# 1

**Energy production is the generation of power from raw materials – excludes extraction of those materials**

**Vaekstfonden 6** – Vaekstfonden is a Danish government backed investment fund that facilitates the supply of venture capital in terms of start-up equity and high-risk loans "THE ENERGY INDUSTRY IN DENMARK- perspectives on entrepreneurship and venture capital" No Specific Cited, Latest Data From 2006 [s3.amazonaws.com/zanran\_storage/www.siliconvalley.um.dk/ContentPages/43667201.pdf](http://s3.amazonaws.com/zanran_storage/www.siliconvalley.um.dk/ContentPages/43667201.pdf)

In all, 20 industry experts were interviewed about the composition and dynamics of the Danish energy sector. Insights from a minimum of 3 industry experts have been assigned to each of the stages in the value chain. Following is a brief description of what the different stages encompass.

Raw material extraction

This stage encompass the process before the actual production of the energy. As an example it is increasingly expensive to locate and extract oil from the North Sea. Likewise coal, gas and waste suitable for energy production can be costly to provide.

Energy production

Energy production encompasses the process, where energy sources are transformed into heat and power.  
Transmission and distribution

**Violation – the plan removes a restriction on buying solar tech, not the production itself**

**Vote neg for limits – they explode the research base and make it impossible to be neg**

# 2

#### Oil prices will stabilize now – prices will stick above OPEC break-even levels without significant changes

Irina Rogovaya August 2012; writer for Oil and Gas Eurasia, Oil Price Changes: Everyone Wants Stability <http://www.oilandgaseurasia.com/articles/p/164/article/1875/>

According to the current base forecast for the Eurozone prepared by Oxford Economics, within the next two years oil prices will continue to drift lower, but not beyond the bounds of the “green” corridor for the world economy – $80-100 per barrel. This forecast coincides with the expectations of the World Bank (see Fig. 4). Meanwhile, S&P analysts presented three scenarios for the energy market in June. In the base scenario, oil will remain at $100 per barrel. S&P calculates that the likelihood of a stressful scenario in which the price of oil drops below $60 per barrel (the bottom in 2009) is 1:3. Analysts believe that given today’s state of economic and geopolitical affairs, strong political will would be needed to force the price of oil below $70-80 (the current level of effective production). So far, that will is nowhere to be seen. Recent events have shown that nobody is interested in the Eurozone breaking apart. And nobody wants a war in the Persian Gulf. Furthermore, nobody today intends to force the production of less valuable oil. At least that is what OPEC leaders promised during the recent summit. “Stability on the market should be at the center of our attention,” General Secretary Abdalla El-Badri said. Even Saudi Arabia, which consistently violates OPEC discipline in over-producing its quotas, announced at the beginning of July that it would review its margins to determine a higher price for Saudi supplies ordered on August contracts. Analysts noted that the average price of oil supplied to Europe and Asia had jumped (by $0.85 and $0.66 per barrel respectively), a fact which could be seen as proof that the collective members of the cartel will not let prices fall under $100 per barrel.

**Individual-level solar power would significantly impact oil dependence**

Dawn **Allcot** 9-8-20**11**; frequently covers energy efficiency, green living, and topics like LED lighting and whole home control systems for a number of technology trade magazines. Solar Power Reduces Our Dependency on Oil http://www.ecooutfitters.net/blog/2011/09/solar-power-reduces-our-dependency-on-oil/

Oil and the Middle East Unfortunately, **one very significant aspect of U.S. life has not changed** since the September 11 attacks, **and that is our use of foreign oil**. The entire Middle East is still a battlefield, yet we purchase one of our most crucial resources from this region. Statistics vary widely — some bloggers believe we purchase only 12 percent of our oil from the Middle East, while others guess the number is closer to 43 or even 50 percent. The U.S. Energy Administration published a table earlier this year that shows **we import about 25 percent of our oil from the Middle East**. Iraq is one of our country’s top ten crude oil sources. **Are we entirely dependent on Middle Eastern oil? No. Is it significant to us? Absolutely.** Any disruption in the supply of Middle Eastern oil, including war, tends to drive gas and home heating oil prices up. When gas prices go up, it costs more to transport our food supply and soon, grocery prices rise, too. (As an aside, this is just one reason eating locally grown food is a green and cost-effective practice.) Little Changes Make a Big Difference **But there’s good news. The fact that our country’s so-called “dependence” on Middle Eastern oil isn’t as bad as many believe means small changes can make a big difference.** **Changes like** using **solar hot water heat instead of oil** to heat your hot water, **or** using **solar PV panels** for radiant floor heating **can make a big difference in reducing the amount of oil our country needs. With only 5 percent of the world’s population, we use 27 percent of the world’s oil**. **Solar energy is one solution to reduce our oil consumption and our ties to the Middle East. It’s also cleaner than oil, easier to access, constantly renewable, and so far, the price of solar power is not connected to world politics**. The more you think about all these factors, **the case for solar power keeps getting brighter and brighter.**

**High prices are key to the Russian economy and domestic stability**

Michael **Schuman** 7-5-20**12** ; writes about Asia and global economic issues as a correspondent for TIME in Hong Kong. B.A. in Asian history and political science from the University of Pennsylvania and a master of international affairs from Columbia; “Why Vladimir Putin Needs Higher Oil Prices” http://business.time.com/2012/07/05/why-vladimir-putin-needs-higher-oil-prices/

But Vladimir Putin is not one of them. **The economy that the Russian President has built not only runs on oil, but runs on oil priced extremely high. Falling oil prices means rising problems for Russia – both for the strength of its economic performance, and possibly, the strength of Putin himself.** Despite the fact that Russia has been labeled one of the world’s most promising emerging markets, often mentioned in the same breath as China and India, the Russian economy is actually quite different from the others. While India gains growth benefits from an expanding population, Russia, like much of Europe, is aging; while economists fret over China’s excessive dependence on investment, Russia badly needs more of it. Most of all, **Russia is little more than an oil state in disguise**. **The country is the largest producer of oil in the world** (yes, bigger even than Saudi Arabia), **and Russia’s dependence on crude has been increasing**. **About a decade ago, oil and gas accounted for less than half of Russia’s exports; in recent years, that share has risen to two-thirds**. **Most of all, oil provides more than half of the federal government’s revenues. What’s more, the economic model Putin has designed in Russia relies heavily not just on oil, but high oil prices**. **Oil lubricates the Russian economy by making possible the increases in government largesse that have fueled Russian consumption**. Budget spending reached 23.6% of GDP in the first quarter of 2012, up from 15.2% four years earlier. What that means is Putin requires a higher oil price to meet his spending requirements today than he did just a few years ago. Research firm Capital Economics figures that the government budget balanced at an oil price of $55 a barrel in 2008, but that now it balances at close to $120. Oil prices today have fallen far below that, with Brent near $100 and U.S. crude less than $90. **The farther oil prices fall, the more pressure is placed on Putin’s budget, and the harder it is for him to keep spreading oil wealth to the greater population through the government**. **With a large swath of the populace angered by his re-election to the nation’s presidency in March, and protests erupting on the streets of Moscow, Putin can ill-afford a significant blow to the economy, or his ability to use government resources to firm up his popularity.** That’s why **Putin hasn’t been scaling back even as oil prices fall**. His government is earmarking $40 billion to support the economy, if necessary, over the next two years. He does have financial wiggle room, even with oil prices falling. Moscow has wisely stashed away petrodollars into a rainy day fund it can tap to fill its budget needs. But **Putin doesn’t have the flexibility he used to have. The fund has shrunk**, from almost 8% of GDP in 2008 to a touch more than 3% today. **The package**, says Capital Economics, **simply highlights the weaknesses of Russia’s economy:** This cuts to the heart of a problem we have highlighted before – namely that Russia is now much more dependent on high and rising oil prices than in the past… The fact that the share of ‘permanent’ spending (e.g. on salaries and pensions) has increased…creates additional problems should oil prices drop back (and is also a concern from the perspective of medium-term growth)…The present growth model looks unsustainable unless oil prices remain at or above $120pb.

**Russian economic collapse causes global nuclear war**

Steven **David**, January/February 19**99**;Professor of International Relations and Associate Dean of Academic Affairs at the Johns Hopkins University, FOREIGN AFFAIRS, **,** http://www.foreignaffairs.org/19990101faessay955/steven-r-david/saving-america-from-the-coming-civilwars.html

**I**f internal war does strike Russia, economic deterioration will be a prime cause. From 1989 to the present, the GDP has fallen by 50 percent. In a society where, ten years ago, unemployment scarcely existed, it reached 9.5 percent in 1997 with many economists declaring the true figure to be much higher. Twenty-two percent of Russians live below the official poverty line (earning less than $ 70 a month). Modern Russia can neither collect taxes (it gathers only half the revenue it is due) nor significantly cut spending. Reformers tout privatization as the country's cure-all, but in a land without well-defined property rights or contract law and where subsidies remain a way of life, the prospects for transition to an American-style capitalist economy look remote at best. As the massive devaluation of the ruble and the current political crisis show, Russia's condition is even worse than most analysts feared. If conditions get worse, even the stoic Russian people will soon run out of patience.  A future conflict would quickly draw in Russia's military. In the Soviet days civilian rule kept the powerful armed forces in check. But with the Communist Party out of office, what little civilian control remains relies on an exceedingly fragile foundation -- personal friendships between government leaders and military commanders. Meanwhile, the morale of Russian soldiers has fallen to a dangerous low. Drastic cuts in spending mean inadequate pay, housing, and medical care. A new emphasis on domestic missions has created an ideological split between the old and new guard in the military leadership, increasing the risk that disgruntled generals may enter the political fray and feeding the resentment of soldiers who dislike being used as a national police force. Newly enhanced ties between military units and local authorities pose another danger. Soldiers grow ever more dependent on local governments for housing, food, and wages. Draftees serve closer to home, and new laws have increased local control over the armed forces. Were a conflict to emerge between a regional power and Moscow, it is not at all clear which side the military would support.  Divining the military's allegiance is crucial, however, since the structure of the Russian Federation makes it virtually certain that regional conflicts will continue to erupt. Russia's 89 republics, krais, and oblasts grow ever more independent in a system that does little to keep them together. As the central government finds itself unable to force its will beyond Moscow (if even that far), power devolves to the periphery. With the economy collapsing, republics feel less and less incentive to pay taxes to Moscow when they receive so little in return. Three-quarters of them already have their own constitutions, nearly all of which make some claim to sovereignty. Strong ethnic bonds promoted by shortsighted Soviet policies may motivate non-Russians to secede from the Federation. Chechnya's successful revolt against Russian control inspired similar movements for autonomy and independence throughout the country. If these rebellions spread and Moscow responds with force, **civil war is likely**.  Should Russia succumb to internal war, the consequences for the United States and Europe will be severe. **A major power** like Russia -- even though in decline -- **does not suffer civil war quietly or alone**. An embattled **Russia**n Federation might provoke **opportunistic attacks from enemies such as China.** Massive flows of refugees would pour into central and western Europe. Armed struggles in Russia could easily spill into its neighbors. Damage from the fighting, particularly attacks on nuclear plants, would poison the environment of much of Europe and Asia. Within Russia, the consequences would be even worse. Just as the sheer brutality of the last Russian civil war laid the basis for the privations of Soviet communism, a second civil war might produce another horrific regime.

**High prices are key to Russian military modernization**

John T. **Bennett**, 4-3-20**12**; covers national security and foreign policy for U.S. News & World Report“Oil Prices Fueling Russia's Disruption of U.S. Foreign Policy

Russia's burgeoning oil and natural gas exports are underwriting Russian efforts to regain status as a world superpower” http://www.usnews.com/news/articles/2012/04/03/oil-prices-fueling-russias-disruption-of-us-foreign-policy

U.S.-Russian relations returned to the front pages last week after Obama urged outgoing Russian President Dmitry Medvedev to "give me space" on several issues, including a European missile defense shield that Moscow opposes. Likely GOP presidential nominee Mitt Romney soon after called Russia America's "top geopolitical enemy."¶ "**Putin still aspires for Russia to be a superpower**," says Steven Pifer, a former U.S. ambassador to Ukraine. "**There are only two ways for Russia to achieve that: nuclear weapons, and oil and natural gas sales."¶** The price of a barrel of oil was nearly $105 at midday Tuesday, steadily climbing from a 52-week low of $76.35 per barrel in October. Oil prices began to rise in late 2010, peaking at $113 per barrel in May 2011, before dipping last summer and then rising again.¶ [Whose Russia Comment Was More Damaging: Obama's or Romney's?]¶ **Russia is the world's second-largest oil exporter** at 5 million barrels a day, and its the ninth-leading natural gas exporter at 38.2 billion cubic meters a year, according to the CIA World Factbook. Russia rakes in nearly $500 billion annually in exports, with the CIA listing petroleum and natural gas as its top two commodities.¶ Frances Burwell, vice president of the Atlantic Council, says **Russia's oil revenues "give it a comfort zone" from which its leaders feel they have** the **global cache** to make things tough for Washington.¶ Burwell says she "places more weight" for Russia's recent global muscularity on "Putin's re-emergence." **The Russian once-and-soon-again president "clearly sees playing the national card as the strong guy internationally benefits him**," she says.¶ But, make no mistake, **bloated national coffers from high oil and gas prices underwrite Putin's muscle-flexing**, experts say.¶ [Who is Joe Biden to Slam Mitt Romney on Russia Policy?]¶ **Putin made a number of big domestic promises during the presidential race, including plans to usher in sweeping pension and wage hikes. He also put forth "a rather ambitious military modernization program**," Pifer says.¶ "**If oil prices remain high, he might be able to do all of those things**," Pifer says. "If prices come down, however, Putin will have some very tough decisions to make at home ... between guns versus butter."¶ **Should oil and gas prices tumble, experts say Putin would likely pick butter.¶** "**In 2007 when oil was doing well, Putin [as president] could have modernized the Russian military**," says Pifer. **Instead, Putin made a number of economic moves, such as the creation of a rainy day fund that was used during the recent global financial crisis**," Pifer notes.¶ What's more, Putin returns to power with his sharp eyes locked on his opposition, which is composed of the country's urban, middle-class populations.¶ Experts agree that Putin would be hard-pressed to break his pension and wage promises in favor of a few more missiles. But even an economically weaker Russia would likely pick its spots to block Washington's desires.¶ "**They have a very sovereigntist, non-interventionalist view of world affairs**," Burwell says. That means **Moscow fundamentally opposes Western efforts to boss around the world's strongmen,** with which Russian leaders have much in common.¶ "The Russian also have real hard-core, national, commercial and other interests in both Iran and Syria that cannot simply be ignored," Burwell says.

**Modernization is key to maintain the nuclear threshold – prevents miscalc and escalation**

Bettina **Renz and** Rod **Thornton** January 20**12**; lecturers on international security in the Faculty of Social Sciences, University of Nottingham “Russian Military Modernization Cause, Course, and Consequences” Problems of Post-Communism Volume 59, Number 1 / January / February 2012 p 44 - 54

The perceived weakness of this triad means that the Kremlin was pleased with **the START agreement** of March 2010. The **treaty limits favor Moscow in that it does not have to cut any of its own nuclear warheads** or delivery systems—the numbers of ICBMs and warheads in its own triad are actually below the negotiated caps. Only the United States has had to bring its numbers down.58 Normally, in the arranging of such international security treaties, negotiating from a position of military weakness—as Russia was—is not conducive to the ability to drive a hard bargain. Moscow has been lucky, however, in that Washington seems not to be too interested in the shape of Russia’s current and future nuclear arsenal. Rather, in terms of perceived security threats, Washington has its eye more on the terrorist ball than on the Russian one. Additionally, **under STA RT, Russia does not have to reduce the number of its tactical nuclear weapons. It has more of these than the United States. These are prized and important assets to Moscow, and they have become even more prized and important as Russia’s conventional military has become weaker. They are seen more and more as the fallback option if Russia one day faces some sort of defeat in a conventional conflict—against the likes of Georgia or China. In the largest Russian military exercise held since the end of the cold war—conducted recently in the Russian Far East—tactical nuclear weapons (i.e., mines) were notionally “exploded” as part of the exercise play.59 This fact alone seems to confirm that Russia’s conventional military weakness has led to a reduction in its nuclear-use threshold.** Conclusion The current modernization in the Russian military is long overdue. Because it is long overdue, it has to be completed in a rushed, haphazard fashion and against a backdrop of a military–industrial complex unable to fulfill its role in the process. Traditionally, military modernization is not achieved lightly, given the bureaucratic inertia and cultural norms that are always present. When, as in the current situation in Russia, such barriers to change are aided and abetted by any number of additional problems (not to mention the rampant corruption that is endemic across all levels of Russian state institutions, including the military), then it must be expected that Russia’s armed forces will be striving for some time to become truly “modern.”60 In essence, what should have been accomplished as an evolution over many years, and should have begun during the Yeltsin era, is now being attempted as a revolution in the post–Georgian war era. As with any revolutionary change, a good deal of disruption and disaffection has been created. Moreover, **the current Russian military is a weakened military. The psychology of the tsarist/Soviet/Russian military has always been that numbers counted, that mass would prevail. Numbers inspired confidence, and numbers could deter. But the current Russian military is losing numbers** while not making up for them by creating smaller, more professional forces equipped with the requisite technologies. Quality is not replacing quantity. **The military is in a state of flux. Russian politicians and military figures both now lack a genuine confidence in the armed forces’ ability to deter**. This can have two consequences. Either Russia takes large steps to avoid the possibility of military confrontation by stressing diplomatic solutions to possible threat scenarios (as the tsarist government did in 1914), or it goes the opposite way**, fearing that if any state is threatening military action against Russia then the hair trigger comes into operation** (Israeli-style). That is, **the mentality of the first, preemptive strike becomes paramount—taking advantage of surprise—and using what assets Russia now has. The alternative is to take the risk of waiting to be attacked and maybe “losing**.” What is clear is that, with its armed forces currently weakened by the process of change, the **sense of vulnerability generated has led Russia, in classic confirmation of the security dilemma concept, to magnify the threats it faces, or thinks it faces.** Conscious of its vulnerability to threats, real or imagined, **Moscow may begin to look more and more toward the inflexible tool of its tactical nuclear weapons as its principal defense mechanism**. While no one really supposes that such weapons will be used in any confrontation with the West, the same cannot be said of any possible conflict with the Chinese. Ironically, **Beijing’s military still relies on mass. The best modern military counter to mass is to employ either PGMs or tactical nuclear weapons. The Russian military has hardly any of the former but plenty of the latter. Hair triggers and tactical nuclear weapons are not comfortable bedfellows.**

# 3

#### Obama is winning but it will be close and it’s reversible – popularity is key

**Brownstein, 9/21/12** - a two-time finalist for the Pulitzer Prize for his coverage of presidential campaigns, is National Journal Group's Editorial Director, in charge of long-term editorial strategy.(Ronald, National Journal, “Heartland Monitor Poll: Obama Leads 50 Percent to 43 Percent” <http://www.nationaljournal.com/2012-presidential-campaign/heartland-monitor-poll-obama-leads-50-percent-to-43-percent-20120921?page=1>)

President Obama has opened a solid lead over Mitt Romney by largely reassembling the “coalition of the ascendant” that powered the Democrat to his landmark 2008 victory, the latest Allstate/National Journal Heartland Monitor Poll has found.

The survey found Obama leading Romney by 50 percent to 43 percent among likely voters, with key groups in the president’s coalition such as minorities, young people, and upscale white women providing him support comparable to their levels in 2008.

The survey, conducted by Ed Reilly and Jeremy Ruch of FTI Communications, a communications and strategic consulting firm, surveyed 1,055 likely voters by landline and cell phone from Sept. 15-19. It has a margin of error of plus or minus 3 percentage points. Full results from the survey, including a detailed look at Americans’ attitudes about opportunity and upward mobility, will be released in the Sept. 22 National Journal.

The Heartland Monitor’s results are in line with most other national surveys in recent days showing Obama establishing a measurable lead, including this week’s new Pew Research Center and NBC/Wall Street Journal polls. The saving grace for Republicans is that even as these surveys show Obama opening a consistent advantage, the president has not been able to push his support much past the critical 50 percent level, even after several difficult weeks for Romney that began with a poorly reviewed GOP convention. That suggests the president faces continued skepticism from many voters that could allow Romney to draw a second wind if he can stabilize his tempest-tossed campaign.

The poll found Obama benefiting from a small increase in optimism about the country’s direction. Among likely voters, 37 percent said the country was moving in the right direction. Even looking at all adults, the "right track" number now stands at 35 percent, its best showing since the April 2010 Heartland Monitor.

Obama’s approval rating in the new survey also ticked up to 50 percent, with 46 percent disapproving. That’s a slight improvement from May, when the survey of all adults found 47 percent approving and 48 percent disapproving. Among all adults, Obama’s rating improved to 49 percent approving and 45 percent disapproving, also one of his best showings since January 2010.

Those gains are critical, because as always with an incumbent president, attitudes toward Obama’s performance powerfully shape the race. Among likely voters who approve of Obama’s job performance, he leads Romney in the ballot test by 93 percent to 3 percent; those who disapprove prefer Romney by 87 percent to 5 percent.

#### Solar power is unpopular - not seen as cost competitive and perceived as trading off with other sources

**Lifsher, 5 -** LA Times Staff Writer

(Marc, June 27, “Governor's Solar Plan Is Generating Opposition,” <http://articles.latimes.com/2005/jun/27/business/fi-solar27>, d/a 7-20-12

Gov. Arnold Schwarzenegger's plan to spend billions of dollars to put electricity-producing [solar panels](http://articles.latimes.com/2005/jun/27/business/fi-solar27) on a million California rooftops could be running into stormy weather. For the second year running, the governor is sponsoring legislation that would put photovoltaic solar systems at the head of the line for the bulk of state alternative energy [funding](http://articles.latimes.com/2005/jun/27/business/fi-solar27). For Schwarzenegger and his backers in the environmental community and the solar industry, a massive push to use abundant "free power" from the sun is an easy call. "Today, in California, where we are famous for the sun, we are going to put the positive benefits of that sun to good use," Schwarzenegger said in February, announcing his personal support for SB 1, the solar power bill. Schwarzenegger is thinking big: He wants to increase the state's total solar output from about 101 megawatts to 3,000 megawatts by 2018. That's enough nonpolluting power to run about 2.25 million homes and eliminate the need to build six large natural gas-fired generating plants. The governor isn't the only Hollywood star backing sun power. Actors Edward Norton and Ed Begley Jr., both well-known environmental activists, spoke at a recent media event in South Central Los Angeles in support of SB 1. But the bill, despite such high-profile backing and a bipartisan 30-5 vote in the state Senate, is facing potential difficulties in the Assembly. Opposition from business lobbies, utilities, unions and even consumer groups is setting the stage for what could be a close vote. The first hint of how the bill will fare in the Assembly is expected to come today when it faces its first hearing in the Assembly Utilities and Commerce Committee. Most of the complaints about the governor's solar program center on its estimated 10-year, $2-billion-to-$3-billion price tag. Much of that would be paid by power users in the form of surcharges imposed by the California Public Utilities Commission. Proponents estimate that the annual rate hike would be about $15 per residential customer. But business groups -- usually among Schwarzenegger's staunchest supporters -- complain that increases for large power users such as big-box retailers and industrial operations would be much higher -- a key point in a state that already has the highest electricity rates in the continental United States. The governor's solar plan is "so expensive that it's not cost-effective," said Joseph Lyons, an energy lobbyist for the California Manufacturers and Technology Assn. "Our members need rate relief, and this goes in the other direction," Lyons said. Southern California Edison Co., the state's second-largest investor-owned utility, is also skeptical, saying the governor's bill favors rooftop solar systems over what it says are more cost-effective centralized solar generating stations. Even fans of solar power -- who view photovoltaic panels as a crucial part of the state's alternative energy mix -- question the wisdom of earmarking the bulk of funding for one source, to the detriment of less-glamorous energy efficiency and conservation programs. "Solar is not even close to competitive," said Severin Borenstein, director of the University of California Energy Institute in Berkeley. He noted that solar power's long-run, average production cost of 25 cents to 30 cents per kilowatt hour, not including government subsidies or tax [credits](http://articles.latimes.com/2005/jun/27/business/fi-solar27), is much higher than the 5 cents to 9 cents for wind power and 6 cents to 7 cents for modern, natural-gas-fired generation plants. Even a leading energy consumer advocate, the Utility Reform Network, is critical of the governor's solar dream, contending it would drive up utility bills for some lower-income residential ratepayers. "It singles out one technology ... it's not giving us the biggest bang for the buck," said Michael Florio, an attorney for the group. Meanwhile, enthusiasm among home builders is lukewarm at best. They fear that a requirement that solar be offered as an option on most new homes beginning in 2010 would be unpopular with buyers.

#### Romney causes massive foreign backlash and nuclear wars around the globe

Doug Bandow 5-15-2012; Doug Bandow is a senior fellow at the Cato Institute and former special assistant to President Ronald Reagan. “Mitt Romney: The Foreign Policy of Know-Nothingism” http://www.cato.org/publications/commentary/mitt-romney-foreign-policy-knownothingism

Romney’s overall theme is American exceptionalism and greatness, slogans that win public applause but offer no guidance for a bankrupt superpower that has squandered its international credibility. “This century must be an American century,” Romney proclaimed. “In an American century, America leads the free world and the free world leads the entire world.” He has chosen a mix of advisers, including the usual neocons and uber-hawks — Robert Kagan, Eliot Cohen, Jim Talent, Walid Phares, Kim Holmes, and Daniel Senor, for instance — that gives little reason for comfort. Their involvement suggests Romney’s general commitment to an imperial foreign policy and force structure. Romney is no fool, but he has never demonstrated much interest in international affairs. He brings to mind George W. Bush, who appeared to be largely ignorant of the nations he was invading. Romney may be temperamentally less likely to combine recklessness with hubris, but he would have just as strong an incentive to use foreign aggression to win conservative acquiescence to domestic compromise. This tactic worked well for Bush, whose spendthrift policies received surprisingly little criticism on the right from activists busy defending his war-happy foreign policy. The former Massachusetts governor has criticized President Obama for “a naked political calculation or simply sheer ineptitude” in following George W. Bush’s withdrawal timetable in Iraq and for not overriding the decision of a government whose independence Washington claims to respect. But why would any American policymaker want to keep troops in a nation that is becoming ever more authoritarian, corrupt, and sectarian? It is precisely the sort of place U.S. forces should not be tied down. In contrast, Romney has effectively taken no position on Afghanistan. At times he appears to support the Obama timetable for reducing troop levels, but he has also proclaimed that “Withdrawal of U.S. forces from Afghanistan under a Romney administration will be based on conditions on the ground as assessed by our military commanders.” Indeed, he insisted: “To defeat the insurgency in Afghanistan, the United States will need the cooperation of both the Afghan and Pakistani governments — we will only persuade Afghanistan and Pakistan to be resolute if they are convinced that the United States will itself be resolute,” and added, “We should not negotiate with the Taliban. We should defeat the Taliban.” Yet it’s the job of the president, not the military, to decide the basic policy question: why is the U.S. spending blood and treasure trying to create a Western-style nation state in Central Asia a decade after 9/11? And how long is he prepared to stay — forever? On my two trips to Afghanistan I found little support among Afghans for their own government, which is characterized by gross incompetence and corruption. Even if the Western allies succeed in creating a large local security force, will it fight for the thieves in Kabul? Pakistan is already resolute — in opposing U.S. policy on the ground. Afghans forthrightly view Islamabad as an enemy. Unfortunately, continuing the war probably is the most effective way to destabilize nuclear-armed Pakistan. What will Romney do if the U.S. military tells him that American combat forces must remain in Afghanistan for another decade or two in order to “win”? The ongoing AfPak conflict is not enough; Romney appears to desire war with Iran as well. No one wants a nuclear Iran, but Persian nuclear ambitiions began under America’s ally the Shah, and there is no reason to believe that the U.S. (and Israel) cannot deter Tehran. True, Richard Grenell, who briefly served as Romney’s foreign-policy spokesman, once made the astonishing claim that the Iranians “will surely use” nuclear weapons. Alas, he never shared his apparently secret intelligence about the leadership in Tehran’s suicidal tendencies. The Iranian government’s behavior has been rational even if brutal, and officials busy maneuvering for power and wealth do not seem eager to enter the great beyond. Washington uneasily but effectively deterred Joseph Stalin and Mao Zedong, the two most prolific mass murderers in history. Iran is no substitute for them. Romney has engaged in almost infantile ridicule of the Obama administration’s attempt to engage Tehran. Yet the U.S. had diplomatic relations with Hitler’s Germany and Stalin’s Russia. Washington came to regret not having similar contact with Mao’s China. Even the Bush administration eventually decided that ignoring Kim Jong-Il’s North Korea only encouraged it to build more nuclear weapons faster. Regarding Iran, Romney asserted, “a military option to deal with their nuclear program remains on the table.” Building up U.S. military forces “will send an unequivocal signal to Iran that the United States, acting in concert with allies, will never permit Iran to obtain nuclear weapons... Only when the ayatollahs no longer have doubts about America’s resolve will they abandon their nuclear ambitions.” Indeed, “if all else fails... then of course you take military action,” even though, American and Iranian military analysts warn, such strikes might only delay development of nuclear weapons. “Elect me as the next president,” he declared, and Iran “will not have a nuclear weapon.” Actually, if Tehran becomes convinced that an attack and attempted regime change are likely, it will have no choice but to develop nuclear weapons. How else to defend itself? The misguided war in Libya, which Romney supported, sent a clear signal to both North Korea and Iran never to trust the West. Iran’s fears likely are exacerbated by Romney’s promise to subcontract Middle East policy to Israel. The ties between the U.S. and Israel are many, but their interests often diverge. The current Israeli government wants Washington to attack Iran irrespective of the cost to America. Moreover, successive Israeli governments have decided to effectively colonize the West Bank, turning injustice into state policy and making a separate Palestinian state practically impossible. Perceived American support for this creates enormous hostility toward the U.S. across the Arab and Muslim worlds. Yet Romney promises that his first foreign trip would be to Israel “to show the world that we care about that country and that region” — as if anyone anywhere, least of all Israel’s neighbors, doesn’t realize that. He asserted that “you don’t allow an inch of space to exist between you and your friends and allies,” notably Israel. The U.S. should “let the entire world know that we will stay with them and that we will support them and defend them.” Indeed, Romney has known Israeli Prime Minister Benjamin Netanyahu for nearly four decades and has said that he would request Netanyahu’s approval for U.S. policies: “I’d get on the phone to my friend Bibi Netanyahu and say, ‘Would it help if I say this? What would you like me to do?’” Americans would be better served by a president committed to making policy in the interests of the U.S. instead. Romney’s myopic vision is just as evident when he looks elsewhere. For instance, he offered the singular judgment that Russia is “our number one geopolitical foe.” Romney complained that “across the board, it has been a thorn in our side on questions vital to America’s national security.” The Cold War ended more than two decades ago. Apparently Romney is locked in a time warp. Moscow manifestly does not threaten vital U.S. interests. Romney claimed that Vladimir “Putin dreams of ‘rebuilding the Russian empire’.” Even if Putin has such dreams, they don’t animate Russian foreign policy. No longer an ideologically aggressive power active around the world, Moscow has retreated to the status of a pre-1914 great power, concerned about border security and international respect. Russia has no interest in conflict with America and is not even much involved in most regions where the U.S. is active: Asia, the Middle East, and Latin America. Moscow has been helpful in Afghanistan, refused to provide advanced air defense weapons to Iran, supported some sanctions against Tehran, used its limited influence in North Korea to encourage nuclear disarmament, and opposes jihadist terrorism. This is curious behavior for America’s “number one geopolitical foe.” Romney’s website explains that he will “implement a strategy that will seek to discourage aggressive or expansionist behavior on the part of Russia,” but other than Georgia where is it so acting? And even if Georgia fell into a Russian trap, Tbilisi started the shooting in 2008. In any event, absent an American security guarantee, which would be madness, the U.S. cannot stop Moscow from acting to protect what it sees as vital interests in a region of historic influence. Where else is Russia threatening America? Moscow does oppose NATO expansion, which actually is foolish from a U.S. standpoint as well, adding strategic liabilities rather than military strengths. Russia strongly opposes missile defense bases in Central and Eastern Europe, but why should Washington subsidize the security of others? Moscow opposes an attack on Iran, and so should Americans. Russia backs the Assad regime in Syria, but the U.S. government once declared the same government to be “reformist.” Violent misadventures in Kosovo, Afghanistan, Iraq, and Libya demonstrate that America has little to gain and much to lose from another attempt at social engineering through war. If anything, the Putin government has done Washington a favor keeping the U.S. out of Syria. This doesn’t mean America should not confront Moscow when important differences arise. But treating Russia as an adversary risks encouraging it to act like one. Doing so especially will make Moscow more suspicious of America’s relationships with former members of the Warsaw Pact and republics of the Soviet Union. Naturally, Romney wants to “encourage democratic political and economic reform” in Russia — a fine idea in theory, but meddling in another country’s politics rarely works in practice. Just look at the Arab Spring. Not content with attempting to start a mini-Cold War, Mitt Romney dropped his nominal free-market stance to demonize Chinese currency practices. He complained about currency manipulation and forced technology transfers: “China seeks advantage through systematic exploitation of other economies.” On day one as president he promises to designate “China as the currency manipulator it is.” Moreover, he added, he would “take a holistic approach to addressing all of China’s abuses. That includes unilateral actions such as increased enforcement of U.S. trade laws, punitive measures targeting products and industries that rely on misappropriations of our intellectual property, reciprocity in government procurement, and countervailing duties against currency manipulation. It also includes multilateral actions to block technology transfers into China and to create a trading bloc open only for nations genuinely committed to free trade.” Romney’s apparent belief that Washington is “genuinely committed to free trade” is charming nonsense. The U.S. has practiced a weak dollar policy to increase exports. Washington long has subsidized American exports: the Export-Import Bank is known as “Boeing’s Bank” and U.S. agricultural export subsidies helped torpedo the Doha round of trade liberalization through the World Trade Organization. Of course, Beijing still does much to offend Washington. However, the U.S. must accommodate the rising power across the Pacific. Trying to keep China out of a new Asia-Pacific trade pact isn’t likely to work. America’s Asian allies want us to protect them — no surprise! — but are not interested in offending their nearby neighbor with a long memory. The best hope for moderating Chinese behavior is to tie it into a web of international institutions that provide substantial economic, political, and security benefits. Beijing already has good reason to be paranoid of the superpower which patrols bordering waters, engages in a policy that looks like containment, and talks of the possibility of war. Trying to isolate China economically would be taken as a direct challenge. Romney would prove Henry Kissinger’s dictum that even paranoids have enemies. Naturally, Romney also wants to “maintain appropriate military capabilities to discourage any aggressive or coercive behavior by China against its neighbors.” However, 67 years after the end of World War II, it is time for Beijing’s neighbors to arm themselves and cooperate with each other. Japan long had the second largest economy on earth. India is another rising power with reason to constrain China. South Korea has become a major power. Australia has initiated a significant military build-up. Many Southeast Asian nations are constructing submarines to help deter Chinese adventurism. Even Russia has much to fear from China, given the paucity of population in its vast eastern territory. But America’s foreign-defense dole discourages independence and self-help. The U.S. should step back as an off-shore balancer, encouraging its friends to do more and work together. It is not America’s job to risk Los Angeles for Tokyo, Seoul, or Taipei. Romney similarly insists on keeping the U.S. on the front lines against North Korea, even though all of its neighbors have far more at stake in a peaceful peninsula and are able to contain that impoverished wreck of a country. The Romney campaign proclaims: “Mitt Romney will commit to eliminating North Korea’s nuclear weapons and its nuclear-weapons infrastructure.” Alas, everything he proposes has been tried before, from tougher sanctions to tighter interdiction and pressure on China to isolate the North. What does he plan on doing when Pyongyang continues to develop nuclear weapons as it has done for the last 20 years? The American military should come home from Korea. Romney complained that the North’s nuclear capability “poses a direct threat to U.S. forces on the Korean Peninsula and elsewhere in East Asia.” Then withdraw them. Manpower-rich South Korea doesn’t need U.S. conventional support, and ground units do nothing to contain North Korea’s nuclear ambitions. Pull out American troops and eliminate North Korea’s primary threat to the U.S. Then support continuing non-proliferation efforts led by those nations with the most to fear from the North. That strategy, more than lobbying by Washington, is likely to bring China around. Romney confuses dreams with reality when criticizing President Obama over the administration’s response to the Arab Spring. “We’re facing an Arab Spring which is out of control in some respects,” he said, “because the president was not as strong as he needed to be in encouraging our friends to move toward representative forms of government.” Romney asked: “How can we try and improve the odds so what happens in Libya and what happens in Egypt and what happens in other places where the Arab Spring is in full bloom so that the developments are toward democracy, modernity and more representative forms of government? This we simply don’t know.” True, the president doesn’t know. But neither does Mitt Romney. The latter suffers from the delusion that bright Washington policymakers can remake the world. Invade another country, turn it into a Western-style democracy allied with America, and everyone will live happily every after. But George W. Bush, a member of Mitt Romney’s own party, failed miserably trying to do that in both Afghanistan and Iraq. The Arab Spring did not happen because of Washington policy but in spite of Washington policy. And Arabs demanding political freedom — which, unfortunately, is not the same as a liberal society — have not the slightest interest in what Barack Obama or Mitt Romney thinks. Yet the latter wants “convene a summit that brings together world leaders, donor organizations, and young leaders of groups that espouse” all the wonderful things that Americans do. Alas, does he really believe that such a gathering will stop, say, jihadist radicals from slaughtering Coptic Christians? Iraq’s large Christian community was destroyed even as the U.S. military occupied that country. His summit isn’t likely to be any more effective. Not everything in the world is about Washington. Which is why Romney’s demand to do something in Syria is so foolish. Until recently he wanted to work with the UN, call on the Syrian military to be nice, impose more sanctions, and “increase the possibility that the ruling minority Alawites will be able to reconcile with the majority Sunni population in a post-Assad Syria.” Snapping his fingers would be no less effective. Most recently he advocated arming the rebels. But he should be more cautious before advocating American intervention in another conflict in another land. Such efforts rarely have desirable results. Iraq was a catastrophe. Afghanistan looks to be a disaster once American troops come home. After more than a decade Bosnia and Kosovo are failures, still under allied supervision. Libya is looking bad. Even without U.S. “help,” a full-blown civil war already threatens in Syria. We only look through the glass darkly, observed the Apostle Paul. It might be best for Washington not to intervene in another Muslim land with so many others aflame. Despite his support for restoring America’s economic health, Romney wants to increase dramatically Washington’s already outsize military spending. Rather than make a case on what the U.S. needs, he has taken the typical liberal approach of setting an arbitrary number: 4 percent of GDP. It’s a dumb idea, since America already accounts for roughly half the globe’s military spending — far more if you include Washington’s wealthy allies — and spends more in real terms than at any time during the Cold War, Korean War, or Vietnam War, and real outlays have nearly doubled since 2000. By any normal measure, the U.S. possesses far more military resources than it needs to confront genuine threats. What Romney clearly wants is a military to fight multiple wars and garrison endless occupations, irrespective of cost. My Cato colleague Chris Preble figured that Romney's 4 percent gimmick would result in taxpayers spending more than twice as much on the Pentagon as in 2000 (111 percent higher, to be precise) and 45 percent more than in 1985, the height of the Reagan buildup. Over the next ten years, Romney's annual spending (in constant dollars) for the Pentagon would average 64 percent higher than annual post-Cold War budgets (1990-2012), and 42 percent more than the average during the Reagan era (1981-1989). If Mitt Romney really believes that the world today is so much more dangerous than during the Cold War, he should spell out the threat. He calls Islamic fundamentalism, the Arab Spring, the impact of failed states, the anti-American regimes of Cuba, Iran, North Korea, and Venezuela, rising China, and resurgent Russia “powerful forces.” It’s actually a pitiful list — Islamic terrorists have been weakened and don’t pose an existential threat, the Arab Spring threatens instability with little impact on America, it is easier to strike terrorists in failed states than in nominal allies like Pakistan and Saudi Arabia, one nuclear-armed submarine could vaporize all four hostile states, and Russia’s modest “resurgence” may threaten Georgia but not Europe or America. Only China deserves to be called “powerful,” but it remains a developing country surrounded by potential enemies with a military far behind that of the U.S. In fact, the greatest danger to America is the blowback that results from promiscuous intervention in conflicts not our own. Romney imagines a massive bootstrap operation: he wants a big military to engage in social engineering abroad which would require an even larger military to handle the violence and chaos that would result from his failed attempts at social engineering. Better not to start this vicious cycle. America faces international challenges but nevertheless enjoys unparalleled dominance. U.S. power is buttressed by the fact that Washington is allied with every industrialized nation except China and Russia. America shares significant interests with India, the second major emerging power; is seen as a counterweight by a gaggle of Asian states worried about Chinese expansion; remains the dominant player in Latin America; and is closely linked to most of the Middle East’s most important countries, such as Israel, Saudi Arabia, Egypt, Jordan, and Iraq. If Mitt Romney really believes that America is at greater risk today than during the Cold War, he is not qualified to be president. In this world the U.S. need not confront every threat, subsidize every ally, rebuild every failed state, and resolve every problem. Being a superpower means having many interests but few vital ones warranting war. Being a bankrupt superpower means exhibiting judgment and exercising discretion. President Barack Obama has been a disappointment, amounting in foreign policy to George W. Bush-lite. But Mitt Romney sounds even worse. His rhetoric suggests a return to the worst of the Bush administration. The 2012 election likely will be decided on economics, but foreign policy will prove to be equally important in the long-term. America can ill afford another know-nothing president.

# 4

#### The United States Supreme Court should rule that compliance orders from federal enforcement agencies regarding lower antidumping tariffs on crystalline silicon photovoltaic cells from the People’s Republic of China unconstitutional.

#### Courts have authority to rule over energy production

Brenda Bowers April 2011 “Future Of American Energy Production At Stake In US Supreme Court – Big Government” http://brendabowers.wordpress.com/2011/04/19/%C2%BB-future-of-american-energy-production-at-stake-in-us-supreme-court-big-government/

We all know how important energy is in our lives, just as commercial energy is critical to free market capitalism and the pursuit of prosperity in America. Now, thanks to environmental activists and several states, that may all be at risk in the US Supreme Court. In 2004, unhappy that the duly elected Bush administration wasn’t restricting carbon emissions in the alleged cause of global warming, environmental activism prompted several states to file a “public nuisance” lawsuit, which would empower the courts in this regard. They lost in the lower court but that was reversed in 2007. This case is novel, and far more aggressive and disruptive than the global warming case the Court previously permitted. In a 2007 decision, Massachusetts v. EPA, a closely divided Court agreed with 12 states and several cities that the Environmental Protection Agency has authority to regulate carbon dioxide as a pollutant under the Clean Air Act. Though that case dealt with a narrow claim to enforce a federal statute, the Court’s decision emboldened what had already become a cottage industry of lawsuits designed to slow global warming by asking federal courts to enact what interest groups have been unable to secure through the democratic process: carbon caps and other limits on the way energy is produced in this country. Under the guise of “public nuisance,” the plaintiffs in these suits seek to impose enormous damages and binding emissions caps on energy companies. The plaintiffs have acknowledged that their goal is a veritable sea change in the way energy is produced, sold, and used in this country. Incredibly, they assert that these companies can make major changes to lower emissions – such as the adoption of wind and solar alternatives – “without significantly increasing the cost of electricity.” But never before has the “public nuisance” doctrine been used to set national economic and energy policy. While litigation may be therapeutic for those frustrated by political inaction, this case is at odds with this country’s legal tradition. Meanwhile, a recently elected Republican House is taking steps to go in the other direction through budget cuts to the EPA. Environmental activism in the US is, in effect, looking to up-end the democratic process – an all too common theme across the Left – by empowering the courts to make policy in perhaps the single most critical policy area for American prosperity.

#### This solves and competes – it doesn’t ‘reduce’ a legal restriction – it just makes it unenforceable

William Treanor (associate professor of law at Fordham University) and Gene Sperling (Deputy assistant to the president for economic policy University of Minnesota) 1993 “Prospective overruling and the revival of Unconstitutional statutes” JSTOR

Unlike the Supreme Court, several state courts have explicitly addressed the revival issue. The relevant state court cases have concerned the specific issue of whether a statute that has been held unconstitutional is revived when the invalidating decision is over- turned.42 With one exception, they have concluded that such statutes are immediately enforceable. The most noted instance in which the revival issue was resolved by a court involved the District of Columbia minimum wage statute pro- nounced unconstitutional in Adkins. After the Court reversed Adkins in West Coast Hotel, President Roosevelt asked Attorney General HomerCummings for an opinion on the status of the District of Columbia's statute. The Attorney General responded, The decisions are practically in accord in holding that the courts have no power to repeal or abolish a statute, and that notwithstanding a decision holding it unconstitutional a statute continues to remain on the statute books; and that if a stat- ute be declared unconstitutional and the decision so declaring it be subsequently overruled the statute will then be held valid from the date it became effective.43 Enforcement of the statute followed without congressional action.44 When this enforcement was challenged, the Municipal Court of Appeals for the District of Columbia inJawish v. Morlet 45 held that the decision in West Coast Hotel had had the effect of making the statute enforceable. The court observed that previous opinions addressing the revival issue proceed on the principle that a statute declared unconstitutional is void in the sense that it is inoperative or unenforceable, but not void in the sense that it is repealed or abolished; that so long as the decision stands the statute is dormant but not dead; and that if the decision is reversed the statute is valid from its first effective date.46 The court declared this precedent sound since the cases were "in ac- cord with the principle 'that a decision of a court of appellate jurisdic- tion overruling a former decision is retrospective in its operation, and the effect is not that the former decision is bad law but that it never was the law.' "47 Adkins was thus, and had always been, a nullity. The court acknowledged that, after Adkins, it had been thought that the District of Columbia's minimum wage statute was unconstitutional. As the court put it, "'[J]ust about everybody was fooled.' "48 Nonetheless, the court's view was that since the minimum wage law had always been valid, although for a period judicially unenforceable, there was no need to reenact it.49 Almost all other courts that have addressed the issue of whether a statute that has been found unconstitutional can be revived have reached the same result as theJawish court, using a similar formalisticanalysis.50 The sole decision in which a court adopted the nonrevival position is Jefferson v. Jeferson,51 a poorly reasoned decision of the Louisiana Supreme Court. The plaintiff in Jeferson sought child sup- port and maintenance from her husband. She prevailed at the trial level; he filed his notice of appeal one day after the end of the filing period established by the Louisiana Uniform Rules of the Court of Ap- peals. The Court of Appeals rejected his appeal as untimely, even though the Louisiana Supreme Court had previously found that the ap- plicable section of the Uniform Rules violated the state constitution. One of Ms. Jefferson's arguments before the state Supreme Court was that that court's previous ruling had been erroneous and that the rules should therefore be revived. In rejecting this claim and in finding for the husband, the Court stated: Since we have declared the uniform court rule partially unconstitutional, it appears to be somewhat dubious that we have the right to reconsider this ruling in the instant case as counsel for the respondent judges urges us to do. For a rule of court, like a statute, has the force and effect of law and, when a law is stricken as void, it no longer has existence as law; the law cannot be resurrected thereafter by a judicial de- cree changing the final judgment of unconstitutionality to con- stitutionality as this would constitute a reenactment of the law by the Court-an assumption of legislative power not dele- gated to it by the Constitution.52 The Louisiana Court thus took a mechanical approach to the revival question. According to its rationale, when a statute is found unconstitutional, it is judicially determined never to have existed. Revival there- fore entails judicial legislation and thereby violates constitutionally mandated separation of powers: because the initial legislative passage of the bill has no legitimacy, the bill's force is considered to be purely a creature of judicial decision-making. Jefferson has little analytic appeal. Its view of the separation of pow- ers doctrine is too simplistic. Contrary to the Jeferson rationale, a "re- vived" law is not the pure product of judicial decision-making. It is, instead, a law that once gained the support of a legislature and that has never been legislatively repealed. Its legitimacy rests on its initial legis- lative authorization. Moreover, the view that a statute that has been found unconstitutional should be treated as if it never existed may have had some support in the early case law, but it has been clearly rejected by the Supreme Court. Instead of treating all statutes that it has found unconstitutional as if they had never existed, the Court has recognized a range of circumstances in which people who rely on an overturned decision are protected. Indeed, as will be developed, the doctrine of prospective overruling evolved to shield from harm those who relied on subsequently overruled judicial decisions.53 In short, the one case in which there was a holding that a statute did not revive does not offer a convincing rationale for nonrevival.

# 5

#### Text: The United States federal government should substantially increase necessary resources to improve data collection on foreign export promotion, should provide access to export finance and should provide greater investment to improve coordination within the Trade Enforcement Center division of the U.S. Trade Representative’s office. The aforementioned proposal should prioritize resource investment towards the People’s Republic of China.

#### The counterplan solves the case – improving coordination is a pre requisite to effective trade policy

Dewan, 12 [March 14th, Sabina, Director of Globalization and International Employment at the Center for American Progress, Filling in the Gaps in Our Trade Intelligence

The United States Needs Better Intelligence on Other Nations’ Industrial Policy Tools, http://www.americanprogress.org/issues/2012/03/trade\_intelligence.html

Next week’s verdict due from the U.S. Department of Commerce on whether the Chinese government is unfairly subsidizing the production of solar panels and thus driving American competitors out of the market reflects the Obama administration’s commitment to making sure our trading partners play by the rules. Indeed, President Obama’s February 28 executive order creating a beefed-up trade enforcement office means our domestic trade laws and agreements will be more aggressively enforced.¶ But the new trade enforcement office won’t ensure those rules and treaties adequately protect American workers and firms. For that to happen, we need to do more to fill in large intelligence gaps about foreign trade activities. We don’t know the full extent of subsidies, export financing, or the range of trade promotion activities in other countries, especially those with state-owned enterprises.¶ Without this crucial information, our lawmakers and trade negotiators can’t adequately safeguard American workers and companies from unfair trade practices by our competitors.¶ President Obama’s request for $26 million to create the Interagency Trade Enforcement Center, a new department within the U.S. Trade Representative’s office, will increase the number of trade lawyers and investigators available to take cases against countries that violate trade rules. Investigators will also defend America’s firms and workers from claims filed against the United States. But in order for the new Interagency Trade Enforcement Center to function effectively, we must still fill in large gaps in our intelligence in the following three areas:¶ State-owned enterprises and subsidies¶ Export finance¶ Export promotion¶ Let’s look at each in turn.¶ State-owned enterprises and subsidies¶ We need more information about state-owned enterprises in other countries, and the extent to which governments in China, Vietnam, Singapore, and elsewhere subsidize the production and export of their goods and services.¶ What we do know is that a number of countries today manage their economies through a state-capitalist model in which the government directly or indirectly controls many of the economy’s productive assets, formal financial systems, and activities. State-owned enterprises participate in commercial markets but enjoy state backing benefiting from preferred access to bank capital, below-market-rate financing, favorable tax treatment, capital injections, and other subsidies that distort the playing field.¶ What we don’t know is how deep or wide these practices run. Our efforts to date have been piecemeal. And our laws and regulations are not adequately equipped to deal with such subsidies in a state-capitalist model. And without this information, it’s hard for us to craft rules and treaties, much less enforce them, to truly protect firms and workers from unfair competition.¶ Export finance¶ We don’t have enough information on how much other governments are spending on financing their exports.¶ The U.S. Export-Import Bank—the government agency that provides loans, guarantees, and insurance products to help U.S. companies export—has some records of equivalent institutions in other countries. But in many countries these export-finance institutions operate more like commercial banks that don’t share their information publicly. And the extent of export financing that takes place in countries with state-owned enterprises is even harder to discern.¶ Our government must provide access to appropriate levels of export finance for those who need it—and at levels that are in line with the financing other governments provide their businesses. That’s hard for us to do when we don’t fully grasp the extent to which other governments are financing their country’s exports.¶ Export promotion¶ Finally, we don’t systematically keep track of the full range of activities other countries engage in to promote their exports. Our government’s trade advocacy and export-promotion efforts are largely focused on educating, training, and assisting U.S. businesses on accessing information and resources on how and where to export, especially small- and medium-sized companies.¶ But other countries have a less conventional approach to promoting their exports. Foreign governments tend to play a more active role in negotiating deals to boost their exports, while the U.S. government tends to let businesses sell their own products. We must collect data on how other countries promote their exports to be able to compete with them.¶ We must allocate people, time, and money to improving our trade intelligence in these areas in addition to improving trade enforcement. If these gaps were filled, then we would be better equipped to try to preempt violations before they occur, protecting the rights of American firms and workers.¶

#### Every 1ac claim is wrong – tariffs secure competition necessary for innovation – the effects on the industry are small, inconsistent demand and production shifts take out solvency – a refusal to maintain tariffs collapses the solar market

**Hart and Gordon, 12** [Melanie Hart is a Policy Analyst on China Energy and Climate Policy at the Center for American Progress. Kate Gordon is Vice President for Energy Policy at the Center, “The Complexities of the U.S. Decision on Chinese Solar Panel Imports” http://www.americanprogress.org/issues/2012/03/china\_solar\_panels.htm]

Everyone agrees that imposing import tariffs on Chinese solar panels should benefit the U.S. solar module [manufacturing](http://coalition4affordablesolar.org/wp-content/uploads/2012/01/TBG_Solar-Trade-Impact-Report.pdf) [industry](http://www.americansolarmanufacturing.org/news-releases/03-01-12-casm-export-report.htm). Solar-panel prices fell [50 percent](http://www.bloomberg.com/quote/SSPSMCSC:IND) in 2011, and that unusually steep price drop has eroded profit margins worldwide. Cheap Chinese manufacturing appears to have contributed to the price drop, so reducing the impact of Chinese prices on the U.S. market should slow the price decrease to a more sustainable rate and increase [profit margins](http://www.bloomberg.com/news/2012-03-08/solar-shipments-rise-as-prices-fall-to-unsustainable-levels.html) for U.S. manufacturers. U.S. tariffs on Chinese solar panels would also help manufacturers in other countries that do not provide these subsidies, such as some in the European Union, because those manufacturers also export to the United States and compete for U.S. market share.¶ What is less clear is how tariffs would affect the demand side in the United States. Many U.S. solar-installation companies, which purchase solar panels and therefore benefit from low Chinese prices, fear that import tariffs will erode their profit margins, slow industry growth across the value chain, and make it even harder for solar energy to compete with traditional fossil fuels. Some of these solar-installation firms are so concerned that they have formed an opposition group to push back against SolarWorld’s trade petitions. That group—the [Coalition for Affordable Solar Energy](http://coalition4affordablesolar.org/)—claims that imposing high import tariffs on Chinese-manufactured solar panels would decimate the U.S. solar installation industry and eliminate [thousands](http://www.pv-magazine.com/opinion-analysis/blogdetails/beitrag/et-tu--solarworld_100005152/#axzz1oudrmN1o) of jobs in that sector.¶ Solar energy already faces an uphill battle in the United State s. The combination of heavy [fossil-fuel subsidies](http://www.americanprogress.org/issues/2011/05/big_oil_tax_breaks.html) and weak national-level political support for policies to spur demand for renewable energy can make it hard for emerging energy technologies to compete in our country. Some [politicians](http://content.usatoday.com/communities/theoval/post/2012/02/club-for-growth-criticizes-upton-solyndra/1#.T10gQIFTBBk) have even attacked the few solar-industry development policies [we do have](https://lpo.energy.gov/?page_id=45) in an attempt to reduce federal government spending on clean energy across the board.¶ The clean energy advocates who have supported solar-industry development throughout these political battles certainly do not want to throw more obstacles in the path of the solar-installation industry. But that does not mean that the United States needs cheap Chinese solar panels so badly that we should just roll over and let a foreign government break enforceable international trade rules. If the U.S. Department of Commerce finds that the Chinese government has acted illegally, then the Chinese government and the industry it is subsidizing should pay a price for that behavior. Under the current trade system that price is tariffs.¶ If the U.S. Commerce Department finds that Chinese government dumping and subsidies artificially suppressed prices by a significant amount and that the price decreases harmed the U.S. manufacturing industry, then it is possible that the resultant tariffs could be 100 percent or above. Contrary to what the Coalition for Affordable Solar Energy is claiming, that is not a reason to panic.¶ For one thing, many different factors are contributing to declining global solar prices. Chinese manufacturing certainly plays a role, but innovation is also important. Solar panels are becoming [increasingly efficient](http://www.technologyreview.com/energy/39624/) (generating more energy per module), and manufacturers are steadily improving production processes to [bring down](http://energy.gov/articles/innovative-solar-panel-maker-scales-lowering-costs-while-creating-jobs) costs. The U.S. solar manufacturing market is already fiercely competitive, so even without discounted Chinese imports other U.S. manufacturers—and other solar-panel exporters to the United States—should still have strong incentives to keep innovating to bring down costs.¶ It is possible that imposing import tariffs may slow the price decline or even create a temporary price bump in the U.S. market if U.S. customers shift orders from Chinese to non-Chinese manufacturers and the latter cannot keep up with demand. It is important to note, however, that one of the biggest problems facing solar-module markets worldwide is [oversupply](http://www.digitimes.com/Reports/Report.asp?datepublish=2012/1/11&pages=PD&seq=205), so it should not be difficult to fill any gaps produced by a shift away from Chinese solar panels.¶ Furthermore, Chinese manufacturers would likely respond to import tariffs by [shifting production](http://www.reuters.com/article/2012/02/23/trina-idUSL2E8DN2EI20120223) to the United States or other overseas markets where the tariffs would no longer apply, so they would not be out of the game for long. They would, though, be investing in the United States or at least in countries, such as in the European Union, where trade standards are more comparable.¶ If Chinese companies do begin manufacturing here, they will find that the United States is in a strong competitive position to manufacture solar panels because of our skilled labor force, domestic supply of silicon, and strong manufacturing infrastructure. It certainly helps that China’s own labor costs are increasing: Boston Consulting Group [recently estimated](http://www.bcg.com/documents/file84471.pdf) that within five years China’s manufacturing wages will be within 25 percent of those in the lowest-wage U.S. states (South Carolina, Alabama, and Tennessee).¶ The solar-panel industry is one in which labor costs play a smaller role than they do in less advanced, lower-tech manufacturing sectors. Labor accounts for only [3 percent to 4 percent](http://www.technologyreview.com/business/37954/) of the cost of producing solar panels, meaning that higher labor-cost countries such as the United States should be in a strong position to increase solar-manufacturing capacity.¶ Given the volatility of global oil prices, the cost of transportation is currently much more important to most advanced manufacturers. High transportation costs mean that many manufacturers are looking to locate as close as possible to both their suppliers and their customers, so that they can keep costs down and maintain “just-in-time” manufacturing standards. And here is where the United States has a problem in solar.¶ We have inconsistent demand for these products, making it difficult for manufacturers to take the risk in spending the upfront capital to build new plants or expand existing ones. Demand-side policies have spurred solar growth in the past. In 2010, for example, the seven states with the strongest development policies accounted for [82 percent](http://www.seia.org/galleries/pdf/SMI-Q1-2011-ES.pdf) of new U.S. solar installations. In third-quarter 2011 that share increased to [89 percent](http://www.seia.org/galleries/pdf/SMI-Q3-2011-ES.pdf). But political attacks on state-level renewable energy standards, the expiration of many federal clean energy support programs, and the lack of federal policies that would create sustained demand for renewable energy in the United States all play a part in making demand for solar far less stable than it is in the European Union countries or even in China itself.¶ Whether the U.S. solar market [continues to grow](http://www.usatoday.com/money/industries/energy/story/2012-03-14/solar-wind-energy/53517526/1), therefore, may depend much more on demand-side policies than on access to cheap Chinese imports.¶ Overall, then, it is not clear that import tariffs would harm solar-market growth in the United States over the long term. What is clear, however, is that long-term U.S. market exposure to illegal subsidization certainly would not only harm solar-panel manufacturers but possibly also slow growth across the value chain.¶ Chinese leaders look at the United States and want what we have. They [want to become](http://www.americanprogress.org/issues/2011/08/china_energy_competitiveness.html) a global research and development powerhouse that creates and exports cutting edge technologies with big profit margins. China’s traditional command-and-control economic system was not good at creating those innovation incentives, so they are working to reform that system, but reform takes time.¶ In the meantime they are trying to fill the gap with heavy government subsidies. Problem is, that approach can actually reduce innovation, not only in China, but also in the United States. Bureaucrats are not adept at picking winning companies and winning technology standards. When Chinese officials heavily subsidize their favorite domestic solar manufacturers, those subsidies can reduce prices to levels that other firms cannot match, thus driving competitors out of the market and reducing incentives for innovation. When China exports those products to the United States, the same dynamic can play out here.¶ The long-term result is that a small number of heavily subsidized Chinese manufacturers could dominate the global solar market. That may make Chinese leaders happy, but if those firms are not producing the best solar technologies—for example, if their solar panels are not as efficient as they need to be to compete with traditional fossil fuels—that can slow solar-market development worldwide.¶ To keep this market growing, the best thing the U.S. government can do is to create a good environment for technology innovation, and that will require a combination of demand-side policies and protection from adverse price incentives.¶

# 1nc trade adv

#### The plan is a drop in the bucket relative to overall disputes

**Stokes and Hatchigian, 12** [U.S.-China Relations in an Election Year Taking the Long View in a Season of Heated Rhetoric, Jacob, Research Assistant at the Center for a New American Security (CNAS), where his research focuses on U.S. national security and defense policy. His writing has appeared in CNN.com, Politico, BusinessWeek, *The Baltimore Sun*, *The Guardian* and *The American Prospect*, among other publications, Senior Fellow at American Progress.¶ <http://webcache.googleusercontent.com/search?q=cache:QG6048mP53AJ:www.americanprogressaction.org/issues/2012/03/pdf/us_china_relations.pdf+&hl=en&gl=us>]

This report examines the 10 most debated challenges in the U.S.-China relation-¶ ship in the 2012 presidential and congressional campaign season, exploring¶ differences between progressive and conservative approaches to China. We¶ detail these 10 issues in the pages that follow, but briefly, here is a summation of the top challenges and the different approaches advocated by conservatives and¶ taken by progressives.¶ • Ensuring fair trade. The Obama administration’s policy of vigorous enforce-¶ ment and results-oriented dialogue beats conservatives’ refusal to invest in¶ American competitiveness at home; empty, antagonistic rhetoric toward China;¶ and highly inconsistent positions on trade cases. The Obama administration has¶ announced a new trade-enforcement unit and has brought more major trade¶ cases against China than any of its predecessors.¶ • Progress on currency. The Obama administration’s efforts, on its own and with¶ other nations, to pressure China to deal with its undervalued currency have¶ resulted in progress, though more remains to be done. The administration is keeping the pressure on. The conservative answer is both needlessly antago-¶ nistic and ineffective.¶ • China owning U.S. debt. China owning just more than 8 percent of our federal¶ debt is not leverage China can use without unacceptably harming its own interests.¶ Conservative hysterics and fearmongering about this complex issue is misplaced.¶ • Chinese direct investment. Chinese investment in our country can be a major¶ source of capital and jobs going forward. We should allow proven national ¶ 4 Center for American Progress Action Fund | U.S.-China Relations in an Election Year¶ security processes to weed out threats to our nation and avoid excessive¶ paranoia around Chinese purchases, lest we miss investment-led growth¶ opportunities. Conservatives should take heed.¶ • Championing human rights. The Obama administration has consistently called¶ China out on human rights, speaking privately and publicly with Chinese¶ leaders, meeting with the Dalai Lama twice, and giving our diplomats new¶ forums to engage fully with their Chinese counterparts and the Chinese peo-¶ ple to improve human rights and religious freedoms in China. Conservatives’¶ only answer is even more forceful browbeating of Chinese leaders—emotion-¶ ally satisfying, but not an effective tactic to make real change.¶ • America the Pacific power. Under the Obama administration new trade part-¶ nerships, defense arrangements, and serious connections with regional orga-¶ nizations all support deeper U.S. engagement in Asia. Extremist conservative¶ rhetoric claiming the administration is not investing adequately in defense in¶ Asia is nonsense.¶ • Addressing China’s military. China’s military has grown rapidly in recent years,¶ albeit from a very low base. While some technologies are worrisome, the¶ United States retains a huge advantage over China. The Obama administration¶ is responding to China’s military buildup but is not exaggerating the threat, in¶ contrast to conservative efforts to use the “China threat” to justify unsustain-¶ able increases in military spending.¶ • Supporting regional allies. Asian nations continue to turn to America to ensure¶ peace and security. The United States is meeting that need by strengthening rela-¶ tions with our Pacific friends and allies. Relationships with Japan, South Korea,¶ and Australia are rock-solid, and the United States joined with regional players¶ to push back on Chinese belligerence. Conservatives ignore this track record in¶ desperate attempts to tag the Obama administration as abandoning our allies.¶ • A friend to Taiwan. The Obama administration has sold unprecedentedly large¶ packages of arms to Taiwan, including major fighter upgrades, while also upping¶ outreach to the island in ways that will not destabilize cross-Strait relations.¶ Conservatives are left complaining that the current administration, like the Bush¶ administration before it, did not sell Taiwan the most advanced jet fighters.¶ The Obama¶ administration¶ is responding to¶ China’s military¶ buildup but is¶ not exaggerating¶ the threat, in¶ contrast to¶ conservative efforts¶ to use the “China¶ threat” to justify¶ unsustainable¶ increases in military¶ spending.¶ 5 Center for American Progress Action Fund | U.S.-China Relations in an Election Year¶ • Tackling cybersecurity. From the start the Obama administration has identi-¶ fied cybersecurity as an issue of grave concern and mounted a comprehensive¶ response. Conservatives who condemn the administration’s response do not¶ understand its scope; they also offer little in the way of new ideas for combat-¶ ing the threat.¶ In the pages that follow, we will present in more detail these 10 challenges along-¶ side the response of the Obama administration and the misplaced criticisms and¶ hostile rhetoric of many conservatives.

#### Alt cause – EU trade war

**AFP, 7/26/12** [Chinese solar makers warn of 'trade war' with EU, Agente France Press, <http://www.google.com/hostednews/afp/article/ALeqM5ivUmnuP4DxT_q7Gn5M0iqdwRSPnw?docId=CNG.f14afb390e7dda24acd026cad5111c4b.a71>]

BEIJING — Four leading solar cell manufacturers in China on Thursday warned a possible EU anti-dumping investigation could trigger a "trade war" and urged Beijing to step in to protect their interests.¶ German cell maker SolarWorld AG has reportedly requested the European Union to probe alleged dumping by Chinese firms, said a joint statement by Yingli Green Energy, Suntech Power Holdings Co., Trina Solar and Canadian Solar, which is headquartered in Canada but manufactures in China.¶ The move came on the heels of a US decision in May to slap hefty anti-dumping duties on Chinese solar cell makers, which Beijing blasted as "protectionist".¶ The companies called on the Chinese government to block the case by opening a dialogue with the European Union to prevent a trade war.¶ "China's photovoltaic industry will suffer a deadly blow if the EU follows the United States and launches an anti-dumping probe," said the statement.¶ More than 60 percent of China's $35.8-billion-worth solar shipments were exported to the EU last year while the country imported $7.5 billion of European solar equipments and raw materials, it said.¶ "Meanwhile, (a probe) would trigger a full scale trade war between China and Europe," it said, adding the country is a big market for European products ranging from cars, aircraft, machines and luxury goods.

#### Disputes are confined internally to global trade rules – no risk of escalating conflict

**Ikenson, 12** [March 5th, Daniel, [Daniel Ikenson](http://www.cato.org/people/daniel-ikenson) is director of the Herbert A. Stiefel Center for Trade Policy Studies at the Cato Institute,

<http://www.cato.org/publications/free-trade-bulletin/trade-policy-priority-one-averting-uschina-trade-war>]

An emerging narrative in 2012 is that a proliferation of protectionist, treaty-violating, or otherwise illiberal Chinese policies is to blame for worsening U.S.-China relations. China trade experts from across the ideological and political spectra have lent credibility to that story. Business groups that once counseled against U.S. government actions that might be perceived by the Chinese as provocative have changed their tunes. The term "trade war" is no longer taboo.¶ The media have portrayed the United States as a victim of underhanded Chinese practices, including currency manipulation, dumping, subsidization, intellectual property theft, forced technology transfer, discriminatory "indigenous innovation" policies, export restrictions, industrial espionage, and other ad hoc impediments to U.S. investment and exports. ¶ Indeed, it is beyond doubt that certain Chinese policies have been provocative, discriminatory, protectionist, and, in some cases, violative of the agreed rules of international trade. But there is more to the story than that. U.S. policies, politics, and attitudes have contributed to rising tensions, as have rabble-rousing politicians and a confrontation-thirsty media. If the public's passions are going to be inflamed with talk of a trade war, prudence demands that the war's nature be properly characterized and its causes identified and accurately depicted.¶ Those agitating for tough policy actions should put down their battle bugles and consider that trade wars are never won. Instead, such wars claim victims indiscriminately and leave significant damage in their wake. Even if one concludes that China's list of offenses is collectively more egregious than that of the United States, the most sensible course of action — for the American public (if not campaigning politicians) — is one that avoids mutually destructive actions and finds measures to reduce frictions with China.¶ Nature of the U.S.-China Trade War¶ It should not be surprising that the increasing number of commercial exchanges between entities in the world's largest and second largest economies produce frictions on occasion. But the U.S.-China economic relationship has not descended into an existential call to arms**.** Rather, both governments have taken protectionist actions that are legally defensible or plausibly justifiable within the rules of global trade. That is not to say that those measures have been advisable or that they would withstand closer legal scrutiny, but to make the distinction that, unlike the free-for-all that erupted in the 1930s, these trade "skirmishes" have been prosecuted in a manner that speaks to a mutual recognition of the primacy of — if not respect for — the rules-based system of trade. And that suggests that the kerfuffle is containable and the recent trend reversible.1

#### Solar tariffs aren’t key – poultry, yuan and cars – no risk of escalating trade war

**Zappone, 12** [January, Chris, Sydney Morning Herald, 'Murky protectionism' on the rise - but no trade war, <http://www.smh.com.au/business/world-business/murky-protectionism-on-the-rise--but-no-trade-war-20120110-1pt3t.html>]

At the outset of the global financial crisis, the world’s leaders pledged to resist calls to shield their local economies in order to prevent a trade war that could further damage global growth.¶ Four years on, with China slowing, Europe heading into recession and a political environment soured by successive financial crises, the question arises: how long will policymakers be able to resist those calls for more protectionism?¶ “Free trade is going to be under pressure,” said Lowy Institute international economy program director Mark Thirlwell. “Since 2007-08 the case for moving to greater trade liberalisation has got tougher and the demands for protection have increased.”¶ Only last week, China, which is grappling with a slowdown, raised the prospect of a trade war with the European Union in response to the EU's implementation of a carbon emissions tax on air travel to and from Europe. Earlier last month China imposed tariffs up to 21 per cent on US-made cars, affecting about $US4 billion imports a year.¶ Advertisement ¶ Across the Pacific, US politicians in the throes of an election year with 8.5 per cent unemployment have issued more strident calls for China to “play by the rules” and allow the yuan to appreciate faster against the US dollar. The US has also asked the World Trade Organisation to probe China's support for its solar panel industry and the restrictions Beijing has placed on US poultry imports.¶ In fact, the most recent WTO data shows that the number of trade restrictive measures enacted by members rose 53 per cent to 339 occurrences over the year to October.¶ Yet the WTO admits that the motives behind the spate of actions aren’t always simply to protect local jobs. “Not all measures categorised as trade restrictive may have been adopted with such an intention,” the body said.¶ In Brazil, for example, the steep rise in the value of its currency, the real, has sparked a torrent of car imports into the country - similar to the online-overseas shopping boom in Australia. Brazil has in turn put a one-year provisional 30 per cent increase on auto imports, to counterbalance the effects of their strong currency.¶ In the US, China and Australia, infrastructure spending measures contain “buy local” requirements to stoke domestic growth, not necessary punish foreign businesses. The federal government in September streamlined its anti-dumping system that eases the way for companies to ask for investigations into imported goods that come in below market value to Australia. Again, well within the rules.¶ “What we’ve seen is a gradual ratcheting up of trade intervention,” said Mr Thirlwell, amounting to what he calls “murky protectionism” or government intervention through support for industries or complaints to global trade authorities.¶ To date, observers such as Mr Thirlwell say most countries have remained remarkably resistant to throwing up significant trade barriers.¶ For example, in November, the US, Australia and seven other Asian-Pacific nations including Japan, outlined the plan for an ambitious multilateral Trans-Pacific Partnership trade block worth 40 per cent of the world’s trade, in an effort to increase the flow of cross-border goods and investment. Japan, China and South Korea are also in the later stages of negotiation over a free trade deal between those three nations.¶ Australian National University international trade lecturer John Tang doesn’t believe the world is on the edge a new round of protectionism.¶ “I don’t see a general sea change towards protectionism for major trading blocks but that may be because so much of the industrialised world is relying on developing countries to sustain their exports,” he said.¶ Nevertheless, a shift in the political reality of the US, China or elsewhere could change that, he said.¶ Washington DC-based Brookings Institution fellow Joshua Meltzer said that if the euro zone broke up, elevating the crisis to a new stage, nations may switch to much more protective measures.¶ ‘‘I wouldn’t go so far to say the global economy is so integrated that we could never have anything that would approach a trade war,” said Washington DC-based Brookings Institution fellow Joshua Meltzer. “But I don’t think we’re on that track.”

**Economic decline is not a strong enough predictor of war to matter**

**Blackwill 2009** – former US ambassador to India and US National Security Council Deputy for Iraq, former dean of the Kennedy School of Government at Harvard (Robert D., RAND, “The Geopolitical Consequences of the World Economic Recession—A Caution”, http://www.rand.org/pubs/occasional\_papers/2009/RAND\_OP275.pdf, WEA)

Did the economic slump lead to strategic amendments in the way Japan sees the world? No.

Did it slow the pace of India’s emergence as a rising great power? No. To the contrary, the new Congress-led government in New Delhi will accelerate that process.

Did it alter Iran’s apparent determination to acquire a nuclear capability or something close to it? No. Was it a prime cause of the recent domestic crisis and instability in Iran after its 2009 presidential election? No.

Did it slow or accelerate the moderate Arab states intent to move along the nuclear path? No. Did it affect North Korea’s destabilizing nuclear calculations? No.

Did it importantly weaken political reconciliation in Iraq? No, because there is almost none in any case. Did it slow the Middle East peace process? No, not least because prospects for progress on issues between Israel and the Palestinians are the most unpromising in 25 years.

Did it substantially affect the enormous internal and international challenges associated with the growth of Jihadiism in Pakistan? No. But at the same time, it is important to stress that Pakistan, quite apart from the global recession, is the epicenter of global terrorism and now represents potentially the most dangerous international situation since the 1962 Cuban Missile Crisis.

Did the global economic downturn systemically affect the future of Afghanistan? No. The fact that the United States is doing badly in the war in Afghanistan has nothing to do with the economic deterioration. As Henry Kissinger observes, “The conventional army loses if it does not win. The guerrilla wins if he does not lose.” And NATO is not winning in Afghanistan.

Did it change in a major way the future of the Mexican state? No.

Did the downturn make Europe, because of its domestic politics, less willing and able over time to join the U.S. in effective alliance policies? **No**, there will likely be no basic variations in Europe’s external policies and no serious evolution in transatlantic relations. As President Obama is experiencing regarding Europe, the problems with European publics in this regard are civilizational in character, not especially tied to this recession—in general, European publics do not wish their nations to take on foreign missions that entail the use of force and possible loss of life. Did the downturn slow further EU integration? Perhaps, at the margin, but in any case one has to watch closely to see if EU integration moves like a turtle or like a rock.

And so forth.

To be clear, there will inevitably be major challenges in the international situation in the next five years. In fact, this will be the most dangerous and chaotic global period since before the 1973 Middle East war. But it is not obvious that these disturbing developments will be primarily a result of the global economic problems. It is, of course, important to be alert to primary and enduring international discontinuities. If such a convulsive geopolitical event is out there, what is it? One that comes to mind is another catastrophic attack on the American homeland. Another is the collapse of Pakistan and the loss of government control of its nuclear arsenal to Islamic extremists. But again, neither of these two geopolitical calamities would be connected to the current economic decline.

Some argue that, even though geopolitical changes resulting from the current global economic tribulations are not yet apparent, they are occurring beneath the surface of the international system and will become manifest in the years to come. In short, causality not perceptible now will become so. This subterranean argument is difficult to rebut. To test that hypothesis, the obvious analytical method is to seek tangible data that demonstrates that it is so. In short, show A, B, and/or C (in this case, geopolitical transformations caused by the world slump) to have occurred, thus substantiating the contention. One could then examine said postulated evidence and come to a judgment regarding its validity. To instead contend that, even though no such data can be adduced, the assertion, nevertheless, is true because of presently invisible occurrences seems more in the realm of religious conviction than rigorous analysis.

But it is worth asking, as the magisterial American soldier/statesman George Marshall often did, “Why might I be wrong?” If the global economic numbers continue to decline next year and the year after, one must wonder whether any region would remain stable— whether China would maintain internal stability, whether the United States would continue as the pillar of international order, and whether the European Union would hold together. In that same vein, it is unclear today what effect, if any, the reckless financial lending and huge public debt that the United States is accumulating, as well as current massive governmental fiscal and monetary intervention in the American economy, will have on U.S. economic dynamism, entrepreneurial creativity, and, consequently, power projection over the very long term. One can only speculate on that issue at present, but it is certainly worth worrying about, and it is the most important “known unknown”27 regarding this subject.28 In addition, perhaps the Chinese Communist Party’s grip on China is more fragile than posited here, and possibly Pakistan and Mexico are much more vulnerable to failed-state outcomes primarily because of the economic downturn than anticipated in this essay. While it seems unlikely that these worst-case scenarios will eventuate as a result of the world recession, they do illustrate again that crucial uncertainties in this analysis are the global downturn’s length and severity and the long-term effects of the Obama Administration’s policies on the U.S. economy.

Finally, if not, why not? If the world is in the most severe international economic crisis since the 1930s, why is it not producing structural changes in the global order? A brief answer is that the transcendent geopolitical elements have not altered in substantial ways with regard to individual nations in the two years since the economic crisis began. What are those enduring geopolitical elements? For any given country, they include the following:

• Geographic location, topography, and climate. As Robert Kaplan puts it, “to embrace geography is not to accept it as an implacable force against which humankind is powerless. Rather, it serves to qualify human freedom and choice with a modest acceptance of fate.”29 In this connection, see in particular the works of Sir Halford John Mackinder and his The Geographical Pivot of History (1904)30, and Alfred Thayer Mahan, The Influence of Sea Power upon History, 1660–1783 (1890).31 • Demography—the size, birth rate, growth, density, ethnicity, literacy, religions, migration/emigration/ assimilation/absorption, and industriousness of the population.

• The histories, foreign and defense policy tendencies, cultural determinants, and domestic politics of individual countries.

• The size and strength of the domestic economy.

• The quality and pace of technology.

• The presence of natural resources.

• The character, capabilities, and policies of neighboring states.

For the countries that matter most in the global order, perhaps unsurprisingly, none of these decisive variables have changed very much since the global downturn began, except for nations’ weaker economic performances. That single factor is not likely to trump all these other abiding geopolitical determinants and therefore produce international structural change. Moreover, the fundamental power relationships between and among the world’s foremost countries have also not altered, nor have those nations’ perceptions of their vital national interests and how best to promote and defend them.

To sum up this pivotal concept, in the absence of war, revolution, or other extreme international or domestic disruptions, for nation-states, the powerful abiding conditions just listed do not evolve much except over the very long term, and thus neither do countries’ strategic intent and core external policies— even, as today, in the face of world economic trials. This point was made earlier about Russia’s enduring national security goals, which go back hundreds of years. Similarly, a Gulf monarch recently advised—with respect to Iran—not to fasten on the views of President Ahmadinejad or Supreme Leader Khamenei. Rather, he counseled that, to best understand contemporary Iranian policy, one should more usefully read the histories, objectives, and strategies of the Persian kings Cyrus, Darius, and Xerxes, who successively ruled a vast empire around 500 BC.32 The American filmmaker Orson Welles once opined that “To give an accurate description of what never happened is the proper occupation of the historian.” 33 Perhaps the same is occasionally true of pundits. ■

**Resource wars won’t escalate to great power conflict**

**Dombrowski 4** – associate professor, US Naval War College's Strategic Research Department (Peter, Naval War College Review, http://findarticles.com/p/articles/mi\_m0JIW/is\_1\_57/ai\_113755359/print)

Unfortunately, Klare barely pauses to consider the possibility that diplomatic, economic, and political developments might ease potential resource conflicts before they escalate into armed conflicts. After all, countries fighting over access to water or oil could simply negotiate arrangements or allow market forces to dictate outcomes; the author himself notes examples and cases where diplomatic solutions have succeeded in the past. In fact, the absence of economic reasoning in this book is startling. After all, economists from cranks to countless mainstream professionals have demonstrated how market forces can help manage the worst aspects of resource shortages. Thus energy shortages that lead to price increases in turn encourage consumers to conserve; consumption is reduced, as well as overall dependence. Hence, despite tremendous economic growth, Western Europe, Japan, and even the United States have become much more energy efficient since the oil shock of the 1970s. Substitution effects are also possible, although perhaps not for a resource as fundamental and elemental as water.

**Terrorism won’t and can’t cause extinction**

**Friedman 6** – MIT security studies program (Ben, 2/19, The War on Hype, http://sfgate.com/cgi-bin/article.cgi?file=/c/a/2006/02/19/INGDDH8E2T1.DTL&type=printable)

Most homeland security experts say that Hurricane Katrina's flooding of New Orleans shows how vulnerable we are to terrorists. In fact, it shows that most Americans have better things to worry about. By any statistical measure, the terrorist threat to America has always been low. As political scientist John Mueller notes, in most years allergic reactions to peanuts, deer in the road and lightning have all killed about the same number of Americans as terrorism.

In 2001, their banner year, terrorists killed one twelfth as many Americans as the flu and one fifteenth the number killed by car accidents.

Most experts dismiss this history. They contend that because both weapons technology and Sunni extremism are spreading, the terrorist danger is ahistorical. Although both these trends are real, we should not leap to the conclusion that the threat is growing or greater than more mundane dangers. There is no obvious reason to believe that Sept. 11 was the start of an era of ever deadlier terrorism, rather than its high-water mark.

Both terrorism and unconventional weapons have existed for a long time, but terrorists have always done their damage conventionally. Today the remnants of al Qaeda and its fellow-travelers appear to lack the organizational capacity to operate in the United States or harness complex weapons technologies.

This argument does not endorse complacency among government officials. Even a small threat of nuclear terrorism should provoke a better organized non-proliferation policy than the United States now has. Nor does this argument imply that another terrorist massacre in America is unlikely. If enough people try, eventually some attack may well succeed. But attacks are likely to be rare and conventional, on the scale of the London attacks, not apocalyptic nightmares.

Even if attacks killing thousands were certain, the risk to each of us would remain close to zero, far smaller than many larger risks that do not alarm us, or provoke government warnings, like driving to work every day. And if something far worse than Sept. 11 does occur, the country will recover. Every year, tens of thousands Americans die on the roads. Disease preys on us. Life goes on for the rest. The economy keeps chugging. A disaster of biblical proportions visited New Orleans. The Republic has not crumbled. The terrorist risk to the United States is serious, but far from existential, as some would have it.

**No China war—they have every incentive for peace and act rationally under conflict situations.**

**Lee 2008** – Professor of Political Science at Wake Forest University, also teaches IR and comparative politics of East Asia, visiting faculty at Kansai Gaidai University in Japan (Wei-chin, Journal of Asian and African Studies, Volume 43, No. 5, October 2008, "Long shot and short hit", Sage journals online, WEA)

One recent debate between Brzezinski and Mearsheimer is a typical example of varying perspectives in dealing with China’s rise in military power. Brzezinski has argued that the US decision to stay in East Asia has an added advantage for China in restraining a militarily powerful, increasingly nationalistic, and potentially nuclear-capable Japan. Moreover, China’s credible nuclear credentials and strong economic performance in an interdependent global market have made Chinese leaders become more rational, calculating, and conscious than before in order to avoid any mutually disastrous policies, including its oil diplomacy, with the USA (Brzezinski and Mearsheimer, 2005). Such a ‘kinder and gentler’ view of China has been explored and elaborated by various studies indicating that China has virtually transformed into a responsible and cooperative player, in words and in deeds, in the international community, not only by vigorously embracing multilateralism, but also actively and bilaterally cultivating cooperative security partnerships with various countries (Goldstein, 2005). Given China’s insufficient military capability and the vulnerability derived from the RMA, it serves no significant security benefit for China to challenge US hegemony. In fact, China has adapted itself to be a rule-abiding status quo supporter, rather than a radical rule challenger, in the international society. **Even under provocative situations, China’s tame and cool-handed responses have been demonstrated in several presumably serious US–China tests**, including Lee Teng-hui’s abrupt announcement of the ‘two-state’ theory in 1999, the EP-3 spy plane incident in 2001, and the US war on terror and unpopular war in Iraq in recent years. China has appeared to learn, internalize, and integrate the laws, norms and rules of the international community, just as neoliberal institutionalists and constructivists had long articulated and prescribed.

# 1nc blackouts

Evidence cites the Spanish flu, bird flu, etc. – no disease has ever caused extinction

#### Production shifts now and inevitable – takes out the advantage

**Castelazo, et al, 12** [China’s Solar Industry and the U.S. Anti-Dumping/Anti-Subsidy Trade Case, Molly Castelazo, Director¶ ChinaGlobalTrade.com, The Kearney Alliance, The Kearny Alliance, a nonprofit 501 (c) (3) foundation based in¶ Scottsdale, Arizona, partners with other international organizations to¶ further its mission of “Aid through Trade,” to advance international¶ development and poverty alleviation through trade-related business¶ education, training and applied research, <http://ww1.prweb.com/prfiles/2012/05/16/9517260/China%20Global%20Trade%20Solar%20Manufacturing_May%202012b.pdf>]

While manufacturing cells and modules in the U.S. is certainly one potential outcome of significant¶ subsidies against Chinese producers, they could also shift manufacturing to other countries. According to¶ Shyam Mehta, Senior Analyst at GTM Research, Chinese firms could manufacture the components in¶ Taiwan, or buy Taiwanese components, assemble the panels in Mexico, then sell them into the U.S. That¶ keeps module assembly close to the end market, avoids tariffs on modules made of Chinese cells, and¶ allows Chinese producers to maintain significant cost advantage over manufacturing in the U.S.¶ Moving production elsewhere is a step Chinese manufacturers are already gearing up to take, according to¶ one executive at a Chinese solar module manufacturer. “A lot of companies are already doing that.¶ They’re going to Malaysia, Taiwan, Mexico to see if they can outsource to companies there to ship into¶ the U.S.” She said that for her company, “the U.S. remains a very important market, it just opened.”¶ In fact, if manufacturing cells in Taiwan would allow Chinese manufacturers to keep their upstream¶ supply chains intact, that could be their best solution. They could then assemble the modules anywhere in¶ the world – in Taiwan, in China, in Mexico, in the end-use country. And if manufacturing and assembling¶ outside the U.S. allows Chinese manufacturers to keep costs down and avoid U.S. tariffs, we might see¶ that happen. There is far greater indication that this will be the route Chinese producers take – if they¶ move production anywhere – rather than move cell manufacturing into the U.S.¶ According to Jigar Shah, President of the Coalition for Affordable Solar Energy, “If the U.S. makes the¶ mistake of levying high tariffs against Chinese products, the U.S. is going to import solar modules from¶ India, Malaysia, and Taiwan. They’re not going to manufacture in the U.S. If the Chinese lose this case,¶ we’re not going to get the panels from the U.S.; we’re going to get them from other countries that have an¶ industrial policy. So we’re going to sacrifice our downstream jobs in the U.S.; we’re going to shift jobs in¶ manufacturing from China to Taiwan. Why exactly are we doing this? I get that people hate China right¶ now, but it seems like a foolish thing to do.”

**The grid is resilient – no impact to blackouts**

**Washington Post 4** [Jay Apt (former NASA astronaut, Carnegie Mellon Electricity Industry Center Executive Director) and Lester Lave (co-director). “Blackouts Are Inevitable: Coping, Not Prevention, Should Be the Primary Goal” http://www.washingtonpost.com/wp-dyn/articles/A52952-2004Aug9.html WWX]

As we approach the first anniversary of the Blackout of '03, we're reminded of the many times that officials, from New York Gov. Nelson Rockefeller in 1977 to Gov. George Pataki now -- along with a host of senators and representatives -- have assured us that they will take steps to prevent future blackouts. Yet roughly every four months, the United States experiences a blackout large enough to darken a half-million homes. Now the pressure is on Congress to enact an energy bill that will protect us from the lights going out. There's just one problem: It can't be done.

In a large, complicated arrangement such as our system for generating, transmitting and distributing electricity, blackouts simply cannot be prevented. Data for the past four decades show that blackouts occur more frequently than theory predicts, and they suggest that it will become increasingly expensive to prevent these low-probability, high-consequence events. The various proposed "fixes" are expensive and could even be counterproductive, causing future failures because of some unanticipated interaction. The state of current engineering is such that we cannot verify that any particular change won't impose problems larger than those it is designed to remedy. Nor can we eliminate all problems. Further, with a bit of "luck" and sufficient resources, an informed, intelligent terrorist organization could get around any protective structures and software to bring down the system.

Fortunately, we do have a model to follow. The problems uncovered by the blackout of August 2003 can be addressed by the kind of changes that transformed the air traffic control system from one that had occasional deadly crashes to one that has provided a relatively crash-free environment, despite enormous growth in daily flights and occasional errors by pilots and controllers.

While making obvious improvements in control and operation of the grid, we should focus the greater part of our effort on fulfilling the mission of the electricity system, not on trying to prevent blackouts. When hurricanes, tornadoes, ice storms or other problems black out the system, backup generators at hospitals, airports and other critical institutions prevent their missions from being interrupted.

The problem in New York, Toronto, Cleveland and Detroit last Aug. 14 was not that the hospitals or television stations were blacked out. The problem was that other critical missions could not be accomplished. Elevators were stuck between floors, trains stopped between stations, traffic lights went dark, cell phones quieted, and, in Cleveland, water ceased to flow and sewers overflowed. Water treatment and pumping the water to reservoirs requires electricity; without power, water would cease to be available to many people after just a few days. If the blackout had persisted for a week, public health and welfare would have suffered from the failure of a rapidly growing number of critical missions.

Since transmission was a prime contributor to the blackout, one proposal has been to invest $100 billion in upgrading the system. But while transmission investments are required to make deregulated electricity markets work, they will not prevent future blackouts.

Natural hazards produce many local and regional blackouts, and society has learned to cope with them. In fact, August 2003 revealed that many private institutions are far ahead of the public sector in defining their critical missions and taking steps to fulfill them when the lights go out. But it was even more obvious that other facilities, and especially such public functions as traffic lights, water and sewage, were not protected. In the public sector, we need to set priorities among the missions that depend on electricity.

**No price spikes – any rise would be gradual**

Myra Saefong (writer for Market Stream) August 31, 2012 “Hurricanes don’t scare natural gas anymore Abundance of shale gas dulls the industry’s blow from Isaac” http://stream.marketwatch.com/story/markets/SS-4-4/SS-4-10173/

Gas South’s Greiner pointed out that natural-gas storage is nearly at full capacity, and, with the summer almost over, “there is no reason to believe a sustained heat wave will drain storage and lower supply.” Gas in storage stands at 3.4 trillion cubic feet as of the week ended August 24 — 361 billion cubic feet above the five-year average, the EIA reported Thursday. “Even if we lost an average 3 billion cubic feet of supply a day for 15 days, it would be a welcome loss of supply for the natural-gas markets,” said MLV & Co.’s Pacanovsky. Even that “would not come anywhere close to erasing the overage.” Price prospects All told, there isn’t much of a chance for natural-gas prices to see a significant gain in the near future, but there is the potential for a gradual longer-term climb. “We’ll see sub-$2 [prices] again within a month or two as we move through the fall shoulder period where cooling loads tail off and heat loads haven’t ramped up yet,” said Beth Sewell, managing partner at Houston-based Quantum Power & Gas Services. “We have plenty of production that will be looking for a home.” Some early forecasts are calling for a very cold winter, and “if winter turns out to be really cold, then prices will start to rise again,” she said. However, given that shale production has added a “tremendous amount of supply to the market and we lack the ability to export much of it to higher-priced markets overseas, demand for gas will need to continue to grow … for a long-lasting rally to occur,” Sewell said. Regulatory restrictions on other energy markets, such as coal, may contribute to consistent gains in natural-gas prices, said Andrew Schrage, co-owner of Money Crashers Personal Finance, explaining that restrictions could continue to constrain those other industries, and companies, in turn, “will look to natural gas for their energy needs.” Regulations linked to hydraulic fracturing, or fracking — a process of extracting natural gas from shale — can also potentially ease natural-gas supplies. Fracking is a practice that has met with a lot of controversy because of environmental concerns. “If there were draconian legislation passed to limit the use of fracking … this would cut supply and goose prices,” said James Hug, senior portfolio manager at Yorkville Capital. Hug, though, added that he doesn’t think such a scenario is likely. Still, he said, “on the demand side, natural-gas use will pick up over time, so the price will probably creep higher in response to export potential and increasing adoption by the petrochemical industry.”

Fertilizer prices are high now – Corn outweighs gas prices

Colleen Scherer (Managing Editor at Ag Professional) April 25, 2012 “Corn demand is fueling fertilizer pricing” http://www.agprofessional.com/resource-centers/crop-fertility/nitrogen/news/Corn-demand-is-fueling-fertilizer-pricing-148753675.html

Despite fertilizer production curtailments earlier this year, fertilizer prices have remained high while corn production costs have dropped. Many are asking why. It appears that the drive to plant more corn this year is pushing prices up. “A combination of abnormally high corn prices and increased plantings is keeping plant-food costs elevated. Fertilizer products ‘have been more tied to crop prices than lower natural gas price,’” Jeffrey Stafford, a Morningstar analyst in Chicago, told Barrons.com. “So, producers have been able to capture that wide margin.” The biggest variable cost in producing fertilizer is natural gas, which has seen its price collapse. However, despite its drop, fertilizer prices have not carried that through on price. Anhydrous ammonia prices are near $700 a ton. Last year, prices were closer to $800 per ton. However, if the drop in input costs were passed through, farmers would be paying around $231 a ton for nitrogen fertilizer, according to Kevin Dhuyvetter, a farm management specialist at Kansas State University. The current market conditions continue to favor the fertilizer producers. “A lot of people have planted corn, and need nitrogen, so the fertilizer makers have the upper hand,” Dhuyvetter told Barrons.com.

Natural gas not key to fertilizer prices

Capital Press (Western Agricultural news organization) February 2012 “Natural gas key to fertilizer price” http://www.capitalpress.com/newest/mp-natural-gas-sidebar-021712

Natural gas has the potential to fuel farm machinery, but it's already crucial to agriculture for another reason -- as a major ingredient in nitrogen fertilizer. Prices of natural gas and nitrogen have correlated in the past, but the current surge in U.S. natural gas production isn't expected to drive down fertilizer prices anytime soon. "They don't tie anymore," said Glen Buckley, chief economist for the NPK Fertilizer Advisory Service. Natural gas represents roughly 90 percent of the cost of nitrogen production, but that's not currently a deciding factor in fertilizer prices, he said. The fertilizer market is now affected by worldwide demand rather than supply. The price of nitrogen closely tracks the price of natural gas when there is an oversupply of the fertilizer, as there generally was in the 1980s and 1990s, Buckley said. Fluctuating natural gas prices basically represent the cost of production for nitrogen fertilizer, he said. In an oversupply of nitrogen, the price of natural gas determines whether fertilizer manufacturers can afford to continue producing the material. If the nitrogen price falls below the cost of production, manufacturing capacity is closed. That constrains supply of the fertilizer, stabilizing its price. In other words, the price of natural gas establishes a price floor for nitrogen. "We haven't been at that floor for a while," Buckley said. Last year, for example, nitrogen fertilizer became more expensive even as natural gas prices fell, he said. For the past half decade, supplies of nitrogen of have been tight enough that its price moves independently of natural gas.

**Food scarcity doesn’t cause war**

**Salehyan, 08** – Department of Political Science, University of North Texas (Idean, “From Climate Change to Conflict? No Consensus Yet,” Journal of Peace Research, May, palgrave)

First, the deterministic view has poor pre-dictive power as to where and when conflicts will break out. For every potential example of an environmental catastrophe or resource shortfall that leads to violence, there are many more counter-examples in which con-flict never occurs. But popular accounts typ-ically do not look at the dogs that do not bark. Darfur is frequently cited as a case where desertification led to food scarcity, water scarcity, and famine, in turn leading to civil war and ethnic cleansing.5 Yet, food scarcity and hunger are problems endemic to many countries – particularly in sub-Saharan

Africa – but similar problems elsewhere have not led to large-scale violence. According to the Food and Agriculture Organization of the United Nations, food shortages and mal-nutrition affect more than a third of the popu-lation in Malawi, Zambia, the Comoros, North Korea, and Tanzania,6although none of these countries have experienced full- blown civil war and state failure. Hurricanes, coastal flooding, and droughts – which are all likely to intensify as the climate warms – are frequent occurrences which rarely lead to violence. The Asian Tsunami of 2004, although caused by an oceanic earthquake, led to severe loss of life and property, flood-ing, population displacement, and resource scarcity, but it did not trigger new wars in Southeast Asia. Large-scale migration has the potentialto provoke conflict in receiving areas (see Reuveny, 2007; Salehyan & Gleditsch, 2006), yet most migration flows do not lead to conflict, and, in this regard, social inte-gration and citizenship policies are particularly important (Gleditsch, Nordås & Salehyan, 2007). In short, resource scarcity, natural disasters, and long-term climatic shifts are ubiquitous, while armed conflict is rare; therefore, environmental conditions, by themselves, cannot predict violent outbreaks.

Second, even if local skirmishes over access to resources arise, these do not always escalate to open warfare and state collapse. While interpersonal violence is more or less common and may intensify under resource pressures, sustained armed conflict on a massive scale is difficult to conduct. Meier, Bond & Bond (2007) show that, under certain circumstances, environmental condi- tions have led to cattle raiding among pas-toralists in East Africa, but these conflicts rarely escalate to sustained violence. Martin (2005) presents evidence from Ethiopia that, while a large refugee influx and population pressures led to localized conflict over natural resources, effective resource managementregimes were able to ameliorate these ten-sions. Both of these studies emphasize the role of local dispute-resolution regimes and institutions – not just the response of central governments – in preventing resource con-flicts from spinning out of control. Martin’s analysis also points to the importance of international organizations, notably the UN High Commissioner for Refugees, in imple- menting effective policies governing refugee camps. Therefore, local hostilities need not escalate to serious armed conflict and can be managed if there is the political will to do so.

**The attack will never happen**

**Palmquist 2008** (Matt, “How and why the threat of bioterrorism has been so greatly exaggerated.” 5-19-08. http://www.miller-mccune.com/politics/bioterror-in-context-355)

Clark: The more I looked into it, I thought, "Jeez, what are these guys talking about?" What are the odds that a terrorist group, no matter how well financed, would be able to create a bioterror weapon? I began looking into what it takes to really make a successful bioterrorism agent, and I just became very skeptical of this whole thing. The (United States ) military gave up bioweapons 30 years ago. They're too undependable; they're too hard to use; they're too hard to make. Then I started checking around, and I found there's a whole literature out there of people who've been screaming for years that this whole bioterrorism thing is really overblown; it's not practical; it's never going to work. Aum Shinrikyo couldn't get it to work; those guys put millions and millions of dollars into it. So you think of a bunch of guys sitting in a cave in Afghanistan — they're sure as hell not going to do it. Is any government going to do it? No. So that made me very skeptical, and I went back to Oxford and said, "This whole thing's a crock." And they said, "But that's even more interesting!"

M-M: Thus the question mark at the end of the title, Bracing for Armageddon?

Clark: Yeah, exactly. Scientifically, it is a crock. And this really verges into the political, but we've spent $50 billion on it. So Oxford paid for me to take a trip back East and talk to a bunch of these voices that haven't been heard and interview them.

M-M: How much research was involved?

Clark: A couple of years. The science is pretty straightforward on paper. The kind of an organization you'd have to put together, with the varying expertise that is required to make one of these things and deploy it, takes a whole group of people with all kinds of different skills, from engineers to meteorologists. That's just not going to happen. You can run an airplane into an office tower, and you get instant everything you could ever possibly hope for. So why would anybody sit around for years and years? The Aum Shinrikyo guys tried for six, seven years and couldn't get it to work. And a lot of them had Ph.D.s.

**Extinction genetically impossible and ahistorical**

**Posner 2005** (Richard A., Judge U.S. Court of Appeals 7th Circuit, Professor Chicago School of Law, January 1, 2005, Skeptic, Altadena, CA, Catastrophe: Risk and Response, http://goliath.ecnext.com/coms2/gi\_0199-4150331/Catastrophe-the-dozen-most-significant.html#abstract)

Yet the fact that Homo sapiens has managed to survive every disease to assail it in the 200,000 years or so of its existence is a source of genuine comfort, at least if the focus is on extinction events. There have been enormously destructive plagues, such as the Black Death, smallpox, and now AIDS, but none has come close to destroying the entire human race. There is a biological reason. Natural selection favors germs of limited lethality; they are fitter in an evolutionary sense because their genes are more likely to be spread if the germs do not kill their hosts too quickly. The AIDS virus is an example of a lethal virus, wholly natural, that by lying dormant yet infectious in its host for years maximizes its spread. Yet there is no danger that AIDS will destroy the entire human race. The likelihood of a natural pandemic that would cause the extinction of the human race is probably even less today than in the past (except in prehistoric times, when people lived in small, scattered bands, which would have limited the spread of disease), despite wider human contacts that make it more difficult to localize an infectious disease. The reason is improvements in medical science. But the comfort is a small one. Pandemics can still impose enormous losses and resist prevention and cure: the lesson of the AIDS pandemic. And there is always a lust time. That the human race has not yet been destroyed by germs created or made more lethal by modern science, as distinct from completely natural disease agents such as the flu and AIDS viruses, is even less reassuring. We haven't had these products long enough to be able to infer survivability from our experience with them. A recent study suggests that as immunity to smallpox declines because people am no longer being vaccinated against it, monkeypox may evolve into "a successful human pathogen," (9) yet one that vaccination against smallpox would provide at least some protection against; and even before the discovery of the smallpox vaccine, smallpox did not wipe out the human race. What is new is the possibility that science, bypassing evolution, will enable monkeypox to be "juiced up" through gene splicing into a far more lethal pathogen than smallpox ever was.

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#### Solar power development destroys the environment – causes warming and kills biodiversity

**Pizzo 11** – JD from the University of Colorado, attorney for the National Wildlife Federation (“When Saving the Environment Hurts the Environment: Balancing Solar Energy Development with Land and Wildlife Conservation in Warming Climate,” HeinOnline legal search engine)

Land Use and Ecosystem/Habitat Disturbance¶ Development of large-scale solar projects transforms the lands on which they are constructed and precludes most other uses.69 When used to generate electricity on a commercial scale, solar energy facilities require large tracts of land.70 The land requirements for CSP systems are approximately ﬁve to ten acres of land per megawatt of capacity." Thus, a single utility-scale solar plant may occupy up to forty-ﬁve square miles, or nearly 29,000 acres." To prepare land for construction of asolar facility, the ground is scraped and, when necessary, re-contoured to produce a level building site void of all vegetation. In addition, many existing utility-scale facilities have a regular program of herbicide application to keep the area under the collection devices tree of any growth that may block sunlight from reaching the mirrors.”¶ Furthermore, due to the size of utility-scale solar project areas and the extent of landscape disturbance, restoration and reclamation of the project site may not be feasible with current technology."¶ Construction, maintenance, and operation of utility-scale solar plants can have severe impacts on wildlife through direct habitat destruction and habitat fragmentation. Habitat destruction begins when the land within the solar collection ﬁeld is scraped in preparation for construction. The site remains unsuitable for wildlife for the life of the project because the large ﬁelds of solar collectors interfere with natural sunlight, rainfall, and drainage at the facility, causing microclimate alteration." For example, mirrors shield the ground from sunlight and wind, which reduces temperature and decreases wind speed and evapotranspiration beneath the reﬂecting mirrors." As one botanist has noted, “nothing will live under the mirrors?” Construction and maintenance activities also alter the composition, structure, and microclirnate of the land adjacent to the facility." In addition, the reﬂected light in solar-collecting ﬁelds may be increased from thirty percent to ﬁfty-six percent, super-heating the air above and around solar facilities.” These effects are compounded at large facilities due to the number of mirrors that cover and cool the ground while simultaneously reﬂecting light and heating the air. These habitat alterations have direct and indirect effects on wildlife, which may cause shifts in various plant and animal populations.”¶ Ecosystem disturbance and destruction are especially signiﬁcant to local organisms that rely on a limited area for sustenance." “Such species often have access to a particular resource in only one area and unless they abandon historical breeding or wintering grounds, [they are] unlikely to ﬁnd a replacement for the resource?” In addition, construction of solar facilities, roads, and transmission corridors causes habitat fragmentation, which forces wildlife to live on ever-shrinking islands of habitat where it is more difficult for them to ﬁnd food, water, shelter, mates, and protection from predators." Solar development may also affect migratory populations by cutting off migration corridors and eliminating staging grounds.“ Habitat fragmentation and migration disruption combine to limit genetic diversity by decreasing available mates and encouraging inbreeding. As a result, wildlife populations become more susceptible to extinction in the event of catastrophic events such as wildﬁre and disease. Thus, habitat fragmentation inevitably leads to smaller populations of wildlife, and threatens biodiversity by increasing the possibility of extinction for entire populations or species.”

#### Warming’s irreversible

**Solomon et al ‘10** Susan Solomon et. Al, Chemical Sciences Division, Earth System Research Laboratory, National Oceanic and Atmospheric Administration, Ph.D. in Climotology University of California, Berkeley, Nobel Peace Prize Winner, Chairman of the IPCC, Gian-Kasper Plattner, Deputy Head, Director of Science, Technical Support Unit Working Group I, Intergovernmental Panel on Climate Change Affiliated Scientist, Climate and Environmental Physics, Physics Institute, University of Bern, Switzerland, John S. Daniel, research scientist at the National Oceanic and Atmospheric Administration (NOAA), Ph.D. in physics from the University of Michigan, Ann Arbor, Todd J. Sanford, Cooperative Institute for Research in Environmental Science, University of Colorado Daniel M. Murphy, Chemical Sciences Division, Earth System Research Laboratory, National Oceanic and Atmospheric Administration, Boulder Gian-Kasper Plattner, Deputy Head, Director of Science, Technical Support Unit Working Group I, Intergovernmental Panel on Climate Change, Affiliated Scientist, Climate and Environmental Physics, Physics Institute, University of Bern, Switzerland Reto Knutti, Institute for Atmospheric and Climate Science, Eidgenössiche Technische Hochschule Zurich and Pierre Friedlingstein, Chair, Mathematical Modelling of Climate Systems, member of the Science Steering Committee of the Analysis Integration and Modeling of the Earth System (AIMES) programme of IGBP and of the Global Carbon Project (GCP) of the Earth System Science Partnership (ESSP) (Proceedings of the National Academy of the Sciences of the United States of America, "Persistence of climate changes due to a range of greenhouse gases", October 26, 2010 Vol 107.43: 18354-18359)

Carbon dioxide, methane, nitrous oxide, and other greenhouse gases increased over the course of the 20th century due to human activities. The human-caused increases in these gases are the primary forcing that accounts for much of the global warming of the past fifty years, with carbon dioxide being the most important single radiative forcing agent (1). Recent studies have shown that the human-caused warming linked to carbon dioxide is nearly irreversible for more than 1,000 y, even if emissions of the gas were to cease entirely (2–5). The importance of the ocean in taking up heat and slowing the response of the climate system to radiative forcing changes has been noted in many studies (e.g., refs. 6 and 7). The key role of the ocean’s thermal lag has also been highlighted by recent approaches to proposed metrics for comparing the warming of different greenhouse gases (8, 9). Among the observations attesting to the importance of these effects are those showing that climate changes caused by transient volcanic aerosol loading persist for more than 5 y (7, 10), and a portion can be expected to last more than a century in the ocean (11–13); clearly these signals persist far longer than the radiative forcing decay timescale of about 12–18 mo for the volcanic aerosol (14, 15). Thus the observed climate response to volcanic events suggests that some persistence of climate change should be expected even for quite short-lived radiative forcing perturbations. It follows that the climate changes induced by short-lived anthropogenic greenhouse gases such as methane or hydrofluorocarbons (HFCs) may not decrease in concert with decreases in concentration if the anthropogenic emissions of those gases were to be eliminated. In this paper, our primary goal is to show how different processes and timescales contribute to determining how long the climate changes due to various greenhouse gases could be expected to remain if anthropogenic emissions were to cease. Advances in modeling have led to improved AtmosphereOcean General Circulation Models (AOGCMs) as well as to Earth Models of Intermediate Complexity (EMICs). Although a detailed representation of the climate system changes on regional scales can only be provided by AOGCMs, the simpler EMICs have been shown to be useful, particularly to examine phenomena on a global average basis. In this work, we use the Bern 2.5CC EMIC (see Materials and Methods and SI Text), which has been extensively intercompared to other EMICs and to complex AOGCMs (3, 4). It should be noted that, although the Bern 2.5CC EMIC includes a representation of the surface and deep ocean, it does not include processes such as ice sheet losses or changes in the Earth’s albedo linked to evolution of vegetation. However, it is noteworthy that this EMIC, although parameterized and simplified, includes 14 levels in the ocean; further, its global ocean heat uptake and climate sensitivity are near the mean of available complex models, and its computed timescales for uptake of tracers into the ocean have been shown to compare well to observations (16). A recent study (17) explored the response of one AOGCM to a sudden stop of all forcing, and the Bern 2.5CC EMIC shows broad similarities in computed warming to that study (see Fig. S1), although there are also differences in detail. The climate sensitivity (which characterizes the long-term absolute warming response to a doubling of atmospheric carbon dioxide concentrations) is 3 °C for the model used here. Our results should be considered illustrative and exploratory rather than fully quantitative given the limitations of the EMIC and the uncertainties in climate sensitivity. Results One Illustrative Scenario to 2050. In the absence of mitigation policy, concentrations of the three major greenhouse gases, carbon dioxide, methane, and nitrous oxide can be expected to increase in this century. If emissions were to cease, anthropogenic CO2 would be removed from the atmosphere by a series of processes operating at different timescales (18). Over timescales of decades, both the land and upper ocean are important sinks. Over centuries to millennia, deep oceanic processes become dominant and are controlled by relatively well-understood physics and chemistry that provide broad consistency across models (see, for example, Fig. S2 showing how the removal of a pulse of carbon compares across a range of models). About 20% of the emitted anthropogenic carbon **remains in the atmosphere for** many **thousands of years** (with a range across models including the Bern 2.5CC model being about 19 4% at year 1000 after a pulse emission; see ref. 19), until much slower weathering processes affect the carbonate balance in the ocean (e.g., ref. 18). Models with stronger carbon/climate feedbacks than the one considered here could display larger and more persistent warmings due to both CO2 and non-CO2 greenhouse gases, through reduced land and ocean uptake of carbon in a warmer world. Here our focus is not on the strength of carbon/climate feedbacks that can lead to differences in the carbon concentration decay, but rather on the factors that control the climate response to a given decay. The removal processes of other anthropogenic gases including methane and nitrous oxide are much more simply described by exponential decay constants of about 10 and 114 y, respectively (1), due mainly to known chemical reactions in the atmosphere. In this illustrative study, we do not include the feedback of changes in methane upon its own lifetime (20). We also do not account for potential interactions between CO2 and other gases, such as the production of carbon dioxide from methane oxidation (21), or changes to the carbon cycle through, e.g., methane/ozone chemistry (22). Fig. 1 shows the computed future global warming contributions for carbon dioxide, methane, and nitrous oxide for a midrange scenario (23) of projected future anthropogenic emissions of these gases to 2050. Radiative forcings for all three of these gases, and their spectral overlaps, are represented in this work using the expressions assessed in ref. 24. In 2050, the anthropogenic emissions are stopped entirely for illustration purposes. The figure shows nearly irreversible warming for at least 1,000 y due to the imposed carbon dioxide increases, as in previous work. **All published studies to date**, which use multiple EMICs and one AOGCM, show largely irreversible warming due to future carbon dioxide increases (to within about 0.5 °C) on a timescale of at least 1,000 y (3–5, 25, 26). Fig. 1 shows that the calculated future warmings due to anthropogenic CH4 and N2O also persist notably longer than the lifetimes of these gases. The figure illustrates that emissions of key non-CO2 greenhouse gases such as CH4 or N2O could lead to warming that both temporarily exceeds a given stabilization target (e.g., 2 °C as proposed by the G8 group of nations and in the Copenhagen goals) and remains present longer than the gas lifetimes even if emissions were to cease. A number of recent studies have underscored the important point that reductions of non-CO2 greenhouse gas emissions are an approach that can indeed reverse some past climate changes (e.g., ref. 27). Understanding how quickly such reversal could happen and why is an important policy and science question. Fig. 1 implies that the use of policy measures to reduce emissions of short-lived gases will be less effective as a rapid climate mitigation strategy than would be thought if based only upon the gas lifetime. Fig. 2 illustrates the factors influencing the warming contributions of each gas for the test case in Fig. 1 in more detail, by showing normalized values (relative to one at their peaks) of the warming along with the radiative forcings and concentrations of CO2 , N2O, and CH4 . For example, about two-thirds of the calculated warming due to N2O is still present 114 y (one atmospheric lifetime) after emissions are halted, despite the fact that its excess concentration and associated radiative forcing at that time has dropped to about one-third of the peak value.

#### No extinction – empirically denied

**Carter 11–** Robert, PhD, Adjuct Research Fellow, James Cook University, Craig Idso, PhD, Chairman at the Center for the Study of Carbon Dioxide and Global Change, Fred Singer, PhD, President of the Science and Environmental Policy Project, Susan Crockford, evolutionary biologist with a specialty in skeletal taxonomy , paleozoology and vertebrate evolution, Joseph D’Aleo, 30 years of experience in professional meteorology, former college professor of Meteorology at Lyndon State College, Indur Goklany, independent scholar, author, and co-editor of the Electronic Journal of Sustainable Development, Sherwood Idso, President of the Center for the Study of Carbon Dioxide and Global Change, Research Physicist with the US Department of Agriculture, Adjunct Professor in the Departments of Geology, Botany, and Microbiology at Arizona State University, Bachelor of Physics, Master of Science, and Doctor of Philosophy, all from the University of Minnesota, Madhav Khandekar, former research scientist from Environment Canada and is an expert reviewer for the IPCC 2007 Climate Change Panel, Anthony Lupo, Department Chair and Professor of Atmospheric Science at the University of Missouri, Willie Soon, astrophysicist at the Solar and Stellar Physics Division of the Harvard-Smithsonian Center for Astrophysics, Mitch Taylor (Canada) (March 8th, “[Surviving](file:///C:\Users\Marc\Desktop\Surviving) the Unpreceented Climate Change of the IPCC” <http://www.nipccreport.org/articles/2011/mar/8mar2011a5.html>) Jacome

On the other hand, they indicate that some biologists and climatologists have pointed out that "many of the predicted increases in climate have happened before, in terms of both magnitude and rate of change (e.g. Royer, 2008; Zachos *et al*., 2008), and yet biotic communities have remained remarkably resilient (Mayle and Power, 2008) and in some cases thrived (Svenning and Condit, 2008)." But they report that those who mention these things are often "placed in the 'climate-change denier' category," although the purpose for pointing out these facts is simply to present "a sound scientific basis for understanding biotic responses to the magnitudes and rates of climate change predicted for the future through using the vast data resource that we can exploit in fossil records." Going on to do just that, Willis *et al*. focus on "intervals in time in the fossil record when atmospheric CO2 concentrations increased up to 1200 ppm, temperatures in mid- to high-latitudes increased by greater than 4°C within 60 years, and sea levels rose by up to 3 m higher than present," describing studies of past biotic responses that indicate "the scale and impact of the magnitude and rate of such climate changes on biodiversity." And what emerges from those studies, as they describe it, "is evidence for rapid community turnover, migrations, development of novel ecosystems and thresholds from one stable ecosystem state to another." And, most importantly in this regard, they report "there is very little evidence for broad-scale extinctions due to a warming world." In concluding, the Norwegian, Swedish and UK researchers say that "based on such evidence we urge some caution in assuming broad-scale extinctions of species will occur due solely to climate changes of the magnitude and rate predicted for the next century," reiterating that "the fossil record indicates remarkable biotic resilience to wide amplitude fluctuations in climate.

#### There are multiple Feedbacks:

#### First is N Screw – nitrogen from emissions checks warming – their models don’t assume this

**Carter 10–** Robert, PhD, Adjuct Research Fellow, James Cook University, Craig Idso, PhD, Chairman at the Center for the Study of Carbon Dioxide and Global Change, Fred Singer, PhD, President of the Science and Environmental Policy Project, Susan Crockford, evolutionary biologist with a specialty in skeletal taxonomy , paleozoology and vertebrate evolution, Joseph D’Aleo, 30 years of experience in professional meteorology, former college professor of Meteorology at Lyndon State College, Indur Goklany, independent scholar, author, and co-editor of the Electronic Journal of Sustainable Development, Sherwood Idso, President of the Center for the Study of Carbon Dioxide and Global Change, Research Physicist with the US Department of Agriculture, Adjunct Professor in the Departments of Geology, Botany, and Microbiology at Arizona State University, Bachelor of Physics, Master of Science, and Doctor of Philosophy, all from the University of Minnesota, Madhav Khandekar, former research scientist from Environment Canada and is an expert reviewer for the IPCC 2007 Climate Change Panel, Anthony Lupo, Department Chair and Professor of Atmospheric Science at the University of Missouri, Willie Soon, astrophysicist at the Solar and Stellar Physics Division of the Harvard-Smithsonian Center for Astrophysics, Mitch Taylor (Canada) (October 6th 2010, “[The Effect of Nitrogen Deposition on Forest Soil Respiration](http://www.nipccreport.org/articles/2010/oct/06oct2010a4.html)” <http://www.nipccreport.org/articles/2010/oct/06oct2010a4.html>) Jacome

Janssens et al. (2010) write that "atmospheric deposition of reactive nitrogen, originating mainly from fossil-fuel burning and artificial fertilizer applications, has increased three- to five-fold over the past century," and they say that "in many areas of the globe, nitrogen deposition is expected to increase further." This phenomenon stimulates plant growth and the uptake of carbon from the atmosphere, contributing to climate change mitigation; and they state that Magnani et al. (2007) demonstrated nitrogen deposition to be "the dominant driver of carbon sequestration in forest ecosystems," although there has been what they describe as "intense debate" about the magnitude and sustainability of the phenomenon and its underlying mechanisms.

In an effort designed to further explore the subject, Janssens et al. conducted "a meta-analysis of measurements in nitrogen-addition experiments, and a comparison of study sites exposed to elevated or background atmospheric nitrogen deposition."

The work of the fifteen scientists revealed, in their words, that "nitrogen deposition impedes organic matter decomposition, and thus stimulates carbon sequestration, in temperate forest soils where nitrogen is not limiting microbial growth." What is more, they find that "the concomitant reduction in soil carbon emissions is substantial," being "equivalent in magnitude to the amount of carbon taken up by trees owing to nitrogen fertilization."

For those worried about the (highly unlikely) prospect of CO2-induced global warming, these findings should be good news; for in the concluding sentence of their paper, Janssens et al. state that "the size of the nitrogen-induced inhibition of below-ground respiration is of the same order of magnitude as the forest carbon sink." And they state in the concluding sentence of their paper's introduction that "**this effect has not been included in current carbon-cycle models**," suggesting that when it is included, it will contribute much to "climate change mitigation."

#### Second is M screw – co2 solves methane emissions which cause warming

**Carter 1-10 –** Robert, PhD, Adjuct Research Fellow, James Cook University, Craig Idso, PhD, Chairman at the Center for the Study of Carbon Dioxide and Global Change, Fred Singer, PhD, President of the Science and Environmental Policy Project, Susan Crockford, evolutionary biologist with a specialty in skeletal taxonomy , paleozoology and vertebrate evolution, Joseph D’Aleo, 30 years of experience in professional meteorology, former college professor of Meteorology at Lyndon State College, Indur Goklany, independent scholar, author, and co-editor of the Electronic Journal of Sustainable Development, Sherwood Idso, President of the Center for the Study of Carbon Dioxide and Global Change, Research Physicist with the US Department of Agriculture, Adjunct Professor in the Departments of Geology, Botany, and Microbiology at Arizona State University, Bachelor of Physics, Master of Science, and Doctor of Philosophy, all from the University of Minnesota, Madhav Khandekar, former research scientist from Environment Canada and is an expert reviewer for the IPCC 2007 Climate Change Panel, Anthony Lupo, Department Chair and Professor of Atmospheric Science at the University of Missouri, Willie Soon, astrophysicist at the Solar and Stellar Physics Division of the Harvard-Smithsonian Center for Astrophysics, Mitch Taylor (Canada) (January 2012, “Environmental Stresses and Plant Methane Emissions”http://www.nipccreport.org/articles/2012/jan/10jan2012a4.html) Jacome

Concluding from a review of the scientific literature that "aerobic CH4 [methane] emissions from plants may be affected by O2 stress or any other stress leading to ROS [reactive oxygen species] production," authors Wang *et al*. (2009) sought to determine whether physical injury would also affect CH4 emissions from plants. Their work revealed that "physical injury (cutting) stimulated CH4 emissions from fresh twigs of *Artemisia* species under aerobic conditions," and that "more cutting resulted in more CH4 emissions," as did hypoxia in both cut and uncut *Artemisia frigida* twigs.

In discussing their findings, and those of previous studies that suggest, in their words, "that a variety of environmental stresses stimulate CH4 emission from a wide variety of plant species," Wang *et al*. concluded that "global change processes, including climate change, depletion of stratospheric ozone, increasing ground-level ozone, spread of plant pests, and land-use changes, could cause more stress in plants on a global scale, potentially stimulating more CH4 emission globally," while further concluding that "the role of stress in plant CH4 production in the global CH4 cycle could be important in a changing world."

Several things "could" be important in this regard, but the ongoing rise in the air's CO2 content is hard at work *countering* stress-induced CH4 emissions. Environmental stresses of all types do indeed generate highly-reactive oxygenated compounds that damage plants, but atmospheric CO2 enrichment typically boosts the production of antioxidant enzymes that *scavenge* and *detoxify* those highly-reactive oxygenated compounds. Thus, it can be appreciated that the historical rise in the air's CO2 content should have gradually been *alleviating* the level of stress experienced by Earth's plants; and this phenomenon should have been gradually *reducing* the rate at which the planet's vegetation releases CH4 to the atmosphere. In addition, it should have been doing it at *an accelerating rate* commensurate with the accelerating rate of the upward trend in the air's CO2 content.

Wang *et al*.'s way of thinking therefore suggests that the air's CH4 concentration should be *rising ever faster*, as "global change processes" lead to more plant stress, more ROS production in plants, and more CH4 emissions from Earth's vegetation, whereas a conflicting hypothesis suggests that the air's CH4 concentration should be *rising ever slower*, as higher concentrations of atmospheric CO2 lead to less plant stress, more antioxidants that scavenge and detoxify ROS in plants, and less CH4 emissions from Earth's vegetation.

So which view is winning? A quick glance at the atmosphere's recent methane history - shown below - provides the answer.

*Figure 1. Trace gas mole fractions of methane (CH4) as measured at Mauna Loa, Hawaii. Adapted from Schnell and Dlugokencky (2008).*

As can be seen from this figure, the rate of increase in atmospheric methane abundance has steadily declined since the late 1980s, with near-zero increase from 1999 through the end of the record. Is the ongoing rise in the air's CO2 content responsible for knocking its biggest greenhouse-gas competitor (other than water vapor) entirely out of the picture with respect to *future* global warming? Or, will further increases in CO2 emissions actually cause the atmosphere's methane concentration to *decline* and thereby begin to counteract its (CO2's) *own* warming effect. Only time will tell.

#### Third are Natural Aerosols

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In a contemporaneous study of aerosols, Carslaw et al. (2010) write, ―the natural environment is a major source of atmospheric aerosols, including dust, secondary organic material from terrestrial biogenic emissions, carbonaceous particles from wildfires, and sulphate from marine phytoplankton dimethyl sulphide emissions.‖ These aerosols ―have a significant effect on many components of the Earth system, such as the atmospheric radiative balance and photosynthetically available radiation entering the biosphere, the supply of nutrients to the ocean, and the albedo of snow and ice. With this background in mind, the authors reviewed ―the impact of these natural systems on atmospheric aerosols based on observations and models, including the potential for long term changes in emissions and feedbacks on climate.‖ Based on their review, the seven scientists report, ―the number of drivers of change is very large and the various systems are strongly coupled,‖ noting ―there have therefore been very few studies that integrate the various effects to estimate climate feedback factors.‖ However, they add, ―available observations and model studies suggest that the regional radiative perturbations are potentially several watts per square meter due to changes in these natural aerosol emissions in a future climate,‖ which is **equivalent to the magnitude of climate forcing projected** to result from increases in greenhouse gases but typically of the opposite sign.

**Feedbacks happen:**

#### Feedbacks are the only thing that matter – co2’s effect itself is small – negative feedbacks outweigh

**De Freitas 11** – associate professor in the school of environment at the University of Auckland, (Chris, 1-4 http://www.nzherald.co.nz/nz/news/article.cfm?c\_id=1&objectid=10697845)

The degree of warming directly caused by the extra carbon dioxide is, by itself, relatively small. This is not controversial. What is controversial is whether this initial change will trigger further climate changes that would be large or damaging. Debate focuses on climate feedbacks that may or may not suppress, perpetuate or amplify an initial change caused by increasing concentrations of greenhouse gases. A doubling of carbon dioxide, by itself, adds only about one degree Celsius to greenhouse warming. Computer climate models project more warming because the modellers build in feedbacks from water vapour and clouds that amplify the initial change. These are the so called positive feedbacks. For example, higher temperature would mean more evaporation globally, which in turn means more heat-trapping water vapour is put into the atmosphere leading to even higher temperatures. On the other hand, negative feedbacks might prevail. For example, more water vapour in the atmosphere could lead to greater cloud cover. Clouds reflect the heat from the Sun and cool the Earth, offsetting the initial rise in global temperature. The role of negative feedback processes are played down by global warming alarmists, whereas sceptics point to the four-billion-year-old global climate record that shows runaway global cooling or warming has never occurred because negative feedbacks regulate the global climate system. It is important to consider the above in the proper context. Change is a constant feature of climate, even through recent human history. During the Medieval Warm Period, from 900 to 1200AD, the Vikings sailed in Arctic waters that by 1700 had turned to permanent sea ice, and farmed in Greenland soil in a climate that soon became too cold for agriculture. The Medieval Warm Period was followed by the Little Ice Age which ended around 1850. It in turn was followed by another warm period. The hottest year since 1850 was 1998. In the nine years since 2002 average annual global temperature has not risen. Most people are surprised to hear that no one has uncovered any empirical real-world evidence that humans are causing dangerous global warming. Finding this evidence is crucial, since scientific issues are resolved by observations that support a theory or hypothesis. They are not resolved by ballot.

**Feedbacks are negative**

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The frightening warnings that alarmists offer about the effects of doubling CO2 are based on computer models that assume that the direct warming effect of CO2 is multiplied by a large “feedback factor” from CO2-induced changes in water vapor and clouds, which supposedly contribute much more to the greenhouse warming of the earth than CO2. But **there is observational evidence that the feedback factor is small and may even be negative. The models are not in good agreement with observations**—even if they appear to fit the temperature rise over the last 150 years very well.