### **1NC- T**

#### Interpretations-

#### 1. Financial incentives offer special funding for investors- distinct from procurements.

Czinkota et al, 9 **-** Associate Professor at the McDonough School of Business at Georgetown University (Michael, Fundamentals of International Business, p. 69 – google books)

Incentives offered by policymakers to facilitate foreign investments are mainly of three types: fiscal, financial, and nonfinancial. **Fiscal incentives** are specific tax measures designed to attract foreign investors. They typically consist of special depreciation allowances, tax credits or rebates, special deductions for capital expenditures, tax holidays, and the reduction of tax burdens. **Financial incentives** offer special funding for the investor by providing, for example, land or buildings, loans, and loan guarantees. **Nonfinancial incentives** include guaranteed government purchases; special protection from competition through tariffs, import quotas, and local content requirements, and investments in infrastructure facilities.

#### 2. “In” means inclusion within

Random House 12 (Unabridged Dictionary, “in”, http://dictionary.reference.com/browse/in?s=t)

in   [in] Show IPA preposition, adverb, adjective, noun, verb, inned, in·ning.

preposition

1. (used to indicate inclusion within space, a place, or limits): walking in the park.

2. (used to indicate inclusion within something abstract or immaterial): in politics; in the autumn.

3. (used to indicate inclusion within or occurrence during a period or limit of time): in ancient times; a task done in ten minutes.

4. (used to indicate limitation or qualification, as of situation, condition, relation, manner, action, etc.): to speak in a whisper; to be similar in appearance.

5. (used to indicate means): sketched in ink; spoken in French.

#### That’s the USA

Encarta 7 (Dictionary Online, “United States”, http://encarta.msn.com/encnet/features/dictionary/DictionaryResults.aspx?refid=1861708119)

U·nit·ed States [ [y ntəd stáyts](http://encarta.msn.com/encnet/features/dictionary/Pronounce.aspx?search=United+States) ] country in central North America, consisting of 50 states.
Languages: English.
Currency: dollar.
Capital: Washington, D.C..
Population: 290,342,550 (2001).
Area: 9,629,047 sq km (3,717,796 sq mi.)
Official name  United States of America

#### Violation: the plan’s is not a financial incentive for energy production in the united states- its procurement for production outside the US

#### 1. The energy is produced in space

Pambazuka News ’11 (nexis)

For more than three decades, Kaku has been a supporter of the solar revolution and the vast potentialities of the future solar economy. He wrote simply that, by the end of the century, another possibility opens up for energy production: Energy from space. This is called space solar power. While the US government invests in wars of occupation, Japan, Germany and China have moved ahead with investments in research on the future of solar power. 'Mitsubishi Electric and other Japanese companies will join a $10 billion program to launch a solar power station into space that will generate billions of watts of power.' However, Kaku writes on the future of the revolutionary technologies for the provision of energy and expounds on the present catastrophe of global warming without conveying a sense of urgency in confronting the corporations that are profiting from the fossil fuel industries. Whether it is space based solar power, cold fusion, anti-matter reactors, nanotech solar cells or other novel breakthroughs integrated in the revolutionary superconductor grid, the current lords of finance and big oil companies are seeking to ensure that energy is not freely available to all humans and that energy will remain a commodity. Herman Scheer, the German environmentalist has written clearly that in a revolutionary situation, there will be a confrontation with the conventional energy industry. In his book, 'The Solar Economy: Renewable Energy for a Sustainable Global Future', Scheer wrote:¶ 'There is no point in constructing a global strategy for climate change if renewable energy is seen as a secondary issue. Where the aim is to replace fossil with renewable energy, there can be no question of compensation for the fossil energy industry. There can be no environmental revolution in energy supply without creative destruction (à la Schumpeter) of the existing conventional energy industry.'

#### 2. “outer space” is NOT “in the United states”

Bornemann ‘98

(Lauren S.-B, “ARTICLE: THIS IS GROUND CONTROL TO MAJOR TOM ... YOUR WIFE WOULD LIKE TO SUE BUT THERE'S NOTHING WE CAN DO \* ... THE UNLIKELIHOOD THAT THE FTCA WAIVES SOVEREIGN IMMUNITY FOR TORTS COMMITTED BY UNITED STATES EMPLOYEES IN OUTER SPACE: A CALL FOR PREEMPTIVE LEGISLATION” 63 J. Air L. & Com. 517)

Finally, the Court relied on the "longstanding principle of American law 'that legislation of Congress, unless a contrary in tent appears, is meant to apply only within the territorial juris diction of the United States.'" n118 The Court commented that avoidance of international clashes is only one basis for the pre sumption against extraterritoriality, another being "the com monsense notion that Congress generally legislates with [\*535] domestic concerns in mind." n119 The Court ruled, therefore, that in the absence of "clear evidence of congressional intent to ap ply the FTCA to claims arising in Antarctica," the presumption against extraterritoriality holds fast. n120 The language of the Smith opinion and the reasoning that un derpins it bode ill for those who would seek redress against the United States for torts committed in outer space. If a place need only be a "region or tract of land" outside of United States territory to be a "foreign country," outer space is certainly a foreign country. Moreover, outer space has no more law of its own for choice of law purposes than does Antarctica, and the Outer Space Treaty makes it clear that space will have no "district" that can provide a venue for claims made by nonresidents of the United States. If the Court believes that the FTCA is governed by the presumption against exterritoriality, then surely it be lieves it subject to a presumption against extraterrestriality.

#### C) Vote Negative

#### Limits --- they explode the topic, allowing investment anywhere in the world --- makes international Affs with unique, unpredictable advantages topical--- and makes the entire space topic Aff ground --- both make research impossible. And they make DOD purchasing any type of tech topical- leads to virtually unlimited military aff

#### Ground --- best links to spending, politics, and private-sector crowd-out DAs assume the United States and financial incentives

#### D. Topicality is a voting issue for fairness and education

### ENVIRONMENTAL SECURITY 1NC

#### THE AFFIRMATIVE’S STRATEGY OF ENVIRONMENTAL SECURITIZATION EMPIRICALLY FAILS TO MOTIVATE SUCCESSFUL ACTION AND BECOMES A SELF-FULFILLING PROPHECY

Ahmed 11

Dr. Nafeez Mosaddeq Ahmed is Executive Director of the Institute for Policy Research and Development (IPRD), an independent think tank focused on the study of violent conflict, he has taught at the Department of International Relations, University of Sussex "The international relations of crisis and the crisis of international relations: from the securitisation of scarcity to the militarisation of society" Global Change, Peace & Security Volume 23, Issue 3, 2011 Taylor Francis

The twenty-ﬁrst century heralds the unprecedented acceleration and convergence of multiple, interconnected global crises – climate change, energy depletion, food scarcity, and economic instability. While the structure of global economic activity is driving the unsustainable depletion of hydrocarbon and other natural resources, this is simultaneously escalating greenhouse gas emissions resulting in global warming. Both global warming and energy shocks are impacting detrimentally on global industrial food production, as well as on global ﬁnancial and economic instability. Conventional policy responses toward the intensiﬁcation of these crises have been decidedly inadequate because scholars and practitioners largely view them as separate processes. Yet increasing evidence shows they are deeply interwoven manifestations of a global political economy that has breached the limits of the wider environmental and natural resource systems in which it is embedded. In this context, orthodox IR’s ﬂawed diagnoses of global crises lead inexorably to their ‘securitisation’, reifying the militarisation of policy responses, and naturalising the proliferation of violent conﬂicts. Global ecological, energy and economic crises are thus directly linked to the ‘Otherisation’ of social groups and problematisation of strategic regions considered pivotal for the global political economy. Yet this relationship between global crises and conﬂict is not necessary or essential, but a function of a wider epistemological failure to holistically interrogate their structural and systemic causes. In 2009, the UK government’s chief scientiﬁc adviser Sir John Beddington warned that without mitigating and preventive action ‘drivers’ of global crisis like demographic expansion, environmental degradation and energy depletion could lead to a ‘perfect storm’ of simultaneous food, water and energy crises by around 2030. 1 Yet, for the most part, conventional policy responses from national governments and international institutions have been decidedly inadequate. Part of the problem is the way in which these crises are conceptualised in relation to security. Traditional disciplinary divisions in the social and natural sciences, compounded by bureaucratic compartmentalisation in policy-planning and decision-making, has meant these crises are frequently approached as largely separate processes with their own internal dynamics. While it is increasingly acknowledged that cross-disciplinary approaches are necessary, these have largely failed to recognise just how inherently interconnected these crises are. As Brauch points out, ‘most studies in the environmental security debate since 1990 have ignored or failed to integrate the contributions of the global environmental change community in the natural sciences. To a large extent the latter has also failed to integrate the results of this debate.’ 2 Underlying this problem is the lack of a holistic systems approach to thinking about not only global crises, but their causal origins in the social, political, economic, ideological and value structures of the contemporary international system. Indeed, it is often assumed that these contemporary structures are largely what need to be ‘secured’ and protected from the dangerous impacts of global crises, rather than transformed precisely to ameliorate these crises in the ﬁrst place. Consequently, policy-makers frequently overlook existing systemic and structural obstacles to the implementation of desired reforms. In a modest effort to contribute to the lacuna identiﬁed by Brauch, this paper begins with an empirically-oriented, interdisciplinary exploration of the best available data on four major global crises – climate change, energy depletion, food scarcity and global ﬁnancial instability – illustrating the systemic interconnections between different crises, and revealing that their causal origins are not accidental but inherent to the structural failings and vulnerabilities of existing global political, economic and cultural institutions. This empirical evaluation leads to a critical appraisal of orthodox realist and liberal approaches to global crises in international theory and policy. This critique argues principally that orthodox IR reiﬁes a highly fragmented, de-historicised ontology of the international system which underlies a reductionist, technocratic and compartmentalised conceptual and methodological approach to global crises. Consequently, rather than global crises being understood causally and holistically in the systemic context of the structure of the international system, they are ‘securitised’ as ampliﬁers of traditional security threats, requiring counter-productive militarised responses and/or futile inter-state negotiations. While the systemic causal context of global crisis convergence and acceleration is thus elided, this simultaneously exacerbates the danger of reactionary violence, the problematisation of populations in regions impacted by these crises and the naturalisation of the consequent proliferation of wars and humanitarian disasters. This moves us away from the debate over whether resource ‘shortages’ or ‘abundance’ causes conﬂicts, to the question of how either can generate crises which undermine conventional socio-political orders and confound conventional IR discourses, in turn radicalising the processes of social polarisation that can culminate in violent conﬂict.

#### SECURITIZING ENERGY SCARCITY FAILS AND CAUSES MORE LONG-TERM DESTRUCTION AND MILITARY CONFLICT. UNIQUELY TURNS THE CASE.

Ahmed 2k11

[nafeez mosaddeq, department of ir at university of essex, “the international relations crisis and the crisis of international relations: from the securitization of scarcity to the militarization of society”, Executive Director of the Institute for Policy Research and Development, an independent think tank focused on the study of violent conflict in the context of global ecological, energy and economic crises, global change, peace and security, vol 23, no 3, October]

In one salient example, O’Keefe draws extensively on both offensive and defensive variants of neorealist theory, including the work of Jack Snyder, Robert Jervis and Kenneth Waltz, to argue for realism ’s continuing relevance in understanding how the biophysical environment plays a signiﬁcant role in triggering and prolonging the structural conditions that result in conﬂict. She notes that standard realist concepts such as ‘anarchy, security dilemmas, and the prisoner ’s dilemma can be used to explain the emergence of environmental or resource-based violent conﬂicts largely within, and occasionally between, the weaker states of the South. Environmental anarchy occurs in weak states which lack active government regulation of the internal distribution of natural resources, leading to a tragedy of the commons. This generates resource scarcities which lead to security dilemmas over ownership of resources, often settled by resort to violence, perpetuated by the prisoner’s dilemma. Ultimately, this theoretical hypothesis on the causes of environmental or resource-related conﬂict is incapable of engaging with the deeper intersecting global structural conditions generating resource scarcities, independently of insufﬁcient government management of the internal distribution of resources in weak states. It simplistically applies the Hobbesian assumption that without a centralized Leviathan state structure, the persistence of anarchy in itself generates conﬂict over resources. Under the guise of restoring the signiﬁcance of the biophysical environment to orthodox IR, this approach in effect actually occludes the environment as a meaningful causal factor, reducing it to a mere epiphenomenon of the dynamics of anarchy in the context of state failure. As a consequence, this approach is theoretically impotent in grasping the systemic acceleration of global ecological, energy and economic crises as a direct consequence of the way in which the inter-state system itself exploits the biophysical environment. The same criticism in fact applies to opposing theories that resource abundance is a major cause of violent conﬂict. Bannon and Collier, for instance, argue that resource abundance and greed, rather than resource scarcity and political grievances, generated intra-state conﬂicts ﬁnanced by the export of commodities in regions like Angola and Sierra Leone (diamonds) or West Africa (tropical timber). In other regions, abundance rather than shortages of oil, drugs and gold fuelled and ﬁnanced violent secessionist movements in the context of widespread corruption and poor governance. Ultimately, this departs little from the theoretical assumptions above with weak central state governance still blamed for generating anarchic conditions conducive to conﬂict over abundant resources. Furthermore as Kaldor shows this simplistic perspective overlooks the wider context of the global political economy–the evolution of regional ‘war economies’ was often enabled precisely by the devastating impact of neoliberal structural adjustment programmes which eroded state structures and generated social crises that radicalized identity politics.58Under traditional neorealist logic a strategic response to global environmental crises must involve the expansion of state-military capabilities in order to strengthen the centralised governance structures whose task is to regulate the international distribution of natural resources as well as to ensure that a particular state’s own resource requirements are protected. Neorealism under-stands inter-state competition rivalry and warfare as inevitable functions of states’ uncertainty about their own survival arising from the anarchic structure of the international system. Gains for one state are losses for another and each state’s attempt to maximise its power relative to all other states is simply a reﬂection of its rational pursuit of its own security. The upshot is the normalisation of political violence in the international system including practices such as over-exploitation of energy and the environment as a ‘rational’ strategy–even though this ultimately ampliﬁes global systemic insecurity. Inability to cooperate internationally and for mutual beneﬁt is viewed as an inevitable outcome of the simple axiomatic existence of multiple states. The problem is that neorealism cannot explain in the ﬁrst placethe complex interdependence and escalation of global crises. Unable to situate these crises in the context of an international system that is not simply a set of states but a transnational global structure based on a speciﬁc exploita-tive relationship with the biophysical environment neorealism can only theorise global crises as‘new issue areas’appended to already existing security agendas.59Yet by the very act of projecting global crises as security threats neorealism renders itself powerless to prevent or mitigate them by theorising their root structural causes. In effect despite its emphasis on the reasons why states seek security neorealism ’s approach to issues like climate change actually guarantees greater insecurity by promoting policies which frame these ‘non-traditional’ issues purely as ampliﬁers of quite traditional threats. As Susanne Peters argues the neorealist approach renders the militarisation of foreign and domestic policy a pragmatic and necessary response to issues such as resource scarcities–yet in doing so it entails the inevitable escalation of ‘resource wars’ in the name of energy security. Practically this serves not to increase security for competing state and non-state actors but to debilitate inter-national security through the proliferation of violent conﬂict to access and control diminishing resources in the context of unpredictable complex emergencies.60Neorealism thus negates its own theoretical utility and normative value. For if ‘security ’is the fundamental driver of state foreign policies then why are states chronically incapable of effectively ameliorating the global systemic ampliﬁers of ‘insecurity despite the obvious rationale to do so in the name of warding off collective destruction if not planetary annihilation?

#### THE 1AC’S SECURITIZING PERFORMANCE OF ENERGY AND THE ENVIRONMENT ENSURES LONG-TERM ENVIRONMENTAL DESTRUCTION BY ORGANIZING IT AS A PROBLEM TO BE SOLVED BY INTERESTED ACTORS. THE ALTERNATIVE IS AN ACT OF RE-WRITING ECOLOGICAL CONSIDERATIONS BEYOND SECURITY’S DESTRUCTIVE FRAMEWORK

Cudworth and Hobden 2k10

[Erika and Stephen professors university of east London securing what for whom? Multiple complex inequalities and the politics of environmental security in Europe European Consortium for Political Research]

A full discussion of the concepts that underlie the notion of complex ecology is developed in our forthcoming book on the environment and/in international relations (Cudworth and Hobden 2011). Here we point to the main features of such an approach. A complexity-inspired approach to environmental issues in international relations would constitute a distinct form of analysis compared to ‘environmental conflict’ and ‘environmental security’ approaches. Such an approach gives priority to developing an understanding of social political and economic relations as impacting beyond the human. While human and non‐human systems have distinct features ultimately they are co‐constitutive overlapping and intersected. Rather than seeing a separation between the human and the non‐human complex ecologism sees the human world as embedded within the natural world with the variety of human social systems intersecting with those of other natural systems. Varied social systems overlap and intersect with resulting implications for a range of other natural systems (species scapes and the wider biosphere). The notion of panarchy described in the previous section provides an effective depiction of the sets of inter‐relating systems. There are a few attempts to deploy complexity in ‘ecological security approaches’. Harrison for example identifies ‘four principle concepts of complexity adapted to ecological systems’: adaptive agency self‐organizing emergence authority and openness’ (2006: 55). There are two major difficulties with Harrison’s application of complexity concepts: dualism and0 the eliding of power relations. Harrison discusses the concept of agency entirely in relation to the subjectivity and adaptation strategies of human beings in the context of environmental change. Second in his discussions of self‐organisation and emergence he stresses the bottom‐up interconnections and processes for example in environmental policy making. In Harrison’s interconnected non‐linear systems natural and social systems are analytically separate and politics is lost – there is no understanding of power in the social world here or its impact on non‐human systems. Whilst ‘ecological security’ firmly places the analysis of political social and economic relations within the global environmental system and pays attention to regional differences it does not account for the full range of complex social inequalities that shape human relations with and within environments. The contribution of a complex ecology approach is the potential to analyse intersectionality and multiple power relations. As discussed above a variety of different sets of power relations have been analysed by political ecologists. These represent the operation of different sets of systems such as patriarchal capitalist ethnocentrist and so on which can have an impact on each other and have implications for the environment. We would argue that while these can be considered as distinct systems the development path of each has implications for other systems. This allows for the development of multiple levels of analysis drawing the focus away from the state to supra‐state levels (including the biosphere) and sub‐state levels. Environmental issues can therefore be analysed operating at a variety of levels. Complex ecologism provides a means of overcoming the weaknesses in the range of environmental securitization approaches as discussed in the first section of this paper. By moving away from a state focussed framework and considering a panarchy of inter‐linked systems environmental problems can be considered at global regional and local levels. The biosphere itself is asystem co‐constitutive with other human and non‐human systems.Envisioning human systems embedded within a wider range of systems overcomes the duality inherent in the majority of approaches to understanding environmental issues within international relations. The environment is not “out there” but instead constitutive of and reactive to human systems. Human systems are embedded within a number of non‐human systems with the consequence that developments in one system mayhave implications elsewhere in the panarchy. Thus as a simple exampleincreased carbon dioxide levels as a result of increased industrialisation can be linked to species migration in local ecological systems. Likewise global temperature rises can increase energy use for example to run cooling systems impacting across economic (oil prices) political (inter‐state relations) and ethnic systems (relations with Islamic European populations)1 The interlinking of complex systems also allows the analysis to shiftfrom a focus on security to one of insecurity. Complex ecologism understandsinteractions and changes in complex human/natural systems as resulting in multiple risks hazards and uncertainties which international politics mustnavigate. A significant feature of current global environmental issues is thatmany of those most in a situation of risk are not the authors of the causes ofthat risk. Environmental risk situations faced by individuals communities and societies are frequently the consequences of complex power inter‐ relationships. More developed societies have been effective at exporting their environmental degradation gaining the benefits of industrial production without the inherent costs. Finally by focussing on the intersection of power relations operating in and between different systems and the creation of risk that is associated with relations between systems the possibilities for a mitigation of risk throughout the panarchy become the key issue. The move from ‘security’ to ‘risk alleviation’ implies that the focus of attention is on the restructuring of risk creating activities rather than attempts to secure protection for specific groups. By breaking the link between this as a state-focussed issue and instead a concentration on an analysis focussed on intersecting systems removes the focus on particular social groups and re-orientates the analysis towards both a concern for the wider biosphere and social justice. As manyothers have pointed out work on environmental change in international relations theory has tended to modify existing approaches by including the environment in pre‐existing frameworks such as securitization. Perspectives such as ‘ecological security’ which attempt a radical questioning and transformation of that framework are still shaped by it. We need to move beyond securitization but in policy terms it seems the notion of security has been attractive and it frames environmental policies alongside initiatives for ‘mitigation’ of and ‘adaptation’ to environmental ‘problems’.

### Production Shell

#### Obama will win- Polls prove but race could shift if an event comes up

Cook 10-4

Charlie is a National Journal Columnist and writes the Cook Political Report, “Mitt Romney Breaks his Losing Streak,” <http://nationaljournal.com/columns/cook-report/the-cook-report-romney-breaks-his-losing-streak-20121004>

Too many political observers see politics in an entirely binary way: Everything has to be either a “0” or a “1”; a race is either tied or it’s over; every election is either won or stolen. Some people never want to admit that their side lost. And some people think that a poll either tells them what they want to hear or is methodologically flawed—or crooked. It’s like an obnoxious sports fan (often found in Philadelphia) who views a ruling by a referee or umpire as either favorable or a bad call. Denial and simplicity reign.¶ The presidential election is neither tied nor over. Of the 16 most recent national polls using live telephone interviewers calling both respondents with landlines and those with cell phones (between 30 and 40 percent of voters do not have landlines and cannot legally be called by robo-pollsters), one has the race even, two have Obama with a narrow 2-point edge, five have 3-point Obama margins, two have 5-point Obama advantages, another pair have 6-point Obama leads, two have 7-point leads, and one has an 8-point Obama lead. This would strongly suggest that the Obama lead is between 3 and 6 percentage points; such brand-name polls as those by CNN, Fox News, and NBC News/Wall Street Journal are among those in that 3- to 6-point range.¶ Conversations with Democratic and Republican pollsters and strategists suggest that Colorado, Florida, North Carolina, and Virginia are the most competitive swing states. Some high-quality private polling shows Romney with very narrow leads in both North Carolina and Virginia, but a few other equally sophisticated surveys show Obama with narrow advantages in those two states. At least one private survey shows Florida even, but most show the Sunshine State and Colorado with narrow Obama leads, in the small- to mid-single-digit range. Just a hair or two better for Obama but still quite close are Nevada and Wisconsin, followed by Iowa. Things really get ugly for Romney in Ohio and Michigan, and, finally, in Pennsylvania, which is no longer competitive. Ohio shows a 5- to 8-point lead for Obama in private polling. In Michigan, Obama’s lead is slightly wider, and in Pennsylvania, Romney faces close to a 10-point deficit. It is mathematically possible for Romney to reach 270 electoral votes without Michigan, Ohio, or Pennsylvania, but it is in reality exceedingly unlikely.¶ It would take a very consequential event to change the trajectory of this race. Time will tell whether Romney’s strong debate performance on Wednesday night was the event that he needed—particularly in swing states such as Ohio. But at least he energized his supporters and sent a clear message that the race is not over.¶ As for down-ballot races, my hunch is that there is a pretty good chance that we may not know which party will hold a majority in the Senate in the next Congress by breakfast or lunch the day after the election. With 10 seats in the toss-up category—five for each party—the Senate outlook couldn’t be more volatile.¶ Republicans can be confident that they will pick up the open seat in Nebraska, but they have to be very worried about their own open seats in Indiana and Maine. The latter is particularly troublesome for the GOP. Republican incumbents Scott Brown in Massachusetts and Dean Heller in Nevada are in very tight races; the odds of Heller winning are better than those for Brown. The newest entry on the toss-up list is the open Republican seat in Arizona, where Democrat Richard Carmona has pulled even or slightly ahead of GOP Rep. Jeff Flake.¶ Conversely, Democrats have to be most worried about hanging on to the open seat in Connecticut, where former pro-wrestling CEO Linda McMahon now has a narrow lead, and in Montana, where incumbent Jon Tester is locked in a nail-biter. The top of the ticket is a challenge for both McMahon and Tester. Open seats in North Dakota, Virginia, and Wisconsin are statistical dead heats, notwithstanding some public polls that show rather substantial leads for former Democratic Gov. Tim Kaine over former Sen. George Allen in the Old Dominion.¶ A look at the polling data shows two inflection points in the presidential contest and many Senate races. The Democratic convention clearly had a positive impact for Democrats, while Republicans took a real hit after the release of the video of Mitt Romney suggesting that 47 percent of voters are basically deadbeats who see themselves as victims. We are now hearing reports of a similar drop for down-ballot Republicans in some districts, particularly in places like California and New York where Romney was already going nowhere. Many GOP candidates took a hit the week of Sept. 17, then stabilized the following week. They didn’t drop further but they didn’t regain any altitude, either.¶ For now, the GOP majority in the House seems fairly secure; The Cook Political Report currently sees GOP losses in the zero- to 10-seat range, well short of the 25-seat net gain Democrats need to gain control.¶ It’s always difficult to gauge how any event will be interpreted and what impact it will have on a campaign, but there is considerable evidence that the “47 percent” video did make a mark. Democratic pollster Peter Hart and his Republican counterpart Bill McInturff asked in the Sept. 26-30 NBC News/Wall Street Journal poll of 832 likely voters nationwide, “Has what you have seen, read, or heard in the past couple of weeks about Mitt Romney and his campaign for president given you a more favorable impression of him or a less favorable impression of him?” Some 28 percent responded that they felt more complimentary about Romney, but 51 percent indicated that what they heard made them feel less likely to support him.¶ Romney had a six-week stretch where nothing broke his way. Now we’ll see if his debate performance was a turning point—or a brief interruption—in the campaign narrative.

#### Plan is unpopular, solar failures make selling solar difficult

Bloomberg 6-28

“Abound Failure Revives Debate over Obama Solar Policies,” <http://www.bloomberg.com/news/2012-06-29/abound-failure-revives-debate-over-obama-solar-policies.html>

**The failure of a second solar manufacturer that received loan guarantees from the U.S. Energy Department adds to pressure on President Barack Obama to justify incentives for the clean-energy industry that’s being undercut by Chinese competition**. Abound Solar Inc., a U.S. solar manufacturer that was awarded a $400 million loan guarantee in 2010, said yesterday it will suspend operations and file for bankruptcy next week. Enlarge image Abound Solar Inc. solar panels in Germany. Source: Abound Solar Imc. Abound said its thin-film panels couldn’t compete against Chinese products, the same reason cited by Solyndra LLC, which closed its doors in August after receiving a $535 million guarantee from the same program. Half of the four solar manufacturers that received loan guarantees have failed, supporting the argument that backing clean-energy is a mistake, according to Representative Cliff Stearns. “We know why they went bankrupt. We warned them they would go bankrupt,” Stearns, a Florida Republican, told reporters yesterday. “**The larger question is why the administration was pursuing a green-energy policy in which companies are going bankrupt and wasting taxpayer money**.” Stearns is chairman of the House Energy and Commerce Committee’s oversight panel that has held hearings on the Energy Department’s loan guarantee program. Representative Jim Jordan, an Ohio Republican and chairman of the House Oversight and Government Reform Committee’s stimulus oversight panel that has investigated loan guarantees to solar companies, said **Abound’s failure is further proof the Energy Department program was a mistake. “It just adds to the weight of how ridiculous this was,” Jordan told reporters.**

**Approval Rating is key, lines up perfectly with reelection
Silver ’11**

Nate directs five thirty eight and is a statistician, “Approval Ratings and Reelection Odds,” <http://fivethirtyeight.blogs.nytimes.com/2011/01/28/approval-ratings-and-re-election-odds/>

Earlier this month, we posted the simple version of a finding, based on the historical record, that is worth keeping in mind when you read articles about how Barack Obama’s presidency has (or has not been) been revitalized: It’s just too soon for his approval ratings to tell us very much about his re-election prospects for 2012. This is an overdue follow-up to that article — what you might think of as the slightly-more-complicated version. While **it’s true that approval ratings aren’t of much use now, it’s also the case that, by the time we get close to the election, they will have become a very reliable predictor of Mr. Obama’s chances of winning another term**. Based on Gallup polling, here is what I estimate that the incumbent president’s approval rating was on Election Day in almost every election since 1940. (There is no data for 1944 because Gallup went on wartime hiatus.) There are a few tricks I had to employ to derive these numbers; I’d ask you to take them on faith for a few moments, and then we’ll explain everything later on. **At first glance, the relationship seems nearly perfect: every incumbent with an approval rating of 49 percent or higher won re-election, while every candidate with a rating of 48 percent or lower lost.** In practice, things probably don’t work quite that crisply. For example, Harry Truman, whom we estimate had a 50 percent approval rating on Election Day 1948, won by 4.5 points, and 114 electoral votes, over Thomas E. Dewey, which suggests that he had some margin to spare. And candidate quality clearly makes a difference. Although Robert Dole is sometimes considered a weak Republican nominee, Bill Clinton beat him in 1996 by just 8.5 points, despite Mr. Clinton’s 55 percent approval rating. By contrast, in 1972, Richard Nixon, with an approval rating only a couple of points higher (57 percent), trounced a very weak Democratic nominee, George McGovern, by more than 23 points. Still, the approval rating at which an incumbent candidate goes from being an underdog to a favorite for re-election is somewhere in the high 40s. **The reason the threshold is probably slightly below 50 percent rather than right at 50 percent is that in any approval survey, some people (typically 5 to 10 percent) say they are undecided about the president’s performance**. For instance, at this writing, Barack Obama’s Gallup approval rating is 49 percent but his disapproval rating is just 42 percent, a net margin of +7. If those were the figures on Election Day, he would be a favorite to win unless nearly everybody who was undecided about his performance cast their ballots against him, something that is possible in theory but usually doesn’t occur in practice. Now, then, how did we come up with these numbers? As I said, it’s not quite so straightforward. Gallup has approval ratings data going back to 1937. The problem is that, until fairly recently, they had a habit of stopping their approval ratings polling several months before a presidential election. For instance, in 1956, their last poll of Dwight Eisenhower’s public approval was in early August; they did not survey him again until late November, after he had already defeated Adlai Stevenson. However, we can extrapolate what Mr. Eisenhower’s rating would have been on Election Day 1956 by drawing a smoothed regression line — known in the business as a Loess curve — using the data points before and after that date. The one hitch is that incumbent presidents, whether they win, lose, or don’t run at all, almost always receive a “bounce” in their approval rating after the election, as people either rally around a winner or feel sympathy for the lame duck. The average magnitude of this post-election bounce is 4 points. So, before I fitted the curves, I subtracted 4 points from approval rating polls conducted after Election Day. By applying this process of bounce-adjustment and curve-fitting, we are able to estimate an incumbent president’s Gallup approval rating on Election Day itself or on any day before it, as shown in this nifty-looking graphic: I haven’t labeled the curves by the candidate’s name in the chart, because that which create too much clutter. But I have distinguished those who eventually won re-election (blue lines) from those who lost (red). A couple of cases are worth attention. The red line that you see briefly extending above 80 percent is for George H.W. Bush. His approval ratings, which were already pretty good, shot up following the start of Operation Desert Storm in 1991, when American-led forces drove Iraqi troops back from their occupation of Kuwait. Politically, that made Mr. Bush look like an extremely formidable candidate for re-election: Saturday Night Live ran a sketch later that year entitled “Campaign ’92: The Race To Avoid Being The Guy Who Loses To Bush,” with Democratic candidates at a debate all trying to lose so they would not have to run against him. But Mr. Bush’s approval ratings fell precipitously throughout late 1991 and early 1992, and were below 40 percent by Election Day. If Mr. Bush is the precedent that challengers will cite when their campaign seems to be flailing, the opposite example is the original Comeback Kid, Harry Truman. He’s the blue line that you still see down around 40 percent approval with just five months to go before the election of 1948. It’s hard to know exactly where Mr. Truman’s approval numbers were on Election Day. When Gallup surveyed in late June, he had just 39 percent approval; in January, 1949, after he had beaten Thomas E. Dewey, he was up to 69 percent; and then he reverted back to 50 percent just a couple months later. Our Loess curve estimates that Mr. Truman’s approval rating was probably around 50 percent on Election Day, but this is just a guess. What’s clear is that Mr. Truman was at some point an extremely unpopular president, and he nevertheless — to the great surprise of the Chicago Daily Tribune — defeated Mr. Dewey. Another thing to take from the graphic is how the red and blue lines gradually untangle themselves as the relationship between approval ratings and re-election becomes stronger over time. We can see this a bit more clearly by taking the average approval rating for the 8 winning candidates and the 3 losing ones and tracking them over the two years leading up to the election: I would resist the idea that there is any one magical date when approval ratings go from meaningless to meaningful as predictors of re-election. In the chart, the first time the winners and the losers begin to separate themselves is about 19 months before the election — which would correspond roughly to March of the prior year — but the split would have come a bit earlier if not for Mr. Bush’s Gulf War bounce. There’s also increasing differentiation in the period roughly 10 to 5 months before the election, corresponding with primary season. Still, for the most part, the separation occurs gradually. I’ve also tried to play around with various sorts of logistic regression models that attempt to predict a president’s chances at re-election based solely on his Gallup approval rating and the number of days until the election. Don’t take this terribly seriously — it’s hard to do anything very rigorous based on so few data points (just 11 presidents in the sample), and I can imagine better model designs than the one that I’ve used. But it does yield some ballpark estimates of what this data implies. **For example, a year in advance of the election, the model figures that a president with a 60 percent approval rating is about 90 percent likely to win re-election, whereas a 40 percent rating translates into a win probability of a bit below 40 percent**. So by that point the differences have become fairly meaningful: What does this mean for Barack Obama? Right now, we’re still in the period where the most useful number for estimating his re-election chances is not his approval rating but rather the historical track record of incumbent presidents. As I wrote on Wednesday, since the Civil War, 73 percent of incumbent presidents who sought another term won, as have 70 percent since World War II. Plugging Mr. Obama’s current numbers into the regression model that I described above yields a 65 percent likelihood of re-election — but again, this is a really rough guess, based mostly on the high historical batting average for incumbents rather than anything to do with Mr. Obama himself. What we can say is important is the range in which Mr. Obama’s approval ratings have been varying in recent months: between about 45 and about 50 percent. **If Mr. Obama’s approval rating is at the top of that range, 50 percent, on Nov. 6, 2012 — about where it is now — the model figures that his chances of winning re-election will be greater than 80 percent. But if his approval rating is at the bottom of the range instead, at 45 percent, his chances for a second term will be only about one in three,** and he’ll have to hope that the Republican nominee is a weak one. Much will change between now and then, of course. But Mr. Obama would probably win an election held next Tuesday — and that would not have been true a couple of months ago.

#### China label kills relations and the economy

Roach 8-28

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True to his word as a candidate, a few hours after taking office as US president on January 20, 2013, Mitt Romney issued his first executive order, declaring China guilty of currency manipulation. In accordance with the Omnibus Trade and Competitiveness Act of 1988, President Romney’s act triggered immediate negotiations between US and Chinese officials. But the negotiations stalled and both parties blamed the other in press releases.¶ In early February, in his first State of the Union address, Mr Romney said: “Enough is enough. It is high time for China to play by our rules.” Congress roared its approval and within a week, overwhelming bipartisan majorities of both houses passed the Defend America Trade Act of 2013. Modelled on the currency manipulation “remedies” of countervailing tariffs first proposed in 2005, DATA was signed into law on President’s Day, February 18 2013. China was quickly deemed to be in violation of the new statute.¶ More¶ At that point negotiations took on a new urgency. But the new leaders in both countries were in no mood for compromise and the talks failed. In accordance with the provisions of DATA, Washington slapped immediate tariffs of 20 per cent on all Chinese products entering the US.¶ As plants shut down across China, Beijing declared this to be an act of economic war and filed a complaint with the World Trade Organization. Li Keqiang, newly installed as premier, announced after the National People’s Congress in March that China had no patience to endure a WTO dispute process that could take anywhere from two to five years to run its course.¶ China’s Ministry of Commerce then announced retaliatory tariffs of 20 per cent on all US exports to China. This hit growth-starved America right between the eyes. With $104bn of American-made goods sold in Chinese markets in 2011, China had become the US’s third-largest and its fastest-growing export market. To add insult to injury, China-dependent Walmart announced average price increases of 5 per cent. Other retailers followed suit. Talk of stagflation was in the air and hard-pressed American consumers hunkered down further.¶ US financial markets swooned. The stock market was hit by pressures on profit margins, growth and inflation. The bond market was also unnerved by the realisation that the Federal Reserve was seriously behind the curve. With good reason. After its meeting in June 2013, the Fed reaffirmed its ever-extending commitment to keep its benchmark policy rate near zero through 2015, and even dangled the possibility of yet another round of quantitative easing, QE4. Yields on 10-year Treasuries moved back above 4 per cent and stocks fell sharply further.¶ Feeling the heat from financial markets, Washington turned up the heat on China. Mr Romney called Congress back from its Independence Day holiday into a special session. By unanimous consent, Congress passed an amendment to DATA – upping the tariffs on China by another 10 percentage points.¶ At that point an indignant China turned to its own version of the big bazooka. The biggest foreign buyer of US debt was nowhere to be seen at the Treasury’s August 2013 auction. Long-term interest rates spiked and within weeks yields on 10-year Treasuries hit 7 per cent. The dollar plunged and the US stock market went into free fall.¶ Just like that, the so-called exorbitant privilege of the haven asset vanished. When asked at a press conference why China would willingly engage in actions that would undermine the value of more than $2tn in Treasuries and other dollar-based holdings, Zhou Xiaochuan, retiring governor of the People’s Bank of China, said: “This is not about risk-adjusted portfolio returns. We are defending our people against an act of economic war.”¶ By the autumn of 2013 there was little doubt of the severity of renewed recession in the US. Trade sanctions on China had backfired. Beleaguered American workers paid the highest price of all, as the unemployment rate shot back up above 10 per cent. A horrific policy blunder had confirmed that there was no bilateral fix for the multilateral trade imbalance of a savings-starved US economy.¶ In China, growth had slipped below the dreaded 6 per cent threshold and the new leadership was rolling out yet another investment stimulus for a still unbalanced and unstable Chinese economy. As the global economy slipped back into recession, the Great Crisis of 2008-09 suddenly looked like child’s play. Globalisation itself hung in the balance.¶ History warns us never to say never. We need only look at the legacy of US Senator Reed Smoot and Representative Willis Hawley, who sponsored the infamous Tariff Act of 1930 – America’s worst economic policy blunder. Bad dreams can – and have – become reality.

#### Economic decline causes nuclear war

Harris and Burrows, 09 –

 PhD in European History @ Cambridge and Counselor of the US National Intelligence Council AND Member of the National Intelligence Council’s Long Range Analysis Unit (Mathew J. and Jennifer, “Revisiting the Future: Geopolitical Effects of the Financial Crisis,” April, Washington Quarterly, <http://www.twq.com/09april/docs/09apr_Burrows.pdf>)

Of course, the report encompasses more than economics and indeed believes the future is likely to be the result of a number of intersecting and interlocking forces. With so many possible permutations of outcomes, each with ample Revisiting the Future opportunity for unintended consequences, there is a growing sense of insecurity. Even so, history may be more instructive than ever. While we continue to believe that the **Great Depression** is not likely to be repeated, the **lessons** to be drawn from that period **include the harmful effects on** **fledgling** **democracies** and multiethnic societies (think Central Europe in 1920s and 1930s) **and** on the sustainability of **multilateral institutions** (think League of Nations in the same period). **There is no reason to think that this would not be true in the twenty-first** as much as in the twentieth **century.** For that reason, the ways in which **the potential for greater conflict could grow** would seem to be even more apt **in a** constantly **volatile economic environment** as they would be if change would be steadier. In surveying those risks, the report stressed the likelihood that terrorism and nonproliferation will remain priorities even as resource issues move up on the international agenda. **Terrorism**’s appeal **will decline if** economic **growth continues** in the Middle East and youth unemployment is reduced. For those terrorist groups that remain active in 2025, however, the **diffusion of technologies** and scientific knowledge **will place** some of **the world’s most dangerous capabilities within their reach**. Terrorist groups in 2025 will likely be a combination of descendants of long established groups\_inheriting organizational structures, command and control processes, and training procedures necessary to conduct sophisticated attacks and newly emergent collections of the angry and disenfranchised that become self-radicalized, particularly in the absence of economic outlets that would become narrower in an economic downturn. The most dangerous casualty of any economically-induced drawdown of U.S. military presence would almost certainly be the Middle East. Although Iran’s acquisition of nuclear weapons is not inevitable, worries about a nuclear-armed Iran could lead states in the region to develop new security arrangements with external powers, acquire additional weapons, and consider pursuing their own nuclear ambitions. It is not clear that the type of stable deterrent relationship that existed between the great powers for most of the Cold War would emerge naturally in the Middle East with a nuclear Iran. Episodes of low intensity **conflict** and terrorism taking place under a nuclear umbrella **could lead to an unintended escalation** and broader conflict if clear red lines between those states involved are not well established. The close **proximity of** potential **nuclear rivals** combined with underdeveloped surveillance capabilities and mobile dual-capable Iranian missile systems also will produce inherent difficulties in achieving reliable indications and warning of an impending nuclear attack. The lack of strategic depth in neighboring states like Israel, short warning and missile flight times, and uncertainty of Iranian intentions **may place more focus on preemption** rather than defense, potentially **leading to escalating crises**. 36 Types of **conflict** that the world continues to experience, such as **over resources, could reemerge,** particularly if protectionism grows and there is a resort to neo-mercantilist practices. **Perceptions of renewed energy scarcity** will drive countries to take actions to assure their future access to energy supplies. In the worst case, this **could result in interstate conflicts** if government leaders deem assured access to energy resources, for example, to be essential for maintaining domestic stability and the survival of their regime. Even actions short of war, however, will have important geopolitical implications. Maritime security concerns are providing a rationale for naval buildups and modernization efforts, such as China’s and India’s development of blue water naval capabilities. If the fiscal stimulus focus for these countries indeed turns inward, one of the most obvious funding targets may be military. Buildup of regional naval capabilities could lead to increased tensions, rivalries, and counterbalancing moves, but it also will create opportunities for multinational cooperation in protecting critical sea lanes. With water also becoming scarcer in Asia and the Middle East, **cooperation** to manage changing water resources **is** likely to be increasingly **difficult** both within and between states **in a** more **dog-eat-dog world.**

### Shell

#### **China is not a space challenger to the US - status quo success gives the CCP legitimacy at home**

Wiggin 10
(Stuart, is a freelance writer based in Beijing, “Asian space race more about prestige than power” <http://opinion.globaltimes.cn/foreign-view/2011-04/585161.html> //Donnie)

At the start of this month China launched its first lunar probe. This was the latest step of an arduous journey, with the final goal of sending a manned mission to the moon. Many countries have praised Chinese efforts in space exploration, but some observers have been left with the puzzling question of why the Chinese government feels the need to pursue a space program now. Are these efforts purely related to scientific research, or is China actually trying to com-pete with the world's leading space powers? The true answer lies somewhere in the middle. China is one of only three countries to have sent manned flights into space, and in doing so they have confirmed their status as a world leader in innovation and technological capability. Yet, amid these great achievements, some observers have misread China's efforts at pursuing a space program as an challenge to the US. When China destroyed one of its own weather satellites with a ballistic missile in 2007, many felt that this was a flexing of military muscle. However, the 2008 space walk and the launching of the Chang'e-2 probes should not be interpreted along the same lines. China is not attempting to trigger a 21st century space race between itself and the US. If there is a space race, it's an Asian one. India, Japan, South Korea and China are all competing for ascendancy and popular glory. In the competition to be among the world's new powers, space is an important frontier. The US is looking on with interest, but is not alarmed about the situation and has almost no interest in responding with a competitive stance. This relaxed viewpoint is because China is still four decades or so behind the US in its technological capabilities in space and, while they are closing the gap fast, it will be some time before China is in direct competition with the US in this field. China's space ambitions can be fruitfully compared to the 19th century imperial adven-tures of European nations. Many then recently created European countries, such as Belgium, Germany, and Italy, followed Britain's lead in carving up the globe in an effort to confirm their status as a nation-state. Asian space exploration is not driven by the same urge, but is a way of pursuing legitimacy in the eyes of the developed world, as well as appealing to domestic needs. Through the space program, China not only gains legitimacy as a functioning and capable nation in the eyes of outside observers, but more importantly, it gains legitimacy among its own people. Success in space is a huge boost to national pride and a strong sign of advances barely thought possible a decade earlier. The official standpoint regarding China's space program is that it represents the fundamental task of humanity to research humanity's origin and develop a sustainable lifestyle, as stated by Qian Weiping, a chief designer of the Chang'e-2 mission. Qian went on to say that it is China's responsibility to carry out such research, rather than an act of imitation. Whether out of responsibility, or a desire to prove to the rest of the world that they are indeed capable of success in space, a large element of pride is at play within the motivating factors, evidenced by Qian's declaration to the nation that "we will shorten the gap (between China and the US/Russia) fast."

#### **Chinese space leadership is key to CCP stability – plan causes nationalist up-rise Johnson-Freese 4**(Dr. Joan Johnson-Freese Chair, Department of National Security Studies, Naval War College “Space Wei Qi: The Launch of Shenzhou V” <http://www.usnwc.edu/getattachment/ba695c64-2c13-4913-a6f5-9ebcec9aa311/Space-Wei-Qi--The-Launch-of-Shenzhou-V---Johnson-F> */)*

China faces Herculean challenges on a daily basis keeping its population employed, fed, housed, and subsequently stable. 8 Why, then, would its leaders spend severely limited government resources on a manned space program? There are many reasons, in addition to which Chinese program supporters had the benefit of being able to learn from the American and Russian experiences. China has read the playbooks from both countries on how to maximize program benefits and strategic opportunities. Additionally, in terms of the technology used, China did not reinvent the wheel but instead chose to build on proven Russian designs. Project 921, as this, the second Chinese attempt at a manned space program, is called, was initiated and championed by former Chinese president, and still head of the military, Jiang Zemin. 9 It was undertaken in 1992 because the time was ripe: China was on an economic upswing and more technologically adept than during its first attempt in the 1970s; 10 China desired advanced space technology for both domestic telecommunications and the military; and the program created a positive focal point for national pride to counter negative 1989 Tiananmen Square images. China has not, however, sent a man into space because Jiang Zemin is a space visionary, yearning to explore the heavens as an expression of humankind’s essential nature. Jiang is a pragmatist, a skilled politician and a technocrat who ascended to power by maneuvering his way through the Byzantine maze of China’s power structure. His support for the manned program—publicly evidenced by his visit to Johnson Space Center in October 2002, his presence at the March 2003 launch of the Shenzhou III unmanned precursor, and ultimately more importantly, through sustained government funding—has been a calculated risk. Domestic pride and international prestige, economic development (including skilled jobs and expanded science and engineering educational programs), and dual-use technology development are all proven reasons for pursuing manned space programs. Jiang understood that if space successes are spectacular, so too are space failures. Not only were national goals on the line but his own position relative to his successor as president, Hu Jintao. Failure would be devastating. As it turned out, success may have had personal implications as well—one of the few surprises of the carefully choreographed launch was the absence of Jiang Zemin. Although he had been scheduled to speak to the taikonaut during the launch and offer congratulations afterward, he was conspicuously missing from the launch site and media events. While a disaster would have certainly reflected poorly on Jiang, apparently being poised to accept credit, even by inference, presented issues as well for him. It was Hu Jintao at the launch site who spoke to Yang before the launch, Hu on the phone during the flight, and Hu there to proclaim the mission a complete success afterward. Twice on CCTV (China Central Television) news on the evening of the flight Hu spoke, saying that he was representing Jiang. People’s Daily reported that “in a phone call to [General] Li Jinai, chief commander of China’s space program, Jiang said, ‘I am very happy and excited to hear that our country’s first manned space flight has turned out to be a complete success.’” 11 CCTV also showed footage of the Chinese defense minister, General Cao Gangchuan, talking to Yang in orbit. Cao too said he was representing Jiang. But it was clearly Hu that dominated the news that Wednesday night, with CCTV airing long portions of his two speeches on the space launch. 12 Jiang’s absence at the pre- and postlaunch events possibly indicated ambiguity about how the Chinese leadership wants the launch perceived. Since Jiang’s sole remaining formal post is that of chairman of the Communist Central Military Commission, a visible role for him might have sent too loud a message about military involvement. Although the Chinese want the United States to view the Chinese military capabilities with respect, they do not want it to view this launch as a threat that requires a response. But since both People’s Liberation Army (PLA) Generals Cao and Li were in attendance, perhaps Jiang’s absence primarily indicates Jiang’s further distancing from power, pari passu with Hu’s rise. 13 The 1957 launch of Sputnik was a huge psychological boost for both the Soviet people and the Soviet government during the Cold War, and conversely a huge blow to both the people and the government of the United States. Pride, and a consequent “rallying-around” in the Soviet Union after Sputnik (as experienced as well in the United States after the Apollo moon landing), also translated into credibility and hence governmental legitimacy. Credibility and legitimacy are important considerations in Beijing. One Chinese official stated of the Shenzhou V launch, “This is not America where money comes from the taxpayers. This is money of the Communist Party—they would do with it what they decide. It is great they are investing in something that makes us proud.” 14 Beijing’s interest in manned spaceflight for reasons of domestic pride and international prestige parallels its interest in bringing the Olympics to Beijing in 2008. Indeed, Yang carried an Olympic flag with him into orbit, unfurling it ceremoniously upon his return. 15 Six centuries ago a Ming dynasty inventor, Wan Hu, is said to have strapped rockets onto his chair and ordered his assistants to light them. When the smoke cleared, Hu and the chair were, not surprisingly, gone. Yang Liwei has now joined Wan Hu as a space hero. A statue of Yang is already planned in his home province, Liaoning, a rust-belt region ripe for the revitalization Yang is intended to inspire. The Shenzhou V capsule will be displayed at the Millennium Monument in Beijing, where crowds estimated in the thousands celebrated at the time of the launch. Most celebrations appeared largely choreographed, as opposed to the many celebrations that spontaneously erupted when Beijing was named the 2008 Olympic host city. The space mission was both an event meant to be filmed and shown to the world, and one directed by and supported from the top levels of government. Having planned celebrations at the Millennium Monument rather than in Tiananmen Square also deflected comparisons with or reference to other times in Tiananmen that were neither celebratory nor reflective of national pride and unity. The diminutive (and now promoted) Colonel Yang’s biography reads like “the right stuff”—thirty-eight, college-educated, fighter pilot, selfless wife, adoring son. He is described as having been a bright youth and a bit of a mischief maker. In postlaunch interviews he is personable, connecting well with average people. His political credentials must also be assumed impeccable, as he is both the new poster boy for the Chinese leadership and the role model for China’s youth.

#### Nuclear war

Yee 2
Professor of Politics and International Relations at the Hong Kong Baptist University and Storey, Lecturer in Defence Studies at Deakin University, (Herbert Yee, Professor of Politics and International Relations at the Hong Kong Baptist University and Ian Storey, Lecturer in Defence Studies at Deakin University, 2002, “The China Threat: Perceptions, Myths and Reality,” p5)

The fourth factor contributing to the perception of a China threat is the fear of political and economic collapse in the PRC, resulting in territorial fragmentation, civil war and waves of refugees pouring into neighbouring countries. Naturally, any or all of these scenarios would have a profoundly negative impact on regional stability. Today the Chinese leadership faces a raft of internal problems, including the increasing political demands of its citizens, a growing population, a shortage of natural resources and a deterioration in the natural environment caused by rapid industrialisation and pollution. These problems are putting a strain on the central government's ability to govern effectively. Political disintegration or a Chinese civil war might result in millions of Chinese refugees seeking asylum in neighbouring countries. Such an unprecedented exodus of refugees from a collapsed PRC would no doubt put a severe strain on the limited resources of China's neighbours. A fragmented China could also result in another nightmare scenario - nuclear weapons falling into the hands of irresponsible local provincial leaders or warlords.2 From this perspective, a disintegrating China would also pose a threat to its neighbours and the world.

### Heg Adv

#### No risk of blackout- grid break up

USA Today 8-1

“Similar Blackout is unlikely in the U.S.,” USA Today page 8-1

A massive, countrywide power failure like the one in India is "extremely unlikely" in the United States, energy experts say.¶ The U.S. electricity system is segmented in three parts with safeguards to prevent an outage in one system from tripping a blackout in another, "making blackouts across the country extremely unlikely," Energy Department spokeswoman Keri Fulton said.¶ "We are much, much less at risk for something like that happening here," said Gregory Reed, a professor of electric power engineering at University of Pittsburgh. "Most of our issues have been from natural disasters." The U.S. generates more than enough electricity to meet demand and always has power in reserve, Reed said.¶ Grid operators across the USA analyze power usage and generation in real time, factoring forces such as weather, and can forecast power supply and demand by the hour, said Arshad Mansoor, senior vice president of the Electric Power Research Institute in Washington.¶ "In any large, complex interactive network, the chance of that interconnection breaking up is always there," he said.

#### Microgrids solve vulnerability

Pike Research 11,

market research and consulting firm that provides in-depth analysis of global clean technology markets, 9/16/’11

(<http://www.pikeresearch.com/newsroom/military-microgrid-capacity-to-experience-more-than-700-growth-by-2017>)

¶ Military Microgrid Capacity to Experience More than 700% Growth by 2017¶ September 16, 2011¶ The United States Department of Defense (DOD) is the single largest consumer of petroleum in the world. U.S. military operations are also the largest consumer of all forms of energy globally. Microgrids, which enable distributed energy generation at a localized scale including the ability to “island” themselves from larger utility grids, can shrink the amount of fossil fuels consumed to create electricity by networking generators as a system to maximize efficiency. Microgrids enable military bases – both stationary and tactical – to sustain operations no matter what is happening on the larger utility grid or in the theater of war. ¶ According to a new report from Pike Research, the capacity of military microgrids will grow at a rate of 739% between 2011 and 2017, increasing from 38 megawatts (MW) to 316 MW during that period, under a baseline forecast scenario. The cleantech market intelligence firm expects that, under a more aggressive adoption scenario, stationary and mobile military microgrid capacity could reach as high as 817 MW during the same timeframe.¶ “The military’s primary concern is disruption of service from utility transmission and distribution lines,” says senior analyst Peter Asmus. “The lack of control and ownership of these lines – and the uneven quality of power service regionally throughout the United States – has prompted the DOD to reexamine the existing electricity service delivery model. This analysis has led the DOD to the inevitable conclusion that the best way to bolster its ability to secure power may well be through microgrid technology it can own and control.”¶ Asmus adds that, as awareness about the electrical grid’s vulnerability to terrorist attacks has increased in recent times, the U.S. military has become one of the strongest proponents of microgrids, which offer the ultimate secure power supply for fixed base mobile operations. Many army, navy, air force, and other related bases and offices already have vintage microgrids in place. What is new, says Asmus, is that these facilities are looking to envelop entire bases with microgrids and integrate distributed energy generation on-site. These resources, when capable of safe islanding from the surrounding grid, offer the ultimate security since fuel never runs out with renewable energy resources such as solar or wind. The opportunity to help develop these microgrids has attracted a number of powerful technology companies including Lockheed Martin, GE, Honeywell, Boeing, and Eaton.

#### The Unipolar Moment is over and can’t be recovered – 08 financial crash means the US can’t prevent competition

Rachman 11

(Gideon Rachman, Financial Times chief foreign affairs commentator, Zero-Sum Future, 2011, pp 3-4)

But the economic crisis that struck the world in 2008 has changed the logic of international relations. It is no longer obvious that globalization benefits all the world's major powers. It is no longer clear that the United States faces no serious international rivals. And it is increasingly apparent that the world is facing an array of truly global problems-such as climate change and nuclear proliferation-that are causing rivalry and division between nations. After a long period of international cooperation, competition and rivalry are returning to the international system. A win-win world is giving way to a zero-sum world. Both as individuals and as a nation, Americans have begun to question whether the "new world order" that emerged after the cold war still favors the United States. The rise of Asia is increasingly associated with job losses for ordinary Americans and with a challenge to American power from an increasingly confident China. The crash has heightened awareness of American economic vulnerability and the country's reliance on continued Chinese and Middle Eastern lending. Of course, even after the crash, the United States remains the most powerful country in the world-with its largest economy, its most powerful military, and its leading universities. But the United States will never recover the unchallenged superiority of the "unipolar moment" that began with the collapse of the Soviet Union

#### Entitlement spending makes hege collapse inevitable

Cohen ‘12

[Michael A. Cohen is a regular columnist for Foreign Policy's Election 2012 Channel and a fellow at the Century Foundation. <http://www.foreignpolicy.com/articles/2012/02/21/rotting_from_the_inside_out?page=full> ETB]

There is, however, one serious problem with this analysis. Any discussion of American national security that focuses solely on the issue of U.S. power vis-à-vis other countries -- and ignores domestic inputs -- is decidedly incomplete. In Kagan's New Republic article, for example, he has little to say about the country's domestic challenges except to obliquely argue that to focus on "nation-building" at home while ignoring the importance of maintaining U.S. power abroad would be a mistake. In fact, in a recent FP debate with the Financial Times' Gideon Rachman on the issue of American decline, Kagan diagnoses what he, and many other political analysts, appear to believe is the country's most serious problem: "enormous fiscal deficits driven by entitlements." Why is this bad? It makes it harder, says Kagan, for the United States to "continue playing its vital role in the world" and will lead to significant cutbacks in defense spending. However, a focus on U.S. global dominance or suasion that doesn't factor in those elements that constitute American power at home ignores substantial and worsening signs of decline. Indeed, by virtually any measure, a closer look at the state of the United States today tells a sobering tale of rapid and unchecked decay and deterioration in a host of areas. While not all of them are generally considered elements of national security, perhaps they should be.

#### Heg not solve war –

#### A. No threats require primacy and other factors ensure security.

Friedman and Preble 10 (Benjamin Friedman is a research fellow in defense and homeland security studies at the Cato Institute, Christopher Preble is director of foreign policy studies at the Cato Institute, Budgetary Savings from Military Restraint, September 22, 2010 Cato Policy Analysis No. 667 September 23, 2010 <http://www.cato.org/pubs/pas/PA667.pdf>

The United States confuses what it wants from its military, which is global primacy or hegemony, with what its needs, which is safety. Our leaders tend to exaggerate the capability of the enemies we have and invent new enemies by defining traditional foreign troubles —geopolitical competition among states and instability within them, for example—as pressing threats to our security. Geography, wealth, and nuclear weapons provide us with safety that our ancestors would envy. Our hyperactive military policies damage it by encouraging rivalry and resentment. Global military primacy is a game not worth the candle.56

#### B. No war – States have an incentive to avoid it.

Zakaria 08 (Fareed Zakaria, editor of Newsweek International, 2008, The Post-American World, p. 244)

In certain areas – the South China Sea, for example – U.S. military force is likely to be less relevant than that of China. In international negotiations, America will have to bargain and compromise with the others. Does all this add up to instability and disorder? Not necessarily. Two hundred years of Anglo-American hegemony has in fact created a system that is not as fragile is it might have been in the 1920s and 1930s. (When British power waned, American power was unwilling to stip in, and Europe fell through the cracks). The basic conception of the current system – an open world economy, multilateral negotiations – has wide acceptance. And new forms of cooperation are growing. Ann-Marie Slaughter has written about how legal systems are constructing a set of standards without anyone’s forcing them to do so—creating a bottom-up, networked order. Not every issue will lend itself to such stabilization, but many will. In other words, the search for a superpower solution to every problem may be futile and unnecessary. Small work-arounds might be just as effective.

#### Empirics and studies are conclusive – resource wars don’t happen

Salehyan ‘7

[Idean Salehyan, assistant professor of political science at the University of North Texas. “The New Myth About Climate Change”, Foreign Policy, August 2007, <http://www.foreignpolicy.com/story/cms.php?story_id=3922>]

First, aside from a few anecdotes, there is little systematic empirical evidence that resource scarcity and changing environmental conditions lead to conflict. In fact, several studies have shown that an abundance of natural resources is more likely to contribute to conflict. Moreover, even as the planet has warmed, the number of civil wars and insurgencies has decreased dramatically. Data collected by researchers at Uppsala University and the International Peace Research Institute, Oslo shows a steep decline in the number of armed conflicts around the world. Between 1989 and 2002, some 100 armed conflicts came to an end, including the wars in Mozambique, Nicaragua, and Cambodia. If global warming causes conflict, we should not be witnessing this downward trend. Furthermore, if famine and drought led to the crisis in Darfur, why have scores of environmental catastrophes failed to set off armed conflict elsewhere? For instance, the U.N. World Food Programme warns that 5 million people in Malawi have been experiencing chronic food shortages for several years. But famine-wracked Malawi has yet to experience a major civil war. Similarly, the Asian tsunami in 2004 killed hundreds of thousands of people, generated millions of environmental refugees, and led to severe shortages of shelter, food, clean water, and electricity. Yet the tsunami, one of the most extreme catastrophes in recent history, did not lead to an outbreak of resource wars. Clearly then, there is much more to armed conflict than resource scarcity and natural disasters.

#### Even if the US fades, new powers won’t upset the system – they’re too invested

Ikenberry 10 (G. John, Albert G. Milbank Professor of Politics and International Affairs at Princeton University and a Global Eminence Scholar at Kyung Hee University, Korea“The Liberal International Order and its Discontents,” Millennium – Journal of International Studies 2010; 38; 509)

There are also reasons to think that this liberal order will persist, even if it continues to evolve. Firstly, the violent forces that have overthrown international orders in the past do not seem to operate today. We live in the longest period of ‘great power peace’ in modern history. The great powers have not found themselves at war with each other since the guns fell silent in 1945. This non-war outcome is certainly influenced by two realities: nuclear deterrence, which raises the costs of war, and the dominance of democracies, who have found their own pathway to peace. In the past, the great moments of order-building came in the aftermath of war when the old order was destroyed. War itself was a ratification of the view that the old order was no longer sustainable. War broke the old order apart, propelled shifts in world power and opened up the international landscape for new negotiations over the rules and principles of world politics. In the absence of great power war it is harder to clear the ground for new ‘constitutional’ arrangements. Secondly, this order is also distinctive in its integrative and expansive character. In essence, it is ‘easy to join and hard to overturn’. This follows most fundamentally from the fact that it is a liberal international order – in effect, it is an order that is relatively open and loosely rulebased. The order generates participants and stakeholders. Beyond this, there are three reasons why the architectural features of this post-war liberal order reinforce downward and outward integration. One is that the multilateral character of the rules and institutions create opportunities for access and participation. Countries that want to join in can do so; Japan found itself integrating through participation in the trade system and alliance partnership. More recently, China has taken steps to join, at least through the world trading system. Joining is not costless. Membership in institutional bodies such as the WTO must be voted upon by existing members and states must meet specific requirements. But these bodies are not exclusive or imperial. Secondly, the liberal order is organised around shared leadership and not just the United States. The G-7/8 is an example of a governance organisation that is based on a collective leadership, and the new G-20 grouping has emerged to provide expanded leadership. Finally, the order also provides opportunities for a wide array of states to gain access to the ‘spoils of modernity’. Again, this is not an imperial system in which the riches accrue disproportionately to the centre. States across the system have found ways to integrate into this order and experience economic gains and rapid growth along the way. Thirdly, rising states do not constitute a bloc that seeks to overturn or reorganise the existing international order. China, India, Russia, Brazil, South Africa and others all are seeking new roles and more influence within the global system. But they do not constitute a new coalition of states seeking global transformation. All of these states are capitalist and as such are deeply embedded in the world economy. Most of them are democratic and embrace the political principles of the older Western liberal democracies. At the same time, they all have different geopolitical interests. They are as diverse in their orientations as the rest of the world in regard to energy, religion and ideologies of development. They are not united by a common principled belief in a post-liberal world order. They are all very much inside the existing order and integrated in various ways into existing governance institutions. Fourthly, the major states in the system – the old great powers and rising states – all have complex alignments of interests. They all are secure in the sense that they are not threatened by other major states. All worry about radicalism and failed states. Even in the case of the most fraught relationships – such as the emerging one between the United States and China – there are shared or common interests in global issues related to energy and the environment. These interests are complex. There are lots of ways in which these countries will compete with each other and seek to push ‘adjustment’ to problems onto the other states. But it is precisely the complexity of these shared interests that creates opportunities and incentives to negotiate and cooperate – and, ultimately, to support the open and rule-based frameworks that allow for bargains and agreements to be reached. Overall, these considerations suggest that the leading states of the world system are travelling along a common pathway to modernity. They are not divided by great ideological clashes or emboldened by the potential gains from great power war. These logics of earlier orders are not salient today. Fascism, communism and theocratic dictatorships cannot propel you along the modernising pathway. In effect, if you want to be a modern great power you need to join the WTO. The capitalist world economy and the liberal rules and institutions that it supports – and that support it – are foundational to modernisation and progress. The United States and other Western states may rise or fall within the existing global system but the liberal character of that system still provides attractions and benefits to most states within it and on its edges.

### Warming Adv

#### Satellites won’t be enough to solve energy needs or offset warming

Globus, 2008,

Spring 2008 (Al, space expert, “On The Moon,” Ad Astra, <http://www.nss.org/adastra/AdAstra-SBSP-2008.pdf>)

While it has been suggested that in the long term, space solar power (SSP) can provide all the clean, renewable energy Earth could possibly need (and then some), there has been less discussion on the most economic way to produce that power. If we want to build two or three solar power satellites, one obvious approach is to manufacture the parts on the ground, launch them into orbit, and assemble them there, just like the International Space Station. But a few power satellites won’t solve our energy **or greenhouse gas** problems. We’ll need more. To generate all the energy used on Earth today (about 15 terawatts)would require roughly 400 solar power satellites 10 kilometers across. Assuming advanced, lightweight space solar power technology, this will require at least 100,000 launches to bring all the materials up from Earth. But even 400 satellites won’t be enough. Billions of people today have totally inadequate energy supplies— and the population is growing. Providing everyone with reasonable quantities of energy might take five to ten times more than we produce today. To supply this energy from solar power satellites requires a staggering launch rate. There are two major issues with a very high launch rate.

#### No impact—threat overestimated and global warming is solved by adaptation and mitigation.

Mendelsohn 9,

(Robert O. the Edwin Weyerhaeuser Davis Professor, Yale School of¶ Forestry and Environmental Studies, Yale University, June 2009, “Climate Change and¶ Economic Growth,” online: http://www.growthcommission.org/storage/cgdev/documents/¶ gcwp060web.pdf

The heart of the debate about climate change comes from a number of warnings from scientists and others that give the impression that human induced climate change is an immediate threat to society (IPCC 2007a,b; Stern 2006.) Millions of people might be vulnerable to health effects (IPCC 2007b) crop production might fall in the low latitudes (IPCC 2007b), water supplies might dwindle (IPCC 2007b), precipitation might fall in arid regions (IPCC 2007b), extreme events will grow exponentially (Stern 2006), and between 20-30 percent of species will risk extinction (IPCC 2007b). Even worse, there may be catastrophic events such as the melting of Greenland or Antarctic ice sheets causing severe sea level rise, which would inundate hundreds of millions of people. (Dasgupta et al. 2009) Proponents argue there is no time to waste. Unless greenhouse gases are cut dramatically today, economic growth and wellbeing may be at risk (Stern 2006). These statements are largely alarmist and misleading. Although climate change is a serious problem that deserves attention, society’s immediate behavior has an extremely low probability of leading to catastrophic consequences. The science and economics of climate change is quite clear that emissions over the next few decades will lead to only mild consequences. The severe impacts predicted by alarmists require a century (or two in the Case of Stern 2006) of no mitigation. Many of the predicted impacts assume there will be no or little adaptation. the net economic impacts from climate change over the next 50 years will take more than a century or even a millennium to unfold and many of these “potential” impacts will never occur because people will adapt. It is not at all apparent that immediate and dramatic policies need to be developed to thwart long‐range climate risks. What is needed are long-run balanced responses.

#### 6 degree warming’s inevitable

AP 9

(Associated Press, Six Degree Temperature Rise by 2100 is Inevitable: UNEP, September 24, <http://www.speedy-fit.co.uk/index2.php?option=com_content&do_pdf=1&id=168>)

Earth's temperature is likely to jump six degrees between now and the end of the century even if every country cuts greenhouse gas emissions as proposed, according to a United Nations update. Scientists looked at emission plans from 192 nations and calculated what would happen to global warming. The projections take into account 80 percent emission cuts from the U.S. and Europe by 2050, which are not sure things. The U.S. figure is based on a bill that passed the House of Representatives but is running into resistance in the Senate, where debate has been delayed by health care reform efforts. Carbon dioxide, mostly from the burning of fossil fuels such as coal and oil, is the main cause of global warming, trapping the sun's energy in the atmosphere. The world's average temperature has already risen 1.4 degrees since the 19th century. Much of projected rise in temperature is because of developing nations, which aren't talking much about cutting their emissions, scientists said at a United Nations press conference Thursday. China alone adds nearly 2 degrees to the projections. "We are headed toward very serious changes in our planet," said Achim Steiner, head of the U.N.'s environment program, which issued the update on Thursday. The review looked at some 400 peer-reviewed papers on climate over the last three years. Even if the developed world cuts its emissions by 80 percent and the developing world cuts theirs in half by 2050, as some experts propose, the world is still facing a 3-degree increase by the end of the century, said Robert Corell, a prominent U.S. climate scientist who helped oversee the update. Corell said the most likely agreement out of the international climate negotiations in Copenhagen in December still translates into a nearly 5-degree increase in world temperature by the end of the century. European leaders and the Obama White House have set a goal to limit warming to just a couple degrees. The U.N.'s environment program unveiled the update on peer-reviewed climate change science to tell diplomats how hot the planet is getting. The last big report from the Nobel Prize-winning Intergovernmental Panel on Climate Change came out more than two years ago and is based on science that is at least three to four years old, Steiner said. Global warming is speeding up, especially in the Arctic, and that means that some top-level science projections from 2007 are already out of date and overly optimistic. Corell, who headed an assessment of warming in the Arctic, said global warming "is accelerating in ways that we are not anticipating." Because Greenland and West Antarctic ice sheets are melting far faster than thought, it looks like the seas will rise twice as fast as projected just three years ago, Corell said. He said seas should rise about a foot every 20 to 25 years.

#### CO2 isn’t key

Watts 12

Watts, 25-year climate reporter, works with weather technology, weather stations, and weather data processing systems in the private sector, 7/25/’12

(Anthony, <http://wattsupwiththat.com/2012/07/25/lindzen-at-sandia-national-labs-climate-models-are-flawed/>)

ALBUQUERQUE, N.M. — Massachusetts Institute of Technology professor Richard Lindzen, a global warming skeptic, told about 70 Sandia researchers in June that too much is being made of climate change by researchers seeking government funding. He said their data and their methods did not support their claims.¶ “Despite concerns over the last decades with the greenhouse process, they oversimplify the effect,” he said. “Simply cranking up CO2 [carbon dioxide] (as the culprit) is not the answer” to what causes climate change.¶ Lindzen, the ninth speaker in Sandia’s Climate Change and National Security Speaker Series, is Alfred P. Sloan professor of meteorology in MIT’s department of earth, atmospheric and planetary sciences. He has published more than 200 scientific papers and is the lead author of Chapter 7 (“Physical Climate Processes and Feedbacks”) of the International Panel on Climate Change’s (IPCC) Third Assessment Report. He is a member of the National Academy of Sciences and a fellow of the American Geophysical Union and the American Meteorological Society.¶ For 30 years, climate scientists have been “locked into a simple-minded identification of climate with greenhouse-gas level. … That climate should be the function of a single parameter (like CO2) has always seemed implausible. Yet an obsessive focus on such an obvious oversimplification has likely set back progress by decades,” Lindzen said.¶ For major climates of the past, other factors were more important than carbon dioxide. Orbital variations have been shown to quantitatively account for the cycles of glaciations of the past 700,000 years, he said, and the elimination of the arctic inversion, when the polar caps were ice-free, “is likely to have been more important than CO2 for the warm episode during the Eocene 50 million years ago.”¶ There is little evidence that changes in climate are producing extreme weather events, he said. “Even the IPCC says there is little if any evidence of this. In fact, there are important physical reasons for doubting such anticipations.”¶ Lindzen’s views run counter to those of almost all major professional societies. For example, the American Physical Society statement of Nov. 18, 2007, read, “The evidence is incontrovertible: Global warming is occurring.” But he doesn’t feel they are necessarily right. “Why did the American Physical Society take a position?” he asked his audience. “Why did they find it compelling? They never answered.”¶ Speaking methodically with flashes of humor — “I always feel that when the conversation turns to weather, people are bored.” — he said a basic problem with current computer climate models that show disastrous increases in temperature is that relatively small increases in atmospheric gases lead to large changes in temperatures in the models.¶ But, he said, “predictions based on high (climate) sensitivity ran well ahead of observations.”¶ Real-world observations do not support IPCC models, he said: “We’ve already seen almost the equivalent of a doubling of CO2 (in radiative forcing) and that has produced very little warming.”¶He disparaged proving the worth of models by applying their criteria to the prediction of past climatic events, saying, “The models are no more valuable than answering a test when you have the questions in advance.”¶ Modelers, he said, merely have used aerosols as a kind of fudge factor to make their models come out right. (Aerosols are tiny particles that reflect sunlight. They are put in the air by industrial or volcanic processes and are considered a possible cause of temperature change at Earth’s surface.)¶ Then there is the practical question of what can be done about temperature increases even if they are occurring, he said. “China, India, Korea are not going to go along with IPCC recommendations, so … the only countries punished will be those who go along with the recommendations.”¶ He discounted mainstream opinion that climate change could hurt national security, saying that “historically there is little evidence of natural disasters leading to war, but economic conditions have proven much more serious. Almost all proposed mitigation policies lead to reduced energy availability and higher energy costs. All studies of human benefit and national security perspectives show that increased energy is important.”¶ He showed a graph that demonstrated that more energy consumption leads to higher literacy rate, lower infant mortality and a lower number of children per woman.¶ Given that proposed policies are unlikely to significantly influence climate and that lower energy availability could be considered a significant threat to national security, to continue with a mitigation policy that reduces available energy “would, at the least, appear to be irresponsible,” he argued.¶ Responding to audience questions about rising temperatures, he said a 0.8 of a degree C change in temperature in 150 years is a small change. Questioned about five-, seven-, and 17-year averages that seem to show that Earth’s surface temperature is rising, he said temperatures are always fluctuating by tenths of a degree.

#### No impact to ocean acidification and its not caused by anthropogenic warming

Eschenbach 10 **\*\* cites Robert Byrne**, Ph.D from University of Rhode Island, Professor of Seawater Physical Chemistry at the University of South Florida

Willis “The Electric Oceanic Acid Test” [<http://wattsupwiththat.com/2010/06/19/the-electric-oceanic-acid-test/#more-20792> SJE] June 19

There is a recent and interesting study in GRL by Byrne et al., entitled “Direct observations of basin-wide acidification of the North Pacific Ocean“. This study reports on the change in ocean alkalinity over a 15 year period (1991-2006) along a transect of the North Pacific from Hawaii to Alaska. (A “transect” is a path along which one measures some variable or variables.) Here is the path of the transect: I love researching climate, because there’s always so much to learn. Here’s what I learned from the Byrne et al. paper.The first thing that I learned is that when you go from the tropics (Hawaii) to the North Pacific (Alaska), the water becomes less and less alkaline. Who knew? So even without any CO2, if you want to experience “acidification” of the ocean water, just go from Hawaii to Alaska … you didn’t notice the change from the “acidification”? You didn’t have your toenails dissolved by the increased acidity? Well, the sea creatures didn’t notice either. They flourish in both the more alkaline Hawaiian waters and the less alkaline Alaskan waters. So let’s take a look at how large the change is along the transect. Changes in alkalinity/acidity are measured in units called “pH”. A neutral solution has a pH of 7.0. Above a pH of 7.0, the solution is alkaline. A solution with a pH less than 7.0 is acidic. pH is a logarithmic scale, so a solution with a pH of 9.0 is ten times as alkaline as a solution with a pH of 8.0. Figure 2 shows the measured pH along the transect. The full size graphic is here. The second thing I learned from the study is that the pH of the ocean is very different in different locations. As one goes from Hawaii to Alaska the pH slowly decreases along the transect, dropping from 8.05 all the way down to 7.65. This is a change in pH of almost half a unit. And everywhere along the transect, the water at depth is much less alkaline, with a minimum value of about 7.25. The third thing I learned from the study is how little humans have changed the pH of the ocean. Figure 3 shows their graph of the anthropogenic pH changes along the transect. The full-sized graphic is here: The area of the greatest anthropogenic change over the fifteen years of the study, as one might imagine, is at the surface. The maximum anthropogenic change over the entire transect was -0.03 pH in fifteen years. The average anthropogenic change over the top 150 metre depth was -0.023. From there down to 800 metres the average anthropogenic change was -0.011 in fifteen years. This means that for the top 800 metres of the ocean, where the majority of the oceanic life exists, the human induced change in pH was -0.013 over 15 years. This was also about the amount of pH change in the waters around Hawaii. Now, remember that the difference in pH between the surface water in Hawaii and Alaskan is 0.50 pH units. That means that at the current rate of change, the surface water in Hawaii will be as alkaline as the current Alaskan surface water in … well … um … lessee, divide by eleventeen, carry the quadratic residual … I get a figure of 566 years. But of course, that is assuming that there would not be any mixing of the water during that half-millennium. The ocean is a huge place, containing a vast amount of carbon. The atmosphere contains about 750 gigatonnes of carbon in the form of CO2. The ocean contains about fifty times that amount. It is slowly mixed by wind, wave, and currents. As a result, the human carbon contribution will not stay in the upper layers as shown in the graphs above. It will be mixed into the deeper layers. Some will go into the sediments. Some will precipitate out of solution. So even in 500 years, Hawaiian waters are very unlikely to have the alkalinity of Alaskan waters. The final thing I learned from this study is that creatures in the ocean live happily in a wide range of alkalinities, from a high of over 8.0 down to almost neutral. As a result, the idea that a slight change in alkalinity will somehow knock the ocean dead doesn’t make any sense**.** By geological standards, the CO2 concentration in the atmosphere is currently quite low. It has been several times higher in the past, with the inevitable changes in the oceanic pH … and despite that, the life in the ocean continued to flourish. My conclusion? To mis-quote Mark Twain, “The reports of the ocean’s death have been greatly exaggerated.”

Oceans can easily survive acidification

Ridley 10 (Matt, Doctor of Philosophy in Zoology, June 15, http://www.thegwpf.org/the-observatory/1106-matt-ridley-threat-from-ocean-acidification-greatly-exaggerated.html, JM)

Lest my critics still accuse me of cherry-picking studies, let me refer them also to the results of Hendrikset al. (2010, Estuarine, Coastal and Shelf Science 86:157). Far from being a cherry-picked study, this is a massive meta-analysis. The authors observed that `warnings that ocean acidification is a major threat to marine biodiversity are largely based on the analysis of predicted changes in ocean chemical fields’ rather than empirical data. So they constructed a database of 372 studies in which the responses of 44 different marine species to ocean acidification induced by equilibrating seawater with CO2-enriched air had been actually measured. They found that only a minority of studies demonstrated `significant responses to acidification’ and there was no significant mean effect even in these studies. They concluded that the world's marine biota are `more resistant to ocean acidification than suggested by pessimistic predictions identifying ocean acidification as a major threat to marine biodiversity’ and that ocean acidification `may not be the widespread problem conjured into the 21st century…Biological processes can provide homeostasis against changes in pH in bulk waters of the range predicted during the 21st century.’ This important paper alone contradicts Hoegh-Gudlberg’s assertion that `the vast bulk of scientific evidence shows that calcifiers… are being heavily impacted already’. In conclusion, I rest my case. My five critics have not only failed to contradict, but have explicitly confirmed the truth of every single one of my factual statements. We differ only in how we interpret the facts. It is hardly surprising that my opinion is not shared by five scientists whose research grants depend on funding agencies being persuaded that there will be a severe and rapid impact of carbon dioxide emissions on coral reefs in coming decades. I merely report accurately that the latest empirical and theoretical research suggests that the likely impact has been exaggerated.

#### Ozone depletion is low now, but the plan collapses the ozone layer

Ross et al 9

(Martin Ross The Aerospace Corporation, Los Angeles , Darin Toohey University of Colorado , Manfred Peinemann The Aerospace Corporation, Los Angeles & Patrick Ross Embry-Riddle Aeronautical University “Limits on the Space Launch Market Related to Stratospheric Ozone Depletion” <http://www.tandfonline.com/doi/pdf/10.1080/14777620902768867>

Combustion emissions from rocket launches change the composition of the atmosphere. The changes can be divided into transient changes near the launch site that affect air quality in the lowermost troposphere and long-term global changes in the composition of the stratosphere. In this paper, we are concerned with the long-term impact of rocket emissions on the global ozone layer. Ozone depletion has been a critical concern of nations across the globe for many decades, and large-scale industrial processes that alter stratospheric composition are assessed with respect to the amount of ozone depletion they would cause. When an assessment suggests unacceptably large ozone loss for a particular process, regulatory actions to limit or modify that process might be enacted to protect the ozone layer.1 In this paper, we consider rocket combustion emissions in the context of ozone layer protection over the next several decades. Our calculations are not a formal assessment, but are a preliminary evaluation to identify the main areas of concern for the space industry. These concerns include risks associated with overly conservative regulation and a suggestion for new research in order to reduce the likelihood of such regulation. Cicerone and Stedman2 first considered rocket emissions as a source of ozone depletion. Subsequent studies have shown consistently that at current launch rates, ozone depletion from rocket exhaust is insignificant compared to other sources of ozone loss.3 If launch rates and ozone depletion from other sources remain at current levels, this assessment will not change. The potential exists that the demand for launch services could increase significantly in the future.4 Large (factors of ten or more) increases in launch demand could come about for a variety of reasons, including national decisions regarding security, enhanced space exploration, market forces associated with significant reductions in launch costs, or the emergence of new markets such as space tourism, manufacturing, or solar power. Analysts generally assume that if the cost of access to orbit is reduced sufficiently, then large, new markets will emerge for space industry and the launch market. This development would be considered revolutionary, and it is not clear when or if, this might occur. Nevertheless, if space transport follows the ‘‘normal’’ development path of transportation technology enters a period of continual expansion, it would be necessary to reconsider the environmental consequences of large rockets, launched often. In this paper, we consider the implication of such significant increase in demand for orbital launches on the global ozone layer.

### 1NC Solvency

#### No Energy – Power can’t be transmitted

Paul Evans, 2009, Feb 23, 2009, (Gizmag, Solar power beamed from space within a decade?, <http://www.gizmag.com/solar-power-space-satellite/11064/>)

February 23, 2009 The concept of [Space-Based Solar Power](http://www.gizmag.com/the-solar-power-satellite-broadcasts-energy-to-earth/10290/%22%20%5Ct%20%22_blank) (SBSP) has been doing the rounds for decades with fantastic claims of 24 hour a day solar power beamed from space via microwave to any point on earth. A start up company called Space Energy, Inc says it plans to develop SBSP satellites to generate and transmit electricity to receivers on the Earth's surface. To do this, the company plans to create and launch a prototype satellite into low earth orbit (LEO). The hitch: this concept is based on as yet unproven technology. SBSP was theorized over 40 years ago by renowned scientist Dr. Peter Glaser. Since then, in response to periodic energy crises, the idea has been re-evaluated from time to time by the U.S. Department of Energy, NASA, major aerospace companies and countries such as Japan and India. Solar power satellites are large arrays of photovoltaic panels assembled in orbit, which use microwave radio waves to transmit solar power to large receiving antennas on Earth. The resulting power can either supplement, or be a substitute for, conventional electricity sources. The advantage of placing solar collectors in geosynchronous Earth orbit (GEO), about 36,000 kilometres (22,500 miles) above Earth, is that it uses the constant and unobstructed output of the Sun, unaffected by the Earth's day/night cycle. By contrast, ground-based solar power provides a vital and valuable addition to the Earth's energy needs, but is limited by these factors: Weather Variable seasons Atmospheric blocking of sunlight Poor direct sunlight at higher and lower latitudes Because none of these factors applies in outer-space, an orbiting SBSP station can supposedly provide an estimated 6-8 times more power than a comparable solar cell on the Earth's surface. Here’s where the entire concept falls flat. [Space Energy, Inc](http://www.spaceenergy.com/s/Home.asp%22%20%5Ct%20%22_blank) claims that a successful long-range wireless power transmission test was conducted in mid-2008, that supposedly transmitted a microwave beam (similar to the kind that would be used to transmit energy from space to Earth) between two Hawaiian Islands across 148 kilometres - more than the distance from the surface of the Earth to the boundary of space. They claim this test demonstrated the technical feasibility of transmitting SBSP to Earth. Less than 1/1000th of 1% received Unfortunately for Space Energy, Inc and the entire concept of space based solar power, the actual test results conducted for a Discovery channel documentary proved a total failure. The former NASA executive and physicist who organized the experiment, John Mankins, admitted in a [press conference](http://www.nss.org/news/releases/pc20080912.html%22%20%5Ct%20%22_blank) that the $1 Million budget spent of the experiment resulted in less than 1/1000th of 1% of the power transmitted being received on the other island. The most successful test of wireless power transmission over any distance at high efficiency was conducted by Bill Brown in 1975. Using a NASA deep space tracking dish they transmitted 30kw over 1.6 km (1 mile) at 82.5% efficiency at the Goldstone Deep Space Communication Complex. A Since Geostationary orbit is 36,000 km (22,500 miles) away from earth the space based power station needs to efficiently transmit power over twenty thousand times further than has ever been achieved to date.

#### Timeframe is 40 years – assumes their study

Day 08

**Washington D.C.-Based Space Policy Analyst¶** [Dwayne A., Knights in shining armor, The Space Review, (<http://www.thespacereview.com/article/1147/1>)]

The NSSO study is remarkably sensible and even-handed and states that we are nowhere near developing practical SSP and that it is not a viable solution for even the military’s limited requirements. It states that the technology to implement space solar power does not currently exist… and is unlikely to exist for the next forty years. Substantial technology development must occur before it is even feasible. Furthermore, the report makes clear that the key technology requirement is cheap access to space, which no longer seems as achievable as it did three decades ago (perhaps why SSP advocates tend to skip this part of the discussion and hope others solve it for them). The activists have ignored the message and fallen in love with the messenger.