# Off

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#### Restrictions on production must mandate a decrease in the quantity produced

Anell 1989

Chairman, WTO panel

 "To examine, in the light of the relevant GATT provisions, the matter referred to the

CONTRACTING PARTIES by the United States in document L/6445 and to make such findings as will assist the CONTRACTING PARTIES in making the recommendations or in giving the rulings provided for in Article XXIII:2." 3. On 3 April 1989, the Council was informed that agreement had been reached on the following composition of the Panel (C/164): Composition Chairman: Mr. Lars E.R. Anell Members: Mr. Hugh W. Bartlett Mrs. Carmen Luz Guarda CANADA - IMPORT RESTRICTIONS ON ICE CREAM AND YOGHURT Report of the Panel adopted at the Forty-fifth Session of the CONTRACTING PARTIES on 5 December 1989 (L/6568 - 36S/68)

<http://www.wto.org/english/tratop_e/dispu_e/88icecrm.pdf>

The United States argued that Canada had failed to demonstrate that it effectively restricted domestic production of milk. The differentiation between "fluid" and "industrial" milk was an artificial one for administrative purposes; with regard to GATT obligations, the product at issue was raw milk from the cow, regardless of what further use was made of it. The use of the word "permitted" in Article XI:2(c)(i) required that there be a limitation on the total quantity of milk that domestic producers were authorized or allowed to produce or sell. The provincial controls on fluid milk did not restrict the quantities permitted to be produced; rather dairy farmers could produce and market as much milk as could be sold as beverage milk or table cream. There were no penalties for delivering more than a farmer's fluid milk quota, it was only if deliveries exceeded actual fluid milk usage or sales that it counted against his industrial milk quota. At least one province did not participate in this voluntary system, and another province had considered leaving it. Furthermore, Canada did not even prohibit the production or sale of milk that exceeded the Market Share Quota. The method used to calculate direct support payments on within-quota deliveries assured that most dairy farmers would completely recover all of their fixed and variable costs on their within-quota deliveries. The farmer was permitted to produce and market milk in excess of the quota, and perhaps had an economic incentive to do so. 27. The United States noted that in the past six years total industrial milk production had consistently exceeded the established Market Sharing Quota, and concluded that the Canadian system was a regulation of production but not a restriction of production. Proposals to amend Article XI:2(c)(i) to replace the word "restrict" with "regulate" had been defeated; what was required was the reduction of production. The results of the econometric analyses cited by Canada provided no indication of what would happen to milk production in the absence not only of the production quotas, but also of the accompanying high price guarantees which operated as incentives to produce. According to the official publication of the Canadian Dairy Commission, a key element of Canada's national dairy policy was to promote self-sufficiency in milk production. The effectiveness of the government supply controls had to be compared to what the situation would be in the absence of all government measures.

#### Restrictions are statutory – must be codified in law

Gerald Hill, practiced law for more than four decades, Executive Director of the California Governor’s Housing Commission, drafted legislation, taught at Golden Gate University Law School, and Kathleen Hill, writer, publisher and newspaper columnist, who graduated from the University of California, Berkeley and has an M.A. in political psychology from California State University. She was also a Fellow in Public Affairs with the prestigious Coro Foundation, No Date, “restriction,” The Free Dictionary, http://legal-dictionary.thefreedictionary.com/restriction

restriction n. any limitation on activity, by statute, regulation or contract provision. In multi-unit real estate developments, condominium and cooperative housing projects, managed by homeowners' associations or similar organizations are usually required by state law to impose restrictions on use. Thus, the restrictions are part of the "covenants, conditions and restrictions," intended to enhance the use of common facilities and property, recorded and incorporated into the title of each owner.

#### The plan changes who provides the permitting for energy

#### Vote Neg:

#### Limits –

Doub 1976 Energy Regulation: A Quagmire for Energy Policy Annual Review of Energy Vol. 1: 715-725 (Volume publication date November 1976) DOI: 10.1146/annurev.eg.01.110176.003435LeBoeuf, Lamb, Leiby & MacRae, 1757 N Street NW, Washington, DC 20036 http://0-www.annualreviews.org.library.lausys.georgetown.edu/doi/pdf/10.1146/annurev.eg.01.110176.003435

 Mr. Doub is a principal in the law firm of Doub and Muntzing, which he formed in 1977. Previously he was a partner in the law firm of LeBoeuf, Lamb, Leiby and MacRae. He was a member of the U.S. Atomic Energy Commission in 1971 - 1974. He served as a member of the Executive Advisory Committee to the Federal Power Commission in 1968 - 1971 and was appointed by the President of the United States to the President's Air Quality Advisory Board in 1970. He is a member of the American Bar Association, Maryland State Bar Association, and Federal Bar Association. He is immediate past Chairman of the U.S. National Committee of the World Energy Conference and a member of the Atomic Industrial Forum. He currently serves as a member of the nuclear export policy committees of both the Atomic Industrial Forum and the American Nuclear Energy Council. Mr. Doub graduated from Washington and Jefferson College (B.A., 1953) and the University of Maryland School of Law in 1956. He is married, has two children, and resides in Potomac, Md. He was born September 3, 1931, in Cumberland, Md.

FERS began with the recognition that federal energy policy must result from concerted efforts in all areas dealing with energy, not the least of which was the manner in which energy is regulated by the federal government. Energy selfsufficiency is improbable, if not impossible, without sensible regulatory processes, and effective regulation is necessary for public confidence. Thus, the President directed that "a comprehensive study be undertaken, in full consultation with Congress, to determine the best way to organize all energy-related regulatory activities of the government." An interagency task force was formed to study this question. With 19 different federal departments and agencies contributing, the task force spent seven months deciphering the present organizational makeup of the federal energy regulatory system, studying the need for organizational improvement, and evaluating alternatives. More than 40 agencies were found to be involved with making regulatory decisions on energy. Although only a few deal exclusively with energy, most of the 40 could significantly affect the availability and/or cost of energy. For example, in the field of gas transmission, there are five federal agencies that must act on siting and land-use issues, seven on emission and effluent issues, five on public safety issues, and one on worker health and safety issues-all before an onshore gas pipeline can be built. The complexity of energy regulation is also illustrated by the case of Standard Oil Company (Indiana), which reportedly must file about 1000 reports a year with 35 different federal agencies. Unfortunately, this example is the rule rather than the exception.

#### Precision: Only direct prohibition is a restriction – key to predictability

Sinha 6

<http://www.indiankanoon.org/doc/437310/>

 Supreme Court of India Union Of India & Ors vs M/S. Asian Food Industries on 7 November, 2006 Author: S.B. Sinha Bench: S Sinha, Mark, E Katju CASE NO.: Writ Petition (civil) 4695 of 2006 PETITIONER: Union of India & Ors. RESPONDENT: M/s. Asian Food Industries DATE OF JUDGMENT: 07/11/2006 BENCH: S.B. Sinha & Markandey Katju JUDGMENT: J U D G M E N T [Arising out of S.L.P. (Civil) No. 17008 of 2006] WITH CIVIL APPEAL NO. 4696 OF 2006 [Arising out of S.L.P. (Civil) No. 17558 of 2006] S.B. SINHA, J :

 We may, however, notice that this Court in State of U.P. and Others v. M/s. Hindustan Aluminium Corpn. and others [AIR 1979 SC 1459] stated the law thus:

"It appears that a distinction between regulation and restriction or prohibition has always been drawn, ever since Municipal Corporation of the City of Toronto v. Virgo. Regulation promotes the freedom or the facility which is required to be regulated in the interest of all concerned, whereas prohibition obstructs or shuts off, or denies it to those to whom it is applied. The Oxford English Dictionary does not define regulate to include prohibition so that if it had been the intention to prohibit the supply, distribution, consumption or use of energy, the legislature would not have contented itself with the use of the word regulating without using the word prohibiting or some such word, to bring out that effect."

#### It promotes multidirectionality, destroying topic coherence

McKie 84

 Professor James W. McKie, distinguished member of the economics department at The University of Texas at Austin for many years

McKie, J W

Annual Review of Environment and Resource , Volume 9 (1)

Annual Reviews – Nov 1, 1984

 THE MULTIPLE PURPOSES OF ENERGY REGULATION AND PROMOTION Federal energy policy since World War II has developed into a vast and multidirectional program of controls, incentives, restraints, and promotions. This development accelerated greatly during the critical decade after 1973, and has become a pervasive and sometimes controlling influence in the energy economy. Its purposes, responding to a multitude of interests and aims in the economy, have frequently been inconsistent, if not obscure, and the results have often been confusing or disappointing.

## CP

#### The United States federal government should establish a Quadrennial Energy Review. In the Quadrennial Energy Review, the United States federal government should include a recommendation that the Federal Energy Regulatory Commission ought to mandate states to set rates above the avoided cost for the production of solar energy

#### Recommending plan mandates through a QER process solves—only the CP creates policy sustainability and private sector coordination that unlocks energy innovation

Ernest Moniz, Cecil and Ida Green Professor of Physics and Engineering Systems and Director of the Energy Initiative at the Massachusetts Institute of Technology; Former Clinton Administration Under Secretary of the Department of Energy and as Associate Director for Science in, Spring 2012, “Stimulating Energy Technology Innovation,” Daedalus, Vol. 141, No. 2, Pages 81-93

It should come as no surprise that I do not have the answers for how the government should intersect the latter stages of the innovation process in a general sense. However, PCAST recommended a pragmatic approach to an integrated federal energy policy that would employ all the tools available to the government in a coherent way. Termed **the** Quadrennial Energy Review (**QER**), the process is necessarily complex, but **history suggests** that **anything short of a full multiagency effort is unlikely to provide a robust plan that accounts for the many threads of an energy policy**. Furthermore, a degree of analysis is required that has not been present in previous efforts. Energy policy is derivative of many policies: environment, technology and competitiveness, diplomacy and security, natural resources, and land and food, among many others. Indeed, multiple agencies that are not labeled “energy” have major equities and long-held perspectives on key elements of energy policy. Often, the preferred policies for different agencies’ agendas conflict. Further, states and local governments play a strong role, for example with building codes, and their approaches can vary dramatically in different parts of the country; certainly, California’s energy policies have influenced the national market. The tools available to support innovation are also diverse, ranging from direct support of RD&D to a variety of economic incentives, regulation, standards, and federal procurement, among other instruments. Congress is equally fragmented: in the House of Representatives and Senate, many committees beyond those tasked with energy policy have equities that mirror those of the different executive agencies. To overcome this fragmentationof responsibilities and perspectives, and especially if the goal is a plan that has staying power in advancing adoption and diffusion, PCAST recommended a QER process to provide a multiyear roadmap that:• lays out an integrated view of short-, intermediate-, and long-term objectives for Federal energy policy in the context of economic, environmental, and security priorities; • outlines legislative proposals to Congress; • puts forward anticipated Executive actions (programmatic, regulatory, fiscal, and so on) coordinated across multiple agencies; • **identifies resource requirements** for the RD&D programs **and** for innovation **incentive programs**; and, most important, • provides a strong analytical base.14 This is a tall order intellectually and organizationally. Several process elements are essential to fostering a chance for success. First, the Executive Office of the President (eop) must use its convening power to ensure effective cooperation among the myriad relevant agencies. However, the capacity to carry out such an exercise and to sustain it does not (and should not) reside in the eop. The doe is the logical home for a substantial Executive Secretariat supporting the eop interagency process that would present decision recommendations to the president. However, the scope of the analytical capability needed does not currently reside at the doe or any other agency. The doe needs to build this capability, presumably supplemented by contractor support to gather data, develop and run models, and carry out analysis, such as independent energy-system engineering and economic analysis. Market trends and prices would be part of the analysis, including international markets and robust analyses of uncertainty. The Energy Information Administration can help with some data gathering and models, but its independence from the policy function needs to be preserved. The national laboratories also lack this range of functions, and tasking them with providing the analytical support to the policy process would be regarded as a conflict of interest; their focus is best directed at research, invention, and technology transfer. Building this analysis capacity is a large job that will take time. For the QER to succeed, the government must seek substantial input from many quarters in a transparent way; certainly, ongoing dialogue with Congress and the energy industry are essential. The good news is that members of Congress have supported the development of the QER as a way to present a coherent starting point for congressional action across many committees**.** A hope is that Congress could then use the QER as a basis for a four or five-year authorization that would provide the private sector with the increased confidence needed to make sound clean energy investment decisions. Given the magnitude of the task, PCAST recommended in 2011 that the doe carry out a Quadrennial Technology Review (qtr)–a first step centered in a single department and focused on technology. The qtr resulted in a rebalancing of the R&D portfolio toward the oil dependence challenge through advanced vehicle development, particularly transportation electrification. The key now will be to extend the processes developed for the qtr to the multiagency QER, involving the eop in a leadership role. Taking the next steps in 2012 will maintain momentum and establish the capabilities needed for the QER by early 2015, the time frame recommended by PCAST. While some may view 2015 as a frustratingly long time away, the alternative is to rely on wishes rather than analysis while failing to gain multiple perspectives in a fair and open manner. Rushing the process will result in a poorly done job **that will not accomplish** any of the **key** QER **goals**. Certainly, **it will not bring together succeeding administrations and Congresses around a** reasonably **shared vision** and set of objectives **that can accelerate innovation in service of national competitiveness and environmental and security goals. Continuing with fragmented** and economically inefficient **policies, technologies “du jour,” and frequent shifts** will complicate private-sector decisions **rather than facilitate innovation**. The government unavoidably plays a strong role in the innovation process, even when this is unacknowledged in policy and political debates. The issue now is to present both a set of principles and fact-based analyses supporting coordinated government-wide actions that earn decent buy-in from major stakeholders.

## 1NC VC DA

#### Venture capital shifting away from renewables to grid modernization now

Dinah Wisenberg Brin, award-winning writer with a strong background producing financial, healthcare, government news, 3-1-2012, “Clean Tech Investing Shifts, With Lower-Cost Ventures Gaining Favor”, NBC News, http://www.cnbc.com/id/46222448/Clean\_Tech\_Investing\_Shifts\_With\_Lower\_Cost\_Ventures\_Gaining\_Favor

For many investors, that change means shifting funds from capital-intensive alternative-energy technologies, such as solar panels, to lower-cost ventures focused on energy efficiency and “smart grid” technologies that automate electric utility operations. “We continue to be very optimistic about things like the smart grid and the infusion of information technologies and software services” into old lines like electricity, agriculture and the built environment," says Steve Vassallo, general partner in Foundation Capital. “We’re very bullish on what I would consider the nexus of information technology and clean tech.” Foundation, based in Menlo Park, Calif., reflects this in investments such as Sentient Energy Inc., a smart-grid monitoring company that allows utilities to remotely find power outages, and Silver Spring Networks, which provides utilities a wireless network for advanced metering and remote service connection. Another holding, EnerNOC [ENOC Loading... () ], a demand-response business with technology to turn off noncritical power loads during peak periods, went public in 2007. EMeter, a one-time Foundation investment, was recently acquired by Siemens Industry [SI Loading... () ]. To be sure, investors have not abandoned costlier technologies with longer-term horizons, but many — put off, in part, by last year’s bankruptcy and shutdown of solar power firm Solyndra — now favor smaller infusions in businesses with a quicker potential payoff. Rob Day, partner in Boston-based Black Coral Capital, says his cleantech investment firm maintains some solar holdings, but he sees a shift from an emphasis on those types of plays to more “intelligence-driven, software-driven, web-driven businesses.” These technologies can be used to improve existing businesses, he says One Black Coral smart-technology investment is Digital Lumens of Boston, which makes high-efficiency, low-cost LED lighting for warehouses and factories. Software and controls are embedded in the fixtures, which can cut lighting bills by 90 percent, providing customers a two-year payback, says Day. U.S. venture capital investment in cleantech companies hit $4.9 billion last year, down 4.5 percent in dollar terms but flat in the number of transactions, according to Ernst & Young LLP, which analyzed data from Dow Jones VentureSource. Cleantech companies raised 29 percent more capital last year than in 2009, E&Y said recently. Most of that decline, however, came from less investment in sectors that were once hot. Investment in energy and electric generation, including solar businesses, fell 5 percent to $1.5 billion, while that of industry products and services companies plunged 34 percent to $1 billion, according to E&Y's analysis of equity investments from venture capital firms, corporations and individuals. The energy efficiency category leads the diverse industry in deals with 78 transactions worth $646.9 million. Energy-storage companies raised $932.6 million, a 250 percent increase and 47 percent deal increase. “Cleantech is … a maturing industry. I think people are beginning to have worked through the early stages, figured out where the more attractive opportunities are and those less so, and meanwhile lots and lots of changes have occurred in the broader world,” says Dan Reicher, executive director of Stanford University’s Center for Energy Policy and Finance, and a faculty member of the university’s business and law schools. Cleantech investment in 2011 brought a number of other important changes: Most of the money went to companies already generating revenue, the emergence of innovative contributions from the IT industry and extraordinary interest by the Chinese in large-scale, capital-intensive technology, such as energy hardware. Many U.S. companies can’t get domestic backing for what they call the “valley of death” phase: between the VC-backed pilot plant and the fully commercialized facility. As a result, they are increasingly turning to China, says Reicher. “There are clearly economic implications," he adds. "The wonderful fruits of our innovation in this country are increasingly being consumed in China, and that has implications for job creation here, for a whole host of things that are important to our economy and our security." Stanford is developing a financing vehicle to address that valley, but Reicher says he couldn’t provide details yet. “You really want to see big impacts; you’ve got to put big money in,” says Kilambi, the serial entrepreneur, who has experience raising large sums of investment capital. Federal funding for cleantech is facing more political resistence in the wake of the Solyndra collapse. President Obama has requested $2.27 billion in his 2013 budget, versus $3.2 billion the previous year. Congress, however, has approved less than the president's requests for the last three fiscal years, notes Reicher. Black Rock’s Day, who laments the politicization of the cleantech sector, suggests that investors look beyond Solyndra or the next election to what will happen over the next 20- or 50-year cycle.

#### Plan reverses that trend—causes capital diversion

Veronica De Rugy, senior research fellow at the Mercatus Center at George Mason University, 6-19-2012, “Assessing the Department of Energy Loan Gaurantee Program: Testimony Before the House Committee on Oversight and Government Reform”, <http://mercatus.org/publication/assessing-department-energy-loan-guarantee-program>

3. Mal-investments¶ Loan guarantee programs can also have an impact on the economy beyond their cost to taxpayers.¶ Mal-investment—the misallocation of capital and labor—may result from these loan guarantee programs. In theory, banks lend money to the projects with the highest probability of being repaid. These projects are often the ones likely to produce larger profits and, in turn, more economic growth. However, considering that there isn’t an infi- nite amount of capital available at a given interest rate, loan guarantee programs could displace resources from non-politically motivated projects to politically motivated ones. Think about it this way: When the government reduces a lender’s exposure to fund a project it wouldn’t have funded otherwise, it reduces the amount of money available for projects that would have been viable without subsidies.¶ This government involvement can distort the market signals further. For instance, the data shows that private investors tend to congregate toward government guarantee projects, independently of the merits of the projects, taking capital away from unsubsidized projects that have a better probability of success without subsidy and a more viable business plan. As the Government Accountability Office noted, “Guarantees would make projects [the federal government] assists financially more attractive to private capital than conservation projects not backed by federal guarantees. Thus both its loans and its guarantees will siphon private capital away.”[26]¶ This reallocation of resources by private investors away from viable projects may even take place within the same industry—that is, one green energy project might trade off with another, more viable green energy project.¶ More importantly, once the government subsidizes a portion of the market, the object of the subsidy becomes a safe asset. Safety in the market, however, often means low return on investments, which is likely to turn venture capitalists away. As a result, capital investments will likely dry out and innovation rates will go down.[27]¶ In fact, the data show that in cases in which the federal government introduced few distortions, private inves- tors were more than happy to take risks and invest their money even in projects that required high initial capital requirements. The Alaska pipeline project, for instance, was privately financed at the cost of $35 billion, making it one of the most expensive energy projects undertaken by private enterprise.[28] The project was ultimately aban- doned in 2011 because of weak customer demand and the development of shale gas resources outside Alaska. [29] However, this proves that the private sector invests money even when there is a chance that it could lose it. Private investment in U.S. clean energy totaled $34 billion in 2010, up 51 percent from the previous year.[30]¶ Finally, when the government picks winners and losers in the form of a technology or a company, it often fails. First, the government does not have perfect or even better information or technology advantage over private agents. In addition, decision-makers are insulated from market signals and won’t learn important and necessary lessons about the technology or what customers want. Second, the resources that the government offers are so addictive that companies may reorient themselves away from producing what customers want, toward pleasing the government officials.

#### Key to econ

Stephen Chu, Nobel Prize in Physics, 5-30-2012, “America’s Competitiveness Depends on a 21st Century Grid,” Energy.Gov, <http://energy.gov/articles/america-s-competitiveness-depends-21st-century-grid> PMA=Power Marketing Administrations

Upgrades are Key to American Competitiveness¶ The leadership of the PMAs is critically important because America’s continued global competiveness in the 21st century will be significantly affected by whether we can efficiently produce and distribute electricity to our businesses and consumers, seamlessly integrating new technologies and new sources of power.¶ Other countries are moving rapidly to capitalize on cost-saving new smart grid and transmission technologies -- and we will find ourselves at a competitive disadvantage unless we do the same. Blackouts and brownouts already cost our economy tens of billions of dollars a year, and we risk ever more serious consequences if we continue to rely on outdated and inflexible infrastructure. For example, across the country, most of the transmission lines and power transformers we depend upon are decades old and in many cases nearing or exceeding their expected lifespan.¶ Lessons of the September 2011 Blackout¶ One recent example of the challenges we face occurred in September 2011, when a relatively minor loss of a single transmission line triggered a series of cascading failures that ultimately left 2.7 million electric customers in Arizona, Southern California, and Baja California, Mexico without power, some for up to 12 hours. The customers of five utilities -- San Diego Gas and Electric (SDG&E), Imperial Irrigation District (IID), Western Area Power Administration-Lower Colorado (WALC), Arizona Public Service (APS), and Comision Federal de Electridad (CFE) -- lost power, some for multiple hours extending into the next day. ¶ Put simply, this disruption to the electric system could have been avoided. The investigation into the blackout conducted by the Federal Energy Regulatory Commission and the North American Electric Reliability Council concluded the system failure stemmed primarily from weaknesses in two broad areas: 1) operations planning and 2) real-time situational awareness. Without these two critical elements, system operators are unable to ensure reliable operations or prevent cascading outages in the event of losing a single component on the grid. As our system ages, these situations threaten to become more frequent and even more costly. ¶ The Role of the PMAs in Accelerating the U.S. Transition to a 21st Century Grid¶ Most of our nation’s electric transmission system is privately owned. However, the federal government directly owns and controls significant portions of the electric transmission system through its four PMAs, created to market and distribute hydroelectric power from federally owned dams. The PMAs, part of the Energy Department, are responsible for more than 33,000 miles of transmission that overlay the transmission systems of utilities in 20 states, which represent about 42% of the continental United States. The PMAs provide the federal government the ability to lead by example in modernizing and securing our nation’s power grid, or risk putting the entire system -- and America’s economy -- at risk. The benefits of action, as well as the risks and consequences of inaction, could directly or indirectly affect nearly every electricity consumer and every business in the United States. ¶ This is why my March 16th memo set forth foundational goals that DOE is considering for the PMAs. This is part of a much broader effort to transition to a more flexible and resilient electric grid and establish much greater coordination among system operators.

#### Economic growth is key to avoid global conflict

Earl Tilford, PhD in history from George Washington University and served for thirty-two years as a military officer and analyst with the Air Force and Army, 2008, “Critical Mass: Economic Leadership or Dictatorship,” The Cedartown Standard, Lexis

Could it happen again? Bourgeois democracy requires a vibrant capitalist system. Without it, the role of the individual shrinks as government expands. At the very least, the dimensions of the U.S. government economic intervention will foster a growth in bureaucracy to administer the multi-faceted programs necessary for implementation. Bureaucracies, once established, inevitably become self-serving and self-perpetuating. Will this lead to “socialism” as some conservative economic prognosticators suggest? Perhaps. But so is the possibility of dictatorship. If the American economy collapses, especially in wartime, there remains that possibility. And if that happens the American democratic era may be over. If the world economies collapse, totalitarianism will almost certainly return to Russia, which already is well along that path in any event. Fragile democracies in South America and Eastern Europe could crumble.  A global economic collapse will also increase the chance of global conflict. As economic systems shut down, so will the distribution systems for resources like petroleum and food. It is certainly within the realm of possibility that nations perceiving themselves in peril will, if they have the military capability, use force, just as Japan and Nazi Germany did in the mid-to-late 1930s. Every nation in the world needs access to food and water. Industrial nations—the world powers of North America, Europe, and Asia—need access to energy. When the world economy runs smoothly, reciprocal trade meets these needs. If the world economy collapses, the use of military force becomes a more likely alternative. And given the increasingly rapid rate at which world affairs move; the world could devolve to that point very quickly.

## Politics

#### Top of the docket, Obama’s pushing and it will pass

Daniel Halper, online editor, 1-2-2013, “Obama to 'Quickly' Go for Immigration Reform and Gun Control,” Weekly Standard, http://www.weeklystandard.com/blogs/obama-quickly-go-immigration-reform-and-gun-control\_693547.html

President Barack Obama will go for immigration reform and gun control this month, the White House tells the left-leaning Huffington Post. Obama's actions will reportedly be done "quickly." "An Obama administration official said the president plans to push for immigration reform this January. The official, who spoke about legislative plans only on condition of anonymity, said that coming standoffs over deficit reduction are unlikely to drain momentum from other priorities. The White House plans to push forward quickly, not just on immigration reform but gun control laws as well," reports the Huffington Post. "The timeframe is likely to be cheered by Democrats and immigration reform advocates alike, who have privately expressed fears that Obama's second term will be drowned out in seemingly unending showdowns between parties." The outlet claims that it is "unclear what type of immigration policies the White House plans to push in January." No details on what sort of gun control legislation the White House will seek were offered in the article. As Politico reported last month, a "Gang of Eight," a conference of 8 senators from both parties, "has begun to meet to discuss immigration reform." But it is not at all clear what progress this group has made and what immigration laws it might propose. The Huffington Post quotes a Democratic aide who believes "Good news for immigration advocates may have come Tuesday night, when Boehner broke the so-called 'Hastert Rule' and allowed the fiscal cliff bill to come for a vote without support from a majority of his Republican conference. Given opposition to immigration reform by many Tea Party Republicans, the proof that Boehner is willing to bypass them on major legislation is a good sign."

#### PC key

Tom Kludt, staff writer, 1-3-2012, “Report: Obama To Make Push For Immigration Reform This Month,” TPM, http://livewire.talkingpointsmemo.com/entry/report-obama-to-make-push-for-immigration-reform

President Barack Obama is prepared to use his political capital to pursue immigration reform this month, according to a report published Wednesday in the Huffington Post. The report cited an anonymous official in the Obama administration, who suggested that the president is unlikely to be deterred by the protracted fiscal cliff debate that will be revisited in the coming months. As such, the administration will reportedly move quickly on both immigration reform and gun control. The report also quoted an unnamed Senate Democratic aide, who gauged the likelihood of immigration reform to pass Congress. Citing the fiscal cliff deal that passed the House of Represenatives this week with a combination of Republican and Democratic votes, the aide expressed confidence that House Speaker John Boehner (R-OH) will be able to overcome expected opposition from the conservative wing of his caucus. "He already did it with this fiscal issue, so I would not be surprised if when it came down to it he puts up a bill that he just allows to go through with a combination of Democratic and Republican votes, without worrying about a majority of the majority," the aide said.

#### Feed in tariffs cost capital

Michael Dorsi, Fellow, Phillips and Cohen LLP and JD-Harvard Law School, 5-18-2012, “Clean Energy Pricing and Federalism: Legal Obstacles and Options for Feed-in Tariffs,” Spring, 35 Environs Envtl. L. and Pol'y J. 173

Although potentially challenging in the current Congress, establishing legislative authorization for a feed-in tariff could resolve most of the issues presented in this Article. A federally regulated feed-in tariff may be politically infeasible, and would be undesirable because of the variety of state and regional systems where it would need to apply. The need to take into account regional differences within a federal feed-in tariff scheme only adds to the political challenge. Additionally, since state commissions control the administrative infrastructure that implemented avoided cost rates for QFs under PURPA, state commissions could serve well again for feed-in tariffs. A simple legislative option to authorize feed-in tariffs would be to amend PURPA to permit states to set rates above avoided cost for particular units. Federal permission for state regulation carries the strongest defenses against court challenges because it waives the dormant Commerce Clause while displacing any federal preemption. Additionally, because the activity ultimately rests with the state, it does not risk a commandeering challenge. Such legislation would also render moot any utility’s opportunity to challenge FERC’s decision. If the federal government sought to direct state policy rather than to simply permit states to act, the federal government is limited, but has two primary options. First, the federal government could condition the grant of reasonably related funds to states on implementation of feed-in tariffs. The Court upheld this type of fiscal federalism with regard to highway funds and drinking age laws in South Dakota v. Dole.125 Given current political conditions, such a policy seems politically challenging. A second option would be a cooperative federalism arrangement similar to the Clean Air Act.126 Such an arrangement escapes the commandeering challenge by providing a backstop of federal implementation should a state elect to not act.127 Cooperative federalism in the model of the Clean Air Act, which codifies state plans in federal statutes, would also provide the opportunity to seek enforcement in federal courts.128 However, in those instances where a state does not act, this policy would have the same faults as a federal feed-in tariff. What the federal government cannot do is require states to adopt feed-in tariffs. Given the recent treatment of FERC v. Mississippi, it is unlikely that the Supreme Court would even permit Congress to require that states consider establishing feed-in tariffs. Advocates should not pin their hopes for renewable energy policy on the federal government. Congress, rather than exploring these policies, has recently discussed the possible relaxation or abolition of efficiency standards in order to ensure that customers can continue to purchase incandescent light bulbs.129 At the same time, states have expanded their support for renewable energy. For example, in April 2011, California Governor Jerry Brown signed new legislation requiring California utilities to obtain a third of their energy from renewable sources.130 Given the greater promise of state-level commitment to environmental policy, it is worth exploring the options for states to act if the federal government stands still.

#### Immigration reform key to solving the nursing shortage

Hanlon Law Group, 2012, “Nursing Shortage Should Be Top Priority in Health Care and Immigration Reform,” [www.visaandgreencard.com/CM/Articles/Nursing-Shortage.asp](http://www.visaandgreencard.com/CM/Articles/Nursing-Shortage.asp)

As policymakers, special interest groups, health care professionals and others discuss the need for health care reform in the US and debate how this reform should take place, one of the most important issues to health care is being left out of the debate: the national nursing shortage. So far, the debate over health care has hinged around whether there should be a “public option,” creating room for divisive ideological debate at the expense of any real progress toward improvements to the current broken system. The nursing shortage continues to exacerbate the health care crisis, such that no true healthcare reform can occur without immigration law reform. The health care industry has and continues to face a crisis in fillingcurrent openpositions with trained, skilled nurses. As the baby boomers enter their golden years, an increasing strain is put on the health care system to provide care for this large, aging population. Further compounding the problem is the fact that the current nursing population is aging as well. For example, the average age of nurses in California is 47. The California Institute for Nursing and Health Care estimates that the state will need 108,000 new nurses by 2020 to fill the vacancies left by retiring nurses and to fill the new positions opened up to meet the increased demands for health care. Nationally, the US Bureau of Labor Statistics estimates that 1 million new and replacement nurses will be needed by 2016 to meet staffing needs. Individual states have ramped up their efforts to tackle their individual nursing shortages by offering more grants and scholarships to nursing students and trying to increase enrollments at nursing schools. While these efforts may help meet some of the future nursing needs, they do little to nothing to meet current staffing demands — including the 135,000 open positions across the country for registered nurses. What makes this shortage all the more difficult to understand is the fact that there are hundreds of qualified,availablenurses from other countries who are willing to immigrate to the United States but, because of the immigration system, cannot get a visato enter the country. There are two different categories of visas foreign nurses can apply for to enter the US to work: nonimmigrant visas and immigrant visas. Nonimmigrant visas are temporary visas that allow them to enter the US for a limited amount of time. There are three types of nonimmigrant visas nurses may be eligible for: H1-B visas, TN visas and H-1C visas. Nonimmigrant visas present a couple of difficulties. First, they are valid for a limited amount of time, whereas the nursing crisis is an ongoing problem. Second, there are very few available nonimmigrant visas for which nurses can apply. For example, H1-B visas are only available to those who have a bachelor's degree or higher and many nurses do not have the required educational degree. TN visas, on the other hand, are only available to qualified nurses from Canada and Mexico. Lastly, H1-C visas, which were created specifically to address the nursing shortage, are limited to only 500 per year and currently only 14 hospitals have the required certification to qualify for the visas! The second option, immigrant visas, allows foreign nurses to receive permanent residence in the US, otherwise known as a "green card." Nurses typically are eligible for EB-3 visas, or a "third priority employment-based visa." In order to apply for an immigrant visa, the foreign nurse must be sponsored by a US employer, like a hospital. The employer then must enter a lengthy application process before the foreign nurse can become eligible to apply for a visa. The process includes filing an I-140 petition and labor certification with the US Citizenship and Immigration Services (USCIS) office. Generally, employers seeking to sponsor workers for EB-3 visas also must complete a lengthy application process with the US Department of Labor (DOL) to certify that there is a shortage of US workers for the position and that hiring a foreign worker will not have an adverse affect on the wages or working conditions of US workers. However, nursing is considered a "Schedule A" occupation. This means that the DOL has pre-certified that there is a documented shortage of nurses and that hiring foreign nurses will not displace or adversely affect US nurses. The Schedule A designation is supposed to speed up the application process for employers trying to sponsor foreign nurses by allowing them to bypass the DOL process and skip ahead to filing the petition and labor certification with the USCIS. But even with this designation, it still takes the USCIS an estimated 15 months to process an I-140 Immigrant Visa Petition for a Schedule A nurse. The biggest barrier, however, to bringing more foreign nurses to work in the US is not the application processing time, but how long it takes after the application has been processed until a nurse receives a visa. Once the USCIS has approved the application for the foreign nurse, the nurse then is given a priority date and placed in line for a visa with all of the other approved EB-3 applicants. The current wait time for an available EB-3 visa number is 3-7 years. So this means that hospitals who filed successful petitions for foreign nurses as far back as 2002 still may be waiting for the nurse to begin work. Once the visa number becomes available, then the foreign nurse must either apply for a visa at the US consulate or embassy in his or her home country. If the nurse currently is in the US on a different type of visa, he or she then must apply for a change of immigrant status. Either one of these processes may take months more to process. Waiting 7 or more years for a foreign nurse's immigration process to be fully completed is not helping any hospital with its nursing staff shortages. If anything, the length and complexity of the process serves as a deterrent to hospitals and other health care institutions who may be considering employing foreign nurses. One of the easiest ways to increase the number of nurses and decrease the waiting time in the immigration process is to create a special priority category just for nurses. Under US immigration law, only an act of Congress amending the Immigration and Nationality Act (INA) or an executive order issued by the President can create this new category for immigrant visas. Additionally, the federal government could take action to increase the number of immigrant and nonimmigrant visas available to nurses. This number is set each year by Congress. Currently, there only are 140,000 eligible visas for all five of the EB categories. By increasing the number of available visas and providing nurses with a special priority category for attaining a visa number, the federal government can take significant steps towards addressing the nursing shortage. Meaningful health care reform cannot occur without tackling the nursing shortage. No matter what shape the US health care system takes in the future, there will always be a need for well-trained nurses. Without them, hospital care cannot be expected to improve. Individuals, health care providers and the public must urge their Congressmen to support immigration reform as important means through which to reform the broken US health care system.

#### Nursing shortage impedes efforts to prepare for bioterror attacks

Oncology Times, 07, “Reps. Capps, LaTourette Call for Increased Funding of Nurse Education Programs,” <http://journals.lww.com/oncology-times/Fulltext/2007/07100/Eye_on_Washington.4.aspx>

Nurses also are the cornerstone of bioterrorism and pandemic flu preparedness and response, the letter notes. If these events were to occur, an adequate supply of nurses will be needed to evaluate patients, administer vaccines and medications, perform disease surveillance, and train non-licensed staff. GAO [the Government Accountability Office], the American Hospital Association, and Trust for America's Health have released reports citing the nursing shortage as a major impediment to preparedness efforts.

#### Bioweapon use spreads globally and causes extinction – outweighs nuclear weapons

John Steinbruner, Brookings Senior Fellow, 1997, “Biological weapons: a plague upon all houses,”

Although human pathogens are often lumped with nuclear explosives and lethal chemicals as potential weapons of mass destruction, there is an obvious, fundamentally important difference: Pathogens are alive, weapons are not. Nuclear and chemical weapons do not reproduce themselves and do not independently engage in adaptive behavior; pathogens do both of these things. That deceptively simple observation has immense implications. The use of a manufactured weapon is a singular event. Most of the damage occurs immediately. The aftereffects, whatever they may be, decay rapidly over time and distance in a reasonably predictable manner. Even before a nuclear warhead is detonated, for instance, it is possible to estimate the extent of the subsequent damage and the likely level of radioactive fallout. Such predictability is an essential component for tactical military planning. The use of a pathogen, by contrast, is an extended process whose scope and timing cannot be precisely controlled. For most potential biological agents, the predominant drawback is that they would not act swiftly or decisively enough to be an effective weapon. But for a few pathogens - ones most likely to have a decisive effect and therefore the ones most likely to be contemplated for deliberately hostile use - the risk runs in the other direction. A lethal pathogen that could efficiently spread from one victim to another would be capable of initiating an intensifying cascade of disease that might ultimately threaten the entire world population. The 1918 influenza epidemic demonstrated the potential for a global contagion of this sort but not necessarily its outer limit.

# Case

## Warming

#### Warming doesn’t cause extinction – its gradual, humans adapt, and technology solves problems before they occur

Matt Ridley, British scientist, 8-17-2012, “Apocalypse Not: Here’s Why You Shouldn’t Worry About End Times,” Wired, http://www.wired.com/wiredscience/2012/08/ff\_apocalypsenot/all/

So, should we worry or not about the warming climate? It is far too binary a question. The lesson of failed past predictions of ecological apocalypse is not that nothing was happening but that the middle-ground possibilities were too frequently excluded from consideration. In the climate debate, we hear a lot from those who think disaster is inexorable if not inevitable, and a lot from those who think it is all a hoax. We hardly ever allow the moderate “lukewarmers” a voice: those who suspect that the net positive feedbacks from water vapor in the atmosphere are low, so that we face only 1 to 2 degrees Celsius of warming this century; that the Greenland ice sheet may melt but no faster than its current rate of less than 1 percent per century; that net increases in rainfall (and carbon dioxide concentration) may improve agricultural productivity; that ecosystems have survived sudden temperature lurches before; and that adaptation to gradual change may be both cheaper and less ecologically damaging than a rapid and brutal decision to give up fossil fuels cold turkey.¶ We’ve already seen some evidence that humans can forestall warming-related catastrophes. A good example is malaria, which was once widely predicted to get worse as a result of climate change. Yet in the 20th century, malaria retreated from large parts of the world, including North America and Russia, even as the world warmed. Malaria-specific mortality plummeted in the first decade of the current century by an astonishing 25 percent. The weather may well have grown more hospitable to mosquitoes during that time. But any effects of warming were more than counteracted by pesticides, new antimalarial drugs, better drainage, and economic development. Experts such as Peter Gething at Oxford argue that these trends will continue, whatever the weather.¶ Just as policy can make the climate crisis worse—mandating biofuels has not only encouraged rain forest destruction, releasing carbon, but driven millions into poverty and hunger—technology can make it better. If plant breeders boost rice yields, then people may get richer and afford better protection against extreme weather. If nuclear engineers make fusion (or thorium fission) cost-effective, then carbon emissions may suddenly fall. If gas replaces coal because of horizontal drilling, then carbon emissions may rise more slowly. Humanity is a fast-moving target. We will combat our ecological threats in the future by innovating to meet them as they arise, not through the mass fear stoked by worst-case scenarios.

#### Food shortages coming – causes extinction without food production expansion

Lester Brown, founder of both the WorldWatch Institute and the Earth Policy Institute, MacArthur Fellowship recipient, May 2009, “Could food shortages bring down civilization?” Scientific American, Ebsco.

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

#### CO2 expansion key to solve food shortages – science postdates

**Idso et. al. 11**—Former Professor in the Departments of Geology, Geography, and Botany and Microbiology @ Arizona State and PhD from UMinnesota and former research physicist for the Department of Agriculture—AND Keith Idso, PhD in Botany—AND Craig, PhD in Geography (Sherwood, “Is There a Need for a More Sustainable Agriculture?” Vol. 14, Iss. 24, 15 June 2011, <http://co2science.org/articles/V14/N24/EDIT.php>

In a paper that came to our attention a couple weeks ago, Gomiero et al. (2011) ask the question "Is there a need for a more sustainable agriculture?" This they do in the title of a paper recently published in Critical Reviews in Plant Sciences, where they write that "notwithstanding the great achievements of the 'Green Revolution,' the world will need 70 to 100% more food by 2050," concluding that "a new challenge lies ahead: how to feed nine billion with less land, water and energy, while at the same time preserving natural resources and soil fertility." Coincidentally, this is essentially the same question asked by one of us (Idso, 2011) in a major report published in the current week's issue of CO2 Science: "Estimates of Global Food Production in the Year 2050: Will We Produce Enough to Adequately Feed the World?" In their analysis of the question, Gomiero et al. state that "technical advances are important in order to meet the future needs," as does Idso. In addition, Gomiero et al. state that "addressing key socioeconomic issues, such as the inequality in the access to resources, population growth and access to education are also a priority if we want to properly deal with sustainability." Idso alludes to these same factors, particularly population growth; but he concentrates most heavily on a subject not touched upon by Gomiero et al. -- the aerial fertilization effect of the ongoing rise in the air's CO2 content. Idso first identifies the 45 key crops that account for 95% of world food production, after which he calculates the rates at which their productivities rose over the past 15 years in response to all technological innovations of that time period plus the concurrent increase in atmospheric CO2 concentration. Then, calculating the percentage increases in the productivities of these crops in response to a 300-ppm increase in the atmosphere's CO2 concentration from experimental data tabulated in the Plant Growth Database of CO2 Science, and knowing how much the atmosphere's CO2 content rose over the past 15 years, he determines what part of the past 15 years' productivity increases were due to the aerial fertilization effect of CO2 and what part was due to everything else, which remaining part he calls the techno-intel effect. Extending the linear regression representing this latter effect to the year 2050, and using the IPCC's best median estimate of what the atmosphere's CO2 concentration will be in that year, Idso then calculates the productivity increases of the 45 key crops due to the aerial fertilization effect of CO2 to that point in time, adding the results to those he obtained for the techno-intel effect. This he does for the world as a whole, six world regions, twenty sub-regions and the 25 countries with the greatest populations. And comparing these results with what has been learned from the many different analyses of the subject -- and making adjustments for each geographic entity's projected rate of population growth -- he determines which entities' projected crop productivity increases fall either below, within or above the 70-100% interval that is deemed necessary to insure food security in 2050, with productivity increases below 70% representing food insecurity, with those above 100% representing food security, and with anything in between the two percentages being a "maybe" in terms of food security. The results are rather chilling. And they should cause all those who are calling for mandatory reductions in anthropogenic CO2 emissions to seriously reconsider their views on the subject, while those who may not have thought at all about the topic should do so now; for the looming global food crisis is everybody's business, and all should have a say in what to do about it.

#### Cutting coal ends aerosols – aerosols solve climate change.

Jim Robbins, staff writer, 11-16-2011, “2 Views of Aerosols and Climate Change,” NYT, http://green.blogs.nytimes.com/2011/11/16/good-cop-bad-cop-2-views-of-aerosol-and-climate-change/

In a reflection of the complexity of atmospheric science, however, a different new study suggests that aerosols created by humans are not all bad. The same clouds thickened by aerosols reduce temperatures by blocking sunlight, keeping the planet cooler than it otherwise would be, according to the article, which was published last week in the journal Science. And the aerosols themselves reflect sunlight back into space, which also acts to limit temperature increases. Yet there is a third factor, not widely recognized, said Natalie Mahowald, a climate researcher at Cornell University and author of the article in Science. Some artificial aerosols containing iron, nitrogen and phosphorus are fertilizers that settle on the planet and stimulate plant growth on land and phytoplankton in the ocean. Those plants take up more carbon dioxide and can thereby possibly mitigate global warming. It is not the first time that Catch-22 questions have been raised about climate science and the atmosphere. Some people argue, for example, that eliminating coal-fired power as an energy source could have drawbacks because the pollutants emitted would no longer be there to block sunlight and slow warming. Dr. Mahowald said aerosols obviously needed to be reined in regardless because such emissions “kill people.” Still, “research shows it’s an uphill battle” to clean up carbon dioxide she said — and more uphill rhetorically “because those aerosols allow carbon dioxide to be taken up more readily on land and oceans.”

#### Some warming is inevitable and new species fill in for any extinctions

William DeBuys, Writer and conservationist, 7-27-2012, “The West in flames: Get used to it,” GRIST, http://grist.org/climate-change/the-west-in-flames-get-used-to-it/

It’s never too late to take action, but now, even if all greenhouse gas emissions were halted immediately, Earth’s climate would continue warming for at least another generation. Even if we surprise ourselves and do all the right things, the forest fires, the insect outbreaks, the heat-driven die-offs, and other sweeping transformations of the American West and the planet will continue.¶ One upshot will be the emergence of whole new ecologies. The landscape changes brought on by climate change are affecting areas so vast that many previous tenants of the land — ponderosa pines, for instance — cannot be expected to recolonize their former territory. Their seeds don’t normally spread far from the parent tree, and their seedlings require conditions that big, hot, open spaces don’t provide.¶ What will develop in their absence? What will the mountains and mesa tops of the New West look like? Already it is plain to see that scrub oak, locust, and other plants that reproduce by root suckers are prospering in places where the big pines used to stand. These plants can be burned to the ground and yet resprout vigorously a season later. One ecologist friend offers this advice: “If you have to be reincarnated as a plant in the West, try not to come back as a tree. Choose a clonal shrub, instead. The future looks good for them.”

#### ( ) Human and environmental resiliency prevents extinction from loss of bio-d

Holly Doremus, Professor of Law, U. Cal Davis, 57 Was & Lee L. Rev. 11, winter 2000 is one

The Rhetoric and Reality of Nature Protection: Toward a New Discourse, 57 Wash. & Lee L. Rev. 11 (2000).

In recent years, this discourse frequently has taken the form of the ecological horror story. That too is no mystery. The ecological horror story is unquestionably an attention-getter, especially in the hands of skilled writers [\*46] like Carson and the Ehrlichs. The image of the airplane earth, its wings wobbling as rivet after rivet is carelessly popped out, is difficult to ignore. The apocalyptic depiction of an impending crisis of potentially dire proportions is designed to spur the political community to quick action. Furthermore, this story suggests a goal that appeals to many nature lovers: that virtually everything must be protected. To reinforce this suggestion, tellers of the ecological horror story often imply that the relative importance of various rivets to the ecological plane cannot be determined. They offer reams of data and dozens of anecdotes demonstrating the unexpected value of apparently useless parts of nature. The moth that saved Australia from prickly pear invasion, the scrubby Pacific yew, and the downright unattractive leech are among the uncharismatic flora and fauna who star in these anecdotes. n211 The moral is obvious: because we cannot be sure which rivets are holding the plane together, saving them all is the only sensible course. Notwithstanding its attractions, the material discourse in general, and the ecological horror story in particular, are not likely to generate policies that will satisfy nature lovers. The ecological horror story implies that there is no reason to protect nature until catastrophe looms. The Ehrlichs' rivet-popper account, for example, presents species simply as the (fungible) hardware holding together the ecosystem. If we could be reasonably certain that a particular rivet was not needed to prevent a crash, the rivet-popper story suggests that we would lose very little by pulling it out. Many environmentalists, though, would disagree. n212 Reluctant to concede such losses, tellers of the ecological horror story highlight how close a catastrophe might be, and how little we know about what actions might trigger one. But the apocalyptic vision is less credible today than it seemed in the 1970s. Although it is clear that the earth is experiencing a mass wave of extinctions, n213 the complete elimination of life on earth seems unlikely. n214 Life is remarkably robust. Nor is human extinction probable any time soon. Homo sapiens is adaptable to nearly any environment. Even if the world of the future includes far fewer species, it likely will hold people. n215

#### We’ll geoengineer

Ronald Bailey, reason’s science correspondent, 6-10-2008, “An Emergency Cooling System for the Planet,” Reason Magazine, http://reason.com/archives/2008/06/10/an-emergency-cooling-system-fo

So if we don't want to perpetuate poverty in the name of preventing climate change, geoengineering may be our way out. Why? Because geoengineering would provide more time for the world's economy to grow while inventors and entrepreneurs develop and deploy new carbon neutral energy sources to replace fossil fuels. Wigley also noted that cutting greenhouse gas emissions is a tremendous global collective action problem. It seems unlikely that fast-growing poor countries like India and China will agree cut back on their use of fossil fuels any time soon. If that's the case, then emissions reductions in rich countries would have almost no effect on future temperature trends. Geoengineering could give humanity more time to resolve this collective action problem, too. So let's take Wigley's second proposal first—changing the reflectivity of clouds. Researchers know that this can be done because it already happens with ship tracks. Ship exhaust over the oceans injects particles into the atmosphere that serve as cloud condensation nuclei, creating clouds in the wakes of ships. Ship exhaust produces and brightens clouds so that they cool the planet by reflecting sunlight back into space, but only by a little bit. However, recent modeling research by University of Edinburgh engineer Stephen Salter and his colleagues calculates that doubling the number of cloud condensation nuclei would more than compensate for any warming associated with a doubling of carbon dioxide in the atmosphere. This could be accomplished by having ships deliberately inject seawater into the atmosphere where salt particles would serve as extra cloud condensation nuclei. In 2006, Chemistry Nobelist Paul Crutzen proposed injecting sulfate particles into the stratosphere to reflect some sunlight back into space (an idea discussed by reason contributor Gregory Benford more than ten years ago). This might be done with giant cannons. Crutzen argues that it would cost between $25 and $50 billion per year to shoot enough sulfate particles into the stratosphere to reduce incoming sunlight by 1.8 percent. This would be enough to counter the predicted warming produced by doubling atmospheric carbon dioxide. An earlier study by Yale University economist William Nordhaus estimated that the sulfate injection proposal would cost about $8 billion per year. This compares nicely with the $125 billion per year Nordhaus calculated it would have cost the U.S. to implement the Kyoto Protocol. Wigley spent most of his time at AEI discussing the possible risks involved with the sulfate injection proposal. Wigley argued that sulfates injected into the stratosphere would be equal to only about 10 percent of those humanity already injects into the lower atmosphere, so this wouldn't greatly boost acid rain. In April, a study by some of Wigley's National Center for Atmospheric Research colleagues found that injecting sulfates would further deplete the ozone layer that shields the earth's surface from damaging ultraviolet light. Wigley simply noted in passing that even more recent research suggests that the damage to the ozone layer will be less than the April study estimated. Stratospheric sulfate injection might also change rainfall patterns, perhaps reducing precipitation from the monsoons on which millions of Asian farmers are dependent. In response to these worries, Wigley noted that stratospheric sulfates might reduce the intensity of monsoons by two to three percent which contrasts with a current monsoon variability of 30 percent. But one big problem that sulfate injection would not solve is the continuing acidification of the ocean that is occurring as extra carbon dioxide from the atmosphere dissolves into the seas. This acidification could eventually pose problems for creatures such as mollusks and corals that use calcium carbonate to grow their shells and skeletons. What is the safe level at which to stabilize carbon dioxide? The current greenhouse gas concentrations are equivalent to 385 parts per million (ppm) of carbon dioxide, up 100 ppm over pre-industrial levels. In the past some researchers suggested that stabilizing concentrations at 550 ppm would avoid the most serious effects of global warming. Now other researchers are arguing that we have to get back to 350 ppm. Wigley sees no signs that humanity is on a track to stabilize carbon dioxide concentrations at 550 ppm. Consequently, he believes that we will have to resort to geoengineering as a way to buy the time humanity needs to figure out how to cut carbon dioxide emissions. He foresees an effort to ramp up stratospheric sulfate injection over 75 years to counter the climatic effects of rising carbon dioxide concentrations.

## Manufacturing

#### No US-China war – expert consensus

Ali Wyne, researcher at the Belfer Center for Science and International Affairs, 2-23-2012, “The future of the US-China relationship” http://globalpublicsquare.blogs.cnn.com/2012/02/23/the-future-of-the-u-s-china-relationship/

The good news is that while strategic tension between them is inevitable, a military conflict is not. The RAND Corporation recently explored six flashpoints that could trigger one, but concluded that war was not “probable in any of the cases” over the next 30 years. Meanwhile, a new survey of 1,600 U.S. international-relations scholars assigns U.S.-China war a 23% probability over that same window—appreciable, but low.

#### No US-China war – economic ties check and both sides realize that the cost is too high

Harry Harding, Founding Dean of the Frank Batten School of Leadership and Public Policy at the University of Virginia, Vice Chairman of the Asia Foundation, and Senior Fellow in the Center on U.S.-China Relations at the Asia Society in New York, 6-1-2011, “Are China and the U.S. on a collision course?” http://thinkingaboutasia.blogspot.com/2011/06/are-china-and-us-on-collision-course.html

Fortunately, an essentially confrontational relationship is also unlikely, especially if one is primarily concerned with the risks of military conflict. The high degree of economic interdependence between the two countries has already created a relatively resilient relationship. The cost of military conflict, especially given the fact that both China and the US are nuclear powers, will be a significant deterrent against military conflict. Equally important, the probability of the most worrying of the trigger events identified above– a unilateral declaration of independence by Taiwan – is presently quite low, as is the risk that China would try to compel unification through the use of force.

#### US winning the race – clean energy industry booming – studies and numbers prove

Scott Sklar, Prof @ GWU, energy policy expert and researcher, President, The Stella Group, Ltd, 10-24-2011, “Numbers Back Up Booming Solar Industry”, http://energy.nationaljournal.com/2011/10/is-america-losing-the-clean-en.php

Over the last 36 months, over 100 new US renewable energy and energy efficiency manufacturing plants have opened in the United States. According to a report by Ernst & Young. Global private sector investments in the renewable energy sector reached a record $243 billion in 2010, an annual increase of 30%,. On Oct 13, 2011, Reuters reported that “wind farm and solar park financing surged to a record $41.8 billion in the third quarter, even though clean energy share prices and the European economy slumped, a report by research firm Bloomberg New Energy Finance”. A new report released in September (2011) by The Pew Charitable Trusts stated, “Globally, 2010 clean energy finance and investments grew by 30 percent to a record $243 billion. The United States received $34 billion in equity last year, a 51 percent increase from 2009.” But a 51% increase isn’t shabby. A new report shows that the US is central to the global solar supply chain. § Marked 19:45 § In 2010, US solar firms achieved a positive trade flow of $1.9 billion (USD) globally, according to Solar Energy Industries Association's (SEIA) and GTM Research's US Solar Energy Trade Assessment 2011. Photovoltaic (PV) components accounted for more than 99% of the year's exports, with solar heating and cooling (SHC) claiming the remainder of the positive balance. For the US PV manufacturing industry, 2010 was a record year. Exports totaled more than $5.6 billion, with PV polysilicon feedstock and capital equipment leading all components at $2.5 billion and $1.4 billion, respectively. The leading destinations for US-sourced PV components were China and Germany. A new US solar employment report just released by The Solar Foundation shows real net growth in US jobs in the US solar industry, stating “Over the last 12 months solar manufacturing jobs grew nearly 25 percent, and employers expect to add an additional 3,473 new jobs by August 2012. Jobs at solar installation firms grew by 5.6 percent and are expected to grow by an additional 22 percent – 13,068 new jobs – by August 2012”. The bad press on the recent bankruptcy’s of EvergreenSolar and Solyndra is distorting the status of the US solar industry and by default, all the green industries. Evergreen’s demise was no surprise. Bloomberg News reported, “Since 2010, Evergreen has been the worst-performing company on the Bloomberg Global Leaders Solar Index. Solyndra’s failure also was not a surprise to many of us, whose production exceeded $3/watt and whose product was brittle and had larger-than-industry standard breakage. Solyndra’s failure has nothing to do with solar or green industries. Most US industries have turned to China for scaled-up manufacturing – which has nothing to do with who leads in clean energy. In fact the US leads in innovation. Leads in system integration, leads in building material integration, leads in resource assessment, mapping and forecasting, leads in innovative support and tracking structures, and leads in innovative storage, nanotechnology materials, and advanced manufacturing processes. To confuse solar and wind’s manufacturing in existing solar and wind technologies with global technology leadership is foolhardy and substantively wrong. And there are a host of green technologies, other than solar and wind, where the US is a global leader including geo-exchange, compressed and battery storage, concentrated solar power, management software, biomass power and fuels, marine energy, small wind, solar daylighting, geothermal, and advanced fuel cells – to name a few.

#### No impact to heg

Christopher J. Fettweis, Department of Political Science, Tulane University, 9-26-2011, Free Riding or Restraint? Examining European Grand Strategy, Comparative Strategy, 30:316–332, EBSCO

It is perhaps worth noting that there is no evidence to support a direct relationship between the relative level of U.S. activism and international stability. In fact, the limited data we do have suggest the opposite may be true. During the 1990s, the United States cut back on its defense spending fairly substantially. By 1998, the United States was spending $100 billion less on defense in real terms than it had in 1990.51 To internationalists, defense hawks and believers in hegemonic stability, this irresponsible “peace dividend” endangered both national and global security. “No serious analyst of American military capabilities,” argued Kristol and Kagan, “doubts that the defense budget has been cut much too far to meet America’s responsibilities to itself and to world peace.”52 On the other hand, if the pacific trends were not based upon U.S. hegemony but a strengthening norm against interstate war, one would not have expected an increase in global instability and violence. The verdict from the past two decades is fairly plain: The world grew more peaceful while the United States cut its forces. No state seemed to believe that its security was endangered by a less-capable United States military, or at least none took any action that would suggest such a belief. No militaries were enhanced to address power vacuums, no security dilemmas drove insecurity or arms races, and no regional balancing occurred once the stabilizing presence of the U.S. military was diminished. The rest of the world acted as if the threat of international war was not a pressing concern, despite the reduction in U.S. capabilities. Most of all, the United States and its allies were no less safe. The incidence and magnitude of global conflict declined while the United States cut its military spending under President Clinton, and kept declining as the Bush Administration ramped the spending back up. No complex statistical analysis should be necessary to reach the conclusion that the two are unrelated. Military spending figures by themselves are insufficient to disprove a connection between overall U.S. actions and international stability. Once again, one could presumably argue that spending is not the only or even the best indication of hegemony, and that it is instead U.S. foreign political and security commitments that maintain stability. Since neither was significantly altered during this period, instability should not have been expected. Alternately, advocates of hegemonic stability could believe that relative rather than absolute spending is decisive in bringing peace. Although the United States cut back on its spending during the 1990s, its relative advantage never wavered. However, even if it is true that either U.S. commitments or relative spending account for global pacific trends, then at the very least stability can evidently be maintained at drastically lower levels of both. In other words, even if one can be allowed to argue in the alternative for a moment and suppose that there is in fact a level of engagement below which the United States cannot drop without increasing international disorder, a rational grand strategist would still recommend cutting back on engagement and spending until that level is determined. Grand strategic decisions are never final; continual adjustments can and must be made as time goes on. Basic logic suggests that the United States ought to spend the minimum amount of its blood and treasure while seeking the maximum return on its investment. And if the current era of stability is as stable as many believe it to be, no increase in conflict would ever occur irrespective of U.S. spending, which would save untold trillions for an increasingly debt-ridden nation. It is also perhaps worth noting that if opposite trends had unfolded, if other states had reacted to news of cuts in U.S. defense spending with more aggressive or insecure behavior, then internationalists would surely argue that their expectations had been fulfilled. If increases in conflict would have been interpreted as proof of the wisdom of internationalist strategies, then logical consistency demands that the lack thereof should at least pose a problem. As it stands, the only evidence we have regarding the likely systemic reaction to a more restrained United States suggests that the current peaceful trends are unrelated to U.S. military spending. Evidently the rest of the world can operate quite effectively without the presence of a global policeman. Those who think otherwise base their view on faith alone.

#### Energy not key to competitiveness – many alt causes and incentives would hurt us – their authors are hacks with a political agenda

William O'Keefe, CEO, George C. Marshall Institute, 10-26-2011, “Clean Energy Race Driven By Politics”, http://energy.nationaljournal.com/2011/10/is-america-losing-the-clean-en.php

The notion of a clean energy technology race that the US might be losing is a creation of politics, the media, and the environmental lobby. Does any one remember the space race, the semi-conductor race or any of the other so called races we were supposed to lose over the past half century? The economic strength of a nation has a lot to do with it's investment in science and technology. As long as our colleges and universities remain world class in math, science, and engineering, we have little to fear from the manufacturing of China or any other emerging economy. We have been developing advances in energy technology for decades. As long as the cost of producing energy using them is lower than the real cost of so called “green technologies” our economy can prosper. The fact is that the carbon intensity of our economy continues to drop. Wind and solar technologies are not close to competing with conventional energy technologies on a total system basis. The cost of attempting to use them on a wide scale basis makes no economic sense. There are two reasons why China might be leading in the production of wind turbines and solar panels. The first is China's willingness to subsidize the sale of those systems. If China wants to do that, they are transferring wealth to purchasers. That is a benefit to the buyers. No firm or country can subsidize buyers indefinitely. The second reason could be that China has a comparative advantage in the manufacture of wind and solar. If it does, it would be economically harmful to us to try to compete. We should concentrate on production that creates the most national wealth for us. If the Congress and Obama Administration want us to be more competitive in manufacturing, they need to re-examine policies that drive investment and manufacturing off-shore. Our corporate tax policy puts US companies at a disadvantage and the Administration's current tax proposals would only make the situation worse. Unnecessarily burdensome regulations drive up the cost of manufacturing and create another incentive to invest off shore. There should be a comprehensive review of regulations to make sure that their real as opposed to alleged benefits actually exceed their real costs. We cannot win races if our economic system is weighed down with excessive and unnecessary burdens. Even the great Secretariat would not have won the Triple Crown if asked to carry too much weight. Instead of focusing on one area of energy technology, Congress and the Administration should focus on fiscal, economic, and energy policies that will allow our economy to once again experience robust growth and be the model for others to follow.

#### Tech diffusion ensures US heg.

Reihan Salam, Schwartz Fellow at the New American Foundation, “ROBERT PAPE IS OVERHEATED,” 1-21-2009, http://www.theamericanscene.com/2009/01/21/robert-pape-is-overheated

Pape spends a lot of time demonstrating that U.S. economic output represents a declining share of global output, which is hardly a surprise. Yet as Pape surely understands, the more relevant question is how much and how readily can economic output be translated into military power? The European Union, for example, has many state-like features, yet it doesn’t have the advantages of a traditional state when it comes to raising an army. The Indian economy is taxed in a highly uneven manner, and much of the economy is black — the same is true across the developing world. As for China, both the shape of the economy, as Yasheng Huang suggests, and its long frontiers, as Andrew Nathan has long argued, pose serious barriers to translating potential power into effective power. (Wohlforth and Brooks give Stephen Walt’s balance-of-threat its due.) So while this hardly obviates the broader point that relative American economic power is eroding — that was the whole idea of America’s postwar grand strategy — it is worth keeping in mind. This is part of the reason why sclerotic, statist economies can punch above their weight militarily, at least for a time — they are “better” at marshaling resources. Over the long run, the Singapores will beat the Soviets. But in the long run, we’re all dead. And given that this literature is rooted in the bogey of long-term coalition warfare, you can see why the unipolarity argument holds water. At the risk of sounding overly harsh, Pape’s understanding of “innovativeness” — based on the number of patents filed, it seems — is crude to say the least. I recommend Amar Bhidé‘s brilliant critique of Richard Freeman, which I’ll be talking about a lot. Pape cites Zakaria, who was relying on slightly shopworn ideas that Bhidé demolishes in The Venturesome Economy. The “global diffusion of technology” is real, and if anything it magnifies U.S. economic power. “Ah, but we’re talking about the prospect of coalition warfare!” The global diffusion of technology is indeed sharply raising the costs of military conquest, as the United States discovered in Iraq. The declining utility of military power means that a unipolar distribution of military power is more likely to persist. And yes, it also means that unipolar military power is less valuable than it was in 1945.

#### The renewable energy race is not zero-sum – gains in one country have benefits in others

Brian Murray, Professor and Director for Economic Analysis, Nicholas Institute for Environmental Policy Solutions @ Duke University 10-28-2011, “Unlike a race, many winners possible”, http://energy.nationaljournal.com/2011/10/is-america-losing-the-clean-en.php

One of the core take home messages from economics since the 18’th century days of Adam Smith is that the value of specialization drives the gains from trade. That applies in the clean energy market as well. The value chain for clean energy is complex; it is not a simple issue of “Made in America” or “Made in China.” There are several links in the chain. Each of these links has forms of specialization that may distribute the value across countries. For example, a wind turbine now operating in the state of Pennsylvania is a complex combination of basic scientific knowledge of aerodynamics developed by a German scientist, Albert Metz, in 1919, embodied in a foundation, tower, and blades, which together consist of thousands of components produced and assembled all over the world. The turbine is installed onsite primarily by U.S. labor, and the electricity it generates is distributed through a domestically produced electric power grid to Pennsylvania factories, commercial buildings, and households. The U.S. has played a key role in the R&D and innovation stage of clean energy technologies. For instance, the first solar cell was developed by Bell Laboratories in the 1950s, and the solar power industry developed throughout the U.S. in the 1970s and 1980s. The U.S. is still a leading recipient of venture capital for new product development in this area, but its dominance is slipping as other countries have ramped up their focus on basic and applied research and development. China is increasing its emphasis in this area, with the new emphasis on science in its latest five-year plan. China is now breaking ground on several new universities to feed this growing desire for scientific prominence. Some of this growth is in collaboration with universities from the U.S. and the rest of the world. There are clear benefits to those who develop and can effectively license (and enforce their intellectual property rights for) new products, with much of the value retained by entrepreneurs, scientists, and other “high-tech” workers. But there is also value added in the rest of the chain, all the way from the component factory workers and managers, to the engineers who design grid networks, to the truck and train operators who transport parts, to the construction workers who build generation units, to the designers, makers, and installers of energy efficiency systems. Beneficiaries of the same technology stream (e.g., wind, solar, biofuels) will generally reside in different countries as long as the borders are open to trade in clean energy goods and services. There are numerous examples of U.S. companies partnering with Chinese companies on clean energy initiatives. For example, in late 2010, GE announced a partnership with a Chinese company (Harbin) to manufacture GE-designed wind turbines for the Chinese market. Duke Energy, soon to be the United States’ largest electric utility,has an ongoing partnership with the Chinese firm ENN to operate electric generation plants in China, including a joint effort to provide power in Langfang, China’s first smart energy “eco-city.” The U.S. and China are not the only players in the market. Europe’s relatively long history of renewable energy subsidies such as feed-in tariffs has established a viable regional market, both on the demand and the supply side. Brazil has become a significant player in renewables, especially in biofuels, and with the recent Fukushima nuclear disaster, Japan may consider greater investments in renewable energy if it continues to pursue its GHG emissions commitments with less reliance on nuclear energy.

#### China can’t overtake the US

David **Weinberger**, 2-3-**2010**, “Why China is Not an Economic Threat,” Heritage Foundry, http://blog.heritage.org/2010/02/03/why-china-is-not-an-economic-threat-to-the-u-s/

Aside from the fact that **China’s GDP numbers are illusory** (largely because of how the country calculates its GDP), **a significant portion of the growth China is experiencing is not creating wealth**, it is merely taking it from other countries. In other words, **Chinese growth is** partly the result of detraction from, not addition to, world GDP, which means much of its success is **dependent upon others.** This is because of the way China’s economy is set up. **China relies on its trade surplus** with the rest of the world **as the lifeblood of its economy**. It exports vastly more than it imports. Seen in this light, China sucks GDP from other countries in addition to creating its own. Therefore, while it may be leading the world in GDP growth, to a notable extent these GDP gains are the result of China using the world to boost itself higher. That does not mean, however, that China does not produce anything. To the contrary, over the last couple of decades, China has contributed to the world economy. While China’s production has historically met consumer demand to keep prices low around the globe, the world-wide recession is now causing China to oversupply due to weak global demand, which could lead to deflation. This is hardly an indication of a sound, robustly-growing economy. If China does not start developing more of its own domestic economy for its people, trouble looms. Further, China is not America’s banker, as many people believe. President Obama’s stimulus package was bad policy, but the notion that China is now funding our economy as a result is a fallacy. America could get by without China funding its debt. What’s largely unknown is that China officially holds less than 7 percent of U.S. treasuries, and that Chinese bond purchases declined in 2009, to under $100 billion, while our deficit soared to an all-time high of $1.4 trillion. Moreover, **China does not buy our debt for our sake; it does so it because it depends on an economy as large** and sound **as ours for its own growth** propelled through trade: The same set of rules that keep its currency undervalued means, by law, it can’t spend at home the huge pile of cash that it sits on. In that respect, **China is more directly tied to us than we are to them**. If the United States were to discontinue trade with China, it would hurt them more than us. Finally, **China is not going to surpass the U**nited **S**tates **as the world economic leader any time soon.** **We control** about **a fourth of the wealth in the world – more than China, India, Japan and the rest of Asia combined. Other indicators are just as definitive.** The average American earns close to fifteen times more than the average person in China. If the United States keeps tax rates low, shows spending discipline, and brings the deficit down to promote solid economic growth, there is strong reason to believe that **China will never surpass** the **U**nited **S**tates **as the world’s largest economy.**

#### Can’t win when China is playing unfair and no impact anyways

Armond Cohen, Executive Director, Clean Air Task Force, 10-24-2011, “Rethinking The Clean Energy “Race””, http://energy.nationaljournal.com/2011/10/is-america-losing-the-clean-en.php

Recent events, including the recent trade petition submitted by seven US-based solar manufacturing companies (including SolarWorld, a German-owned company), have suggested China is unfairly subsidizing its solar panel companies. Of course the WTO should rectify any trade rule violations. IP theft must also be addressed. But it’s not clear how much retaining the low-end part of the clean energy supply chain matters in the end to US employment (although it may matter to company stockholders), or to building innovative clean-energy companies in the US that demand higher-end talent. First, much of low-end component manufacture in commodity items like solar cells and smaller turbine blades is moving to automation in any case, both in the US and China. Second, large-component manufacture such as increasingly supersized wind towers and turbines is likely to remain in the US, due to shipping costs. Finally, while much innovation undoubtedly stems from manufacturing experience, US companies manufacturing through joint ventures in China can still internalize that incremental learning. Arguably, the US should focus on what it does best – high-end design, systems integration and advanced manufacturing – and not declare defeat if we lose the commodity end of the supply chain offshore, which is, in many cases, probably a losing battle anyway. We may have lost flat panel television and iPhone manufacture to China and South Korea, but does anyone seriously talk about trying to recapture it, or suggest that this development impedes US innovation in IT or electronics? None of this means we should be complacent. American companies should accelerate, not slow, their partnerships with Chinese companies to demonstrate and commercialize technology. Government should continue to insist that China and its companies play by international trade rules and abide by IP protection agreements and rules. Finally, and most importantly, the US should play to its strengths at the higher end of the supply chain. That means adopting policies that accelerate the pace of energy innovation on our own shores through research, demonstration, and commercial scale-up of advanced energy systems – specific initiatives that we have detailed elsewhere: .

#### Manufacturing’s recovering – renewables aren’t key

AP**,** U.S. Manufacturing Grows for 1st Time in 4 Months, 10-1-2012,

WASHINGTON — U.S. manufacturing grew for the first time in four months, buoyed by a jump in new orders. The increase was a hopeful sign that the economy is improving. The Institute for Supply Management, a trade group of purchasing managers, said Monday that its index of factory activity rose to 51.5. That’s up from 49.6 in August. A reading above 50 signals growth and below indicates contraction. The index had been below that threshold from June through August. (MORE: Are We Already in a Recession?) Stocks increased their gains after the report was released. The Dow Jones industrial average had been up roughly 100 points before the report came out. It jumped to 150 points up within 10 minutes of the release. A measure of employment also increased, suggesting manufacturers added workers last § Marked 19:47 § month. The increase could signal that manufacturing is picking up after a weakening this spring because of declining consumer demand and a drop in exports. The improvement in the United States comes even as growth is slowing overseas. Europe’s financial crisis has pushed many countries in the region into recession. Growth in emerging nations such as China and India has slowed. China’s manufacturing sector shrank in September, according to a survey by a Chinese trade group. But its measure of factory activity rose for the first time in four months, to 49.8, from 49.2.

#### Manufacturing growth is inevitable in other industries

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Fortifying this development are America’s innate advantages in what is becoming known as the “third industrial revolution” – one that is powered by high-skill labor as well as seminal progress in the areas of artificial intelligence, robotics, nanotechnology, composite materials, and “additive manufacturing” or three-dimensional computerized manufacturing. (Reports by the Economist magazine and the New America Foundation provide more detailed overviews of these advances.) Besides putting to rest the ideological rancor over outsourcing, the manufacturing resurrection will have other domestic political ramifications. My last post cited Walter Russell Mead’s argument that the Midwest’s growing prosperity brought about by new-found energy abundance will inject greater moderation into the nation’s political discourse. The manufacturing turn-around will augment this effect. A new Brookings Institution report finds that, after decades of decline, industrial employment is beginning to grow once again in the Rust Belt. I argued earlier that it is questionable whether China will be able to replicate America’s energy renaissance. There is even greater uncertainty about whether the People’s Republic can capitalize on the technological innovations that will power the new era in U.S. manufacturing. As one expert puts it, “it is China’s turn to worry” as “technical advances will soon lead to the same hollowing out of China’s manufacturing industry that they have to U.S. industry over the past two decades.” He adds that: All of these advances play well into America’s ability to innovate, demolish old industries, and continually reinvent itself. The Chinese are still busy copying technologies we built over the past few decades. They haven’t cracked the nut on how to innovate yet. To be sure, Beijing is hurriedly trying to address this threat. Premier Wen Jiabao has acknowledged that China possesses “insufficient scientific and technological innovation capabilities” and the country has launched a concerted program to become an “innovation nation” by 2020. But it is doubtful that the authoritarian nature of the Chinese regime, bereft of incentives for commercial inventiveness, will permit this outcome. Daron Acemoglu and James A. Robinson, in their noteworthy new book, “Why Nations Fail,” argue that “the spectacular growth rates in China will slowly evaporate” precisely because of the regime’s exclusionary political institutions. The regime’s character also explains why its approach to innovation is one that relies on “autocratic directives, by ordering people to be inventive, and by throwing money at projects that often end up as white elephants.”