in morphology—in the face of extensive taxonomic loss and ecological disruption. Besides extinction, at least four evolutionary patterns can be seen in the fossil record. These are: (i) unbroken continuity, (ii) continuity with setbacks, (iii) survival without recovery (“dead clade walking”), and (v) unbridled diversification.

Not key to anything

Dodds 2k (Donald, M.S. P.E., President of North Pacific Research, 2000, <http://webcache.googleusercontent.com/search?q=cache:X8s-Gaf_5r0J:northpacificresearch.com/downloads/The_myth_of_biodiversity.doc+the+planet+was+microbial+and+not+diverse.+Thus,+the+first+unexplainable+fact+is+that+the+earth+existed+for+3.5+billion+years&cd=1&hl=en&ct=clnk&gl=us>)

Biodiversity is a corner stone of the environmental movement. But there is no proof that biodiversity is important to the environment. Something without basis in scientific fact is called a Myth. Lets examine biodiversity through out the history of the earth. The earth has been a around for about 4 billion years. Life did not develop until about 500 million years later. Thus for the first 500 million years bio diversity was zero. The planet somehow survived this lack of biodiversity. For the next 3 billion years, the only life on the planet was microbial and not diverse. Thus, the first unexplainable fact is that the earth existed for 3.5 billion years, 87.5% of its existence, without biodiversity. Somewhere around 500 million years ago life began to diversify and multiple celled species appeared. Because these species were partially composed of sold material they left better geologic records, and the number of species and genera could be cataloged and counted. The number of genera on the planet is a indication of the biodiversity of the planet. Figure 1 is a plot of the number of genera on the planet over the last 550 million years. The little black line outside of the left edge of the graph is 10 million years. Notice the left end of this graph. Biodiversity has never been higher than it is today.

Beavers solve

Ferry 12 ( David Ferry is a writer in Oakland, California, writing for the Atlantic, citing studies in Idaho, “Leave It to Beavers” http://www.theatlantic.com/magazine/archive/2012/06/leave-it-to-beavers/308980/)

In the 1820s, one of the largest corporations on Earth tried to kill every beaver in the Pacific Northwest. Britain’s Hudson’s Bay Company, threatened by the United States’ westward expansion, sent trappers sweeping down the Columbia River watershed to exterminate all the beavers they found and harvest their valuable pelts. Without beavers to hunt, the company’s governor reasoned, the United States would have “no inducement to proceed hither.” Within 20 years, the beaver was nearly eradicated from an area the size of France. Now, nearly two centuries later, beavers are valued not just for their pelts, but for the environmental benefits of their gnawing and nesting. A growing community of “beaver believers” is reintroducing the animal to regional water systems throughout the American West in the hopes of reducing the incidence of floods and the damage from forest fires, alleviating drought, helping fish thrive, and conserving fresh water—in the process, helping to combat some of the effects of climate change. In the 1600s, as many as 400 million beavers were waddling about the continent. Just 6 million to 12 million remain today. “You have to imagine that there was a beaver dam every half mile, on every stream, in every single watershed in North America,” says Amanda Parrish, who manages the watershed program for the Lands Council, a nonprofit based in Spokane, Washington. Conservationists have been working to restore the population since as early as 1928, when Grey Owl (né Archibald Belaney), the original beaver believer, established his first colony with two baby beavers he found in the backwoods of Canada. In the 1940s, Idaho’s Department of Fish and Game embarked on an effort both larger in scale and kookier in method. Finding long, dusty overland trips too hard on the beavers, the department instead packed pairs of the animals into crates, loaded them onto airplanes bound for drought-stricken corners of the state, and dropped them by parachute. (The crates were rigged to open on impact.) The endeavor was apparently a success: a 1950 report notes that of the 76 beavers airdropped in the fall of 1948, only one fell to its death; the others began building dams and homes and founding colonies, which can grow as large as a dozen or so beavers. Idaho’s strategy has since been validated by dozens of scientific studies illustrating the vital role beavers play in ecosystems. Their dams create ponds and wetlands that retain rainwater and snowmelt, and while beaver ponds themselves are shallow little affairs, research has shown that they help preserve groundwater, allowing vegetation and trees to flourish and increasing biodiversity. According to one study, the amount of fresh water a single colony adds to a local ecosystem each day is the equivalent of at least a once-in-200-years flood event. To see a beaver today, I drove some 30 miles from Oakland, where I live, to suburban Martinez, California, where a beaver family has moved into the creek that cuts through town. There, a delightful beaver-believer couple showed me around the colony, pointing out the subtleties of beaver construction and anatomy, as a pair of yearlings swam below us. The beaver evolved to live in and out of water, and the result feels a bit schizophrenic. Your standard beaver comes with webbed hind feet and a scaly, flat tail (perfect for maneuvering underwater and for balancing on land), as well as grasping paws and a pair of buckteeth. It is further equipped with nose valves that close underwater and eye membranes that act as swim goggles. Adult beavers weigh about 40 pounds and are appealing in the way squirrels are: they’re cute, but they’re still rodents. From a historical perspective, the beaver’s most fateful feature is its coat, a combination of thick underfur and longer guard hair that allows the animal to thrive in widely varying climes. It is rugged enough to let the beavers of northern Canada linger beneath the surface of frozen ponds, but light enough to help keep the animal cool during hot New Mexico summers. Unfortunately for beavers, these qualities also make for very fine hats. Eastern Washington, where Amanda Parrish and her team are implementing their “Beaver Solution,” is today home to about 50,000 beavers, compared with a onetime high of perhaps 5 million. Because of rising temperatures, the snowpack is melting earlier and earlier in springtime, causing trillions of gallons of fresh water to gush down from the mountains, overwhelming streams and sluicing over the ground too fast to nourish the ecosystem. Repopulating such a large region with beavers is exceptionally complex. The dense forests that beavers once inhabited no longer cover the range, so reintroduced families have limited options for homes. And beavers, being wild animals, don’t always stay put. But each new family integrated into the ecosystem makes the job easier, stemming the loss of fresh water and creating habitat suitable for more beavers. So far, Parrish and her team have moved 45 beavers into the area. Their thinking is simple, and especially compelling as the Earth warms and droughts become more prevalent: where there are beavers, there is water.

# 1NR

### \*\*A2: Russia War Addon

#### Your 2AC evidence is descriptive of food price inflation in 2010 and 2011 – proves the impact is non unique or empirically denied

#### ---No risk of nuclear war with Russia.

Graham 2007

Thomas, senior advisor on Russia in the US National Security Council staff 2002-2007, September 2007, Russia in Global Affairs “The Dialectics of Strength and Weakness”

An astute historian of Russia, Martin Malia, wrote several years ago that “Russia has at different times been demonized or divinized by Western opinion less because of her real role in Europe than because of the fears and frustrations, or hopes and aspirations, generated within European society by its own domestic problems.” Such is the case today. To be sure, mounting Western concerns about Russia are a consequence of Russian policies that appear to undermine Western interests, but they are also a reflection of declining confidence in our own abilities and the efficacy of our own policies. Ironically, this growing fear and distrust of Russia come at a time when Russia is arguably less threatening to the West, and the United States in particular, than it has been at any time since the end of the Second World War. Russia does not champion a totalitarian ideology intent on our destruction, its military poses no threat to sweep across Europe, its economic growth depends on constructive commercial relations with Europe, and its strategic arsenal – while still capable of annihilating the United States – is under more reliable control than it has been in the past fifteen years and the threat of a strategic strike approaches zero probability. Political gridlock in key Western countries, however, precludes the creativity, risk-taking, and subtlety needed to advance our interests on issues over which we are at odds with Russia while laying the basis for more constructive long-term relations with Russia. 7. To rebuild relations, we need to focus on common interests, but we can’t ignore values. To a great extent, this is already happening in U.S.-Russian relations. Because of an overlap in interests, the two countries are working together effectively on a number of nuclear security, counterterrorism, and non-proliferation issues, including Iran and North Korea. But we cannot avoid the issue of values, because they shape the way we think about our interests and are critical to the trust needed to deal with sensitive issues, even when outside observers would posit a common interest.

### \*\*\*Topicality

### 1NR Overview

#### Second, implementation of a feed-in tariff devolves authority to states and regulatory mandates are distinct from financial incentives– this kills core negative ground based on federal policy

Gielecki et al-EIA-1

Incentives, Mandates, and Government Programs for Promoting Renewable Energy

<http://lobby.la.psu.edu/_107th/128_PURPA/Agency_Activities/EIA/Incentive_Mandates_and_Government.htm>

Federal Incentives, Mandates, and Programs for Renewable Energy In response to energy security concerns of the mid-1970s, President Carter signed into law the National Energy Act of 1978 (NEA), a compendium of five bills that sought to decrease the Nation's dependence on foreign oil and increase domestic energy conservation and efficiency. A major regulatory mandate that has encouraged renewable energy, the Public Utility Regulatory Policies Act of 1978 (PURPA), was established as a result of the NEA. Most of the remaining Federal renewable energy legislation enacted since the late 1970s are financial. Regulatory Mandates Public Utility Regulatory Policies Act of 1978 PURPA was the most significant section of the National Energy Act in fostering the development of facilities to generate electricity from renewable energy sources. (9) However, with the electric power industry challenging its legality and implementation issues, the broad application of PURPA did not occur until after the legality of PURPA was upheld in 1981. PURPA opened the door to competition in the U.S. electricity supply market by requiring utilities to buy electricity from qualifying facilities (QFs). QFs are defined as nonutility facilities that produce electric power using cogeneration technology, or power plants no greater than 80 megawatts of capacity (10) that use renewable energy sources. There is no size restriction for cogeneration plants; however, at least 5 percent of the energy output from a qualifying cogeneration facility must be dedicated to "useful" thermal applications. Under PURPA, utilities are required to purchase electricity from QFs at the utilities' "avoided cost." (11) The Federal government, in formulating regulations, often delegates implementation to the States. This occurred with PURPA, as the Federal Energy Regulatory Commission (FERC) delegated the authority for the determination of avoided cost to the States. In several States including California, avoided cost purchase contracts were very favorable to non-utility generators. For example, between 1982 and 1988, Standard Offer 4 (SO4) contracts written in California allowed QFs to sell renewable energy under 15-to-30 year terms. The contract guarantees fixed payment rates (based on forecasted short-run avoided costs) for up to 10 years if the QF has signed a contract for at least 20 years. After the 10 th year, energy prices moved to the short-run avoided cost of the purchasing utility. The 10-year provisions were tied to forecasts of increases in oil and gas prices, and were the basis for the fixed payments for the first ten years of the contracts. The forecasts were much higher than prices actually turned out to be. Therefore, a price and revenue drop occurred in the eleventh year when the fixed contract energy prices converted to variable prices (based on short-term avoided cost), greatly lessening the economic viability of affected projects. Financial Incentives The major Federal legislation on financial incentives for renewable energy and renewable transportation fuels has been structured as tax credits and production incentive payments. (See Tables 1 and 2 for a summary of major Federal provisions that affect renewable energy and renewable-based transportation fuels, respectively.) For renewable energy, tax credits for purchases of renewable energy equipment were aimed at both the residential and business sectors. Accelerated depreciation of renewable energy equipment and production incentives were aimed at investors. From 1978 through 1998, similar types of tax credits have been in existence. Over time, the various laws have usually expanded the technologies covered, increased the credit amount, or extended the time period. Two new types of financial incentives were introduced as part of the Energy Policy Act of 1992 (EPACT)--a production tax credit (PTC) and a renewable energy production incentive (REPI). The PTC is a 1.5 cents-per- kilowatthour (kWh) payment, payable for 10 years, to private investors as well as to investor-owned electric utilities for electricity from wind and closed-loop biomass facilities. The REPI provides a 1.5 cents-per- kWh incentive, subject to annual congressional appropriations, for generation from biomass (except municipal solid waste), geothermal (except dry steam), wind and solar from tax-exempt publicly owned utilities, local and county governments, and rural cooperatives.

### 1NR A2: W/M

#### ---Financial incentives are distinct from feed-in tariffs-Extend Brady-Financial incentives and regulatory incentives are different-Financial incentives include robust mechanisms like tax credits and other production subsidies. Regulatory incentives include feed-in-tariffs and other mandates.

#### ---Financial incentives require the disbursement of public funds linked to energy production – excludes bailouts and regulations with incentive effects

Webb, 93 – lecturer in the Faculty of Law at the University of Ottawa (Kernaghan, “Thumbs, Fingers, and Pushing on String: Legal Accountability in the Use of Federal Financial Incentives”, 31 Alta. L. Rev. 501 (1993) Hein Online)

In this paper, "financial incentives" are taken to mean disbursements 18 of public funds or contingent commitments to individuals and organizations, intended to encourage, support or induce certain behaviours in accordance with express public policy objectives. They take the form of grants, contributions, repayable contributions, loans, loan guarantees and insurance, subsidies, procurement contracts and tax expenditures.19 Needless to say, the ability of government to achieve desired behaviour may vary with the type of incentive in use: up-front disbursements of funds (such as with contributions and procurement contracts) may put government in a better position to dictate the terms upon which assistance is provided than contingent disbursements such as loan guarantees and insurance. In some cases, the incentive aspects of the funding come from the conditions attached to use of the monies.20 In others, the mere existence of a program providing financial assistance for a particular activity (eg. low interest loans for a nuclear power plant, or a pulp mill) may be taken as government approval of that activity, and in that sense, an incentive to encourage that type of activity has been created.21 Given the wide variety of incentive types, it will not be possible in a paper of this length to provide anything more than a cursory discussion of some of the main incentives used.22 And, needless to say, the comments made herein concerning accountability apply to differing degrees depending upon the type of incentive under consideration. By limiting the definition of financial incentives to initiatives where public funds are *either disbursed or* contingently committed, a large number of regulatory programs with incentive effectswhich exist, but in which no money is forthcoming,23 are excluded from direct examination in this paper. Such programs might be referred to as indirect incentives. Through elimination of indirect incentives from the scope of discussion, the definition of the incentive instrument becomes both more manageable and more particular. Nevertheless, it is possible that much of the approach taken here may be usefully applied to these types of indirect incentives as well.24 Also excluded from discussion here are social assistance programs such as welfare and *ad hoc* industry bailout initiatives because such programs are not designed primarily to encourage behaviours in furtherance of specific public policy objectives. In effect, these programs are assistance, but they are not incentives.

---Production Incentives are direct monetary support for specific project development – distinct from ensuringmarket access or feed-in-tariffs

Doris, 12 – National Renewable Energy Laboratory (Elizabeth, “Policy Building Blocks: Helping Policymakers Determine Policy Staging for the Development of Distributed PV Markets,” Paper to be presented at the 2012 World Renewable Energy Forum, 5/13-5/17, http://www.nrel.gov/docs/fy12osti/54801.pdf)

3.3 Market Expansion

This stage of policy development targets the development of projects and includes both incentives that attempt to distribute the high first costs of distributed technologies and policies that facilitate project installation. The purpose of this category is to increase the installation of individual projects through monetizing the non-economic benefits of distributed generation for the developer. Because the value of those benefits vary in different contexts, these policies can be politically challenging to put in place and technically challenging to design and implement. There is a large body of literature (encompassing the energy field as well as other fields) that discusses the design and implementation of effective market incentives. Specific policy types include:

• Incentives. In the context of this framework, incentives are defined as direct monetary support for specific project development. Incentives, especially in the current economic environment, can be politically challenging to implement and require detailed design to ensure that they are effectively reaching the intended market at levels that spur development without creating over-subsidization. Because of the complications and expense of these types of policies, they are most used and most cost-effective in environments where the market is prepared for project development. There are three primary types of incentives:

• Investment incentives directly alter the first cost of technologies. These incentives can take the form of grants, rebates, or tax incentives, depending on the market needs. Grants are typically applied to larger scale projects and are paid in advance of development, and so target development that would not take place without advance investment. Rebates are most commonly based on equipment purchases and can be applied at the time of purchase or through a post-purchase mechanism. Tax incentives can be deductions or credits, can be applied to entire installations, and are applied after purchase, annually. Tax incentives target development that does not need direct capital investment, but instead prioritizes reduction in pay-back period.

• Production incentives provide payment for electricity produced from the distributed electricity. These are different from net metering because the aim is not to provide the economic value of electricity sold into the grid, but instead, to monetize the indirect benefits of distributed generation and apply that on a production basis to projects. These incentives do not directly remove the challenge of higher first costs, and so are most effective in situations in which those high first costs can be spread over the course of the project lifetime (e.g., where direct priori investment is not a priority). In the last decade, incentives for distributed generation have tended toward the production type, because it assures the public that the investment is resulting in clean energy development (whereas investment incentives have the potential to be invested in projects that do not materialize).

• Feed-in-Tariffs. This incentive type reduces investment risk by providing fixed payments for projects based on the levelized cost of renewable energy generation. This (among other design characteristics) distinguishes feed-in-tariffs from production-based incentives, which are based on monetizing the value of the electricity to the grid or the value to the electricity purchaser.

• Removing Siting Restrictions or Ensuring Broad Market Access. Siting restrictions can be stipulated by local ordinances or home owners associations and designate where solar panels can be placed within the jurisdiction. Twenty-four states currently have laws in place that prevent the restriction of solar facilities on residences (12). Like the current state role in encouraging transparency in permitting policies, these typically legislative policies cost nothing to put in place, but implementation and enforcement can be challenging and costly, depending on the interests of the localities. This is an expansion policy (as opposed to a preparation policy) because the effect of siting restrictions is currently unclear, and to date, market development has not been limited by these types of regulations.

• Streamlined Permitting. Permitting for solar facilities has traditionally been the jurisdiction of localities, but there are some states that also issue permits. In the past two years, both Colorado (13) and Vermont (14) have issued laws regulating state permits for renewable energy systems. Such permitting falls into the market expansion category as a potential follow-on to the development of transparent permitting. However, because of its limited use to date there is little information on effectiveness, potential intended or unintended impacts, or broad applicability, so it is not currently considered a primary policy for developing markets.

#### ---Financial incentives are distinct from regulatory incentives for production – it requires distinct financial instruments and excludes feed-in-tariffs

Brady, 4 **-** A Thesis In The Department of Political Science Presented in Partial Fulfillment of the Requirements for the Degree of Master of Arts (Public Policy and Public Administration) at Concordia University Montreal, Quebec, Canada (Jonathan, “Wind Boom, Wind Bust: An Examination of the Conditions and Policies that Led to Gennany's Wind Industry and Canada's Lack Thereof,” December, <http://spectrum.library.concordia.ca/8274/1/MR20699.pdf>) **Italics in original**

This chapter outlines my approach to answering the central question of this examination what conditions affect the will and ability of German and Canadian federal political leaders, respectively, to create a wind energy incentive policy, designed to stimulate private investment into their country's wind industry? The focus of comparison is on the degree of variation between the two countries' wind energy incentive policy (my dependent variable) and federal political leaders' will and ability (my independent variables) to create them. For the purpose of this examination I define *wind energy incentive policy* as a single outcome that constitutes the regulatory pricing (i.e. feed-in tariffs) and/or financial incentives created to stimulate wind energy production and industry growth. I define regulatory incentives as regulatory pricing legislation design to catalyze wind energy production and industry growth. Conversely, I define financial incentives as financial instruments designed spark wind energy production and industry growth. For the purpose of this investigation I define federal political leaders as the elected leaders of the ruling government as well as the senior civil servants of the federal ministries examined. When necessary to distinguish between these actors I refer to the former as the elected federal political leaders and former as the civil federal political leaders.

#### ---Financial incentives are distinct from mandates – they include loans, grants, tax support.

Benson 7 – J.D, University of Iowa (Christine C., Winter, “STUDENT NOTE: Putting Your Money Where Your Mouth Is: The Varied Success of Biofuel Incentive Policies in the United States and the European Union”, 16 Transnat'l L. & Contemp. Probs. 633, Lexis Law)

There are two main ways a government can promote an industry requiring support to survive and prosper. A government may use financial incentives to reduce costs to the industry at one or several points in the chain of production. n139 A government may also use regulatory mandates to impose a minimum usage requirement for certain products produced by the industry. n140

Both the United States and the EU have implemented mandates in regard to biofuels. n141 Mandates are structured goals that a government lays out for an industry to accomplish, and a government usually provides a date by which those goals should be met. n142 Mandates allow a government to define and promote a structured policy, and financial incentives provide the [\*650] means of assistance for implementing that policy. n143 Therefore, mandates are usually accompanied by some type of financial incentive. n144

Financial incentives take many forms. Loans, grants, production payments, tax credits or deductions, and tax exemptions all provide some type of financial assistance. n145 Loans and grants generally promote the development of an industry's infrastructure, research, and development. n146 Tax incentives are generally more focused on promoting long-term production of a product. n147 This Note focuses only on tax incentives, not loan and grant programs, for biofuels in the United States and the EU.

### 1NR a2: Hutton – W/M Restrictions

#### This card has no intent to define, doesn’t say the word restrictions, is in the context of the United Kingdom, and grid access is never conflated with being an actual restriction on the production of renewable energy – this is essentially a non-starter, their evidence only says barrier, which can mean anything, like how long of a walk it is to the desert to place a solar panel

#### ---Restrictions are distinct from the Feed-in-Tariff

Umino-Jones Day-12

Japan: Japan's New Feed-In-Tariff System For Renewable Energy

http://www.mondaq.com/x/192876/Renewables/Japans+New+FeedInTariff+System+For+Renewable+Energy

While the new feed-in tariff system reflects the Japanese government's desire to expand the renewable energy sector, especially in light of the current uncertainty over the future of nuclear power in Japan, there are still a number of challenges to be addressed. These include the need to liberalize or eliminate legal and regulatory restrictions that hinder the development of renewable energy projects (such as land use restrictions and time-consuming filing obligations), as well as the limitations of the power grids that make it difficult for extensive cross-regional power transmission within Japan.

#### ---Restriction means to confine energy production-it is negative action

Word Net 3.1

<http://wordnetweb.princeton.edu/perl/webwn?s=restriction>

Noun

S: (n) restriction, limitation (a principle that limits the extent of something) "I am willing to accept certain restrictions on my movements"

S: (n) limitation, restriction (an act of limiting or restricting (as by regulation))

S: (n) restriction, confinement (the act of keeping something within specified bounds (by force if necessary)) "the restriction of the infection to a focal area"

#### ---Our interpretation is that reducing restrictions includes only negative action-the plan increases regulations that require the purchase of renewable energy. This is an increase in restrictions. At best its extra topical because it goes beyond removing restrictions on the production of energy.

#### ---Extra-Topicality is a voting issue-Extra-topicality proves the resolution insufficient and gives the affirmative unfair and unpredictable ground. This is especially true in this case where you can’t sever the extra-topical action and the entire advantage is based off increasing regulations not reducing restrictions.

#### ---Our interpretation is superior because it limits affirmatives to increasing incentives or reducing restrictions. It massively unlimits the topic to allow plans to tack on extra mechanisms like new regulations. You should err negative because the aff already has two mechanisms on this topic.

### 1NR A2: Pace – Production on PKWH

#### This counter-interpretation does nothing for them – the payment plan incentive is an effect of the plan text, not the mandate of a feed in tariff regulation – yes, utilities will pay for people who produce solar and wind in their homes, but the initial mandate of the plan is a negative incentive that is a law to require purchase of renewable energy by private entities

### 1NR A2: Gold (precision)

#### This just says financial incentives need to be defined in context, we’ll define it for them, it excludes the aff and the floodgates to regulation affirmatives, it’s key to limits

### 1NR A2: Predictability

#### Our interpretation is just as predictable – it’s in the context of governmental policy and our evidence cites the EIA

#### Additionally, this evidence is in the context of Europe – obviously it’s the most predictable there because they actually use FITs, but in the U.S., the basis for literature regarding financial incentives are market-based such as loans, grants, loan guarantees, and tax credits.

More evidence – we’re predictable, in the context of the resolutional actor, have the intent to define, and we make important ground distinctions

US Energy Information Administration, 1 (Renewable Energy 2000: Issues and Trends, Report prepared by the US Energy Information Administration, “Incentives, Mandates, and Government Programs for Promoting Renewable Energy”, http://tonto.eia.doe.gov/ftproot/renewables/06282000.pdf)

Over the years, incentives and mandates for renewable energy have been used to advance different energy policies, such as ensuring energy security or promoting environmentally benign energy sources. Renewable energy has beneficial attributes, such as low emissions and replenishable energy supply, that are not fully reflected in the market price. Accordingly, governments have used a variety of programs to promote renewable energy resources, technologies, and renewable-based transportation fuels.1 This paper discusses: (1) financial incentives and regulatory mandates used by Federal and State governments and Federal research and development (R&D),2, 3 and (2) their effectiveness in promoting renewables. A financial incentive is defined in this report as providing one or more of the following benefits: • A transfer of economic resources by the Government to the buyer or seller of a good or service that has the effect of reducing the price paid, or, increasing the price received, respectively; • Reducing the cost of production of the good or service; or, • Creating or expanding a market for producers. The intended effect of a financial incentive is to increase the production or consumption of the good or service over what it otherwise would have been without the incentive. Examples of financial incentives are: tax credits, production payments, trust funds, and low-cost loans. Research and development is included as a support program because its effect is to decrease cost, thus enhancing the commercial viability of the good(s) provided.4 Regulatory mandates include both actions required by legislation and regulatory agencies (Federal or State). Examples of regulatory mandates are: requiring utilities to purchase power from nonutilities and requiring the incorporation of environmental impacts and other social costs in energy planning (full cost pricing). Another example is a requirement for a minimum percentage of generation from renewable energy sources (viz., a “renewable portfolio standard,” or, RPS). Regulatory mandates and financial incentives can produce similar results, but regulatory mandates generally require no expenditures or loss of revenue by the Government.

### 1NR a2; Aff Ground (Farell)

#### Reject this evidence – it makes no comparative claim between the vitality of a feed in tariff in relation to other mechanisms – the fact that affirmatives like the Wind PTC, loan guarantees for solar power, the Wind and Solar investment tax credit, grants for wind and solar, etc. exist means that they are able to access renewable energy education on this topic because those incentives actually pay for and cover the biggest problem with developing renewable energy which is high initial capital cost.

#### ------You should err negative on limits-Extend Webb from the 1NC-a limited definition of financial incentives is necessary for focused analysis-a broad interpretation opens the door to indirect regulatory actions that render the term meaningless. Limits are important for in depth clash and manageable research burdens.

---Independently, you should err negative on ground issues. Regulations should be negative ground. Their interpretation makes the topic bidirectional. Our interpretation makes regulations and mandates core negative ground. Creating a fair balance of affirmative and negative ground is important for manageable research burdens and clash.

#### ---Alternate topic wordings prove. The committee spent two days on the question and decided that regulation should be negative ground because the topic was already bidirectional with renewable energy and fossil fuels. Their interpretation literally undermines the only stable negative ground this year.

#### ----Our interpretation allows for the core affirmatives on the topic

#### A. Wind

Fehrenbacher 2012

Katie, founding Editor of Earth2Tech Report: The clean power cash grant program was working 4-9-12 <http://gigaom.com/cleantech/report-the-clean-power-cash-grant-program-was-working/>

The cash grant program was funded from the stimulus package as a way to help spur clean power project development, particularly in the wake of the 2008/2009 recession and for small clean power developers. Clean power projects have long been able to take advantage of the production tax credits (PTC) and investment tax credits (ITC), which give clean power companies 30 percent of total eligible costs of a project in the form of tax credits that can be used to offset taxes paid on company profits. However, because many clean power companies are small and have tax liabilities that are less than the value of their available tax credits, some of the companies couldn’t take immediate advantage of the ITC and the PTC. Commonly those smaller companies would turn to tax equity investors to make up for the shortfall, but the recession made the tax equity market a lot weaker. To help combat all of these issues, the DOE created the 1603 cash grant program, which gave clean power companies an option to take a one-time cash grant that was equal to what they would have gotten from the ITC/PTC, so 30 percent of the cost of the project. The report says that the $9 billion cash grant program supported the installation of 23,000 clean power projects — both large scale wind and solar panel projects — which is the equivalent of adding 13.5 GW of clean power to the grid (or enough to power 3.4 million U.S. homes). Those projects also attracted more than $20 billion in direct investment from private, regional, and state sources, says the report. The report also finds that these projects will deliver $1.8 billion per year in economic output for the next 20 to 30 years, or the lifetimes of the systems. As Politico points out, the bulk of the jobs created through the grant program were indirectly, like for parts manufacturing, and a smaller portion of jobs were created for the design and development of the actual renewable energy systems. In addition, it’s hard to tell if the clean power projects would have been installed anyways, with or without the cash grants.

#### B. Solar

Meadows 2011

Bill, President of the Wilderness Society past Chairman of the Green Group, Chairman of the Board of the Campaign for America's Wilderness and the Partnership Project, and also serves on the boards of the League of Conservation Voters and Island Press, Certainly Tax Credits Must Stay 12-8-11, http://energy.nationaljournal.com/2011/12/should-congress-renew-cleanene.php

Failure to renew these job sustaining renewable energy financing programs would erode any incentive to invest in emerging technologies like wind and solar power. As the expiration date of these essential programs approaches, and Congress ponders their renewal, it is useful to count the truths on which we can rely in these times of uncertainty. Without renewing these tax credits, clean energy cannot achieve its potential as a viable, cost-effective power source.The tax credits increase certainty for investors looking to make cost effective investments in renewable energy technology. When similar tax credits have expired in the past, installations have dropped between 73 and 93 percent, with corresponding job losses. Moreover, the impended expiration of these financial incentives has created unnecessary pressures on agencies responsible for permitting these projects. Predictable fiscal conditions enable sound, defensible decisions. The lapse of the clean-energy tax credits would create unnecessary burdens on a promising industry and those who work in it. That much is certain. It is important to secure the credits, not only for 2012, but to promote long-term investment and sustained industry and job growth in the years ahead. Without the incentives to invest in renewable energy, we can count on more of the same: status quo dirty energy, a stagnant economy and job market, and an uncertain future.

#### C. Nuclear Power

NMNEP 2011

Group part of the Third Way, a national think tank, published with the Idaho National Laboratory, The Future of Nuclear Energy: A White Paper, January 2011 <http://content.thirdway.org/publications/370/Third_Way-INL_-_The_Future_of_Nuclear_Energy_A_White_Paper.pdf>

With domestic nuclear energy construction relatively dormant for more than twenty years, and with the political, social and management issues that led to the shuttering of the completed Shoreham plant in 1989, financial firms are understandably wary about future changes in the political winds. There is therefore no question that government must play a role in mitigating some of the financial risk of at least the first wave of new reactors. The most important role for government assistance in managing the financing costs for the initial wave of new reactors is through loan guarantees like those authorized in the Energy Policy Act of 2005. The future owner of the nuclear energy facility pays the premium for these government “insurance policies,” which mitigate the risk of project failures. This government action leverages major investments by private industry to provide clean, safe and reliable energy, as demonstrated by today’s operating fleet of power-generating reactors. Emerging Consensus: Loan guarantees are vital—most of the first wave of new plants cannot be built without them. Congress should increase the amount of money available to finance projects under the loan guarantee program, and the Executive Branch should set a premium cost that is commensurate with the government’s risk. Further, tax benefits in the form of investment tax credits, production tax credits and accelerated depreciation could be useful tools to foster investment, and a long-term financing program that addresses the continuing large-scale new investment over several decades could be necessary. The working group assigned this issue should identify what other additional financial incentives the federal government could provide (or could improve) to help move the nuclear industry forward.

#### D. Oil

Mayer-energy consulting-9

<http://www.americanenergysecurity.com/AJM-Article-CO2-EOR-5-20-09.htm>

How America Can Dramatically Ramp Up the Production of Domestic Oil

and Simultaneously Sequester Large Volumes of CO2

Government programs to advance CO2 EOR should include strong incentives to build CO2 pipelines. Expanding the current CO2 pipeline network (see Figure 3 below) will be necessary to transport this valuable gas from emissions sources to targeted oil fields where it can be utilized to produce "Green Oil." Also, the work currently being done by the U.S. EPA to further regulate underground injection of CO2 should be carefully monitored to ensure that unnecessary burdens are not placed on CO2 EOR that prevent or slow the rapid expansion of this important value added energy and environmental activity. The CO2 EOR story is begging to be introduced to the American people and to many in industry and political leadership positions. Increasing awareness of the economic, energy security, and environmental benefits offered by CO2 EOR and other CCS programs may well be the most important action that can be taken to advance the cause of American energy independence.6 Figure 3: Major CO2 Pipelines in the United States Source: U.S. Dept. of Transportation, National Pipeline Mapping System

### 1NR A2: Reasonability

#### It’s arbitrary – Donnie doesn’t know what the judge things is reasonable before his 2NR

#### Competing interpretations best – key to educated understanding of the direction of the topic which promotes best research practices and clash