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#### Immigration will pass—PC key

Houston Chronicle 2-13-13. blog.chron.com/txpotomac/2013/02/analysis-obama-makes-the-economic-case-for-immigration-reform/

President Barack Obama cast immigration reform in economic terms Tuesday as he prodded Congress to create a path for citizenship for undocumented immigrants and provide employers with highly skilled workers needed to compete globally.¶ “Our economy is stronger when we harness the talents and ingenuity of striving, hopeful immigrants,” Obama said to a standing ovation and applause from a joint session of Congress.¶ Obama seized on the political momentum and used his State of the Union speech to praise lawmakers in the Senate and House for working together on the emotionally charged issue.¶ “Send me a comprehensive immigration reform bill in the next few months and I will sign it right away,” he said.¶ In the Republican rebuttal, Sen. Marco Rubio, R-Fla., a co-author of a bipartisan Senate immigration measure, agreed with the president that the immigration system needs fixing.¶ Rubio said we can help “our economy grows if we have a legal immigration system that allows us to attract and assimilate the world’s best and brightest.”¶ He stopped short of endorsing a path to citizenship while calling for “a responsible, permanent solution to the problem of those who are here illegally.”¶ And, Rubio said: “We must first follow through on the broken promises of the past to secure our borders and enforce our laws.”¶ The president’s speech comes one day before the Senate Judiciary Committee takes up the bipartisan comprehensive immigration reform plan.¶ Sweeping legislation still faces hurdles, particularly in the Republican-controlled House.¶ “Illegal immigration is a drain on the economy and amnesty is not the answer,” said Rep. Lamar Smith, R-San Antonio, a member of the House Judiciary subcommittee on immigration.¶ Smith said that amnesty “actually makes matters worse by providing an incentive for more immigrants to come to the U.S. illegally.”¶ Tuesday night, the president said immigration reform would benefit the economy by leveling the playing field for both workers and employers.¶ He called on Congress to streamline the legal immigration system for families, workers and to attract highly skilled entrepreneurs and engineers who will create jobs.¶ Obama said immigration reform should include border security, building upon the progress of his administration, which increased the number of Border Patrol agents and saw illegal crossing on the Southwest border plunge to the lowest levels in 40 years.¶ And he called for a path to citizenship for undocumented immigrants who pass background checks, pay taxes, learn English and stand at “the back of the line behind the folks trying to come here legally.”¶ The speech was applauded by congressional Democrats elected on vows to reform immigration laws.¶ “I’m glad immigration reform was a focal point of tonight’s speech,” said Rep. Pete Gallego, D-Alpine. “Immigration reform is the right thing to do for our country and a necessity for America’s economic future.”¶ Rep. Joaquin Castro, D-San Antonio, said Obama “is putting his full weight behind immigration reform. I think the president’s efforts are paying off.”

#### Plan saps capital – scientific and economic concerns

Schrag 7 – the Sturgis Hooper Professor of Geology at Harvard University, Professor of Environmental Science and Engineering, and Director of the Harvard University Center for the Environment (Daniel P., “Preparing to Capture Carbon,” http://www.uri.edu/hc/2008/2010\_Spring/bibliography/Schrag\_Science\_2007.pdf)

If carbon sequestration from coal combustion is essential to mitigate the worst impacts of global warming, what stands in the way of its broad implementation, both in the United States and around the world? With limited coal reserves, countries in the European Union have chosen to emphasize climate mitigation strategies that focus on energy efficiency, renewable sources, and nuclear power. Of the major coal producers, Russia, China, and India have been unwilling to sacrifice short-term economic growth, although Chinese coal gasification efforts, which many see as a step toward sequestration capacity, are more advanced than current U.S. policies. In the United States, there are scientific and economic questions that must be answered before largescale deployment can be achieved. But none of these is critical enough to suggest that carbon sequestration cannot be done. The real obstacle is political will, which may require more dramatic public reaction to climate change impacts before carbon sequestration becomes a requirement for burning coal. In the meantime, there are critical steps that can be taken that will prepare us for the moment when that political will finally arrives.

#### Capital key

Shifter 12-27. [Michael, PRESIDENT of the Inter-American Dialogue & adjunct professor of Latin American politics at Georgetown University’s School of Foreign, “Will Obama Kick the Can Down the Road?” http://www.thedialogue.org/page.cfm?pageID=32&pubID=3186]

Not surprisingly, Obama has been explicit that reforming the US’s shameful and broken immigration system will be a top priority in his second term. There is every indication that he intends to use some of his precious political capital – especially in the first year – to push for serious change. The biggest lesson of the last election was that the “Latino vote” was decisive. No one doubts that it will be even more so in future elections. During the campaign, many Republicans -- inexplicably -- frightened immigrants with offensive rhetoric. But the day after the election, there was talk, in both parties, of comprehensive immigration reform.¶ Despite the sudden optimism about immigration reform, there is, of course, no guarantee that it will happen. It will require a lot of negotiation and deal-making. Obama will have to invest a lot of his time and political capital -- twisting some arms, even in his own party. Resistance will not disappear. ¶ There is also a chance that something unexpected could happen that would put off consideration of immigration reform. Following the horrific massacre at a Connecticut elementary school on December 14, for example, public pressure understandably mounted for gun control, at least the ban of assault weapons. But a decision to pursue that measure -- though desperately needed -- would take away energy and time from other priorities like immigration.

#### Comprehensive reform solves the economy – wages, revenue, jobs.

De Los Santos 2-9. [Michael, political writer, contributor @ Policy Mic, "3 Ways Immigration Reform Will Lead to a Stronger American Economy" Policy Mic -- www.policymic.com/articles/25301/3-ways-immigration-reform-will-lead-to-a-stronger-american-economy]

Immigration, immigration, immigration: it seems that reform has become the hot topic of the day now that the debt ceiling debate is temporarily over. PolicyMic has published at least 16 articles over the last week that dealt with the topic. We have had a bipartisan panel and President Obama release ideas for immigration reform, and you can expect it to play a significant role in his upcoming State of the Union address. With the economy still the biggest driver of dissatisfaction in this country, how will passing immigration reform impact the economic recovery? Passing a comprehensive package will positively impact the economy in three key areas: consumption, tax revenue and job creation.¶ 1. Consumption:¶ Consumption is driven by wages, and so to understand how consumption will improve, we have to look at wage increases. Immigration reform does not just impact the immigrant community, but U.S.-born workers as well. Our first glimpses are the effects of President Reagan's Immigration Reform and Control Act of 1986. While immigrants still made less than their U.S. born-comrades, they still saw their incomes increase by 15% years following their legalization. While anti-immigration reform groups will dispute the effectiveness of the reforms of 1986, they can’t refute the increase in wages.¶ These wage increases also extended to U.S.-born workers. The Economic Policy Institute looked at the impact immigration had on wages of the non-immigrant community. What they found was that between 1994 and 2007, wages increased by 0.4% over foreign-born workers. This also extended to those with less than a high school education, who still saw a 0.3% increase during that same time as a result of immigration. These aren't huge gains, but the size of the gains wasn't as important as what they indicated: more workers mean a bigger economy. The influx of immigrant workers meant more people were earning wages, and therefore spending more and growing the economy, which in turn meant higher wages and more opportunities for everyone.¶ 2. Tax Revenue:¶ The increase in wage earners, wages, and spending leads to higher tax revenues. A 2010 study by the University of Southern California estimated that undocumented Latino workers missed out on $2.2 billion in income. As a result, the state of California missed out on $310 million in income taxes. They also determined that the federal government lost out on $1.4 billion in taxes.¶ Furthermore, the Congressional Budget Office and the Joint Committee on Taxation estimated that the Comprehensive Immigration Reform Act of 2006 would have generated $66 billion in new revenue between 2007 and 2016. This increase in revenue would have more than offset the estimated increase in entitlement spending of $54 billion.¶ 3. Job Creation:¶ The final area for consideration is job creation. Ezra Klein of The Washington Post examined this in a recent post. Small businesses are drivers of the economy, and as Klein points out, immigrants start business and file patents at a much higher rate than the non-immigrant community.¶ Our economy is struggling to create jobs and encourage consumer spending, and all levels of government are struggling to generate the necessary revenues and right spending cuts to tackle growing debt.¶ These factors make immigration reform a nobrainer. A comprehensive immigration plan addresses all three of these key areas to fixing our economy. In fact, immigration reform should be looked at as more than just immigration policy – it's economic policy. The economy and our country will be better because of it.

#### Economic collapse causes global instability and nuclear war

Friedberg and Schoenfeld 8 (Aaron, Prof. Politics. And IR – Princeton’s Woodrow Wilson School, and Gabriel, Senior Editor of Commentary and Visiting Scholar – Witherspoon Institute, Wall Street Journal, “The Dangers of a Diminished America”, 10-21, <http://online.wsj.com/article/SB122455074012352571.html>)

Then there are the dolorous consequences of a potential collapse of the world's financial architecture. For decades now, Americans have enjoyed the advantages of being at the center of that system. The worldwide use of the dollar, and the stability of our economy, among other things, made it easier for us to run huge budget deficits, as we counted on foreigners to pick up the tab by buying dollar-denominated assets as a safe haven. Will this be possible in the future? Meanwhile, traditional foreign-policy challenges are multiplying. The threat from al Qaeda and Islamic terrorist affiliates has not been extinguished. Iran and North Korea are continuing on their bellicose paths, while Pakistan and Afghanistan are progressing smartly down the road to chaos. Russia's new militancy and China's seemingly relentless rise also give cause for concern. If America now tries to pull back from the world stage, it will leave a dangerous power vacuum. The stabilizing effects of our presence in Asia, our continuing commitment to Europe, and our position as defender of last resort for Middle East energy sources and supply lines could all be placed at risk. In such a scenario there are shades of the 1930s, when global trade and finance ground nearly to a halt, the peaceful democracies failed to cooperate, and aggressive powers led by the remorseless fanatics who rose up on the crest of economic disaster exploited their divisions. Today we run the risk that rogue states may choose to become ever more reckless with their nuclear toys, just at our moment of maximum vulnerability. The aftershocks of the financial crisis will almost certainly rock our principal strategic competitors even harder than they will rock us. The dramatic free fall of the Russian stock market has demonstrated the fragility of a state whose economic performance hinges on high oil prices, now driven down by the global slowdown. China is perhaps even more fragile, its economic growth depending heavily on foreign investment and access to foreign markets. Both will now be constricted, inflicting economic pain and perhaps even sparking unrest in a country where political legitimacy rests on progress in the long march to prosperity. None of this is good news if the authoritarian leaders of these countries seek to divert attention from internal travails with external adventures.

#### Interpretations –

#### For is a term of exclusion

US CUSTOMS COURT 39 AMERICAN COLORTYPE CO. v. UNITED STATES C. D. 107, Protest 912094-G against the decision of the collector of customs at the port of New York UNITED STATES CUSTOMS COURT, THIRD DIVISION 2 Cust. Ct. 132; 1939 Cust. Ct. LEXIS 35 The same reasons used by the appellate court may be adopted in construing the language of the statute herein involved. If the words "for industrial use" mean no more than the words "articles of utility," there could be no reason for inserting the additional words "for industrial use" in the paragraph. Therefore, it must be held that the [\*135] new language "for industrial use" was intended to have a different meaning from the words "articles of utility," as construed in the case of Progressive Fine Arts Co. v. United States, [\*\*8] supra. Webster's New International Dictionary defines the word "industrial" as follows: Industrial. 1. Relating to industry or labor as an economic factor, or to a branch or the branches of industry; of the nature of, or constituting, an industry or industries \* \* \* . The transferring of the scenes on an oil painting to a printed copy is a branch of industry under the definition above quoted. Some of the meanings of the preposition "for" signify intent, as shown by the following definition in the same dictionary: For. 2. Indicating the end with reference to which anything is, acts, serves, or is done; as: a. As a preparation for; with the object of; in order to be, become, or act as; conducive to. \* \* \*. d. Intending, or in order, to go to or in the direction of. Therefore, the words "articles for industrial use" in paragraph 1807 imply that Congress intended to exclude from that provision articles either purchased or imported with the intention to use the same in industry for manufacturing purposes.

#### Energy Production means AMOUNT OF SUPPLY

5th Circuit Court of Appeals 6 IN THE MATTER OF: MIRANT CORPORATION, Debtor, BONNEVILLE POWER ADMINISTRATION, Appellant, VERSUS MIRANT CORPORATION, Appellee. No. 04-11264 UNITED STATES COURT OF APPEALS FOR THE FIFTH CIRCUIT 440 F.3d 238; 2006 U.S. App. LEXIS 3438; Bankr. L. Rep. (CCH) P80,453; 55 Collier Bankr. Cas. 2d (MB) 1050; 46 Bankr. Ct. Dec. 13 February 13, 2006, Filed BPA is a federal power marketing agency within the United States Department of Energy. BPA was created in 1937 by Congress to market low-cost hydroelectric power generated by a series of federal dams along the Columbia River in the Pacific Northwest. See generally Bonneville Project Act of 1937, [16 U.S.C. § 832](http://www.lexisnexis.com/lnacui2api/mungo/lexseestat.do?bct=A&risb=21_T15305759034&homeCsi=6396&A=0.3905894189281863&urlEnc=ISO-8859-1&&citeString=16%20U.S.C.%20832&countryCode=USA). Originally, BPA marketed the energy produced for the benefit of the public, particularly domestic and rural customers, giving preference and priority to public bodies and cooperatives. See [§ 832c(a)](http://www.lexisnexis.com/lnacui2api/mungo/lexseestat.do?bct=A&risb=21_T15305759034&homeCsi=6396&A=0.3905894189281863&urlEnc=ISO-8859-1&&citeString=16%20U.S.C.%20832C&countryCode=USA). For some time, surplus in energy production meant BPA could market freely to all who desired to purchase in the area. In 1980, increasing demands upon the supply triggered, in part, Congress's enactment of the Pacific Northwest Electric Power Planning and Conservation Act, [16 U.S.C. §§ 839-839h](http://www.lexisnexis.com/lnacui2api/mungo/lexseestat.do?bct=A&risb=21_T15305759034&homeCsi=6396&A=0.3905894189281863&urlEnc=ISO-8859-1&&citeString=16%20U.S.C.%20839&countryCode=USA), which required BPA to offer new contracts to its customers. See [Aluminum Co. of Am. v. Cent. Lincoln Peoples' Util. Dist., 467 U.S. 380, 382, 104 S. Ct. 2472, 81 L. Ed. 2d 301 (1984)](http://www.lexisnexis.com/lnacui2api/mungo/lexseestat.do?bct=A&risb=21_T15305759034&homeCsi=6396&A=0.3905894189281863&urlEnc=ISO-8859-1&&citeString=467%20U.S.%20380,%20382&countryCode=USA). Thereafter, BPA was authorized to acquire additional resources in order to increase the supply of federal power. See [16 U.S.C. § 839d(a)(2)](http://www.lexisnexis.com/lnacui2api/mungo/lexseestat.do?bct=A&risb=21_T15305759034&homeCsi=6396&A=0.3905894189281863&urlEnc=ISO-8859-1&&citeString=16%20U.S.C.%20839D&countryCode=USA). [\*\*5] Accordingly, BPA entered certain contracts related to the marketing of federal power. See [§ 832a(f)](http://www.lexisnexis.com/lnacui2api/mungo/lexseestat.do?bct=A&risb=21_T15305759034&homeCsi=6396&A=0.3905894189281863&urlEnc=ISO-8859-1&&citeString=16%20U.S.C.%20832A&countryCode=USA).

#### Crude oil means hydrocarbons directly out of the ground

EIA 12 (“Definitions, Sources and Explanatory Notes”, <http://www.eia.gov/dnav/pet/TblDefs/pet_sum_sndw_tbldef2.asp>) Crude Oil A mixture of hydrocarbons that exists in liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities.

#### Violation – the plan fiats the way in which its oil is produced – not oil production

#### Vote neg

#### [1] Limits – allowing affs to fiat the means of energy production explodes the topic, and lets their 1AC claim advantages off of those means

#### [2] Ground – aff’s get an unlimited number of unfair advantage internals, which they can use to spike links and solvency deficits or solve disad impacts

#### The United States Federal Government should financially incentivize incremental oil recovery in the United States.

#### Solves the case and avoids politics

Kokal and Al-Kaabi 10 – EXPEC ADVANCED RESEARCH CENTRE, SAUDI ARAMCO (Sunil, Abdulaziz, “Enhanced oil recovery: challenges & opportunities,” http://www.world-petroleum.org/docs/docs/publications/2010yearbook/P64-69\_Kokal-Al\_Kaabi.pdf)

Advanced IOR and best practices A good ‘first’ option for any reservoir is to maximise secondary stage recovery. Advances in technology and the utilisation of best-in-class reservoir management practices will enable the maximisation of water flooding oil recovery before deploying EOR. Saudi Aramco is perhaps the world leader in optimising the recovery from its reservoirs through prudent reservoir management practices. Some of these include10 the deployment of maximum reservoir contact wells (MRC), intelligent autonomous fields, gigacell simulation, deep diagnostics (ability to see inside the reservoir with clarity), and advanced monitoring and surveillance technologies. These are just a fraction of available technologies that may help improve oil recovery and should be considered before fullscale deployment of EOR. Another option to consider before EOR is ‘smart water flooding’. Here, the idea is to inject water with an optimised composition (in terms of salinity and ionic composition) into the reservoir instead of any available water that may currently be injected or planned to be injected. Recent research has shown11,12 that salinity and/or ionic composition can play a significant role in oil recovery during water flooding and may yield up to 10 per cent or higher additional oil recoveries when compared to unoptimised water injection. This option has several advantages compared to EOR: • It can achieve higher ultimate oil recovery with minimal investment in current operations (this assumes that a waterflooding infrastructure is already in place). The advantage lies in avoiding extensive capital investment associated with conventional EOR methods, such as expenditure on new infrastructure and plants needed for injectants, new injection facilities, production and monitoring wells, changes in tubing and casing, for example. • It can be applied during the early life cycle of the reservoir, unlike EOR. • The payback is faster, even with small incremental oil recovery. Figure 9 shows the results from a BP study11 of incremental oil recoveries (over and above water-flooding recoveries) in several sandstone reservoirs. Smart water flooding is relatively new and in the technology development stage, however, the idea of customised water for improving oil recovery is very attractive. There have been a few field trials and pilots, mostly in sandstones, and fewer in carbonates. The initial results are promising and a number of questions remain, although R&D has been accelerating in this area. Saudi Aramco, through its upstream arm (EXPEC Advanced Research Centre), has initiated a strategic research programme in this area to explore the potential of increasing oil recovery by tuning the injected water properties. Another aspect of water flooding that can be improved is the monitoring and surveillance (M&S) of projects. In many cases, adequate monitoring is not done because of the cost involved. This may, however, be detrimental to the overall recovery during water flooding. While an optimum M&S plan cannot be predetermined for a given reservoir, some of its components include: the time-tested open/cased hole logging, coring, flood-front monitoring, single and interwell tracer tests, and emerging technologies, such as: borehole gravimetry, crosswell and borehole to surface electromagnetic (EM), and geophysical methods (crosswell seismic, 4D seismic and 4D vertical seismic profiler (VSP)). A good M&S plan is essential in optimising oil recovery at the secondary recovery stage, and even more important during the EOR phase.

#### Obama will green-light Keystone now- green backlash on energy policy destroys his environmental cover

Restuccia, 2-8 – Politico energy reporter, former energy and environmental reporter for The Hill

[Andrew, "Can Obama pair Keystone, climate action?" Politico, 2-8-13, www.politico.com/story/2013/02/can-obama-pair-keystone-climate-action-87350.html?hp=l12, accessed 2-8-13, mss]

President Barack Obama is approaching two of the most crucial energy decisions of his presidency: **Should he disappoint climate activists by approving** the **Keystone** XL pipeline? And should he anger industry groups by imposing tough greenhouse gas limits on existing power plants? But the president may have a third option: trying to placate both sides. Greenlighting Keystone **while he moves forward with** the **power plant regulations** could limit the political fallout from either move, handing Republicans a win on the pipeline and Democrats a victory on climate change. The White House isn’t tipping its hand, but environmental advocates **who have closely followed the administration’s handling** of both issues say Obama could roll out the two moves at or around the same time. And some climate-minded Democrats, such as Sen. Barbara Boxer, chairwoman of the Committee on Environment and Public Works, have signaled that they may not raise hell over Obama approving Keystone **if it’s accompanied by aggressive action on other** environmental fronts. “**It depends on what else he does**,” the California Democrat said last month when asked whether OKing the pipeline would diminish Obama’s climate legacy. “If he did that but did 17 things that, you know, clean it up … I’d have a different opinion.” One of the world’s leading scientific journals, Nature, has also advocated a package deal, writing in a late-January editorial that going ahead with both the pipeline and tough greenhouse gas rules would “give Obama an early opportunity to build some goodwill across the political spectrum.”

#### Massive environmental backlash to the plan

Luoma 11 – author of three books on environmental issues and a contributing editor at Audubon (Jon, “Are Carbon Sequestration Leaks a Potential Health Danger?” Popular Mechanics September 13 2011 <http://www.popularmechanics.com/science/environment/climate-change/are-carbon-sequestration-leaks-a-health-danger>) MLR

Still, **CCS remains a** lightning rod**.** Roberts and colleagues wrote in their study that CCS must be part of a plan to prevent many millions of tons of from "contributing to a [climate change] process which will have catastrophic effects on human lives across the globe." However, **even** some **environmentalists are opposed to the idea, the argument being that just burying carbon dioxide does nothing to ease the reliance on fossil fuels. Plus, it’s not clear whether studies** like this one **will reassure those wary of CO2 leaks.**

#### Keystone key to prevent Canada-China deal- collapses US-China relations

Tu, 12 – Carnegie Energy program senior associate

[Kevin, "China Should be Cautious about the Canadian Oil Sands," Carnegie Endowment, 2-10-12, carnegieendowment.org/2012/02/10/china-should-be-cautious-about-canadian-oil-sands, accessed 2-10-13, mss]

On February 7, the Canadian prime minister, Stephen Harper, arrived in Beijing for a five-day visit that focused on expanding trade links between Canada and China. Before Harper’s trip, the Obama administration rejected TransCanada’s initial Keystone XL pipeline application, saying that the "rushed and arbitrary deadline" set by congressional Republicans would prevent a full review of the pipeline’s environmental impacts. The pipeline would eventually have moved about 700 thousand barrels per day of carbon-intensive synthetic crude and diluted bitumen from Alberta’s oil sands deposits to oil refineries along the U.S. Gulf Coast. Given that 99 percent of Canadian oil exports are destined for the U.S. market, the Obama administration’s decision is a big blow to the ambitious oil-sands-development agenda set by the conservative Canadian government. To diversify its oil exports away from the U.S. market, Harper promptly turned to Enbridge's plan for the construction of the Northern Gateway pipeline. That pipeline would move synthetic crude and bitumen from Edmonton in Alberta to the west coast of Canada—and then it could be shipped directly to China. The export of Canadian oil sands output was thus a key issue underlying Harper’s visit to China. Oil sands consist of a naturally occurring mixture of bitumen, sand, clay, or other minerals and water. Alberta's total oil sands reserves amount to the equivalent of 169.3 billion barrels of crude, which means Canada has the third-largest proven oil reserves worldwide, ranking only behind Saudi Arabia and Venezuela. Compared to conventional oil extraction, oil sands development is not only technologically more sophisticated but also more energy intensive. Nevertheless, recent spikes in global crude oil prices and technological breakthroughs in oil sands extraction and processing have led to an increase in Canada’s oil sands output from 0.61 million barrels per day in 2000 to 1.47 million barrels per day in 2010. According to the most recent forecast by the Canadian Association of Petroleum Producers, Canada’s oil sands output could be as high as 3.73 million barrels per day by 2025. Since China first became a net oil importer in 1993, its national oil consumption has grown rapidly at an average of 6.5 percent annually, making the country the world’s second-largest oil consumer after the United States. In comparison, China’s oil output has increased at an average annual rate of only 2 percent during the same period. As a result, China has become increasingly reliant on imported oil, currently depending on imported oil to meet more than half of its oil demand. Furthermore, as China sources most of its oil imports from politically unstable countries in the Middle East and Africa, energy security has become an increasingly imperative policy challenge for Chinese decisionmakers. Considering the complementary nature of the two country’s energy sectors, at first glance Harper’s exporting proposal seems like a win-win initiative for both China and Canada. The Northern Gateway pipeline is designed to provide a crude oil export capacity of 525 thousand barrels per day, which could ultimately be expanded to 850 thousand barrels per day. The completion of the pipeline could not only reduce Canada’s overreliance on the U.S. market, but also help China diversify its oil supply. An additional advantage for China is Canada’s stable political and transparent regulatory environment, which makes large-scale imports from Canadian oil sands attractive to Chinese decisionmakers. However, looking beyond the energy-security perspective, Canadian oil sands exports to China are actually politically troublesome, largely due to three factors: the strain such a move would put on the Sino-U.S. relationship, the detrimental impact the deal would have on China’s international climate change negotiations, and the strong opposition from environmental groups and indigenous communities in Canada. First, Canadian oil sands exports to China could further strain the already turbulent Sino-U.S. relationship. In 2012, a presidential election year, the Obama administration rejected TransCanada’s application to build the Keystone XL pipeline. The move stemmed from strong Democratic and environmentalist opposition to the deal—Obama would have risked losing the pro-environment electorate if he approved the plan. Yet, the Democratic Party has been unable to reach a consensus on this contentious issue, and the U.S. State Department has agreed to allow TransCanada to reapply for a Keystone XL permit once an alternative route that avoids particularly environmentally sensitive sites is selected. By comparison, almost all congressional Republicans strongly support the Keystone XL pipeline. Arguing that turning down the pipeline will harm U.S. energy security, kill U.S. jobs, and unnecessarily benefit China, they have vigorously attacked Obama’s decision. Any renewed support for the Northern Gateway pipeline by Chinese national oil companies would shift the focus of the Keystone XL debate within the United States from the environment to national security—a prevailing fear, especially among congressional Republicans, is that without Keystone, China will beat the United States to Canada’s rich oil reserves. A desire to shift the debate to national security in the United States may even be driving the Canadian government’s public support of the Northern Gateway pipeline. Second, large-scale Chinese imports of output from Canadian oil sands would come with a high price tag for China’s future international climate negotiations. According to the revised national Energy Balance Table, China surpassed the United States to become the world’s largest carbon emitter as early as 2006. In 2009, emissions from Chinese coal combustion alone exceeded total U.S. carbon dioxide emissions. According to the International Energy Agency, China is expected to account for 42 percent of global incremental carbon emissions by 2035. Nevertheless, under the 2011 Durban Platform for Enhanced Action, China has already said it will join a legally binding international climate treaty that will be agreed upon by 2015 and will come into force by 2020. As a result, during future international climate negotiations, China is expected to face increasingly higher pressure from the international community to retard its spiking carbon emissions. According to the Canadian Industrial Energy End-Use Data and Analysis Center, carbon-emission intensities of upstream oil sands production are generally one to four times higher than conventional oil extraction. Although recent “well-to-wheels” studies have found that the life-cycle emissions of oil-sands-based products are only 5 to 15 percent higher than those of conventional oil products, such analyses likely overlook the substantial carbon-emissions potential that is embedded in the large amount of carbon-intensive oil sands byproducts, such as petroleum coke. According to Environment Canada, oil sands development and the transportation sector are the primary drivers underlying the growth of Canada’s greenhouse gas emissions. In order to allow room for the emissions that would result from oil sands development, and to save $14 billion in penalties for not achieving its Kyoto targets, the Canadian government withdrew from the Kyoto Protocol right after the Durban climate conference, without adequate consideration of the criticism it would receive from the international community. Large-scale Chinese imports of Canadian oil sands output would correspond to de facto support of Canada’s environmentally irresponsible climate policy. Not surprisingly, Chinese imports from Canada’s oil sands would not only be criticized by the international environmental community but would also make the work of China’s climate negotiation delegation much more difficult in the future. Finally, strong opposition to the Northern Gateway pipeline from environmental organizations and Canada’s indigenous community is another important issue that China should not ignore. As early as 2005, PetroChina, the listed arm of China’s largest national oil company, signed a cooperation agreement with Enbridge to support the Northern Gateway pipeline. However, after Stephen Harper came into power in 2006, Sino-Canadian relations soon deteriorated. Citing a lack of support from the Canadian federal government, PetroChina withdrew from the pipeline project in 2007 but forgot to mention the other serious impediment to the deal—strong opposition from both environmental organizations and indigenous communities along the pipeline route. Although the Canadian government now seems to be supportive of the pipeline, it will still be unable to address environmental concerns and the indigenous community’s opposition to pipeline construction in the near future. Consequently, Enbridge’s application for the pipeline is expected to be a prolonged process, which will inevitably increase the financial risks of the project. To enhance China’s energy security, Chinese national oil companies have significantly expanded their overseas presence in recent years. But, due to the monopoly status they have long enjoyed domestically, these companies often evaluate overseas projects primarily on the basis of energy security and corporate bottom line. However, many other factors are at play, and such practices have made securing a return on some Chinese overseas investments problematic at most. Importing output from Canadian oil sands is likewise complicated. Chinese leaders should prohibit national oil companies’ involvement in the Northern Gateway pipeline, at least during a U.S. presidential election year, or they risk **stirring up a national security debate** in the United States and inflaming Sino-U.S. relations. After the conclusion of the Chinese political power transition by the end of 2012, the new Chinese leadership should not only fundamentally reform China’s energy-oversight mechanism, which has so far failed to adequately regulate Chinese national oil companies, but also significantly improve intergovernmental coordination. This would lead Chinese national oil companies to, in addition to focusing on national energy security and their corporate bottom line, take other important factors such as Sino-U.S. relations, environmental governance, and the host country’s internal politics into consideration when they make future overseas investment decisions.

#### Also leads to ocean destruction

Vancouver Sun, 12

["Exxon Valdez-like oil disaster in Arctic feared," 5-19-12, www.canada.com/vancouversun/news/westcoastnews/story.html?id=dfa788af-e19b-4ce3-8a86-b671b8a2d16a, accessed 2-10-13, mss]

One of Canada's top experts on Arc-tic issues is warning of the "**near-inevitability**" of an Exxon Valdez-scale oil spill at a **fragile choke point** in Alaskan waters if Canada ends up shipping oil-sands fuel to China via pipeline terminals on the British Columbia coast. Michael Byers, a University of British Columbia professor and Canada Research Chair in Global Politics and International Law, argues that Canada's "disregard for the environmental impacts of developing and selling its oilsands to China" could eventually expose the narrow, already-congested Unimak Pass in the Aleutian Islands - a **key maritime gateway** between Asia and North America - **to** an ecological disaster. Byers' warning - published Friday in the Seattle Times under the head-line "Canada's oilsands bonanza could mean disaster for Alaska's coast-line" - follows comments at a Congressional hearing last week by the commandant of the U.S. Coast Guard, Adm. Robert Papp, that the strategic importance of the Unimak Pass and nearby Bering Strait have long been overlooked by the U.S. government, and that protection of the two passageways has become an urgent priority for his agency. The likelihood that China and other Asian countries could become major buyers of Canadian bitumen has increased significantly in recent months because of unanticipated obstacles in securing U.S. approvals for the Keystone XL pipeline, intended to run between Alberta's oilsands and American petroleum refineries on the Gulf Coast.

#### Extinction

Craig, 3 -- Indiana University School of Law professor

[Robin, "Taking Steps Toward Marine Wilderness Protection?" McGeorge Law Review, 34 McGeorge L. Rev. 155, Winter 2003, l/n, accessed 2-2-13, mss]

The world's oceans contain many resources and provide many services that humans consider valuable. "Occupy[ing] more than [seventy percent] of the earth's surface and [ninety-five percent] of the biosphere," n17 oceans provide food; marketable goods such as shells, aquarium fish, and pharmaceuticals; life support processes, including carbon sequestration, nutrient cycling, and weather mechanics; and quality of life, both aesthetic and economic, for millions of people worldwide. n18 Indeed, it is difficult to overstate the importance of the ocean to humanity's well-being: "The ocean is the cradle of life on our planet, and it remains the axis of existence, the locus of planetary biodiversity, and the engine of the chemical and hydrological cycles that create and maintain our atmosphere and climate." n19 Ocean and coastal ecosystem services have been calculated to be worth over twenty billion dollars per year, worldwide. n20 In addition, many people assign heritage and existence value to the ocean and its creatures, viewing the world's seas as a common legacy to be passed on relatively intact to future generations. n21

#### Plan takes too long, and it can only be applied to 20% of U.S. plants – their author

Moniz and Tinker 10 – Professor of Physics and Engineering Systems @ Massachusetts Institute of Technology and Director of the Bureau of Economic Geology @ University of Texas at Austin Ernest J. Moniz and Scott W. Tinker “Role of Enhanced Oil Recovery in Accelerating the Deployment of Carbon Capture and Sequestration,” An MIT Energy Initiative and Bureau of Economic Geology at UT Austin Symposium, July 23, 2010

• It takes time to scale-up any industrial enterprise, including EOR, several-fold. • EOR with CO2 from coal power plants will not be commercially viable absent government subsidy or until CO2 emissions are priced substantially, and such pricing does not appear imminent. • It will take a considerable time to retrofit as much as 50 GWe of the coal fleet for carbon capture and the opportunities may not be much beyond this level: with today’s capture technology, as little as 20% of the existing US coal plants may be serious candidates for CO2 capture retrofit (see Retrofitting of Coal-fired Power Plants for CO2 Emissions Reductions, proceedings of a 2009 MITEI Symposium, web.mit.edu/mitei).

#### Plan causes freshwater contamination – kills global CCS – turns the case

Tzimas 5 – DG JRC, Institute for Energy Petten, The Netherlands (E. Tzimas, A. Georgakaki, C. Garcia Cortes, S.D. Peteves, December, “Enhanced Oil Recovery using Carbon Dioxide in the European Energy System,” http://science.uwaterloo.ca/~mauriced/earth691-duss/CO2\_General%20CO2%20Sequestration%20materilas/CO2\_EOR\_Misciblein%20Europe21895EN.pdf)

Geological storage is currently considered as the best carbon sequestration option. Carbon dioxide can be stored in suitable geological formations, such as active (using EOR) and depleted oil and gas reservoirs and deep saline aquifers. The major issue associated with geological storage is the assessment of storage capacity and the estimation of retention times. Although CO2 is not toxic, its release may cause asphyxiation, contaminate drinking water supplies and, on a global scale, may make carbon capture and storage an ineffective strategy for reducing GHG emissions. Currently, there is one commercial application of geological CO2 storage worldwide — the Sleipner Project, where one million tonnes of CO2 (Mt CO2) per year (the equivalent of the emissions of a 140 MW power plant) are injected and stored in a saline aquifer in the North Sea. Furthermore, CO2 injection underground in a gas field has commenced recently in In-Salah (Algeria) and plans have been finalised for a similar project in the Snohvit gas field in the Norwegian Sea.

#### And it causes extinction

Bergkamp 6 – head of the Water Programme at lUCN-The World Conservation Union and Katharine Cross, works in IUCN’s Global Water Programme on issues relating to. groundwater and river basin management (Ger, 03/10, “Groundwater and Ecosystem Services: towards their sustainable use,” http://aguas.igme.es/igme/ISGWAS/Ponencias ISGWAS/13-Bergkamp.pdf)

Groundwater is an important component to providing ecosystem services. For example, aquifers are connected to a greater ecological and hydrological landscape that includes adjacent riparian areas, upland terrestrial ecosystems, and surrounding river basins (NRC, 2004). Ecosystems that depend on groundwater include terrestrial vegetation, river base flow systems, aquifer and cave ecosystems, wetlands, terrestrial fauna, and estuarine and near-shore ecosystems (Sinclair Knight Merz, 2001). Groundwater associated ecosystem services provide support to a wide range of production and consumption processes, which have high economic value (Emerton and Bos, 2004). In this section, we discuss the ways in which groundwater provides ecosystems in the form of provisioning, regulating, supporting and cultural services. For example, discharge to streams and rivers may provide essential nutrients to aquatic life and support downstream users of water for drinking or irrigation (NRC, 1997). These ecosystems depend on several groundwater characteristics, which include the quality of water, discharge flux from an aquifer, and the level of pressure of groundwater (Sinclair Knight Merz, 2001). Small changes can potentially cause extensive damage to dependent ecosystems. In addition we examine how ecosystem services, such as climate regulation and land-use are critical to maintaining groundwater systems. The challenge is to use groundwater and interrelated ecosystem services in a sustainable manner to provide for the present without compromising the needs of future generations. The MEA classifies fresh water (including groundwater) as a provisioning service, which is defined as “products obtained from ecosystems” (MEA, 2005, p.40). Most freshwater is not in lakes and rivers, but in aquifers. In fact, groundwater is the earth’s largest accessible store of fresh water (excluding ice sheets and glaciers) and constitutes about 94% of all fresh water (Ward and Robinson, 1990). Groundwater is also an integral component of regulating, supporting and cultural ecosystem services. One of the critical functions of groundwater as a provisioning service is its storage and retention for domestic, industrial and agricultural uses. As many as two billion people depend directly upon aquifers for drinking water, and 40% of the world’s food is produced by irrigated agriculture that relies heavily on groundwater (Morris et al., 2003)

**Relations are resilient, but the cooperation that their impacts assume is impossible**

Harry **Harding 11**, founding dean of the School of Leadership and Public Policy at the University of Virginia, “Are China and the U.S. on a collision course?”, June 14, http://thinkingaboutasia.blogspot.com/2011/06/are-china-and-us-on-collision-course.html

In my judgment, **it is highly unlikely for the relationship between the US and China to be primarily cooperative**, at least in the short to medium term. **The differences in values, political systems, interests, levels of development, and perceptions of the existing international order are simply too great for the two countries to find common ground on all issues, or even to find a mutually agreeable allocation of costs and benefits when they try to pursue common interests**. Only a common interest that was massively compelling – say a widespread pandemic, another financial crisis, a global outbreak of terrorist activity targeted at both countries, or increasingly severe consequences of climate change – might produce a predominantly cooperative relationship. **Fortunately, an essentially confrontational relationship is also unlikely**, especially **if one is primarily concerned with** the risks of **military conflict**. **The high degree of economic interdependence between the two countries has already created a relatively resilient relationship**. **The cost of military conflict**, especially given the fact that both China and the US are nuclear powers, **will be a significant deterrent** against military conflict. Equally important, **the probability of the most worrying of the trigger events** identified above– a unilateral declaration of independence by Taiwan – **is presently quite low**, as is the risk that China would try to compel unification through the use of force.

No china conflict

Rosecrance et al 10 (Richard, Political Science Professor @ Cal and Senior Fellow @ Harvard’s Belfer Center and Former Director @ Burkle Center of IR @ UCLA, and Jia Qingguo, PhD Cornell, Professor and Associate Dean of School of International Studies @ Peking University, “Delicately Poised: Are China and the US Heading for Conflict?” Global Asia 4.4, <http://www.globalasia.org/l.php?c=e251>)

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

#### The conclusion of their Logan article says the squo solves U.S.-China energy cooperation – Future Gen, sequestration power plant, AP6 provides framework for future action

Logan et al. 7 – Senior associate @ World Resources Institute Logan, Joanna Lewis (Senior international fellow at the Pew Center on Global Climate Change), and Michael B. Cummings (JD candidate @ Georgetown University and former Business/Solutions Fellow @ Pew Center on Global Climate Change), “For China, the shift to climate-friendly energy depends on international collaboration,” Boston Review, January/February 2007, pg. http://bostonreview.net/BR32.1/loganlewiscummings.php

\*\*\*EMORY”S CARD BEGINS\*\*\*

All these factors combined call into question the Chinese central government’s ability to move down a different, more climate-friendly path without meaningful international engagement and assistance. It is therefore critically important for the international community to increase bilateral and multilateral collaboration with China to address shared energy and environmental concerns before it commits to half a century of carbon-intensive infrastructure. Five areas are particularly well-suited for further engagement and offer strong opportunities to expand global benefits: Energy efficiency. Efforts to improve energy efficiency are the most effective and affordable measures China can take to meet development goals while reducing greenhouse-gas emissions. Continuing its tradition of relatively impressive energy-efficiency policies, China recently approved new fuel-economy standards for its rapidly growing passenger-vehicle fleet that are more stringent than those in Australia, Canada, and the United States. Moreover, the government has set an extraordinarily ambitious target of cutting energy intensity by one fifth by 2010. International partners can help China to build on these important efforts, in particular by promoting the business, financial, and regulatory skills needed for energy-efficiency projects and standards, and to reform policies that impede market-driven projects. Developing incentives for accelerated technology transfer, particularly for the private sector, are also crucial. Many of these efforts are already underway, and Chinese government officials are open to proposals that can help them meet their targets. Foreign partners need to be open and flexible so that their efforts can have maximum impact. Energy security with climate benefits. China’s booming economy has required a huge expansion in imported raw material, especially oil, since 2001. Chinese national oil companies have begun to purchase oil and gas assets around the globe as a way to increase energy security. Some nations view these actions with alarm, since there are potentially destabilizing military, political, and economic implications. From a climate perspective, China’s growing interest in coal liquefaction is also alarming because making transportation fuels from coal through chemical transformation sends approximately twice as much CO2 into the atmosphere as using standard crude oil. Better integrating China into the processes of managing the global energy system would make it a more helpful partner in managing that system. Increased participation in the IEA, G-8 and other global bodies involved in high-level energy dialogues would provide opportunities for developing shared understandings on topics affecting global energy security. Such dialogues could lead to energy-security-enhancing initiatives with climate benefits, and could lead the way toward climate-focused dialogue between the major energy consumers of the world. But any such endeavours will need to be backed by meaningful actions. China and its international partners could also discuss deeper technical collaboration on vehicle technologies, alternative fuels, and associated policies. However, any partnerships first need to focus on a dramatically improved atmosphere of trust and sincerity. Advanced coal technologies and carbon sequestration. For the past few years, China has built, on average, one new large power plant each week. Provided that it can overcome technical, financial, regulatory, and social barriers, carbon capture and storage (CCS) may become a critical option for reducing greenhouse-gas emissions from fossil-burning plants throughout the world, but especially in coal-intensive countries such as China. While China is unlikely to invest in CCS systems for coal plants in the next decade or two due to the cost, it is looking to collaborate on advanced coal technology research including coal gasification. China is also keenly interested in enhanced oil-recovery methodologies that could use carbon dioxide in the process. CO2-enhanced oil recovery can help anchor early investments in CCS infrastructure that might otherwise have to wait for a more comprehensive climate policy.

\*\*\*EMORY’S CARD ENDS\*\*\*

Once more, international partnerships can help. A new U.K.-led initiative, part of the China–EU partnership on climate change, aims to accelerate experience with CCS by building a demonstration plant in the next decade. And Huaneng, China’s largest coal-based power-generation company, is one of 12 energy companies participating in the U.S. FutureGen “clean coal” project, attempting to become the world’s first integrated sequestration and hydrogen production research power plant. China is also collaborating with international partners on coal and CCS technologies through the Asia Pacific Partnership on Clean Development and Climate, known as the AP6. Officially launched in January 2006, the AP6 brings together China, the United States, Australia, India, Japan, and the Republic of Korea in an agreement based on clean energy technology cooperation. Some have criticized the AP6 as an attempt to further weaken the Kyoto Protocol, but limited funding raises doubts about whether there is enough glue to hold the membership together. The AP6 does bring together an important grouping of nations, and therefore has the potential to lay the groundwork for future action. Finally, China is a member of the Carbon Sequestration Leadership Forum, an international initiative of 22 countries currently collaborating with the International Energy Agency to deliver recommendations to the G-8 in 2008 on how CCS can be enhanced in the near term. The Forum is opening its meetings to new participants but doesn’t yet seem to offer much interest for developing countries such as China.

#### Their Zha and Hu evidence says the plan has to do a bunch of other stuff to solve, and there are alt causes to tech transfers – have to do nuclear power, renewable energy, coal and oil production, improve energy efficiency, replace obsolete plants, and improve power price systems, urban planning, and energy conservation; IPR protection and low-cost competition alt causes

Zha and Hu 7 – Professors of International Studies @ Renmin University and Professor of Politics @ University of Hong Kong Zha Daojiong and Hu Weixing, “Promoting Energy Partnership in Beijing and Washington,” Washington Quarterly • 30:4 Autumn 2007, pp.105–115

\*\*\*EMORY’S ENTIRE CARD \*\*\*

Policy dialogues are certainly useful. Yet, as is true of so many other venues for government communication, they often result in being a means for defending one side’s own policy orientations. Partnership, on the other hand, is action oriented. Although China and the United States are not yet strategic partners in the field of energy, actions in the spirit of partnership are certainly desirable. First, Washington should continue to collaborate with Beijing on China’s energy technology development. The logic for doing so is simple: energy saved in China means an increase in worldwide supply and a reduction of pollutants into the air, which migrate across the Pacific Ocean. The areas for action include working to increase the use of nuclear and other cleaner forms of power, improving recovery rates of coal and oil production, achieving better user efficiency, and replacing technologically obsolete plants. In addition, China and the United States can benefit from discussing how to address policy issues associated with energy use such as fuel and electric power price systems, urban planning, and the encouragement of lifestyle changes to enable energy conservation. In order to promote energy technology development in China, it is essential for U.S. companies to see the benefits of participation. For U.S. and other international companies, two issues stand in the way of the transfer of energy-saving technologies to China: inadequate Chinese protection of intellectual property rights of foreign technology and low-cost competition from Chinese-made equipment. As such, transfer of the best available technologies, a frequent suggestion of Chinese government officials, is often regarded as undesirable by the U.S. business community. Energy conservation in China and environmental protection is nonetheless a matter of urgency and in the interest of the entire world. The U.S. government has sound reason to provide incentives for U.S. businesses to establish a stronger presence in China’s energy development and environmental protection. Intellectual property rights concerns are legitimate. One compromise is for U.S. technology companies to partner with their Chinese counterparts to produce better-than-available (though not the most high-end) energy technologies and equipments for adoption in China. This approach can establish intellectual property rights protection within the Chinese system from the start, with Chinese partners having an interest in protecting their own investments. As for concerns about competition from cheaper Chinese-made energy-saving technologies, energy conservation is a worldwide task. Such competition thus ought to be viewed as a benign if not welcome development. Second, the governments of China and the United States ought to explore ways for their energy companies to jointly enlarge the global supply of oil and other forms of energy. Chinese oil companies are already collaborating with U.S. and other international oil companies through subcontracting arrangements. Serious competition between Chinese and U.S. companies as well as other international oil companies takes place when they pursue wholly owned or equity investment in the same asset in a third country. Chinese oil investment decisions baffle their U.S. competitors when profit margins are estimated to be considerably lower than those of other companies, raising suspicions of political motives. When Beijing and Washington are viewed as condoning such company behavior through diplomacy, they inadverdently help strengthen the leverage of the third country, increasing the cost of extraction for all. Rather than providing cover for each other’s energy companies to compete in third-country markets, the two governments should find ways to encourage joint ventures in oil extraction. Chinese-U.S. joint ventures in oil development could help to lower the costs for oil companies associated with competitive bidding for the same energy assets. They would also help dissuade the appeal of resource nationalism to oil-exporting states. This approach can certainly contribute to confidence building between the political establishments in Beijing and Washington. Energy security as a bilateral issue between China and the United States has the potential to become contentious. Although energy has little chance of being the issue that diffuses the myriad tensions between Beijing and Washington, energy cooperation in the spirit of partnership can help improve the status quo.

#### The conclusion of their Herberg article says new multilateral institutions and regional power cooperation are key, not just oil

Herberg 11 - Senior Lecturer of International Relations and Pacific Studies @ University of California–San Diego Dr. Mikkal E. Herberg (Research Director on Asian energy security at the National Bureau of Asian Research), “China’s Energy Rise and the Future of U.S.-China Energy Relations,” New America Foundation, June 21, 2011 |pg. http://newamerica.net/publications/policy/china\_s\_energy\_rise\_and\_the\_future\_of\_us\_china\_energy\_relations

\*\*\*EMORY”S CARD BEGINS\*\*\*

Competing Visions of Energy Security On the vexing challenge of energy security there remains a major contradiction between the common energy security challenge that the U.S. and China both face and the deeply divergent approach that each takes toward the challenge. The inability to work together on this common problem concedes the advantage to producer governments who can take advantage of the fractious and uncoordinated response of the two largest oil importers to their anxieties over reliable supplies of crude oil. The common problem is clear: as the two largest oil consumers and importers China and the U.S. have a fundamental common interest in working together to find ways to boost global oil production, strengthen investment in new oil supplies, to encourage an increasingly diversified geographic spread of new oil suppliers, to strengthen the security of sea lanes and critical transport bottlenecks around the globe, and to collaborate in building strategic oil stocks and coordination mechanisms in the case of major oil supply disruptions which are virtually inevitable over time. Global oil markets are tightening and prices are rising well above $100 a barrel and are likely to continue rising as demand increasingly bumps up against a structurally weak global oil supply picture. Both countries are by far the most exposed to the increasing costs and worsening reliability of global oil supplies. These mutual interests are so profoundly obvious that the lack of collaboration on this between the two governments is frankly stunning. The lack of coordination between the two leviathans of the oil market leaves their energy security to the tender mercies of a chronically unstable global oil market and a group of politically unstable, often corrupt, economically mismanaged, and increasingly geographically concentrated group of oil exporters that are quite happy to exploit this to increase revenues. Beyond the different prisms through which each leadership sees energy security, other aspects of each’s current approach to energy security further reduce the potential for working together. The U.S. Obama administration lacks any serious, near or medium-term strategy on oil and energy security and isn’t philosophically or organizationally inclined to seek a more active global energy security strategy that would engage China and other major importers at a high level. The Obama administration came to office with a laudable “green” energy agenda of accelerating renewable energy development and, relevant to the oil side of the equation, accelerating development of electric vehicles and battery technology. Its vision of energy security is to move away from oil, coal, and traditional fossil fuels toward more reliable, domestically-produced green energy technologies. It launched the Major Economies Forum for Energy and Climate in mid-2009 which tackles climate change and clean energy cooperation multilaterally in a group of 17 major economies. Unfortunately, the green revolution will take at least 20 years to make any serious difference in the need for oil and reduce the importance of global oil market stability. When the administration does talk about more near and medium-term energy and oil security, it remains mired in the domestic dialogue of “energy independence” and professes an aim of reducing dependence on imported oil and completely eliminating imports of Middle East and Venezuelan oil. In the next 20 years, this is simply not a serious strategy given how central imported oil will remain to U.S. transportation needs and economic prosperity. But there doesn’t seem to be an appetite in the Obama administration for an activist global energy security strategy at the leadership level that could potentially enlist a stronger sense of common purpose and collaboration with China. On Beijing’s side, there are also added constraints on the potential to collaborate. Beijing’s political leadership sees energy security in terms of national, physical control of overseas oil supplies owned or controlled by China’s NOCs and control of pipeline infrastructure and sea lanes bringing supplies directly to China. But China’s approach is mercantilist in deeper ways that help explain the persistence of an energy security policy that is inadequate to meet China’s real global energy security dilemma. China’s oil import needs are rising at three times the rate that its NOCs can acquire or develop new overseas producing assets.8 Most of their overseas production is not exported back to China rather it is sold into local and regional markets to benefit from the best available netback value of their production, just like other international oil companies. For a whole range of reasons the benefit of nationally controlled oil supplies perceived by China’s leadership as a form of energy security isn’t really effective in the real global oil industry of today. This raises the question of how to explain the persistence of leadership beliefs in the NOC-based energy security strategy? The answer is that what appears to be a mercantilist energy security strategy has gradually evolved into what is, in reality, a mercantilist industrial policy aimed at building oil industry “national champions”. This is a key distinction between leadership perception and oil industry reality. The Chinese political leadership seems to believe that its state support for the expansion of its NOCs abroad is ensuring or “locking up” more secure future oil supplies for China. However, in practice China’s NOCs are investing and operating largely driven by the same commercial, competitive, and global oil market imperatives as the IOCs.9 Ironically, this is linking China’s oil security ever more closely to global oil market supply, demand, and price conditions rather than directly ensuring national physical control of sufficient future oil supplies to meet rising demand. Where the leadership’s perceptions and the commercial interests of the NOCs do converge is the extensive direct political and financial support Beijing provides their NOCs to get ahead, i.e. to “catch-up”, in the highly competitive global oil industry. To outside observers and oil company competitors this collaboration, whether state or NOC-led, has all the markings of “China Energy, Inc.” Nevertheless, what the leadership perceives as an energy security policy is, in practice, more an outcome of Beijing’s reflexive reliance on industrial policies and strong state support to build global national champions, as it does in other industrial sectors, from vehicles to the electronics industry to clean energy to the nuclear industry. The persistence of this approach is reinforced by other industries and bureaucracies which have learned to use the language of energy security to promote state support for their own global competitive advantage. For example, the Chinese tanker/shipbuilding industry has convinced the leadership that Chinese oil and natural gas imports will be more secure if carried on Chinese tankers, therefore justifying subsidies and cheap loans.10 As Erica Downs suggests in an excellent recent Brookings report, the China Development Bank (CDB) has strong converging interests with China’s NOCs insofar as large loans to support NOC overseas investments and loans to secure long-term oil and gas supply arrangements from key exporters like Russia, Brazil, Kazakhstan, Turkmenistan, Venezuela, and others, all handled through China’s NOCs, provides the CDB with badly needed credit-worthy opportunities to lend out its huge hoard of Chinese state foreign assets.11 The PLA Navy (PLAN) has also begun to cast security of China’s energy sea lanes as an increasingly vital PLAN mission helping to promote growing budgets. In some cases even provincial governments have employed the language of energy security to help promote provincial economic development, such as Yunnan’s promotion of an oil import pipeline across Myanmar, which in reality was mainly aimed at boosting Yunnan’s provincial economy.12 This suggests that the prevailing NOC-based, mercantilist character of China’s energy security policies is more deeply rooted than commonly understood. It is industrial policy masquerading as an energy security strategy. And a wide range of important industrial, financial, and bureaucratic interests have a stake in continuing along this path. Consequently, it’s not surprising that even as Beijing builds its own strategic oil stocks for national use, it has shown little interest in joining in the International Energy Agency’s emergency oil stocks program and becoming entangled in the IEA’s rather tortuous multilateral consultation process over releases of strategic oil stocks. Combined with the lack of engagement on global energy security strategic diplomacy in the Obama administration this suggests that forging a common U.S.-China working consensus at the leadership level on their common multilateral energy security challenges is likely to remain elusive. Despite these divergent interests and poor atmospherics, there have been at least a few signs that progress on a more cooperative, “win-win” approach to energy security and investment is possible. For example, the toxic outcome of the CNOOC-Unocal debacle in 2005 strongly reinforced Beijing’s suspicions that the U.S. viewed oil security and investment as an arena of strategic competition between the U.S. and China and convinced Chinese NOCs that they were not welcome in the U.S. oil patch. China’s NOCs have since avoided seeking any new investments here. Recently, however, CNOOC invested in two large tracts of U.S. shale gas properties in a joint venture with Chesapeake Energy. Shale gas development is a huge and booming sector of the U.S. energy industry and CNOOC clearly would like to acquire the know-how of shale gas development to take back to China. CNOOC was able to make those investments with virtually no reaction in Washington DC which suggests that some of the political hysteria on Capitol Hill and elsewhere in Washington DC about investments by Chinese state-owned NOCs may be easing. It would not be surprising to see other Chinese NOCs following CNOOC’s lead in the U.S. which could help further ease nationalistic concerns over the aims of the Chinese companies. The Challenge of Energy and Regional Diplomacy: Beijing’s energy security drive is accelerating its emergence as a regional and global power. With expanding investments, oil import and LNG supply deals, and active pipeline diplomacy, China will inevitably become a key diplomatic and economic player in virtually every major oil and gas-exporting region of the world. Historian Niall Ferguson talks about this as China’s evolution towards an “inadvertent” empire.13 As its presence and interests in these areas expands China also will increasingly begin to occupy strategic space that has traditionally been dominated by the U.S. From the Persian Gulf to Central Asia to Southeast Asia and Latin America, U.S. and Chinese energy and strategic interests will more and more often bump up against one another. Also, Beijing’s concerns about its growing dependence on seaborne oil and gas imports through the Indian Ocean, Malacca Straits, and South China Sea are contributing to its rapid and substantial naval modernization which also raises new issues in the face of the traditional dominance of the U.S. navy in the Pacific. Ultimately, as the two largest oil importers in the world, the U.S. and China have a strong mutual interest in stability in key energy exporting regions and in the free transit of energy resources. However, this has generally been insufficient to galvanize much agreement on regional policies and influence and, in fact China’s growing presence in these areas of traditional U.S. strategic, energy, and maritime power has aggravated the sense of strategic rivalry on both sides. This growing potential for conflict needs to be acknowledged and will need to be managed carefully. Iran is an example of how China’s widening energy footprint can complicate bilateral relations. Iran has become a key oil supplier to China and also a potential source of major new oil and gas investments for China’s NOCs. The U.S. believes that China’s long-running reluctance to support tightening U.S.-led UN sanctions on Iran reflect its growing energy relationship with Iran. Indeed, at each step of tightening sanctions China has worked to limit the sanctions in a way that China’s NOCs can continue to invest in the oil industry and can also continue to supply oil products to Iran which is heavily dependent on imported oil products. Many in Beijing, alternatively, believe that the U.S. is cynically trying to deny China access to vital oil supplies that it needs to fuel economic growth. Although China has gradually come along on increasing sanctions on Iran, it remains the key opponent on the Security Council of more effective sanctions and, moreover, its NOCs are positioned for potentially much larger oil and gas investments in Iran. This issue remains a key irritant in U.S.-China relations.14 Nevertheless, even in the case of Iran, creative diplomacy can potentially help reduce friction and reinforce our common energy security interests in stabilizing oil and gas exports from the region. During 2010, as oil prices continued to rise, the U.S. sought Saudi and Gulf Cooperation Council (GCC) support in an effort to convince Beijing that the Saudis and GCC producers could supply China’s oil needs, a move to encourage China to limit its crude oil purchases from Iran.15 This suggests a more nuanced U.S. recognition of China’s energy security concerns and a search for a more integrated and common approach to our mutual energy security interests in the region. As China’s energy footprint grows, distrust over energy intentions and investments are likely to increasingly affect new areas where both the U.S. and China have vital strategic interests. In Southeast Asia and the South China Sea region access to energy resources and control of the increasingly vital energy sea lanes of the Malacca Straits and South China Sea China have become important dimensions of U.S.-China regional diplomacy. China’s NOCs have growing energy investments in Indonesia, Australia, Myanmar, and elsewhere in the region and Beijing also has staked historic claims to sovereign control of a vast and contested maritime space across the South China Sea that it believes holds large oil and gas resources. Also, 80% of China’s imported oil and a growing share of its natural gas imports are transported by tanker through these sea lanes and these volumes are destined to rise dramatically over the next decade. Hence, energy security has become another dimension of China’s regional strategic calculus of strengthening its influence in the region, enforcing its sovereignty claims in disputed areas like the Spratly and Paracel Islands, and exerting greater strategic influence over shipping and the sea lanes. This has contributed to significantly more assertive actions recently by Beijing in the region in pressing its sovereignty claims. The Chinese also reacted with a virtual diplomatic tantrum when U.S. Secretary of State Hillary Clinton said at a recent ASEAN meeting that the U.S. was interested in helping broker a resolution of regional maritime claims. The Chinese have also become increasing active in harassing U.S. naval activities along China’s coast, such as the recent episode of harassing the U.S. Impeccable naval vessel. In Northeast Asia, as well, energy has become an important irritant in China’s relations with Japan as they joust over a natural gas field in the East China Sea. Further from China’s regional heartland, in Central Asia China’s large and growing energy investments and oil and gas supply pipelines are key elements of its rapidly growing strategic and economic presence in the region. China now accounts for 25% of Kazakhstan’s oil production, has built a large oil pipeline from Kazakhstan to China, has built a large natural gas pipeline from Turkmenistan to China, and is developing another gas pipeline from Kazakhstan. At the same time, the U.S. has been a key player since the fall of the Soviet Union in the energy geopolitics of the Caspian region and has invested much political capital and diplomatic effort to encourage the construction of oil and gas pipelines toward the west and free of Russian influence. This creates an increasingly delicate balance. On the one hand, to the extent China’s growing access to Central Asian energy undermines Russia’s traditional dominance there, this suits U.S. interests. Nevertheless, China’s growing influence is also coming at the expense of U.S. influence over future energy flows and investments in the region. For example, China’s growing access to Turkmenistan’s natural gas supplies to move them east to China effectively weakens the rationale for a large gas pipeline from Turkmenistan to the west and on to Europe, the so-called Nabucco Pipeline project, which the U.S. strongly supports. Even potentially more problematic, Iran’s oil and gas supplies could at some future point move by pipeline across Central Asia to China if China were to promote such a plan. Hence, energy is now an important factor in how the U.S. and China view each other’s role in the region, a factor that geographically and economically increasingly favors China. China’s energy engagement is leading to a range of concerns for the U.S. over its regional influence in a number of key places. In the Persian Gulf, the traditional heart of U.S. energy and strategic presence, China is rapidly becoming a key player beyond its ongoing involvement in Iran. The U.S.-Saudi strategic alliance has been the cornerstone of U.S. energy security strategy for decades. However, China-Saudi relations are booming as the Saudis have become the largest single oil import supplier to China, now regularly accounting for 20% of China’s oil imports. In a highly symbolic sign of the changing times, in early 2010 for some months the Saudis exported more oil to China than to the U.S. something that would have been thought nearly impossible just a few years earlier. China’s NOCs were the largest investors in Iraq’s massive oil field development auctions snagging three very large deals. In Africa much has been written about U.S. concerns over China’s enormous new energy and resource investments and the expansion in Chinese diplomatic and economic influence. This is growing as China’s NOCs become increasingly active in West Africa’s prolific offshore oil fields in Nigeria, Angola, Ghana, and Equatorial Guinea traditionally dominated by U.S. and western oil companies. In Latin America, China’s booming energy ties with Venezuela and more recently Brazil’s offshore oil bonanza have created new concerns in Washington over the potential erosion of U.S. influence in the region. Even in Canada, China’s NOCs are becoming significant investors in western Canada’s heavy oil and natural gas business. There is growing conversation in Washington that China’s efforts to develop oil and gas pipelines to Canada’s west coast for shipping to China could undermine a key, secure energy supply source to the U.S. Hence, while official U.S. policy tends to focus on our common energy interests in secure oil and gas supplies, under the surface U.S. apprehension is growing over the long-term implications of China’s growing energy footprint. U.S. Secretary of State Clinton let on to this growing anxiety inadvertently in recent Congressional testimony. In defending the need for more funding to defend U.S. interests abroad she blurted out the example of China’s efforts to undermine ExxonMobil’s large liquefied natural gas (LNG) project in Papua New Guinea and its widening energy and diplomatic impact. “We are in a competition with China…..ExxonMobil is producing it. China is in there every day, in every way trying to figure out how it’s going to come in behind us, come in under us…..if anybody thinks that our retreating on these issues is somehow going to be irrelevant to the maintenance of our leadership in a world where we are competing with China, where we are competing with Iran, that is a mistaken notion.” 16 China’s energy reach will inevitably continue to expand and with it the potential for increasing tensions and competition for influence in the key oil and gas producing regions of the world. This has only just begun. It will take strong leadership in both Beijing and Washington to avoid energy becoming a major source of tension in an already complex bilateral relationship. The Carbon, Climate Change Divide Another area where U.S.-China cooperation is central to addressing a critical global energy challenge is in the arena of climate change and carbon emissions. It is perhaps the best example of how the U.S. and China are reluctantly but increasingly joined-at-the-hip as the two indispensible energy powers necessary to meet these global challenges. Unfortunately, the prospects for reaching common ground remain poor. In the wake of the disappointing outcome of the UN Copenhagen climate meetings in December 2009 which clearly exposed the deep rift between China and the U.S., progress on re-energizing the UN climate process has been glacially slow. While the complexity of the UN climate negotiating process itself makes progress very difficult, the core problem remains the same, namely the inability of the two largest emitters to come to any consensus on their respective responsibilities for the future. The recent follow-up meeting in Cancun at the end of 2010 was barely able to forge a reaffirmation of the basic agenda set by the Copenhagen Accord, itself a vague and incomplete outline. China continues to lead the developing countries in seeking a new pact that continues the existing Kyoto Protocol approach of “common but differentiated responsibilities” and places the onus for solutions largely on the rich countries, most importantly the U.S. The U.S., along with most of the other rich countries are seeking a whole new pact that would broaden responsibility and require the developing countries to agree to specific national commitments for carbon emission reductions, taking into account national circumstances. Beneath the dispute lies the fundamental divide which remains largely unbridged between the two groups of countries over historic and future responsibilities. As by far the two largest emitters, the U.S. and China are central to future progress. But there remains little common ground between the two and their national approaches are increasingly at odds. The U.S. is unable to forge any domestic consensus on its responsibilities. The Obama administration’s ambitious approach to climate change suffered from the debacle at Copenhagen, but in any event the lack of domestic support for a more active U.S. climate policy was already clear and has only intensified with the rightward shift in U.S. politics in the wake of the financial crisis and the November 2010 Congressional elections. Even the Obama effort to employ the Environmental Protection Agency (EPA) to impose emission reductions is under assault politically. The lack of consensus domestically fatally undermines U.S. credibility in global talks and, in particular, undermines U.S. hectoring of China over its emissions. The lack of U.S. credibility allows China, which is moving nationally on a much more significant scale to slow the rise in its emissions, to take the moral high ground. Some may argue that a global agreement is unlikely because of the complexity of the negotiations globally, the multitude of conflicting interests and voices, and the continuing questions about the science. That may be. But what is clear is that if there were to be any chance for more progress on global climate negotiations, it will require a stronger consensus between the U.S. and China over their respective responsibilities. Without that, real progress remains impossible. Conclusion Stronger cooperation between China and the U.S. on global energy issues is vital to addressing our key global energy challenges, most importantly our common energy security dilemma. Without a greater willingness to work together on these issues, we are likely to face more unstable and high-priced oil markets, weaker global institutions to address energy market instability, an increasingly competitive and conflict-prone strategic environment in key energy exporting regions, and frightening carbon and climate outcomes. The issue is not cooperation on better U.S.-China relations for its own sake but cooperation that addresses our vital and common interests in energy security on a global basis. Is this possible? There is a long list of possible efforts to improve the scale and quality of U.S.-China energy cooperation. First, there is no serious strategic energy bilateral dialogue and one is desperately needed. The SAED is not up to the task, it is too burdened with a multitude of economic and other issues. The U.S. and China need to begin a semi-annual strategic discussion on common energy interests and develop new rules of the road and understandings about their respective interests in and views on key energy exporting regions. There is a desperate need for a confidence-building process. Part of this is to agree that we will disagree on many issues and try to prevent them from becoming toxic in the larger relationship. An important part of this dialogue is to work to contain the atmosphere of national competition over energy supplies and reshape it towards an acceptance of aggressive commercial competition in a broader context of national cooperation where we have broader mutual energy security interests. In order to fashion an effective dialogue, the Obama administration needs to craft a serious and actionable energy security strategy that focuses on near and medium term realities. The green agenda is a 20 year journey in terms of oil and energy security, the U.S. needs a strategy for the next 5-10 years of continuing vulnerability to a chronically unreliable and unstable global oil market. This should involve a “full-court-press”, together with China, on the producer states to open up oil resources to greater access from international companies and faster development of easily-accessed, low-cost reserves. On China’s part, Beijing needs to abandon its ineffective and counter-productive equity ownership driven model of energy security and cut its NOCs loose to let them compete and prosper. Supporting their oil field acquisitions does not strengthen China’s energy security and these companies no longer need the help given high oil prices and their growing competitive and technological sophistication. State support of their NOCs is increasingly a crude industrial policy of promoting “national champions” while at the same time aggravating energy security fears and distrust of key nearby powers.

\*\*\*EMORY”S CARD ENDS\*\*\*

Moreover, new multilateral institutions for energy security are needed; the IEA no longer represents the interests or the distribution of power among all the major oil importers. A modest start could be to start a Northeast Asian Energy Forum that would bring together the major oil and gas importers in the region. Regional cooperation on establishing emergency oil stocks would be an excellent approach to promote a more cooperative atmosphere. There was a forum to focus on energy security convened in 2006 by China that included all they key regional players including the U.S., Japan, South Korea, Russia, and India. This needs to be revived and reinvigorated.

#### No South China Sea conflict or escalation – their evidence is media exagerration – empirical squabbling, costs too high, interdependence, loss of international credibility, U.S. military de-escalates incidents through cooperation and communication

Kania 1/11 – The Harvard Political Review is a journal of politics and public policy published by the Institute of Politics, cites Andrew Ring, a former Weatherhead Center for International Affairs Fellow, and Peter Dutton, Director of the China Maritime Studies Institute at the U.S. Naval War College (Elsa, “The South China Sea: Flashpoints and the U.S. Pivot,” http://harvardpolitics.com/world/the-south-china-sea-flashpoints-and-the-u-s-pivot/)

Equilibrium and Interdependence? One paradox at the heart of the South China Sea is the uneasy equilibrium that has largely been maintained. Despite the occasional confrontation and frequent diplomatic squabbling, the situation has never escalated into full-blown physical conflict. The main stabilizing factor has been that the countries involved have too much to lose from turmoil, and so much to gain from tranquility. Andrew Ring—former Weatherhead Center for International Affairs Fellow—emphasized that “With respect to the South China Sea, we all have the same goals” in terms of regional stability and development. With regional trade flows and interdependence critical to the region’s growing economies, conflict could be devastating. Even for China—the actor with by far the most to gain from such a dispute—taking unilateral action would irreparably tarnish its image in the eyes of the international community. With the predominant narrative of a “rising” and “assertive China”—referred to as a potential adversary by President Obama in the third presidential debate—China’s behavior in the South China Sea may be sometimes exaggerated or sensationalized. Dr. Auer, former Naval officer and currently Director of the Center for U.S.-Japan Studies and Cooperation at the Vanderbilt Institute for Public Policy Studies, told the HPR that “China has not indicated any willingness to negotiate multilaterally” and remains “very uncooperative.” Across its maritime territorial disputes—particularly through recent tensions with Japan in the East China Sea—Auer sees China as having taken a very aggressive stance, and he claims that “Chinese behavior is not understandable or clear.” Nonetheless, in recent incidents, such as a standoff between China and the Philippines over the Scarborough Shoal this past April, as Bonnie Glaser, Senior Adviser for Asia at the Center for Strategic and International Studies, emphasized, “this is not an either or.” Multiple parties are responsible for the tensions, yet the cycle of action and reaction is often obscured. Nonetheless, Glaser believes that “The Chinese have in every one of these cases overreacted—they have sought to take advantage of the missteps of other countries,” responding with disproportionate coercion. In addition, China has begun to use methods of “economic coercion” to assert its interests against trade partners. A Tipping Point? Has the dynamic in the South China Sea shifted recently? Perhaps not in a fundamental sense. But with the regional military buildup, governments have developed a greater capacity to pursue longstanding objectives. According to Peter Dutton, Director of the China Maritime Studies Institute at the U.S. Naval War College, “China’s recent behavior in the East China Sea and assertive policy in the South China Sea” is “a serious concern.” He believes that China’s willingness to resort to force in defense of its territorial claims has been increasing over time, partially as a consequence of its rising power. As such, Dutton sees the situation as reaching a “tipping point in which China is…no longer satisfied with shelving the dispute.” Is confrontation or resolution imminent? Worryingly, Dutton observes, “the international dynamic in the region is motivated largely by fear and anger.” However, the use of unilateral military force would be a lose-lose for China,” particularly in terms of its credibility, both among its neighbors and in the international community. The Pivot in the South China Sea From a U.S. perspective, a sustained American presence in the region has long been the underpinning of peace and stability. However, excessive U.S. intervention could disrupt the delicate balance that has been established. Although the U.S. has always sought to maintain a position of neutrality in territorial disputes, remarks by Secretary of State Hillary Clinton that referred to the South China Sea as the “West Philippine Sea” led China to challenge U.S. impartiality. If the U.S. engages with its regional allies without seeking enhanced engagement with China, then U.S. actions in the region may be perceived by China as efforts at containment. Moreover, as the U.S. strengthens ties to partners in the region, there is risk of entanglement if conflict were to break out. There has long been an undercurrent of tension between the Philippines and China—most recently displayed in the standoff over the Scarborough Shoal in May 2012. Shortly thereafter, in a visit to Washington D.C., President Aquino sought U.S. commitment to military support of the Philippines in the event of conflict with China on the basis of the 1952 Mutual Defense Treaty. However, despite providing further military and naval support, the U.S. has refrained from making concrete commitments. Although the U.S. would not necessarily be dragged into a dispute, if a confrontation did break out, it might feel compelled to respond militarily to maintain the credibility of commitments to allies and partners in the region. Strong ties to the U.S. and enhanced military capacity could also provoke more confrontational behavior from U.S. partners. Yet, Ring emphasizes that the U.S. navy and military are also unique in the “ability to facilitate military cooperation and communication among all of the claimants” and particularly to “be that bridge…uniquely situated to build some flows of communication” that could facilitate a peaceful resolution to future incidents.

#### They have not read an internal link to their Central Asia scenario, and escalation is empirically denied since 2001

#### Powers will cooperate – contains the impact

**Collins and Wohlforth 4** (Kathleen, Professor of Political Science – Notre Dame and William, Professor of Government – Dartmouth, “Defying ‘Great Game’ Expectations”, Strategic Asia 2003-4: Fragility and Crisis, p. 312-313)

Conclusion **The** popular **great game lens for analyzing Central Asia fails to capture the declared interests of the great powers as well as the best reading of their objective interests** **in security and economic growth**. Perhaps **more importantly, it fails to explain their actual behavior on the ground, as well the specific reactions of the Central Asian states themselves. Naturally, there are competitive elements** in great power relations. Each country’s policymaking community has slightly different preferences for tackling the challenges presented in the region, and the more influence they have the more able they are to shape events in concordance with those preferences. **But these clashing preferences concern the means to serve ends that all the great powers share.** To be sure, policy-makers in each capital would prefer that their own national firms or their own government’s budget be the beneficiaries of any economic rents that emerge from the exploitation and transshipment of the region’s natural resources. But the scale of these rents is marginal even for Russia’s oil-fueled budget. And for taxable profits to be created, the projects must make sense economically—something that is determined more by markets and firms than governments. Does it matter? The great game is an arresting metaphor that serves to draw people’s attention to an oft-neglected region. The problem is **the great-game lens can distort realities on the ground, and** therefore **bias analysis and policy**. For when great powers are locked in a competitive fight, the issues at hand matter less than their implication for the relative power of contending states. Power itself becomes the issue—one that tends to be nonnegotiable. **Viewing an essential positive-sum relationship through zero sum conceptual lenses will result in missed opportunities for cooperation** that leaves all players—not least the people who live in the region—poorer and more insecure. While cautious realism must remain the watchword concerning an impoverished and potentially unstable region comprised of fragile and authoritarian states, **our analysis yields** at least conditional and **relative optimism. Given the confluence** of **their** **chief strategic interests, the major powers are in a better position to serve as a stabilizing force than analogies to the Great Game** or **the Cold War** would **suggest**. It is important to stress that **the region’s response to the profoundly destabilizing shock of** coordinated **terror attacks was increased cooperation** between local governments and China and Russia, and—multipolar rhetoric notwithstanding—between both of them and the United States. If this trend is nurtured and if the initial signals about potential SCO-CSTO-NATO cooperation are pursued, **another destabilizing shock might generate more rather than less cooperation among the major powers**. **Uzbekistan, Kyrgyzstan, Tajikistan, and Kazakhstan [The Stans] are clearly on a trajectory that portends longer-term cooperation** with each of the great powers. **As** military and economic **security interests become more entwined, there are sound reasons to conclude that “great game” politics will not shape Central Asia’s future** in the same competitive and destabilizing way as they have controlled its past. **To the contrary, mutual interests** in Central Asia **may reinforce the broader positive developments** in the great powers’ relations that have taken place since September 11, **as well as reinforce regional and domestic stability in Central Asia.**

#### No extinction from warming

Barrett 7, professor of natural resource economics – Columbia University

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

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

#### SQ solves emissions through renewables- global leadership boost solves now

**Goldenberg 2-1**-13 [Suzanne, the US environment correspondent of the Guardian and is based in Washington DC. She has won several awards for her work in the Middle East, “US carbon emissions fall to lowest levels since 1994,” http://www.guardian.co.uk/environment/2013/feb/01/us-carbon-emissions-lowest-levels]

America's carbon dioxide emissions last year fell to their lowest levels since 1994, according to a new report.¶ Carbon dioxide emissions fell by 13% in the past five years, because of new energy-saving technologies and a doubling in the take-up of renewable energy, the report compiled by Bloomberg New Energy Finance (BNEF) for the Business Council for Sustainable Energy (BCSE) said.¶ The reduction in climate pollution – even as Congress failed to act on climate change – brings America more than halfway towards Barack Obama's target of cutting emissions by 17% from 2005 levels over the next decade, the Bloomberg analysts said.¶ By the end of last year, America's emissions of carbon dioxide and other greenhouse gas emissions had fallen 10.7% from the 2005 baselines.¶ That drop puts Obama in a better position to defend his environmental achievements, which have often gone overlooked in the bitter rows over climate science.¶ It may also buoy up America's standing in the global climate negotiations.¶ "There have certainly been some solid results on the board in the US as a result of all these changes," Ethan Zindler, a BNEF analyst said.¶ A report last year by the independent thinktank Resources for the Future also suggested America was on course to meet those targets.¶ Lisa Jacobson, president of the BCSE, said the Bloomberg findings exposed the conservative argument that acting on climate change would be a drag on the economy. Instead, carbon emissions declined even as GDP was going up, she noted.¶ As described by Bloomberg, the US is in the throes of a major shift in energy production. Coal fell to just 18.1% of America's energy mix last year, down from 22.5% in 2007. Oil use also declined.¶ The explosion of natural gas production, thanks to fracking, filled much of the gap. America got 31% of its electricity from gas-fired power plants last year.¶ But the report found steadily expanding installation of wind, solar, hydro and geothermal energy. Renewables represented the largest single source of new growth last year, reaching $44bn in 2012, the report said, the report said.¶ Over the same time span, total energy use fell since 2007, by 6.4%, the report said. Most of the emissions cuts were due to installing more efficient heating and cooling systems in commercial building.¶ Other cuts in emission came from transport, with 488,000 Americans last year opting for hybrid and plug-in vehicles.

#### **Turn – Aff increases warming**

#### renewable tradeoff- plan causes it

Tady 7 - national political reporter

Megan, “Carbon Capture: Miracle Cure for Global Warming, or Deadly Liability?,” Alternet, http://www.alternet.org/environment/68490/?page=4

Critics of CCS say the high cost of CCS technology could make electricity more expensive, while not driving down the costs of renewable energy. "If that's the case, instead of spending an enormous amount of money sequestering that carbon, you should spend money accelerating the production of new power so you can close that plants down," Morris said. Kill fears that investment in CCS will reduce financial commitments to renewable energy. "With limited money, the more that's spent on technological fixes such as carbon sequestration, the less money will be available for research and development into energy storage, renewable energy and into overhauling the national electricity grid so they work best for renewable energy," Kill said.

#### Increases hydrocarbon consumption- leads to CO2

Dooley Et al 10 (CO2-driven Enhanced Oil Recovery as a Stepping Stone to What? JJ Dooley RT Dahowski CL Davidson July 2010, Pacific Northwest National Laboratory, <http://mitei.mit.edu/system/files/110510_EOR_Report_1.pdf> Joint Global Change Research Institute, Pacific Northwest National Laboratory)

As noted above to many, CO2-EOR looks just like CCS but in fact differs in some fundamental ways. It entails more complexity than is often discussed, and in many cases it is unlikely to appreciably offset the cost of CO2 emissions mitigation. But can it still provide value by decreasing U.S. reliance on imported oil? Again, the answer is more nuanced and less straightforward than typically presented (ARI, 2010; SSEB, 2006; Steelman and Tonachel 2010) . Ample technical literature supports the conclusion that, absent a global commitment to significantly reduce GHG emissions, the world will expand its use of unconventional hydrocarbon resources (e.g., oil shale, tar sands, coal-to-liquids) to replace declining conventional oil production (Dooley et al., 2009b; IPCC, 2007; US Climate Change Science Program, 2007). Given the energy intensity of producing transportation fuels from many of these unconventional hydrocarbon resources (see for example the comprehensive analysis of Brandt and Farrell, 2007), the expansion of unconventional hydrocarbon Page | 22 production in a world without stringent GHG emissions constraints will certainly lead to increased GHG emissions.

#### **b) Earthquakes – Injection of CO2 causes – this results in leaks from sequestration**

Ryan 12 (Future of Coal has an Unexpected New Threat: Induced Seismicity, 6/21/12, Margaret, <http://energy.aol.com/2012/06/21/future-of-coal-has-an-unexpected-new-threat-induced-seismicity/>)

The potential for underground injections to cause earthquakes was thought to be a problem for natural gas, but a new[National Research Council](http://www.nationalacademies.org/nrc/) study [says](http://dels.nas.edu/Report/Induced-Seismicity-Potential-Energy-Technologies/13355) the impacted sector will not be gas. It's a problem for [coal](http://energy.aol.com/tag/Coal/). Carbon capture and sequestration (CCS), pulling carbon out of emissions from coal-burning and storing it deep underground, has been prominent in clean energy planning over the last decade as a way to keep taking advantage of coal resources to meet energy demand while tackling [climate change](http://energy.aol.com/2011/08/31/down-to-the-numbers-on-natural-gas-and-climate-change/). But the new study finds the large-scale CCS needed to keep using coal "may have the potential for causing significant induced seismicity," study chair Murray Hitzman, professor at the [Colorado School of Mines](http://energy.aol.com/tag/Colorado+School+of+Mines/), told the Senate Energy and Natural Resources Committee June 19. The study was requested by Committee Chairman Jeff Bingaman in 2010, who wanted a "comprehensive and independent study" of whether energy-related activities could inadvertently cause earthquakes. They Felt the Earth Move He made the request after small earthquakes were felt in areas of Oklahoma, Arkansas and Ohio that don't normally experience quakes. The quakes were allegedly caused in part by clusters of injection wells disposing of wastewater from industrial activities, including natural gas hydraulic fracturing. Fracking opponents have also claimed the process itself poses a seismic risk. Bingaman asked the scientists to look at a range of energy activity, including fracking, geothermal wells, carbon dioxide injection for[enhanced oil recovery](http://energy.aol.com/2012/03/20/extending-the-life-of-oil-fields-using-pulsed-injection/) (EOR), and carbon sequestration and storage (CSS) from coal burning. Hitzman said the key factors for earthquake risk from underground injection are volumes and pressures. Wells drilled for geothermal generation and for fracking turned out to be no problem as long as increases in underground pressures are relatively small and temporary, he said. The same was true for EOR, where the idea is to force out more oil and have pressures return to normal. Susan Petty, President of [Altarock Energy](http://altarockenergy.com/), said geothermal firms had experienced seismic problems in the past when wells were overpressured. Maintaining a pressure balance is key to long-term safe operation of geothermal resources, she told the committee. Under Pressure But CCS involves continuous injection of CO2 under high pressure for a long time and is intended as permanent storage, Hitzman said. So is wastewater injection, but Hitzman said only a few of thousands of wastewater injection wells have been connected with quakes. Those generally involved higher pressures and volumes affecting previously undetected underground faults, he said. "Energy projects with large net volumes of injected or extracted fluids over long periods of time, such as long-term waste water disposal wells and CCS, appear to have a higher potential for larger induced seismic events," he said. [Stanford University](http://energy.aol.com/tag/Stanford+University/) Professor Mark Zoback said the oil and gas industry is increasingly avoiding the entire injection issue by recycling much of the water used in fracking. But for CCS, he saw a slightly different problem than the study panel: induced small quakes that wouldn't hurt people but would create cracks allowing CO2 to escape from underground reservoirs, negating their usefulness. He questioned how the world could find safe storage for the 7 to 8 billion tons of CO2 emitted now, let alone the 15 billion tons expected by 2050. "The issue is whether the capacity exists for sufficient volumes of CO2 to be stored in geologic formations for it to have a beneficial effect on climate change," he said, adding CCS "will be an extremely expensive and risky strategy." The witnesses did say more data is needed on baseline conditions, as well as better monitoring of injection effects, to minimize the potential for future energy activity to induce tremors.

#### ANY Leak amount is enough—buildup of pressure in the pipelines fractures the rock, allowing CO2 to escape -

Romm 10 – Senior Fellow at American Progress and Ph.D. in physics from MIT (Joe, “New study finds geologic sequestration ‘is not a practical means to provide any substantive reduction in CO2 emissions’” Center for American Progress April 27 2010 <http://thinkprogress.org/climate/2010/04/27/205870/ccs-stunner-new-study-finds-geologic-sequestration-is-not-a-practical-means-to-provide-any-substantive-reduction-in-co2-emissions/>) MLR

But any significant amount of leakage would render CCS pointless. The UK Guardian‘s article on the study quotes the coauthor: Previous modelling has hugely underestimated the space needed to store CO2 because it was based on the “totally erroneous” premise that the pressure feeding the carbon into the rock structures would be constant, argues Michael Economides, professor of chemical engineering at Houston, and his co-author Christene Ehlig-Economides, professor of energy engineering at Texas A&M University “It is like putting a bicycle pump up against a wall**.** It would be hard to inject CO2 into a closed system without eventually producing so much pressure that it fractured the rock and allowed the carbon to migrate to other zones and possibly escape to the surface,” Economides said. The paper concludes that CCS “is not a practical means to provide any substantive reduction in CO2 emissions**,** although it has been repeatedly presented as such by others.”

#### c) Climate skepticism – promoting faith in CCS undermines credibility to solve climate problems globally

**McKillop 12** ­ - Former chief policy analyst, Division A Policy, DG XVII Energy, European Commission, (Andrew, March 22, 2012, “The Crazy World Of Smart Grids And Carbon Capture,” http://www.marketoracle.co.uk/Article33730.html)JCP

While the oil-intensive but deindustrialized countries of the West show mounting signs of stress at the prospect of more and further oil price rises, and China moves ever onward on its oil-intensive industrial path racking up huge trade surpluses while paying for all the oil it wants, the twin sideshow of smart grids and carbon capture still has some headroom, in some countries. The main problem, however, is that CCS is almost certainly impossible, and smart grids will be fantastically expensive. This problem especially concerns Europe, increasingly alone and apart in the world and operating what its major trade partners - the US, China, India, Russia, Brazil and others - call an attempt by Europe to use climate change fear as a trade weapon and tool for shutting out competitors from Europe's markets. The latest spark point has concerned European plans to levy new greenhouse gas taxes and charges on airlines flying into or over Europe. The reasons why Europe has taken a hardline, even a strident line on climate change are complex and range across European cultural history, its energy resource endowment and historical energy development, political change in Europe since the 1970s, its world trading power, and Europe's energy industries with their need for new markets. Other reasons also exist for this hardline, including social change in Europe, and others. The net result however is simple: big government spending on will-o'-the-wisp projects. One recent example brings together UK network operator National Grid and oil services company Petrofac with US power project developer Summit Power as lead candidates in a competition to win a £1 billion government contract to build a carbon capture and storage (CCS) project in the UK. The actual amount of CO2 to be captured relative to UK totals, and even more extremely when related to global emissions (the UK emits 0.75% of the global total of about 35 bn tons a year) are vanishingly small. The maximum possible impact this project, if it was built and if it captured CO2 as hoped, would in no conceivable way reduce or mitigate global warming and climate change. http://www.guardian.co.uk/news/datablog/2011/jan/31/world-carbon-dioxide-emissions-country-data-co2#zoomed-picture This is known. The question is: why is CCS still touted by some governments and some coporations as a vital future need ? Linked with another extreme high cost solution or alternative to current electric power systems - smart grids to transport electricity from renewable sources - the combined effect is a further loss of credibility for any and all energy projects and policies, in a wide range of countries. SMART POWER AND DUMB POLITICS The aims and objectives of smart grids are already the spiraling focus of thousands of Internet sites, business conferences and meetings, even PhD research programs in universities. They can seem good on paper, they can seem an interesting area for business development - if somebody else pays. That somebody else is inevitably electricity consumers either direct, through their power payments, or through governments by way of state taxes and borrowing to pay for CCS and smart grids. There is no secret or alternative ! Current projects Europe, the US and Asia are sometimes massive and also look good on paper, but actual action on the ground is fantastically small scale. The two - CCS and smart grids - are very often rolled together, for example due to both being entirely dependent on the upstream policy concept that global warming is a crisis, massive spending is needed to mitigate it, and this spending will above all and almost exclusively feature the electric power sector. This will be radically shifted to renewable energy ro generate power and, being intermittent, will need smart grids to handle constantly varying power supplies. This can seem simple, but on the ground in the real world is another kettle of fish. Taking only the 2012-2020 period, spending in Europe to achieve the goals of the Dec 2008 EU climate-energy package of policies and programmes featuring a radical energy shift is estimated at anywhere from about 450 to 650 billion euro - if it is possible to achieve the goals of these policies. The upstream politics of global warming is also now a complex subject - with a rearview mirror edge. Gone are the days when Al Gore could stride the global conference circuit, picking up $100 000 for a 40-minute talkshow. The December 2009 Copenhagen climate summit was a tragic event - for global warming free riders and the corporate lobby pushing CCS and alternate energy as urgent and critical to Humanity's future. Loss of credibility and public support to the basic idea that CO2 emissions cause climate change is the rule in all countries, and with it there is mounting political opposition. WHAT WOULD SMART GRIDS DO ? The favoured explanation is maximising flexible responsive demand to varying supplies of electricity in order to maximise supply from renewable based generation, and from decentralised generation that could or might be integrated in national programmes for achieving clean energy goals. Above all, to make demand "flexible" this would need the leveraging of smart metering from a technological curiosity to massive widespread use: in South Korea, current power system planning seeks total coverage of the country with smart metering by 2020, and 50% by 2016. Several European countries have goals almost as high as this, but the impact on power prices and average power bills - or on electric power and distribution company earnings - will be high. Responding to the always present threat of oil shock and the failure of energy plans in most OECD countries to address the issue of oil saving and substitution, the smart metering lobby includes the target of accommodating the growth of electric vehicle fleets as another major reason why smart meters must become a way of life. Anybody who has followed my MO articles on electric cars can quickly understand this so-called alternative to oil is a dead duck on arrival: http://www.marketoracle.co.uk/Article31636.html The basic role of smart metering is to ration electricity, by price, to when it can be generated. How this relates to car owners needing to charge their electric cars every weekday night, to travel to work the next day, is hard to see. To be sure, inventive corporate minds can imagine stand-alone car recharging centres, similar to the Better Place business model, but these centres will need power supplies. Going further up the fantasy scale, mass scale electric car fleets can be claimed as offering a future National Battery Pack, with millions of car batteries becoming a sort-of utility scale power storage system. FINANCING CCS AND SMART GRIDS The most elusive part of any PPT from promoters of either is how they can be financed, with the CCS part of the duo first needing extreme high research and development spending to produce a technologically viable process or method of CCS. Cost outlines for CCS achieving a rate of capture of say 5% of present emissions of CO2 in major emitter countries can be found, but firstly assume the process can be made technologically possible. No figures on "how much would it all cost?" have any credibility, due to this first hurdle. For smart grids there are much harder-edged cost figures, even utility and power distribution company spending plans, in most EU27 countries and in several non-European OECD countries. More complex however, smart grids only concern local or final power distribution and do not concern wide-area power transport - which is also an inevitable need if renewable electricity is going to dominate power production. While local and final user smart grids can be relatively "cheap", especially if this only concerns smart metering of final users, wide-area super grids able to transport huge amounts of power with minimum losses only exist in the mind, because their costs will be astronomic.

#### Coal- before solvency the plan is a PR move for coal that saves the industry

Tady 7 - national political reporter

Megan, “Carbon Capture: Miracle Cure for Global Warming, or Deadly Liability?,” Alternet, http://www.alternet.org/environment/68490/?page=4

But to others, CCS is a bridge that should never be built because of where it could lead. Matt Leonard, a campaigner with the Rainforest Action Network, a group calling for a coal moratorium, said CCS is a public relations scheme to pave the way for new coal-fired power plants. "The coal industry is grasping at straws trying to find some way to convince the public that they have a place in our future energy policy," Leonard said. "And carbon sequestration is their attempt to brand some kind of PR campaign to have clean coal be a possibility." Jutta Kill, a climate change expert for the UK's Forests and the European Union Resource Network, said CCS diverts the public's attention away from cutting ties with the coal industry, and instead entrenches reliance on fossil fuels. "Coal-fired power stations are being built with the promise that this technology will be there one day in the future," Kill said. "It's a very dangerous way of spending a lot of money on a very risky technology and financing new coal-fired power stations, when that supposed remedy is very far-off into the future, and we may well find that it isn't going to work. And then there are all those coal-fired power stations that shouldn't have been built in the first place."

That's the biggest internal link

Claussen 12 – President of the Center for Climate and Energy Solutions ~Eileen Claussen (Former Director of the Office of Atmospheric Programs @ EPA %26 Former Assistant Secretary of State for Oceans and International Environmental and Scientific Affairs), "Speech: Utilizing CCS to Reduce Emissions," Keynote speech at the 11th Annual Conference on Carbon Capture, Utilization and Sequestration, Pittsburgh, Pennsylvania, May 1, 2012 <http://www.c2es.org/newsroom/speeches/claussen-carbon-capture-sequestration>

The proposed GHG rules make it official: In order to keep coal’s share of the U.S. energy mix from declining further, we need to throw out old ways of thinking. We need to think big. This is not just about trying to compete with natural gas on price; it is about embracing new ideas and new technologies to ensure that coal can continue as a fuel of choice in a world that, whether you like it or not, will become increasingly focused on limiting and reducing carbon emissions. Coal alone is responsible for 28 percent of U.S. greenhouse gas emissions. Worldwide, 43 percent of CO2 emissions from fuel combustion come from coal.

### 1NC Warming Defense

#### No spillover of Oil EOR to broader CCS

#### COST – it’s 1.5 billion to convert a coal plant

Wynn 9/20

(Nuclear phase-out risks carbon emissions increase, Gerard, <http://www.smh.com.au/environment/climate-change/nuclear-phaseout-risks-carbon-emissions-increase-20120920-267nt.html>)

The European Commission said last December that all fossil fuel power plants should be fitted with expensive CCS from around 2030, if the European Union is to slash emissions by the middle of the century. "CCS contributes significantly towards decarbonisation in most scenarios, with the highest penetration in case with nuclear constraints," it said in its "Energy Roadmap 2050". CCS is meant to trap carbon emissions from fossil fuel flue gases and pipe them underground, but is still untested at a commercial scale on power plants partly because it adds at least $1.5 billion to the upfront capital cost per gigawatt of electricity generating capacity. The alternatives are either to eliminate fossil fuels except as back-up for renewable energy, or else to relax medium-term carbon emissions targets, most of which are only aspirational and therefore politically feasible to downgrade.

# 2NC

### EXTN: China Shift

#### Keystone rejection means China shift- worse for the environment

Faulkner, 12 -- founder, president and CEO of Breitling Oil and Gas

[Chris, "Bringing the Keystone Pipeline Debate Back into Focus," Oil Online, 5-7-12, www.oilonline.com/blog/main.asp?Tid=45&id=252&cat, accessed 2-10-13, mss]

What many in the media also fail to consider is that the alternatives to the pipeline—tankers and trains—are far more destructive from an emissions standpoint and just as dangerous in relation to potential spills. And let’s not forget this simple fact: whether or not we allow this pipeline, Canada will be increasing production from its tar sands and shipping that oil by whatever method is available. Those hoping to stop the continued exploitation of the Canadian tar sands by blocking the pipeline will only succeed in keeping that oil from reaching US refineries, with the likely result of China taking advantage of our nation’s short-sightedness. And how will Canada’s oil reach China? Overseas tankers, of course, creating a greater risk of oil spills as well as additional emissions. Once again, the environment loses, as do American workers and consumers.

#### Keystone takes the pressure off- NG won’t get built

Pinnacle Digest, 2-5

["Northern Gateway or Keystone XL," www.pinnacledigest.com/blog/southpen/northern-gateway-or-keystone-xl, accessed 2-11-13, mss]

**If the decision had already been made to allow the Keystone** ,then the **Northern Gateway** pipeline **might seem less relevant** .Nothing could be further from the truth. Obama will likely make his decision in May ,while the Canadian Government's reveiw panel will make recomendations by the end of 2013. **If Obama decides against** the **Keystone,pressure will be put on them ( Canadian Gov't), to allow the Northern Gateway**. If Canadians had to choose ,I would suggest divesting as much dependence on the U.S. as buyers of crude, might be wise .The real money for oil & gas is in Asia and Europe ,not North America. It's likely the USD will continue to decline . Chinese currency is likely to rise . If we Americans believe we have plenty of shale oil to develop and thus do not need the Canadian crude, it is a sad day The shale oil boom is not nearly as lucrative as it is being made to assume. .I never would believe I was siding with Exxon ,but in the case of encouraging the Keystone ,I am.

### EXTN: Oceans Impact

#### China shift causes massive ocean destruction- especially plankton, whales, and fisheries

Byers, 12 -- University of British Columbia global politics research chair

[Michael, "Canada's oil-sands bonanza could mean disaster for Alaska's coastline," Seattle Times, 5-17-12, seattletimes.com/html/opinion/2018232475\_guest18byers.html, accessed 2-10-13, mss]

Twenty-three years after the Exxon Valdez spilled more than half a million barrels of oil into Prince William Sound, another threat looms over Alaska's remote and beautiful coastline — in the form of heavy oil exports from Canada to China. Since the Earth is a sphere, the shortest shipping route from Western Canada to China passes through the Aleutian Islands at a narrow strait called Unimak Pass. Two pipeline companies want to dilute tar-like bitumen from the Alberta oil sands with natural gas condensate so that it can be pumped west to the coast of British Columbia. The first plan — a new pipeline called "Northern Gateway" — would carry 525,000 barrels per day to a terminal just south of the Alaska Panhandle, where it would be loaded onto supertankers that would sail westward toward Unimak Pass. The second plan involves tripling the capacity of an existing pipeline to Vancouver so it can carry 850,000 barrels per day, and adding compressor stations so it can handle the diluted but still heavy bitumen. The oil from this "Trans Mountain Pipeline" would also be shipped through Unimak Pass. Unimak Pass is just 10 miles wide. Five thousand ships already use it each year, most of them large container and bulk-cargo vessels. The tidal mixing of cold nutrient-rich waters in and around Unimak Pass supports massive amounts of plankton, the basis of a rich food chain. The area is part of the Alaska Maritime National Wildlife Refuge, which is home to 40 million seabirds. It's also home to a wealth of marine mammals, including endangered Steller sea lions, northern fur seals, sea otters and numerous species of whales. This ecosystem has considerable economical value. The Bering Sea just north of Unimak Pass supports the largest commercial fishery in the United States, worth $1 billion annually. Severe weather and sea conditions are common in Unimak Pass, along with powerful tidal flows. In December 2004, the Selendang Ayu, a 738-foot-long Malaysian cargo ship, had just cleared the pass when it lost power in a storm. The vessel was blown aground and broke apart, spilling 335,000 gallons of fuel oil. Almost none of the oil was recovered due to the remote location, bad weather and the near-complete absence of oil-spill-cleanup equipment and personnel in the Aleutians. Complicating matters, the U.S. State Department has long accepted that Unimak Pass is an "international strait" that foreign vessels can enter without permission or regulatory restriction. As a result, there are no shipping lanes, or notification or pilotage requirements. There are a few steps the federal government could take. It could station a large rescue tug and several oil-spill-cleanup vessels at nearby Dutch Harbor. It could ask the International Maritime Organization to designate Unimak Pass as a "particularly sensitive sea area," which would enable the U.S. to require advance notification of passage and adherence to vessel traffic separation rules. It could seek to persuade shipping companies to voluntarily route oil tankers well south of the Aleutians, though this would increase both distance and cost. In the end, however, none of these steps is likely to prevent hundreds of oil tankers from transiting Unimak Pass each year. For the root of the problem is not the tankers, but Canada's disregard for the environmental impacts of developing and selling its oil sands to China — impacts that include the near-inevitability of another Exxon Valdez-type spill in U.S. waters, this time in Unimak Pass.

#### Plankton loss causes extinction

Alois, 7 -- Arlington Institute

[Paul, and Victoria Cheng, "Keystone Species Extinction Overview," July 2007, www.arlingtoninstitute.org/wbp/species-extinction/443, accessed 2-10-13, mss]

Considering the convenience of modern life, it is easy for people to forget that they rely on natural ecosystems to live as much as other animals do. Advances in the production and distribution of food in the last fifty years have created the impression that humans have mastered their environment, but that is far from being the case. In recent years it has become apparent that much of the progress made in the past several decades came with a price. The ecosystems that human beings depend on for their very survival have been radically undermined, and today many of them appear to be on the verge of breaking down. The most recent paradigm in ecological sciences posits that environmental change happens in a rapid, non-linear fashion. This paper will examine certain species of organisms that have the potential, once their numbers are low enough, to trigger a sudden collapse in the cycles that provide human beings with food. 1. Aquatic Systems 1.1. Plankton Plankton is a blanket term for many species of microorganisms that drift in open water and make up the base of the aquatic food chain. There are two types of plankton, phytoplankton and zooplankton. Phytoplankton make their own food through the process of photosynthesis, while zooplankton feed on phytoplankton. Zooplankton are in turn eaten by larger animals. In this way these tiny organisms **sustain all life** in the oceans. According to the NASA, phytoplankton populations in the northern oceans have declined by as much as 30% since 1980.[4] While the cause of this decline remains uncertain, there are several theories. One theory points to global warming as the main cause.[5] Phytoplankton require nutrients obtained from the bottom of the ocean to reproduce. At the Earth’s poles, ocean water is colder at the surface than down in the depths. Therefore water from the bottom of the ocean rises to the top, carrying with it essential nutrients from the ocean floor. However, as the water near the surface becomes warmer due to climate change, less water rises from the bottom, resulting in less nutrients for the phytoplankton. This consequently hinders their reproduction processes. Another theory suggests that carbon dioxide emissions are causing this decline in plankton population. The ocean has always absorbed a significant amount of carbon dioxide, but in recent years its capacity for this pollutant may not have been able to keep up with the level of human output. Recent studies suggest that the carbon dioxide the ocean absorbs is turned into carbonic acid, which lowers the pH level of the ocean.[6] This acidification is highly corrosive to sea animals that form shells, including pteropods, which are a type of zooplankton. Pteropods are a food source for countless larger animals such as salmon and cod. If they are unable to survive in an acidic ocean, then the entire ocean system will be threatened. A less popular theory suggests that a lack of iron is damaging plankton populations. All the nutrients necessary for phytoplankton reproduction exist all throughout the ocean, except for iron, which is can only be found in certain locations. Therefore, phytoplankton are limited to areas where iron is found. Studies have shown that a major source of iron comes from the dust that is swept off the world’s deserts into the ocean.[7] Increased human activities may be altering the cycle in which desert iron reaches the ocean, therefore cutting phytoplankton off from nutrients vital to their survival.[8] The declining plankton population is a very serious issue. In 1997, El Niño caused a sharp increase in the ocean’s temperatures around the Galapagos Islands.[9] Plankton populations plummeted, and this in turn decimated fish populations. The island’s famous seal population, which depended on the fish for food, also decreased. As El Niño passed, the ecosystem rebounded, but the event was a clear indicator of the severe effects that a plankton extinction would have. Researchers in California fear that a similar disaster may be occurring throughout the entire northern Pacific Ocean. If the decimation of plankton population is caused by global warming, and researchers warn that its impact could be permanent.[10] 1.2. Edible Fish Meanwhile, over the last fifty years the top of the food chain has been destabilized by the modern commercial fishing industry. According to the World Watch Institute, the world’s wild fish harvest increased from 20 million tons in 1950 to 87 million tons in 1997.[11] At that point, the upward trend reversed because fish population growth could not keep up with the losses, and by 2003 only 77.7 million tons of fish were caught in the wild.[12] One of the clearest indicators of the present crisis can be found in Japan. Japanese fishing boats traverse every one of the world’s oceans, and the fishermen have been keeping meticulous records for decades. They use a technique called longline fishing, which consists of dragging fishing lines with hundreds of hooks behind the boats. When longline fishing began after WWII, fishermen caught 10 fish per 100 hooks; now, because of the decline in the fish populations, they are lucky to catch even one.[13] Recently, scientists predicted the total collapse of all edible fish species in the ocean by 2050.[14] Their study blames commercial fishing, pollution, and loss of diversity of fish species as the main causes of this destruction. Among freshwater fish there is no analogous projection, but the IUCN has put freshwater fish at the top of its list of endangered species.[15] Studies examining whether or not species can rebound from low populations have had mixed results. The scientists cited above believe that many oceanic species could recover in ten years or less, provided that they are not fished to extinction.[16] However, in the frequently cited case of Newfoundland cod, a ban on fishing has done little to help the population’s extremely low numbers. Overfishing is not the only problem, however: fish populations are also being affected by global climate change, which is causing the temperatures of lakes, rivers, and oceans to rise. Since oxygen is more plentiful in colder water, warmer waters would mean less oxygen for fish populations. Certain fish such as salmon cannot reproduce if the water temperature deviates too much from a certain range.[17] A recent study conducted by Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO) have concluded that the temperature of the coastal waters of Australia will rise by two degrees by 2030.[18] This would make certain marine organisms such as fish, jellyfish, and turtles move towards colder waters south of Australia. Fishing industries, consumers, and animals who depend on the fish for food, such as birds and sea predators, would suffer as well..[19] This phenomenon is taking place in waters all over the world. Ecosystems are highly dynamic: a slight change in the population of any species sets off a ripple effect throughout the whole system, making it very unlikely that the damage can simply be undone. If the threats of overfishing and climate change to the fish population are not removed, instabilities in the system could have serious and devastating impacts on human beings as well as other animal species. 2. Terrestrial Systems 2.1. Bees Bees are central to the systems that support food production for human beings. An international study of 115 food crops grown in over 200 countries showed that 75% of the crops were pollinated by animals, especially by bees.[20] According to the International Bee Research Association, bees pollinate 80% of the food grown in the United Kingdom.[21] Bees play such an integral role in maintaining many of the planet’s ecosystems that Albert Einstein once said, “If the honeybee goes extinct, we have four more years on Earth.” Both domesticated bees and wild bees contribute significantly to global pollination, but unfortunately both are facing threats to their survival. Domesticated bees serve a vital economic function. Farmers can no longer just depend on wild bees to adequately pollinate their crops, so they must rent domesticated bees for that purpose in the spring. Without a sufficient supply of domesticated bees, crops simply would not be able to reproduce. The total economic value of domestic bees in the world is unknown, but in North America alone they support tens of billions of dollars of agricultural products.[22] The domestic bee population worldwide is being threatened by several factors. In 1987 apiarists in the United States began noticing that domestic hives were being infested with small mites. Without interference, the mites could destroy a colony of bees in as little as two weeks. The mites are dangerous to bees in two ways. First, they hide in the cells of bee larvae and inhibit the larvae’s development. A colony infested with mites often has many juvenile bees with missing legs or wings or with deformed body segments. Secondly, the mites can bore holes in the exoskeletons of adult bees, making them extremely susceptible to viruses. Scientists believe that these mites originated in Asia, where the native bee population has developed a resistance to them.[23] But American bee populations have not been so lucky, and they continue to face this threat to their existence. In the last several years apiarists and scientists have been documenting a very strange phenomenon they label “colony collapse disorder” (CCD). A hive affected by CCD may appear normal at first glance, but upon closer inspection almost all of the adult bees in the hive have vanished. These hives usually contain a large amount of stored food, and many cells are filled with larvae that are being cared for by juvenile bees. There are two aspects of CCD that leave apiarists extremely puzzled. First, there are no bodies of dead adult bees in or around an affected hive, which is to be expected if the hive has been infected with a disease. Secondly, other bees do not take over the affected hive for two weeks or more. This is especially strange as ordinarily a strong bee colony will colonize a weaker neighbor immediately. Scientists studying CCD are unable to pinpoint a cause, but they have noticed that all the affected hives were subjected to constant migration. They suggest that the process of transporting the hive may weaken the colony in some way.[24] The number of hives affected by CCD exploded exponentially in the US in 2006, and if this trend continues it will seriously jeopardize human food production. Wild bee populations are also being directly threatened by human activity, which has caused bee habitat loss and their exposure to poisonous pesticides. Many bee habitats have been destroyed to make room for crops. Ironically, the crops which are then planted depend on bee pollination to reproduce: without wild bees to do the job, farmers are then forced to rent domestic bees. Furthermore, the heavy use of pesticides also damages wild bee colonies, which again hurts crops and farmers. Bees need pollen from specific types of flowering plants, and sometimes these plants only flower during certain times of the year. If a bee population’s habitat is changed or destroyed by human activity, and other types of plant life are introduced to the environment, the bee population may not be able to survive. Also, bees make their homes in particular environments, whether it in decaying logs or burrows in the ground or hives in trees. If the bees cannot find a suitable site for their home because of habitat loss due to anything from natural disaster to human activity, then they are also threatened.[25] Pesticides are sprayed onto crops to protect them from diseases, foraging insects, and other animals. Sometimes bees are sprayed directly with pesticides and die at a distance from the hive. But if a bee takes pollen or nectar from chemically-treated crops back to the hive, many bees would be affected.[26] Also, pollen is kept in honeycombs to feed the young bees, so contaminated pollen would kill the youngest generation as well, threatening the future of the bee colony. Since bees often forage for food miles away from the hive, it is susceptible to pesticides sprayed on crops within a wide radius. Therefore, bees face threats from both natural parasites, strange diseases, and human activity. If something is not done to protect both domestic and wild bee populations, agriculture and even natural plant growth could be compromised. 2.2. Topsoil While topsoil is not a living organism, it is the foundation of the Earth’s terrestrial ecosystems and is loosely analogous to plankton. Topsoil refers to far more than just dirt: it is actually a very complex micro ecosystem made up of numerous different forms of life. One teaspoon of topsoil contains 5 billion bacteria and 20 million fungi; a square meter can contain 12 million nematodes, 120,000 mites, 20,000 pot worms, 8,000 slugs and snails, 2,000 earthworms, and thousands of insects of various species.[27] It can take centuries for just an inch of topsoil to form naturally, and careless destruction of the existing topsoil cannot be easily reversed. Without healthy topsoil, food production is virtually impossible. Ironically, the main cause of soil degradation has historically been agriculture. Consumption of food has increased globally, yet this increase is only destroying topsoil at a faster rate. The United Nations Environment Program estimates that over the last 10,000 years, 2 billion hectares of productive land have been destroyed by human activities.[28] When compared to the 1.5 billion hectares of land being used for agriculture today, that number is very significant. Soil degradation has the potential to threaten global food security, and it is already a major issue in many parts of the world today. According to the United Nations, of the 1.5 billion hectares of land being used for agriculture, 38% of that land is experiencing moderate to severe topsoil degradation.[29] The most affected areas are in Africa and Central America, while the least affected areas are in Europe and North America. The biggest cause of soil degradation is erosion, although nutrient depletion, salination, and pollution also play a role. The effect that soil degradation has had on food production is difficult to quantify from a global perspective, but there is no doubt that this is a serious issue, particularly in the developing world. In India, 38% of agricultural land is severely affected by water erosion.[30] Despite having one of the highest population densities on the planet, India’s total population is still increasing rapidly. Furthermore, the country has a large rural population that is dependent on farming. Soil erosion coupled with water shortages has the potential to seriously cripple India’s ability to feed its rising population. A prominent Chinese minister recently said that soil erosion is China’s number one environmental problem.[31] Over 38% of China’s territory is affected by either wind or water erosion.[32] 7% of the world’s cultivable land is in China, yet this land must support 24% of the world’s people.[33] Water erosion is most serious in China’s “rice bowl,” located between the basins of the Yangtze and Yellow Rivers. Every year over 4.5 billion tons of soil is swept into the two rivers, damaging agricultural output and raising the level of the river beds. Wind erosion, also known as desertification, has already converted 17.6% of China’s landmass into useless desert.[34] The cost to China’s economy from soil erosion is easily in the tens of billions of dollars. Sub-Saharan Africa has the world’s highest rate of soil degradation. This problem is compounded by the region’s extremely high poverty rates and the large number of subsistence farmers. In the coming decades the number of people without adequate access to food in sub-Saharan Africa is expected to grow substantially.[35] While soil degradation is not the only factor causing this food shortage, it is a significant one. The loss of precious topsoil is a problem affecting many regions of the globe, and it has the potential to seriously threaten food supplies worldwide. Like many other resources, topsoil is limited and difficult to replace, and it is imperative to preserve the topsoil that is still in existence. 3. Conclusion The preservation of the fundamental cornerstones of the ecosystem must become a foremost goal in human advancement, and it is clear that their destruction must be stopped. Plankton supporting abundant sea life are dying, fish that is a staple part of the diet of many people around the world are being fished to extinction, bees pollinating crops are threatened by many factors, and topsoil sustaining agriculture is disappearing. To solve these problems, people must also address bigger problems caused by human activity such as climate change, the destruction of habitats, and the depletion of resources due to careless use. If any of these species examined should be reduced to a low enough level, consequences for our own survival would be profound. The loss of these actors is happening rapidly, and it is crucial that this be stopped and reversed as soon as possible.

### 2nc frontline China adv

#### 1AC author Logan says Squo solves—

#### Duke energy agreement

Bloomberg News 3/27/12 (“China Shows US How to Push for Carbon Capture”) <http://www.bloomberg.com/news/2012-03-27/china-shows-u-s-how-to-push-for-carbon-capture.html>

Meanwhile, in China, carbon capture marches steadfastly ahead, as an article in the May issue of Bloomberg Markets magazine reports. A pilot project by [China](http://topics.bloomberg.com/china/) Huaneng Group Corp. has been able to remove carbon from coal-plant exhaust for about $39 per ton of captured CO2, which is a little more than a third of what it costs in the U.S. The work has been so impressive, as John Lippert and Chua Baizhen report, that Duke Energy Corp., the largest U.S. energy company, has signed a research agreement with Huaneng to study its technology. Duke wants to learn how much it would cost to retrofit its largest power plant, in Gibson County, [Indiana](http://topics.bloomberg.com/indiana/), to capture carbon. The Chinese plant filters the smoke through an aqueous amine solution rather than through chilled ammonia, as is commonly done in U.S. [carbon-capture](http://topics.bloomberg.com/carbon-capture/) experiments. Duke would like to find out how much of Huaneng’s cost savings flow from its proprietary technology, and how much is attributable to lower labor and capital costs.

#### US-China Clean Energy Research Center

The Energy Lab No Date (“US-China Clean Energy Research Center”) <http://www.netl.doe.gov/technologies/carbon_seq/global/cerc.html>

The U.S.-China Clean Energy Research Center (CERC) is a collaboration between the United States and China to facilitate joint research and development to accelerate clean energy technologies. Established in 2009, the $150 million center further extends the decades of previous science and technology collaboration between the United States and China. The center's funding is split equally between the two countries, and involves participation from academia, research laboratories, and industry. U.S. funds are being used to support work conducted by U.S. institutions and individuals and Chinese funds are supporting work conducted by Chinese institutions and researchers.

#### Wont escalate—tensions are bluffs for negotiating leverage

Gupta 11

Rukmani Gupta, Associate Fellow at the Institute for Defence Studies and Analyses,10/23/11, South China Sea Conflict? No Way, the-diplomat.com/2011/10/23/south-china-sea-conflict-no-way/

Despite what opinion pieces in the Global Times may say, there’s reason to suspect that China doesn’t want to escalate conflict in the region. Although commentary from the United States has suggested that China considers the South China Sea a ‘core interest,’ no official Chinese writing can be found to corroborate this. In addition, China’s caution can also be seen as a reflection on Chinese military capabilities, which aren’t seen as strong enough to win a war over the South China Sea. In fact, the China National Defence News, published by the Chinese People’s Liberation Army’s General Political Department, has likened the use of force by China in the South China Sea to shooting one’s own foot. Not only would the use of force bring ASEAN together on the issue, it could conceivably involve the United States and Japan, derail China’s plans for continued economic growth and undo China’s diplomacy. Chinese declarations on the South China Sea can therefore be seen as attempts to exaggerate claims so as to secure a better negotiating stance.

#### No SCS conflict

Gupta 11

Rukmani Gupta, Associate Fellow at the Institute for Defence Studies and Analyses,10/23/11, South China Sea Conflict? No Way, the-diplomat.com/2011/10/23/south-china-sea-conflict-no-way/

These suggestions to recalibrate Indian policy towards the South China Sea and its relationship with Vietnam are premature at best. Despite the rhetoric, conflict in the South China Sea may well not be inevitable. If the history of dialogue between the parties is any indication, then current tensions are likely to result in forward movement. In the aftermath of statements by the United States, and skirmishes over fishing vessels, ASEAN and China agreed upon the Guidelines on the Implementation of the Declaration on the Conduct of Parties in the South China Sea at the Bali Summit in July 2010. And recent tensions may well prod the parties towards a more binding code of conduct. This isn’t to suggest that territorial claims and sovereignty issues will be resolved, but certainly they can become more manageable to prevent military conflict. There’s a common interest in making the disputes more manageable, essentially because, nationalistic rhetoric notwithstanding, the parties to the dispute recognize that there are real material benefits at stake. A disruption of maritime trade through the South China Sea would entail economic losses – and not only for the littoral states. No party to the dispute, including China, has thus far challenged the principle of freedom of navigation for global trade through the South China Sea. The states of the region are signatories to the UNCLOS, which provides that ‘Coastal States have sovereign rights in a 200-nautical mile exclusive economic zone (EEZ) with respect to natural resources and certain economic activities, and exercise jurisdiction over marine science research and environmental protection’ but that ‘All other States have freedom of navigation and over flight in the EEZ, as well as freedom to lay submarine cables and pipelines.’ The prospect of threats to SLOCS thus seems somewhat exaggerated.

#### Risk of war is exaggerated – experts agree

Voice of America 12 09/14, “Will South China Sea Disputes Lead to War?”

But that doesn’t mean a war. Storey said an escalation into full-blown conflict is unlikely. “It is in no country’s interests to spill blood or treasure over this issue – the costs far outweigh the benefits,” Storey said. Other experts agree. James Holmes of the U.S. Naval War College says admires how China has been able to get its way in spreading it claims of sovereignty without becoming a bully. “[China] gradually consolidated the nation's maritime claims while staying well under the threshold for triggering outside -most likely American -intervention,” said Holmes. “Is war about to break out over bare rocks? I don't think so.” writes Robert D. Kaplan, Chief Political Strategist for the geopolitical analysis group Stratfor. Kaplan, however, doesn’t give much hope for negotiations. “The issues involved are too complex, and the power imbalance between China and its individual neighbors is too great,” he said. For that reason, Kaplan says China holds all the cards. Kaplan doesn’t look for Chinese military aggression against other claimants. That, he says, would be counterproductive for its goals in the region. “It would completely undermine its carefully crafted ‘peaceful rise’ thesis and push Southeast Asian countries into closer strategic alignment with the US,” said Kaplan. At the same time, he said Chinese leaders probably will be unable to compromise. “The primordial quest for status still determines the international system, and these bare rocks in the South China Sea have become, in effect, logos of nationhood,” Kaplan said.

#### No U.S.-China nuclear escalation

**Simpson 4** (Dan, Retired US Diplomat (35 Years of Service with the Foreign Service), “U.S. losing title as the world's sole superpower,” 9-29)

U.S. military capacity is now so overstretched by the Iraq and Afghanistan conflicts that a Chinese move to realize its own top strategic objective, the scooping up of Taiwan to complete the hat trick with Hong Kong and Macao, would find the United States hard-pressed to be able to respond at all. **A U.S.** threat of a **nuclear attack on China -- with China's inevitable nuclear counterstrike -- would be so wildly unacceptable in political terms** in the United States itself **as to be out of the question** for any U.S. administration. The idea of **causing Los Angeles to disappear because China had seized Taiwan would be a trade-off that no American leader would even dare contemplate.** America is lucky so far that China has not yet sought to match its economic reach in Asia with a corresponding assertion of political influence. That doesn't mean that Asia will inevitably become a sphere of Chinese dominance. What will happen instead -- what is already happening, in fact -- is that other Asian powers such as Japan, Korea and India will increasingly take steps to check Chinese power by increasing their own military capacity. In other words, what was a situation in which the United States stood between Japan and Korea and the imposition of Chinese influence will now become one in which those countries will become more dependent on their own resources to defend themselves. The response of the Koreans could be said to be a move toward resolving the problems between South and North Korea to enable them to present a united front to the Chinese. The response of Japan that can be expected will be limited remilitarization. The health and peace of the region will depend on the degree to which the competition among these countries will be economic, rather than political and military. What will this modification of the balance of power in Asia mean for the United States? First of all, none of this will happen tomorrow. The extension of China's reach and the Japanese and Korean response will be gradual and spread out across the years, although there may well be some pinpricks at the extremities sooner rather than later. **The Chinese themselves will avoid direct confrontation** with the United States **at all costs**. It is not their way. Conflict between the two countries would be asymmetrical in the extreme in any case. Basically, **the two can't attack each other. Nuclear warfare is out.** The million-man People's Liberation Army isn't portable. The Chinese are definitely not into terrorism.

#### Deterrence checks

**Glaser 11** (Charles, Professor of PoliSci and International Affairs and Director of the Institute for Security and Conflict Studies @ George Washington University, “Will China’s Rise Lead to War?” March/April Foreign Affairs)

What does all this imply about the rise of China? At the broadest level, the news is good. **Current international conditions should enable both the United States and China to protect their** vital **interests without posing large threats to each other.** Nuclear weapons make it relatively easy for major powers to maintain highly effective deterrent forces. **Even if Chinese power were to greatly exceed U.S. power** somewhere down the road, **the United States would still be able to maintain nuclear forces that could survive any Chinese attack and threaten** massive damage in **retaliation. Large-scale conventional attack by China** against the U.S. homeland, meanwhile, **are virtually impossible because** the United States and China are separated by the vast expanse **of the Pacific Ocean**, across which it would be difficult to attack. **No foreseeable increase in China’s power would be large enough to overcome these twin advantages of defense for the United States. The same** defensive **advantages, moreover, apply to China as well**. Although China is currently much weaker than the United States militarily, **it will** soon be able to **build a nuclear force that meets its requirements for deterrence**. And China should not find the United States’ massive conventional capabilities especially threatening, because the bulk of U.S. forces, logistics, and support lie across the Pacific. The overall effect of **these conditions** is to **greatly moderate the security dilemma**. Both **the United States and China will** be able to **maintain** high levels of **security** now and **through any potential rise of China** to superpower status. This should help Washington and Beijing avoid truly strained geopolitical relations, which should in turn help ensure that the security dilemma stays moderate, thereby facilitating cooperation. The United States, for example, will have the option to forego responding to China’s modernization of its nuclear force. **This restraint will** help reassure China that the United States does not want to threaten its security - and thus **help head off a downward political spiral fueled by nuclear competition.**

#### It’s empirically proven by the last decade

**Collins and Wohlforth 4** (Kathleen, Professor of Political Science – Notre Dame and William, Professor of Government – Dartmouth, “Defying ‘Great Game’ Expectations”, Strategic Asia 2003-4: Fragility and Crisis, p. 312-313)

Often seen as an arena for a new “great game,” **Central Asia was widely expected to undergo a new round of geopolitical rivalry after the United States entered the region** in force **following September 11**. 1 **Contrary to these expectations, relations among the United States, Russia and China** both **regionally** and globally **have improved dramatically**. The fundamental question this chapter addresses is whether this state of affairs reflects a potential long-term outcome or just a temporary interlude in the great powers’ regional competition. In other words, to what degree does the “great game” lens capture the real dynamics of the major powers’ strategic interaction in Central Asia? To address this question, we present three distinct but mutually supporting analyses: a balance sheet of the major powers’ competitive versus their mutual interests in the region; an assessment of their behavior in the region after September 11 to determine whether it is consistent with our analysis of their interests; and an analysis of the Central Asian states’ response to the great powers’ actions, in order to compare their perceptions and behavior to our reading of the great powers’ role. Our conclusion is that **a new “great game” is not underway in Central Asia**. 2 Although elements of rivalry and competition shadow some relationships, **shared strategic interests dominate the concrete actions of the major powers to a remarkable degree.** Sustaining this state of affairs is clearly in the United States’ interest, but it will require active management.

#### China and Russia prove this - they are cooperating and wouldn’t risk screwing that up in a war

**Weitz 6** (Richard, Senior Fellow and Associate Director of the Center for Future Security Strategies – Hudson Institute, “Averting a New Great Game in Central Asia”, Washington Quarterly, 29(3), Summer, Lexis)

To many observers’ surprise, **Central Asia’s newly independent states have not become objects of rivalry between Moscow and Beijing but rather a major unifying element** in Sino-Russian relations. **The two governments cooperate more closely in Central Asia than in any other world region.** Through the multilateral SCO and their extensive bilateral dialogue, **Russian officials acknowledge China’s legitimate interests in Central Asia, while Beijing has institutional mechanisms to promote its regional objectives in close cooperation with Moscow. China** also **does not want to jeopardize security ties,** including purchases of advanced Russian military technologies, **by challenging Russian policies in a region of still limited importance** for Beijing. Because Chinese leaders share many important goals with Russia in Central Asia, they have been able to benefit from Russian initiatives in these areas and redirect resources to other priorities.

#### No spillover

**Reuters 11** (“Riches, Fear Ensure Central Asia Stability,” Feb 9th, <http://www.themoscowtimes.com/news/article/riches-fear-ensure-central-asia-stability/430628.html>, EMM)

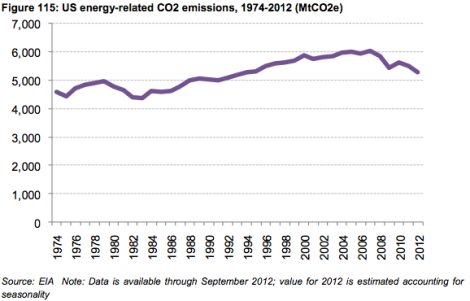
ALMATY, Kazakhstan — **Central Asia’s authoritarian leaders, having crushed dissent during decades in power, are likely to use a mixture of oil** and gas **revenues, repression and cosmetic reforms to meet any threat of** Egyptian-style **protests.**  **Few** in the strategic region, which covers an area twice the size of Saudi Arabia, **expect their entrenched** and aging **leaders to succumb to** the wave of **public anger sweeping** parts of **the Arab world.**  However, in a region riven by ethnic tensions and poverty, where one country — Kyrgyzstan — has twice overthrown a president, authorities would be remiss in ignoring this warning, political analysts and opposition politicians say. “The most important lesson? Don’t take your country to the brink,” said Mukhiddin Kabiri, chairman of the opposition Islamic Revival Party of Tajikistan. **Authoritarian presidents rule four of the five** ex-Soviet **states in Central Asia**, a resource-rich and majority Muslim region, which serves as a key supply conduit for U.S. military operations in Afghanistan. **Kazakhstan** holds slightly more than 3 percent of the world’s recoverable oil reserves, while the world’s fourth-largest reserves of natural gas lie under the desert of Turkmenistan. These **resources generate prosperity.** Kazakhstan, the region’s largest economy, boasts per capita gross domestic product of more than $9,000, four times that of Egypt. **In** Ashgabat, capital of **Turkmenistan, low utility bills help appease a population** in a country where **political dissent is not tolerated**. “We have free gas, water and lighting,” said Aibibi, 34, a bookseller in an Ashgabat market. Inflation remains a region-wide threat. Unrest in Kyrgyzstan led to a colossal 19.2 percent surge in prices last year, while in Kazakhstan food prices rose 3 percent in January alone. Turkmen pensioner Gulsenem, 57, said, “To cook with our free gas, we also need meat — and that’s becoming more expensive.” The riches of Kazakhstan and Turkmenistan can be spread among relatively small populations, but Uzbekistan, a top-10 world gold miner and major cotton exporter, is home to 28 million people. State figures portray a robust economy and the International Monetary Fund forecast 8 percent GDP growth in 2010. However, perhaps nowhere in Central Asia are fear and repression more apparent. President Islam Karimov, 73, says tough measures are needed to curb the threat of Islamist militancy. Human rights activists speak of religious persecution and torture. Mukhammad Salikh, 61, stood against Karimov in a 1991 election. He now lives in exile in Norway. “The danger of a social explosion has not only existed for the last 20 years. It has grown bigger with every year,” Salikh said in a recent interview with Ferghana News Agency, a private, Russian-language agency covering Central Asian affairs. Could an “explosion” take place in Uzbekistan, immune to Western criticism of its rights record, where state television is strictly controlled and a mainly rural population has limited access to the Internet? United Nations data show 36 percent of Uzbekistan’s population is urbanized, compared with 43 percent in Egypt. In Tunisia, whose president was ousted in a popular uprising in January, the figure is 67 percent. **Fear is a strong deterrent to would-be demonstrators. Uzbek government troops shot into crowds** that took to the streets of Andijan in 2005. Witnesses say hundreds were killed. In Tajikistan, protests in Dushanbe in 1992 lit the fuse for a five-year civil war in which tens of thousands of **people** were killed. Taxi driver Turakul, 55, **would rather swallow** his **discontent** with President Emomali Rakhmon **than risk a repetition.** “I’ll never go out on the streets,” he said. “I have food on the table and my four sons work in Russia. We’ll tolerate this as long as we have our small wages.”

# 1nr

#### Emissions are on the decline- here’s a chart from the EIA

**Bump 2-1**-13 [Philip, writer for Grist, an environmental news service, Managing Editor of Daily Download. He has contributed to The Atlantic, The Daily, and Mediaite, covering the intersection of technology and the media, “CO2 emissions from energy production drop to 1994 levels in the U.S.,” http://grist.org/news/co2-emissions-from-energy-production-drop-to-1994-levels-in-the-u-s/]

The headline at The Guardian says almost everything you need to know: U.S. carbon emissions fall to lowest levels since 1994.¶ Carbon dioxide emissions fell by 13% in the past five years, because of new energy-saving technologies and a doubling in the take-up of renewable energy, the report compiled by Bloomberg New Energy Finance for the Business Council for Sustainable Energy (BCSE) [PDF] said.¶ The reduction in climate pollution — even as Congress failed to act on climate change — brings America more than halfway towards Barack Obama’s target of cutting emissions by 17% from 2005 levels over the next decade, the Bloomberg analysts said.¶ By the end of last year, America’s emissions of carbon dioxide and other greenhouse gas emissions had fallen 10.7% from the 2005 baselines.¶ The caveat: The carbon emissions discussed are those related to energy production. Energy production isn’t all CO2 emission, but it’s a lot of it.¶ So here’s what that reduction looks like. Since 1974, levels of energy-related carbon emissions have seen two peaks. As indicated above, we’re on a downward trend, something David Roberts explained last year.



Over the past few years, individual energy sources have played a fluctuating role in the reduction. In 2009, the collapsing economy meant lower emissions from all sources. That coal figure in 2012 is remarkable.¶ This morning, the U.S. Energy Information Administration released state-by-state data on CO2 emissions through 2010. We put together this map showing net increase or reducton in CO2 emissions by state between 1994 and 2010. The darker brown a state is, the more its emissions rose; the darker green, the more emissions fell. Most states went up. But go Delaware!

Framing issues- the internal links to our disads are what is solving warming in the squo

Brown 9 (Lester, President of the Earth Policy Institute, “US Headed for Massive Decline in Carbon Emissions,” October 14th (EVAN MCCARTY’S BIRTHDAY), <http://www.organicconsumers.org/articles/article_19389.cfm>)

For years now, many members of Congress have insisted that cutting carbon emissions was difficult, if not impossible. It is not. During the two years since 2007, carbon emissions have dropped 9 percent. While part of this drop is from the recession, part of it is also from efficiency gains and from replacing coal with natural gas, wind, solar, and geothermal energy. The United States has ended a century of rising carbon emissions and has now entered a new energy era, one of declining emissions. Peak carbon is now history. What had appeared to be hopelessly difficult is happening at amazing speed. For a country where oil and coal use have been growing for more than a century, the fall since 2007 is startling. In 2008, oil use dropped 5 percent, coal 1 percent, and carbon emissions by 3 percent. Estimates for 2009, based on U.S. Department of Energy (DOE) data for the first nine months, show oil use down by another 5 percent. Coal is set to fall by 10 percent. Carbon emissions from burning all fossil fuels dropped 9 percent over the two years. Beyond the cuts already made, there are further massive reductions in the policy pipeline. Prominent among them are stronger automobile fuel-economy standards, higher appliance efficiency standards, and financial incentives supporting the large-scale development of wind, solar, and geothermal energy. (See data in Excel.) Efforts to reduce fossil fuel use are under way at every level of government-national, state, and city-as well as in corporations, [and] utilities, and universities. And millions of climate-conscious, cost-cutting Americans are altering their lifestyles to reduce energy use. For its part, the federal government-the largest U.S. energy consumer, with some 500,000 buildings and 600,000 vehicles-announced in early October 2009 that it is setting its own carbon-cutting goals. These include reducing vehicle fleet fuel use 30 percent by 2020, recycling at least 50 percent of waste by 2015, and buying environmentally responsible products. Electricity use is falling partly because of gains in efficiency. The potential for further cuts is evident in the wide variation in energy efficiency among states. The Rocky Mountain Institute calculates that if the 40 least-efficient states were to reach the electrical efficiency of the 10 most-efficient ones, national electricity use would be reduced by one third. This would allow the equivalent of 62 percent of the country's 617 coal-fired power plants to be closed. Actions are being taken to realize this potential. For several years DOE failed to write the regulations needed to implement appliance efficiency legislation that Congress had already passed. Within days of taking office, President Obama instructed the agency to write the regulations needed to realize these potentially vast efficiency gains as soon as possible. The energy efficiency revolution that is now under way will transform everything from lighting to transportation. With lighting, for example, shifting from incandescent bulbs to the newer light-emitting diodes (LEDs), combined with motion sensors to turn lights off in unoccupied spaces, can cut electricity use by more than 90 percent. Los Angeles, for example, is replacing its 140,000 street lights with LEDs-and cutting electricity and maintenance costs by $10 million per year. The carbon-cutting movement is gaining momentum on many fronts. In July, the Sierra Club-coordinator of the national anti-coal campaign-announced the hundredth cancellation of a proposed plant since 2001. This battle is leading to a de facto moratorium on new coal plants. Despite the coal industry's $45-million annual budget to promote "clean coal," utilities are giving up on coal and starting to close plants. The Tennessee Valley Authority (TVA), with 11 coal plants (average age 47 years) and a court order to install over $1 billion worth of pollution controls, is considering closing its plant near Rogersville, Tennessee, along with the six oldest units out of eight in its Stevenson, Alabama, plant. TVA is not alone. Altogether, some 22 coal-fired power plants in 12 states are being replaced by wind farms, natural gas plants, wood chip plants, or efficiency gains. Many more are likely to close as public pressure to clean up the air and to cut carbon emissions intensifies. Shifting from coal to natural gas cuts carbon emissions by roughly half. Shifting to wind, solar, and geothermal energy drops them to zero. State governments are getting behind renewables big time. Thirty-four states have adopted renewable portfolio standards to produce a larger share of their electricity from renewable sources over the next decade or so. Among the more populous states, the renewable standard is 24 percent in New York, 25 percent in Illinois, and 33 percent in California. While coal plants are closing, wind farms are multiplying. In 2008, a total of 102 wind farms came online, providing more than 8,400 megawatts of generating capacity. Forty-nine wind farms were completed in the first half of 2009 and 57 more are under construction. More important, some 300,000 megawatts of wind projects (think 300 coal plants) are awaiting access to the grid. U.S. solar cell installations are growing at 40 percent a year. With new incentives, this rapid growth in rooftop installations on homes, shopping malls, and factories should continue. In addition, some 15 large solar thermal power plants that use mirrors to concentrate sunlight and generate electricity are planned in California, Arizona, and Nevada. A new heat-storage technology that enables the plants to continue generating power for up to six hours past sundown helps explain this boom. For many years, U.S. geothermal energy was confined largely to the huge Geysers project north of San Francisco, with 850 megawatts of generating capacity. Now the United States, with 132 geothermal power plants under development, is experiencing a geothermal renaissance. After their century-long love-affair with the car, Americans are turning to mass transit. There is hardly a U.S. city that is not either building new light rail, subways, or express bus lines or upgrading and expanding existing ones. As motorists turn to public transit, and also to bicycles, the U.S. car fleet is shrinking. The estimated scrappage of 14 million cars in 2009 will exceed new sales of 10 million by 4 million, shrinking the fleet 2 percent in one year. This shrinkage will likely continue for a few years. Oil use and imports are both declining. This will continue as the new fuel economy standards raise the fuel efficiency of new cars 42 percent and light trucks 25 percent by 2016. And since 42 percent of the diesel fuel burned in the rail freight sector is used to haul coal, falling coal use means falling diesel fuel use. But the big gains in fuel efficiency will come with the shift to plug-in hybrids and all-electric cars. Not only are electric motors three times more efficient than gasoline engines, but they also enable cars to run on wind power at a gasoline-equivalent cost of 75¢ a gallon. Almost every major car maker will soon be selling plug-in hybrids, electric cars, or both. In this new energy era carbon emissions are declining and they will likely continue to do so because of policies already on the books. We are headed in the right direction. We do not yet know how much we can cut carbon emissions because we are just beginning to make a serious effort. Whether we can move fast enough to avoid catastrophic climate change remains to be seen.

China- also drastically reducing emissions

Brookings ’11 (5/3/2011 (A John L. Thornton China Center Event, “China’s Low-Carbon Development”, <http://www.brookings.edu/~/media/Files/events/2011/0531_china_carbon/20110531_china_carbon.pdf>, June 3, 2011,

China’s clean energy policy has advanced rapidly in recent years. In its last five-year plan, China aimed to reduce energy intensity by 20 percent between 2005 and 2010: a very ambitious goal. What policies and strategies did China employ to meet this target, and how did they perform? What lessons does this hold for China’s current five-year plan, which includes targets to further reduce the energy and carbon intensity of its economy? And what are the environmental and economic implications of China’s activities for the United States and the international community? On May 31, the John L. Thornton China Center will host Qi Ye, director of the Climate Policy Initiative (CPI) at Tsinghua University, who will share the findings of CPI’s recent report, "Review of Low-Carbon Development in China 2010." Professor Qi will summarize China’s energy and emissions performance in key sectors, describe the policies and instruments implemented to meet this target, and provide initial insights for China’s future low-carbon development. Trevor Houser, partner of the Rhodium Group and director its Energy and Climate Practice, will provide comments to the presentation. After the discussion, the speakers will take audience questions. TRANSCRIPT QI YE: I would like, today, to report to you this analysis and evaluation of some of the achievements and challenges of China and its endeavor towards this low-carbon green economy. It’s a very fashionable terms and I’m going to present today, is quite mixed picture and I will start with something really optimistic and you will think I’m doing the propaganda here and I will -- with a less optimistic tone. So, what I’m going to go is first I’ll go over -- give an overview of this low-carbon development in China and some key results in different sectors -- six sectors all together here, and summarize this and also I would look into the future, the future, I mean, for the next Five-Year Plan, which started earlier this year. So, whenever we talk about China nowadays, what we think we know is that China is the largest carbon emitter in the world. China exceeded the U.S. in 2007 and became the largest CO2 emitter or the greenhouse gas emitter. And we also know China is the largest energy consumer, started last year in 2010. And the government didn’t like this initially then, but later I think, you know, it’s more or less the case. 3.2 billion tons of coal-equivalent energy consumption, that’s a lot -- a lot of coal -- I mean, that’s a lot of energy, and that’s just roughly just about 7 billion tons of carbon dioxide, so that is -- which is, when you look at the energy intensity, the energy intensity is just about 5 times of Japan and 3 times of the U.S. The U.S. is not the most efficient economy in terms of energy consumption, but still China is five times of the U.S. Then we may ask -- well, the conclusion naturally comes, is China an inefficient economy in energy terms or in carbon terms? Not necessarily. You know, the picture is a little bit complicated when we dig into the details. […]But there has been good news. The good news is, ever since 1980, China has implemented a very -- pretty strong energy policy, energy conservation policy, that’s resulted in just about 5 percent per year declining -- declination in energy intensity. That goes all the way from 1980 to the year 2002. However, when -- after that the problem comes. The trend was reversed because of this heavy industry and because of the growth of the energy-intensive industry. So, that is why in 2005, the Chinese government decided to have a very, very strong policy to reverse this trend, to reduce the energy intensity by 20 percent during the 11th Five-Year Plan. So, how did that policy go? Well, if we put all these figures together and to see this is 2002, all right, and there is upward trend in the last five years, 2006, ’07, ’08, ’09, ’10, and the trend has been reversed. I can amplify that trend so you can see the 2005 was very high already, 1.23 tons of energy -- tons of coal equivalent. And as compared to 2009, for example, that’s just above 1, 1.10. So, the 20 percent target -- 20 percent cut target, is almost met. Right? By the end of the day is just about a little bit more than 19 percent. So, the target was met for that part, but when we look at different sectors, we see very different patterns. The power sector and manufacturing sector, they share a similar trend. For power sector, if you look at the overall emission and that is -- that’s shown in brown, then the overall emission has gone up and pretty fast, but when you look at the concentration, the energy intensity and the carbon intensity, that has been declining also quite rapidly, quite rapidly. You see -- this is a result of a number of key policies, renewable energy law, the large -- you know, a lot of the new power plant, much bigger, large-scale power plants, and many -- closures of many smaller power plants. So, when you compare those numbers, for example, the power industry, the CO2 emissions intensity, so that has been declining from 766 in 2005; 2008 that number is the 716. And you can also compare that for the thermal power generator, so that is even more significant. So, I can give you this data. I don’t want to read all this to you. Basically what happened is renewable energy -- hydro and wind in particular -- have been going up very, very fast. Wind is just about 130 percent increase per year for the installation capacity, and the generation capacity right now is just about 19 percent of the power is generated using renewable energy. So, there has been very, very fast increase. And a major policy is closure of the small and inefficient power plant. During those 5 years, 72 gigawatts of capacity, small and inefficient, that was closed down. Seventy-two, just to give us an idea, that is 20 percent more than the total capacity, total power generation capacity for the entire nation of UK. All right? So, that was removed. Replaced them with larger and more efficient power plants. This is a figure for the wind power installation. You can see -- the wind installation has been going up exponentially. And manufacturing industry had a similar trend. Basically, the overall carbon emission has been going up very, very fast. The energy and carbon intensity has been declining also at a pretty fast rate. And China was very effective in implanting the top 1,000, the most energy-consuming industries, enterprises, and closed a lot of the smaller factories. Last year, in particular, and there are like 2,000 of them were closed, this was at that point generated a lot of problems and generated a lot of dissatisfaction from the business world. And the 10 key energy conservation products was also -- contributed to this overall trend. We can also measure this by looking at the energy intensity per unit of industrial value added, the same thing, and we gave a number. The National Development Reform Commission, where the Climate Change Department is, they also provided a number. In the 5 years, their number is 680 million tons of coal equivalent saved in that -- during the 11th Five-Year Plan, and that converted to almost 1.5 billion tons of carbon dioxide saved as compared to the frozen technology case. So, 1.5 million tons of carbon dioxide -- I mean, billion tons of carbon dioxide, that is 5 times as much as the entire Europe -- EU commitment under the Kyoto Protocol. That’s a lot of carbon saved, but we have to be very careful. Compared to, you know, what we think as a business, as a Euro, the overall carbon emission is still going up. Otherwise, it will save this. So, we calculated a similar number using a bottom up approach, so basically that’s just confirming their data, you know, for the three categories of policy and for different -- three categories of policy and we give a -- trying to allocate like 27 percent contributed by the top 1,000 program, and 29 percent, the 10 key products, and 22 percent from the small plant closure program. That’s for the manufacturing. For buildings, the buildings and transportation, these two consumption sectors are quite different than those two production sectors. We see the overall emission, this top figure, is going up very, very fast and -- but efficiency improvement has been very modest. That means -- this is of big concern, right? China is putting in a lot of new buildings. A lot of people say in the next 20 years China is going to build just another USA, I mean, in terms of building volume. So, therefore, the building efficiency, even though per square meter it’s not that high, but the volume increase is very, very big factor driving the overall carbon emission from the building sector. There are some good news. For example, in the district heating, because it was reformed, the efficiency of district heating has improved very significantly and that also helped to save a lot of energy for this sector. And building codes, China has pretty good building codes, and according to the government, 90 percent of the buildings, the new buildings, actually comply. The compliance level has been very high, more than 90 percent, but the problem is there are some problems in the design of the building code. So even though if you comply 100 percent, because the design is not so good, then that can generate a big problem. Right? For the buildings, if we split the energy consumption savings into different parts, so building codes, 40 percent, and that district heating, 30 percent, and the rest of that being the renewable energy and appliances standard and so on and so forth. The transportation sector has a similar pattern, so if you’re looking at the transportation sector, also the Chinese society now is learning from you guys, from the United States. Everyone wants to have their own car. Then the energy consumption and the carbon emission is going up very, very fast, but the efficiency -- efficiency in the last 11th Five-Year Plan has not been improving very quickly enough. So another sign that’s worrisome, a lot of people want to take more flights, and they want to drive cars rather than to take the public transportation, rather than to take the trains, so this transportation mode, more energy consuming mode, is shown in that five years. The good news is really in the agriculture sector. Agriculture, it’s by far the only sector in China that has an absolute reduction in energy use and CO2 emission. And also when we look at the other greenhouse gas species, the N2O and methane and stayed more or less the same with a little bit decline in that period, but more or less stable. So, agriculture is really the sector we see some good news. The forestry is another sector that is very interesting. Forestry, due to this large scale reforestation programs in China that was enacted in the late 1990s for other purposes, for purposes other than climate change, but now we see the impact. In these 5 years, from 2006 and 2010, each year sees just about 450 million tons of carbon dioxide to be absorbed by the trees, so that is a really, really good news. Agriculture we look at not just CO2, but also some other gas species as well as the indirect, the embodied carbon in machinery, in fertilizer. So, still, putting all this together, we see the agriculture and forestry are very good. Now, some key takeaways. The first one we see, the carbon emission intensity has fallen, has been decreasing, but has been decreasing as a result of the energy intensity decreases, so it’s not as a result of the energy mix, not really, even though we see very significant increase of renewable energy in the five years, but that did not contribute significantly to this carbon emission reduction. Now, it also implies for the 12th Five-Year Plan and the 13th Five-Year Plan, there is huge potential for looking at those renewable energy, non fossil fuel energy options.

# Renewable Tradeoff

Conceded uniqueness claim- investment now- not working now

#### US is ahead – renewables coming now

Hill 12(Joshua, “US Retakes #1 Spot in Clean Energy Investment in 2011”, http://cleantechnica.com/2012/04/12/us-clean-energy-investment-in-2011-number-1/)

New research on clean energy financing in the Group of Twenty (G-20) nations released by The Pew Charitable Trusts shows that investment grew to a record $263 billion in 2011, a 6.5 percent increase over the previous year, with the United States beating out China in the race to secure private clean energy finances and investment. The U.S. attracted $48 billion in clean energy investment in 2011, a 42 percent increase over the previous year. As a result, the U.S. saw an addition of 6.7 gigawatts (GW) of wind and, for the first time, more than 1 GW of solar energy, enough to power 800,000 homes. By the end of the year, total U.S. installed renewable energy capacity topped 93 GW, second only to China, but this position will be difficult to hold with the expiry of Treasury grants and the Department of Energy’s loan guarantee programs. “In 2011, **the global clean energy sector grew again, the U.S. reclaimed its lead as the top destination for private investment, and consumers reaped the rewards of significantly reduced prices for clean energy technologies, such as solar panels, which are now nearly 50 percent cheaper than a year ago**,” said Phyllis Cuttino, director of Pew’s Clean Energy Program. “And yet, the yo-yo effect of U.S. clean energy policy hurts the ability of the United States to consistently compete and turn U.S.-led innovation into manufacturing, deployment, and export opportunities. Creative, stable, and transparent policies remain a critical signal to private investors.” Globally, the combination of falling clean energy technology prices coupled with growing investments saw an acceleration of clean energy generating capacity by a record 83.5 GW in 2011, bringing the global total to 565 GW. **Experts believe that with solar and wind technologies becoming more cost-competitive, renewable energy will become the preferred electric generating capacity for emerging economies.** 2011 saw G-20 investments in solar continue to rise, increasing 44 percent to $128 billion, making solar the leading technology for clean energy investment for the second year in a row. This increase offset a 15 percent decline in investments for both wind and energy efficiency in 2011. “The clean energy sector received its trillionth dollar of private investment just before the end of 2011, demonstrating significant growth over the past eight years,” said Michael Liebreich, CEO of Bloomberg New Energy Finance, Pew’s research partner. “Solar installations drove most of the activity last year as the falling price of photovoltaic modules, now 75 percent lower than three years ago, more than compensated for weakening clean energy support mechanisms in a number of parts of the world.” Overall clean energy investment continued to grow, with China attracting $45.5 billion, spurring the deployment of 20 GW of wind power, the most of any nation. Germany ranked third for the second year in a row among the G-20 members with $30.6 billion and 7.4 GW of solar power installed, while Italy attracted $28 billion and deployed a world record of nearly 8 GW of solar power. Source: Clean Technica (http://s.tt/19dg0)

# Earthquakes

#### Framing question- 1% risk sufficient- conceded that it takes out solvency- that's a high threshold

Concedes takes out solvency because it would DEMOLISH the industry certainty- people wont take the credit in the future

c/a dooley

natgas

Not inject at faultline

#### Earthquakes would happen—releases CO2 back into the atmosphere –

Bruggers 12 – The Courier-Journal [James, July 8, 2012, “Deep trouble? Carbon dioxide capture and storage may cause quakes,” <http://www.courier-journal.com/article/20120708/NEWS01/307080002/Deep-trouble-Carbon-dioxide-capture-storage-may-cause-quakes>

But some scientists are raising new concerns that storing carbon dioxide hundreds to thousands of feet below the ground could cause earthquakes — some severe enough to allow the greenhouse gas to escape into the atmosphere. A recent report by the National Academy of Sciences, a private, nonprofit institution that provides expert advice to the government, suggests that the process could build up enough pressure to cause minor to moderate earthquakes — the same thing that can happen in other energy-related drilling involving fluids that are pumped into the ground. And a Stanford University professor of geophysics, Mark Zoback, has gone a step further, testifying before a Senate committee that large-scale carbon capture and storage is a risky strategy that will likely fail. For the carbon capture and storage technology to make a difference, Zoback said in a telephone interview, the amount of carbon dioxide that will need to be pumped into the ground globally every day must equal the barrels of oil currently extracted and refined to power the world economy. “The question is,” Zoback said, “where are we going to put all that CO2 (carbon dioxide) without pressuring a large part of the Earth’s crust (and) without triggering moderate earthquakes?” While those quakes might not cause much damage to buildings, he said they could open fissures that might cause carbon dioxide to leak into the atmosphere, defeating the purpose of an effort that he said could cost as much as $2 trillion. Taken together, the concerns about earthquakes and leaks have put advocates of carbon capture and storage on the defensive.

# Climate Denial

Conceded- only arg is modeling solves

Obviously dependent on climate talks- your ev says it's a thorn in negotiations in the squpo

Kills obama’s credibility on climate talks that will succeed in the squo- seems like he’s wishing away the emissions question-two impacts

1. No broader domestic legislation
2. No international talks

**China won’t model CCS – any development they do will be exclusively for the purpose of exports not domestic use**

**Wilson 12** - lead North American CCS analyst for Bloomberg New Energy Finance. She has published extensively on the drivers of CCS markets, global public funding expenditures for CCS projects and US and Canadian policy. Cheryl is also leading Bloomberg New Energy Finance’s industry-first coverage of CO2-based enhanced oil recovery as a driver of CCS(Cheryl, 17 Jan 2012, “CCS in China: capturing CO2 or capturing the technology market,” http://www.globalccsinstitute.com/community/blogs/authors/cwilson64/2012/01/17/ccs-china-capturing-co2-or-capturing-technology-market)JCP

One of the main goals of the government-supported pilot programme is for Chinese companies to develop experience with diversified CO2 capture technologies and build international partnerships. At least nine foreign companies are working with 14 domestic companies on research and pilot projects. Chinese firms gain exportable operational and technical experience for markets where CCS will develop well before it does in China, in North America and Europe. Foreign partners not only build cheaper pilot projects but secure useful relationships in the event that a domestic CCS market develops.

These pilots are aimed not just at developing expertise, but lowering the cost of capture. We have all heard goals of about US$50/tCO2 for post-combustion capture in China in a decade – while Bloomberg New Energy Finance estimates for first-mover projects, the levelised cost of CO2 abatement is more in the range of US$80-120/tCO2 for coal post-combustion capture. If Chinese companies could get capture costs to $50/tCO2, the potential would exist for a tech export market.

But unlike the solar and wind markets, a domestic CCS market in China is unlikely any time soon. Growing energy demand in China is unparalleled anywhere else in the world and at least for now, any CCS development will be shaped by the country’s broader energy goals: the aim to develop more efficient uses of coal and to increase energy security.

# Kyoto

Handwerk 12

(<http://news.nationalgeographic.com/news/energy/2012/05/120522-carbon-capture-and-storage-economic-hurdles/>, Brian Handwerk For [National Geographic News](http://news.nationalgeographic.com/) Published May 22, 2012)

The current woes of CCS are tied to the world economic crisis, which has made funding tighter. Another problem is the failure of international governments to achieve a global climate treaty to take the place of the expiring Kyoto Protocol. "Up to two-and-a-half years ago industry believed that, after the Kyoto Protocol, national governments would agree on a new international agreement that (would) commit both developed and developing countries to reducing their greenhouse gas emissions, and that, as a result, they would force the industry to proceed with CCS," said Stefan Bachu of Alberta's provincially funded research organization, Alberta Innovates Technology Futures (AITF). But international compromise has proven elusive, and no agreement requiring cuts in carbon emissions has been achieved. "You cannot make money out of CCS, it's going to be a cost," said Bachu, who shared in the 2007 Nobel Prize as a member of the [Intergovernmental Panel on Climate Change](http://www.ipcc.ch/). "And, in the present economic climate and in the absence of an international agreement, no government is really asking industry to do anything through mandatory emission reductions, cap and trade, or the dreaded carbon tax. The industry knows that this is coming, if not today, then tomorrow, or in 2020. But why spend money today if you don't have to? That's why lots of projects that have been announced are being delayed or falling by the wayside."

# No Solvency- TF

#### Extremely long solvency timeframe – they have to build tens of thousands of miles of CO2 pipeline overcome tons of regulatory barriers – their author

Moniz and Tinker 10 – Professor of Physics and Engineering Systems @ Massachusetts Institute of Technology and Director of the Bureau of Economic Geology @ University of Texas at Austin Ernest J. Moniz and Scott W. Tinker “Role of Enhanced Oil Recovery in Accelerating the Deployment of Carbon Capture and Sequestration,” An MIT Energy Initiative and Bureau of Economic Geology at UT Austin Symposium, July 23, 2010

• Infrastructure Federal CCS programs have paid relatively little attention to the CO2 transportation infrastructure, but this is a key enabler for building both EOR and DSF sequestration. Looking well into the future, a CO2-EOR program utilizing hundreds of millions of tons of CO2 annually will likely require tens of thousands of miles of CO2 pipeline. A “giant horseshoe” configuration was discussed at the symposium, linking the major CO2 sources of the Midwest with the producing regions of the Gulf Coast, West Texas, and the Rockies. Clearly, such an ambitious undertaking should occur with public support only with evidence that large-scale CO2-EOR using anthropogenic sources will materialize as an opportunity for both climate risk mitigation and enhanced oil production. Satisfying these needs will probably require sustained “high” (i.e., current) oil price levels and a price (or cap) on CO2 emissions. However, even the initial steps to implement anthropogenic CO2-EOR should be taken with a view toward beginning to build the physical infrastructure in a way that would be needed for a future major scale-up. In the longer term, other issues will certainly arise as to how a large pipeline infrastructure is built and regulated when part of its purpose is to serve an environmental public good (CO2 “disposal”). For example, will major pipelines be required to serve as common carriers? Will the federal government take on some measure of siting authority, as it does with natural gas pipelines (and more recently with electricity transmission lines)? These questions do not need to be answered immediately, but they merit near-term stakeholder discussion to map out the regulatory landscape in case the value proposition becomes attractive sooner rather than later.