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# 1AC

### 1AC – China Advantage

#### CONTENTION 1: CHINA

#### SMRs ensure Marine mobility and reduced logistics---other energies fail

Andres and Breetz 11 Richard B, Professor of National Security Strategy at the National War College and a Senior Fellow and Energy and Environmental Security and Policy Chair in the Center for Strategic Research, Institute for National Strategic Studies, at the National Defense University and Hanna L, doctoral candidate in the Department of Political Science at The Massachusetts Institute of Technology, February, "Small Nuclear Reactors for Military Installations: Capabilities, Costs, and Technological Implications", www.ndu.edu/press/lib/pdf/StrForum/SF-262.pdf

Operational Vulnerability. Operational energy use represents a second serious vulnerability for the U.S. military. In recent years, the military has become significantly more effective by making greater use of technology in the field. The price of this improvement has been a vast increase in energy use. Over the last 10 years, for instance, the Marine Corps has more than tripled its operational use of energy. Energy and water now make up 70 percent of the logistics burden for troops operating in forward locations in the wars in Afghanistan and Iraq. This burden represents a severe vulnerability and is costing lives. In 2006, troop losses from logistics convoys became so serious that Marine Corps Major General Richard Zilmer sent the Pentagon a “Priority 1” request for renewable energy backup.11 This unprecedented request put fuel convoy issues on the national security agenda, triggering several high-level studies and leading to the establishment of the Power Surety Task Force, which fast-tracked energy innovations such as mobile power stations and super-insulating spray foam. Currently, the Marine Corps is considering a goal of producing all nonvehicle energy used at forward bases organically and substantially increasing the fuel efficiency of vehicles used in forward areas.¶ Nevertheless, attempts to solve the current energy use problem with efficiency measures and renewable sources are unlikely to fully address this vulnerability. Wind, solar, and hydro generation along with tailored cuts of energy use in the field can reduce the number of convoys needed to supply troops, but these measures will quickly reach limits and have their own challenges, such as visibility, open exposure, and intermittency. Deploying vehicles with greater fuel efficiency will further reduce convoy vulnerability but will not solve the problem.¶ **A strong consensus has been building** within planning circles **that small reactors have the potential to significantly reduce liquid fuel use and**, consequently, **the need for convoys to supply power at forward locations.** Just over 30 percent of operational fuel used in Afghanistan today goes to generating electricity. Small reactors could easily generate all electricity needed to run large forward operating bases. This innovation would, for instance, allow the Marine Corps to meet its goal of self sufficient bases. Mobile reactors also have the potential to make the Corps significantly lighter and more mobile by reducing its logistics tail.

#### Marine SMRs make bases like Guam energy self-sufficient

Baker 12 Matthew, American Security Project Think Tank, "Do Small Modular Reactors Present a Serious Option for the Military’s Energy Needs?", June 22, americansecurityproject.org/blog/2012/do-small-modular-reactors-present-a-serious-option-for-the-militarys-energy-needs/

The Defense Energy Security Caucus (DESC) held a briefing yesterday afternoon with proposals to surge the usage of small modular reactors (SMRs). The speakers at the briefing, included Rep. Bartlett (R-MD) and representatives from the American Nuclear Society, recommended that Congress and the White House need to do more “encourage the development and deployment of multiple SMR designs.”¶ SMRs are small, nuclear-powered reactors with power levels less than or equal to 300 MW and the capacity to produce as little as 25MW at a time.¶ SMRs differ from conventional nuclear reactors, which are capable of producing upward of 1,000MW, is that they are much smaller and cheaper. That makes them more capable of catering to our modern energy needs.¶ SMRs are able to be constructed in factories, with manufacturing capabilities already available in the United States. Their smaller size means that they require less construction time and can be deployed in areas that cannot accommodate conventional reactors. Although still in the design stage, SMRs could support small townships and military bases once manufactured. The flexibility of the new technology is particularly important to the DESC audience because SMRs can support remote military bases.¶ The speakers at the DESC briefing suggested a surge is needed in SMR production to combat a major vulnerability in America’s national security: possible attacks to the power grid. Such attacks could cause blackouts for over a year according to Congressman Bartlett, leading to blackouts never before experienced in the United States. In such an event the U.S. military would still need to function 24/7. Current predictions made by the DESC suggest that up to 90% of the US military’s energy needs could be supplied by SMRs.¶ Congressman Bartlett also pointed out that current military bases such as Guam – which is fueled by the transport of diesel – are extremely vulnerable should the energy transport system be disrupted. Fuel supplies are even more unstable in Afghanistan, where one out of every twenty-four convoys results in a casualty. According to Congressman Bartlett, SMRs could make such bases energy self-sufficient.

#### China’s rising now---US must harden Guam to avoid loss of Asia

Barton 11 Paul C, Gannett Washington Bureau citing Thomas Mahnken, Professor at the Naval War College, "Strategist: Guam in reach of Chinese missiles", March 30, www.armytimes.com/news/2011/03/gannett-guam-within-reach-of-china-missiles-033011/

Advancements in Chinese military capabilities mean Guam has lost its status as a safe haven for American forces in the Western Pacific, a top war strategist says.¶ “We are no longer out of reach,” Thomas Mahnken, professor at the Naval War College in Newport, R.I., said in an interview.¶ That’s especially the case, he said, in regard to Chinese ballistic missiles that could rain down on U.S. airfields and other facilities on the island.¶ “They have put a lot of resources into missile programs,” Mahnken said.¶ While the United States has been tied down for the past decade in Afghanistan and the Middle East, he said, the Chinese have been making rapid progress on a range of military technologies.¶ “They have exploited that,” Mahnken said.¶ Besides conventionally armed ballistic missiles, developments in Chinese armaments include sea-launched missiles, both nuclear and conventionally armed; nuclear and diesel submarines; cruise missiles; intercontinental ballistic weapons; better combat aircraft and bombers; and anti-satellite weapons. And cyberwarfare, he said, has not been neglected.¶ Mahnken said the U.S. military retains clear superiority, but “in some cases our advantage is slipping.” Earlier this month, Mahnken delivered similar warnings to the House Armed Services Committee and Delegate Madeleine Bordallo, D-Guam.¶ “This is a matter of some urgency since China is, for the first time, close to achieving a military capability to deny U.S. and allied forces access to much of the Western Pacific rim,” he told the committee.¶ “The assumption that U.S. bases in Guam, Japan and elsewhere will be secure from attack is in question. The Chinese military is fielding ballistic and cruise missile systems and a number of other capabilities designed to destroy most key facilities,” Mahnken also testified.¶ Despite Mahnken’s testimony, Bordallo said in a statement Wednesday: “There is no specific threat from China against U.S. interests in Guam. The re-posturing of U.S. military forces in the Pacific seeks to realign our forces to better respond to a variety of threats or humanitarian crises in the region. Moreover, our military maintains a variety of assets that can counter a wide range of weapons that any country may possess, and this was a point made by U.S. Pacific Command in testimony before our committee.”¶ She added: “Although I share the concerns that have been voiced regarding China’s level of investment in its military, greater transparency by the Chinese government will go a long way in addressing these concerns. I am also confident that the U.S.-China relationship will continue to improve through greater interaction between our military officials as well as greater economic opportunities between our countries.”¶ Since World War II, the United States has relied on a system of forward bases to deter adversaries and reassure allies, Mahnken said. Guam has frequently been called “the tip of the spear.”¶ Now in doubt, he told lawmakers, is the notion that on Guam — or anywhere else in the Western Pacific — the U.S. will “enjoy an operational sanctuary in space.”¶ Assumptions that U.S. naval vessels “can operate with impunity in all parts of the Western Pacific is questionable” as well, he told the committee.¶ A central question is whether the Chinese would regard Guam as a “red line” that they dare not cross because of the threat of U.S. retaliation. Related to that is whether Middle America cares enough about Guam to support going to war to defend it, Mahnken said in the interview.¶ A conflict over Taiwan, Mahken said, would likely bring Guam into play for both sides.¶ The Chinese, he testified, are working night and day to develop “programs to degrade or destroy the U.S. command, control and communications abilities, as well as American intelligence, surveillance and reconnaissance and the navigational systems that are critical for U.S. military operations.”¶ American forces would hardly be defenseless, he said, but the Chinese are clearly working to develop military power that compliments their status as an economic superpower.¶ In sum, he told lawmakers, “Chinese military modernization threatens to reshape the balance of power in Asia.”¶ When interviewed, Mahnken said China’s emphasis on its military could be likened to Germany’s buildup in the early 1930s. A lot of Chinese military activities, he said, are shielded from spy satellites by tunneling.¶ In response to China’s enhancement of its forces, Mahnken testified, the United States should bolster its intelligence, surveillance and reconnaissance networks in the Pacific; harden and diversify its Pacific bases, especially Guam; and bolster the submarine forces of allies and develop better ways to better link with them.¶ “Military power has a role to play in dealing with the rise of China,” he said, adding that the United States “must maintain a preponderance of power in the Pacific in order to ensure access to the global commons.”

#### Energy diversification is critical to Guam buildup

Peterson 11 Chris, Special Projects Editor at Energy and Infrastructure, North America’s Best Utility Management and Underground Solutions, "Guam Power Authority", Winter 2011, www.energyandinfrastructure.com/index.php/featured-content/307-guam-power-authority-gpa

Diversification of its energy sources will become much more important in the coming years, as a planned buildup of United States military presence on Guam figures to place additional demand on the power grid. According to GPA, the buildup is expected to take place sometime after 2014 and will increase demand for electricity by 30 MW. Although GPA has sufficient capacity to meet the increased demand, the cost of meeting that need is of some concern. The U.S. Navy is the GPA’s single largest customer, using more than 350 million kilowatt-hours each year

#### Guam is the lynchpin of deterrence in the region---proximity to hotspots ensures rapid response and deters Chinese expansionism

Caryl 7 Christian, Senior fellow at the Legatum Institute, a contributing editor at Foreign Policy, and a senior fellow at the MIT Center for International Studies, The Daily Beast, 2/25/07, “America's Unsinkable Fleet”, <http://www.thedailybeast.com/newsweek/2007/02/25/america-s-unsinkable-fleet.html>

For an out-of-the-way spit of land in the West Pacific, Guam has been getting a lot of interesting visitors recently. First came a steady stream of Pentagon bureaucrats and senior U.S. military officers. Then, a few weeks ago, a high-ranking delegation of Japanese officials arrived. And this week the island is set to greet its most illustrious guest yet: U.S. Vice President Dick Cheney. So why all the fuss over a tropical island just 30 miles long, known mainly for its white-sand beaches and glorious sunsets? The answer: the Pentagon has begun a major redeployment of U.S. forces in the region, pulling troops and equipment out of sometimes unreliable allies and beefing up its presence in more-congenial locales. First on its list is Guam, a U.S. territory since 1898 that is fast becoming the linchpin of Washington's new Asia strategy. Current U.S. forces on the island number just a few thousand but within a decade will total well over 20,000--about the same size as the Bush administration's planned surge in Iraq. By comparison, there are some 29,000 U.S. troops left in South Korea, yet despite the dangers of a nuclear-armed North, that number is expected to drop significantly. At a time when most of the world's attention is focused on the United States' misadventures in Iraq and Afghanistan, Pentagon planners are quietly working on ways to fortify the U.S. presence in East Asia. And they're looking to do so in ways that will give them a free hand in a wide range of contingencies--including fighting regional terrorists and a possible showdown with China. Guam offers the U.S. military both proximity to potential hot spots and the advantages of operating off U.S. soil. The transfer of forces to the island also reflects the Pentagon's determination to give regional allies such as South Korea and Japan more responsibility for their own security. Guam, a sleepy but diverse place that looks like a cross between Micronesia and Middle America, has long served as a U.S. air base and way station for troops traveling through the Pacific. At the end of the cold war, the Pentagon began shutting down some facilities on the island. But then came September 11, and a dramatic reassessment of America's global forces. Former secretary of Defense Donald Rumsfeld began to advocate the lily-pad strategy: rather than relying on large, static bases in Germany and South Korea, the Pentagon should create a global network of jumping-off points for quick responses to unpredictable attacks. Guam is an ideal lily pad, since the United States can act there without seeking permission from allies, says Honolulu-based defense analyst Richard Halloran. Declares Carl Peterson of the Guam Chamber of Commerce: "This is the U.S. in Asia. This is the tip of the spear." The island has already become a convenient base for fighting Washington's "Global War on Terror" in Indonesia and the Philippines. Small wonder that Brig. Gen. Douglas H. Owens, the commanding officer of Guam's Andersen Air Force Base, describes the island as "an unsinkable aircraft carrier." It's also well positioned for possible trouble to come. As Rear Adm. Charles Leidig, U.S. Navy commander on Guam, points out, if you take a map and draw a circle with Guam at the center and a radius of 1,500 nautical miles--equivalent to three hours' flying time or two to three days by ship--you come close to the main islands of Japan, Okinawa, Indonesia and the Philippines. China and the Korean Peninsula are only a bit farther off. So are several of the world's most important sea lanes, such as the Strait of Malacca, through which some 50 percent of the world's oil passes each year. The Pentagon, however, may be building up its forces on Guam with even bigger game in mind. "The larger strategic rationale [for the shift] can be summed up in one word, and that's 'China'," says Halloran. "They [the Bush administration] don't want to contain China, and they couldn't. What they are trying to do is to deter the Chinese. That's what the buildup on Guam is all about." The nature of the U.S. reorganization reinforces this point. Washington and Tokyo have agreed to move 8,000 Marines to Guam from Okinawa by 2014, at a cost of $10 billion (60 percent of which will be paid for by the Japanese government). But this is only the most public part of a broader buildup that has largely escaped notice. If all the pieces come together, it could mean billions more in Defense Department funds and a total increase in Guam's population (which is currently just 170,000) of 35,000. Guam is already home to a major U.S. Navy port and one of the biggest bases in the U.S. Air Force, featuring twin two-mile-long runways. Not long after September 11, flights of massive B-52 bombers began returning to Andersen to carry out regular training missions. Now the Air Force has begun to prepare for the deployment of tanker aircraft and up to 48 fighter planes, including the state-of-the-art F-22 Raptor. Andersen has also already started construction of a $52.8 million project that will house up to 10 Global Hawks--large unmanned spy planes that, according to Pacific Command Air Force Gen. Paul Hester, could end up replacing aging U-2 spy planes now based in South Korea. Meanwhile, the Navy has turned its port at Guam's Apra Harbor into a home for two Los Angeles-class nuclear-powered attack submarines, with a third to come later this year. It also plans to refurbish wharves to accommodate aircraft carriers and to transform Guam into a base for its new Littoral Combat Ship (a shallow-draft stealth ship designed to operate close to shore) and Trident submarines. The Tridents, immense cold-war-era craft converted to fire Tomahawk cruise missiles, can also be used by Navy Special Operations Forces, who can set off on missions in mini-submarines launched through the Tridents' missile ports. Guam is already home to an undisclosed number of Navy SEALs, many of whom have seen duty in the war on terror, and their number will likely grow. Guam's new capabilities, however, are designed for more than just low-intensity conflicts. The attack submarines that will soon be based there, for example, probably wouldn't be much use in a conflict with North Korea or Qaeda-allied terrorists in the Philippines; the presence of the subs, experts say, is clearly aimed at the possibility of a naval confrontation with China over the Taiwan Strait. Similarly, analysts argue, the stationing of F-22s and tanker planes on Guam points to the Pentagon's desire to ensure dominance in the air should it have to fight the Chinese. China's media often worry about just this scenario, but not everyone agrees that China is the main target of the Guam buildup. Evan Medeiros of the RAND Corporation says "the initial impetus and primary driver" were to restructure the U.S. military for the wide range of operations it now faces, from fighting the war on terror to chasing pirates and conducting humanitarian missions. In the complicated post-9/11 world, the United States believes it must be able to respond to various threats as flexibly as possible. This means keeping its forces close to the action. In the past that's required basing them in other countries' territories. But Guam offers an almost unique combination of a good location, excellent facilities (including a topnotch harbor, vast warehouses and massive airfields) and a lack of political restraints. As Kurt Campbell, a former White House staffer and Defense Department official now at the Center for a New American Security, says, "[Guam is] a point from which you can do a variety of things. And it's a place to remind people that you're still focused on the region." Campbell points out that these secondary missions, such as protecting sea lanes, countering weapons proliferation and conducting relief missions, remain important; the U.S. military's humanitarian efforts after the tsunami of December 2005 gave a huge boost to the country's reputation in Asia. Brad Glosserman, executive director of Pacific Forum CSIS, a Hawaii-based think tank, agrees. The Asia-Pacific region, he says, "is a jigsaw puzzle where all the pieces are changing shape and size all the time. China's the big story--but there are also changes going in on Japan, India, South Korea, Taiwan." One such development driving the move to Guam has been the steady withdrawal of the United States from South Korea in recent years (more than 9,000 troops have left in the last three years)--a result, in part, of rising anti-Americanism there and Rumsfeld's reluctance to keep troops in politically sensitive places. Some Air Force units that have pulled out of South Korea have already arrived on Guam; others may be yet to come. That, along with the planned removal of the Marines from Okinawa, has led some commentators to characterize the Guam expansion as evidence of a virtual U.S. retreat from East Asia. But Campbell and others disagree: "I would see this not as a retrenchment but as a diversification." Indeed, after years of maintaining an even balance between its Atlantic and Pacific fleets, the U.S. Navy is now clearly emphasizing its force in Asia. Whatever the rationale, the changes represent good news for Guam's population. The locals were hit hard in the early 1990s when the U.S. military's post-cold-war drawdown, combined with the Asian financial crises and the resulting plunge in tourism, caused the loss of thousands of skilled and unskilled jobs on the island. Guamanians are hoping that the Pentagon's new plan can bring billions in investment into the territory as well as new support for its sagging infrastructure. Contractors are already maneuvering for deals to build housing and other structures. Real-estate prices shot up 50 percent between 2005 and 2006 and there were more property sales in the fourth quarter of last year than in all of 2003. To be sure, hurdles remain, such as ensuring that the Marines from Okinawa actually make the move. The deal, which requires Japanese cooperation, has already run into political problems there. Then there's the possibility that local activists in Guam will throw a wrench into the works. Some of Guam's indigenous Chamorro people, who wield great influence on the island, have opposed the changes, warning that the military could overrun the island. The Pentagon, which already controls one third of the territory, has promised not to expand this share, but that pledge could prove hard to keep. Still, most Guamanians support the buildup, given their traditional patriotism--traumatic memories linger of Japan's occupation during World War II--and the potential economic benefits the rebasing will bring. Guam's significance as a regional base and steppingstone for U.S. military power therefore seems set to grow exponentially. Notes Gov. Felix Camacho: "We can no longer be ignored as some distant American territory." He seems right about that. If, as many in the region predict, the 21st century ends up belonging to the nations of the Pacific--and conflict in the region rises--Guam will have to get used to being in the headlines.

#### Conflict is emerging as China expands its military---escalating tensions and resource claims make miscalc likely

Westhead 12 Rick, Writer for Foreign Affairs, staff writer/South Asia Bureau Chief for the Toronto Star, The Star, 7/14, “Battle for the Pacific: Naval arms race in the China Sea”, http://www.thestar.com/news/world/article/1225396--battle-for-the-pacific-naval-arms-race-in-the-china-sea

A 21st-century Great Game is unfolding in the Asia Pacific, a region that accounts for more than half the world’s population and many emerging powers. Some, such as China, India, Pakistan and North Korea, are nuclear-armed rivals who have battled before. As these regional rivals vie for control of trade routes, fishing stocks and rich, untapped oil and gas deposits, they are expanding and modernizing their maritime forces, conducting war games and opening naval bases in what has become the most perilous arms race in the world. At the same time, the U.S. is trying to reestablish a dominant presence in the region, strengthening ties to some countries, including the Philippines and Australia, and trying to warm relations with others, such as Burma (Myanmar). With the U.S. pledging to send more troops and ships to the Asia Pacific, regional neighbours want to coax China to be more open at the negotiating table. Ten Southeast Asian nations this week agreed on a code of conduct to prevent disputes over the South China Sea from escalating into open conflict. China has refused to sign the pact. “The more militarized the region becomes the harder it is to resolve conflicts,” says Stephanie Kleine-Ahlbradt, a China analyst with the International Crisis Group, which works to defuse conflicts. “You have increasing harassment of fishermen in disputed waters, which becomes a proxy for bigger issues of claimed territory,” she says. “It can easily spiral into a security dilemma, especially when nationalist sentiments in the region are increasing. There’s a real pressure in these countries not to cave in on disputes, and when you’ve been telling people for 50 years that you have a claim, it’s hard to agree to go to an international tribunal and live with its decisions.” China is the pacesetter. It is said to be spending $106 billion this year alone on its military, up from $14 billion in 2000. It recently began sea trials on its first aircraft carrier, the Shi Lang, and is developing an anti-ship ballistic missile that can penetrate the defences of U.S. aircraft carriers, according to its military. India — whose first prime minister, Jawaharlal Nehru, once wrote, “to be secure on land we must be supreme at sea” — bought a Russian-built attack submarine, the Chakra, in January. It’s the first nuclear-powered sub India has operated in 20 years. India’s first locally built aircraft carriers, the Vikramaditya and Vikrant, are scheduled to join the navy in 2013 and 2014. South Korea last year began construction on a $970-million naval base for 20 warships, including submarines. Australia, which has signalled it will build a sub fleet after construction is finished on three destroyers, recently agreed to allow the U.S. navy to station 2,500 marines in Darwin, while the Philippines is in talks with the U.S. about expanding an American military presence there. Half a world away, the U.S. looms over the islands, straits and channels of the Indian Ocean and South China Sea, a region U.S. Secretary of State Hillary Clinton has called a “national interest.” In January, President Barack Obama said the U.S. would “pivot” and “rebalance” its global military forces toward the Asia-Pacific region. The U.S. is concerned about China’s sweeping claims of sovereignty, such as its directive to foreign oil companies not to help Vietnam develop oilfields in the South China Sea. While the U.S. Defence Department has been ordered to pare spending by $487 billion over the next 10 years, Obama has mostly spared the navy from cuts. In June, Defence Secretary Leon Panetta told a conference in Singapore that by 2020, 60 per cent of U.S. warships, including six aircraft-carrier groups, would be stationed in the Asia-Pacific. Mitt Romney, the Republican nominee in November’s presidential election, has pledged to increase the naval fleet from 285 warships to 346. “In many respects, the broader Pacific will be the most dynamic and significant part of the world for American interests for many decades to come,” U.S. Deputy Secretary of State William J. Burns said in November. The U.S. announced last year it would develop long-range nuclear-capable bombers and better electronic jammers for the navy. The military contractors General Dynamics and Northrop Grumman are also building a new stealth destroyer. The ship, known as the DDG-1000, will cost as much as $3.3 billion and feature a new type of radar that offers improved scanning in shallow coastlines, a wave-piercing hull that leaves a minimal wake, and an electromagnetic rail gun, which employs a magnetic field and electric current to shoot a projectile at several times the speed of sound. While the navy originally wanted 32 of the DDG-1000s, its order has been trimmed to three. But Chinese Rear Admiral Zhang Zhaozhong, a professor at China’s National Defence University, said the DDG-1000’s high-tech design wouldn’t protect it from a group of fishing boats packed with explosives. If enough fishing boats could be mobilized, the DDG-1000 “would be a goner,” Zhaozhong said recently on CCTV, China’s public broadcaster. History would seem to support Zhaozhong. During the Falklands War in 1982, Argentina used a single $200,000 air-to-surface missile to sink a $50-million destroyer, HMS Sheffield. And in 1967, an Egyptian vessel used several guided missiles to sink an Israeli destroyer. Meanwhile, Indonesia, Malaysia, Pakistan, Thailand, Taiwan, Vietnam and Bangladesh have either acquired submarines or plan to buy them. Japan is increasing its 18-sub fleet to 24. And China has more than 68 subs, three nuclear-powered, according to The Military Balance in Asia, a May 2011 report by the Center for Strategic and International Studies. “For most countries, it’s not about a fight, it’s about the ability to dispatch to preserve your quarter,” says Mike Hennessy, a professor of naval history at the Royal Military College of Canada. “It’s about being able to intimidate so your claims go unchallenged.” Throughout the sprawling Asia Pacific region, there is no shortage of maritime claims. The biggest dispute is over the Spratly Islands, a barren patch of 750 islets, coral reefs and outcroppings in the South China Sea about 350 kilometres southeast of Vietnam and 900 kilometres southeast of China. For more than 50 years, China, Vietnam, the Philippines, Malaysia and Brunei have fought for control of the archipelago. In 1956, a Filipino businessman named Tomas Clomas arrived at the islands and declared an independent country, Freedomland. Manila rejected the suggestion but claimed the islands, occupying some with armed troops since 1968. Last year, Vietnam announced that six monks who belong to the government-sanctioned wing of the Buddhist church would set up temples and live on several islands in the Spratlys chain, presumably to establish Vietnam’s claim. In April, the Philippines and Vietnam said they would hold soccer and basketball matches in the Spratlys, the same day a Chinese cruise ship completed a voyage to the disputed territory. At first glance, the Spratlys seem to hold scarce value. Some of the islands actually disappear below the water at high tide. But, the Spratlys offer a prime location to monitor the shipping lanes of the South China Sea. More important, the seabed is believed to contain as much as 225 billion barrels worth oil and natural gas — enough to fuel Canada for 280 years, based on current consumption of about 2.2 million barrels per day. (The Athabasca oilsands formation, by contrast, is estimated to contain 1.7 billion barrels of recoverable oil.) It’s no wonder China covets the Spratlys. The world’s fastest-growing economy, China uses five times as much oil and gas as Canada, but its supply of hydroelectricity declined by 40 per cent last year because of a prolonged drought. When the Philippines announced recently that it would work with a U.K. company to explore for deposits near the Spratlys, China’s government-owned Global Times newspaper wrote an editorial that China should strike first. “Everything will be burned to the ground should a military conflict break out,” the paper argued. “We shouldn’t waste the opportunity to launch some tiny-scale battles that could deter provocateurs from going further.” Oil and gas are only one reason for the naval buildup. The Persian Gulf, Indian Ocean and the Strait of Malacca off Indonesia combine to form a crucial trade route. At least 40 per cent of the world’s oil is carried aboard tankers that travel these waters. An estimated 700 million people live near the South China Sea and depend on the rich fishing stocks for their livelihoods, as well as 80 per cent of their diets. Vietnam, for instance, estimates its population of 87 million will surge by 25 per cent by 2050 and it will need additional food and fish. This spring, on April 8, China and the Philippines quarrelled in a stretch known as the Scarborough Shoal after the Philippine Navy discovered coral, giant clams and live sharks on a Chinese boat. The Philippines announced the Chinese fishermen would be arrested for poaching. The showdown, some 200 kilometres west of the Philippine island of Luzon, simmered for more than two months. Then, on June 17, the Philippines ordered its two ships to withdraw. The day before they left, China had seven large ships and as many as 26 fishing boats stationed at the shoal, the Philippine Daily Inquirer reported. China has alienated and antagonized its regional neighbours during the past two few years over a string of incidents, pushing them “into a coalition and toward the Americans,” says M. Taylor Fravel, a political scientist at the Massachusetts Institute of Technology, who has written a book about China’s territorial issues. Last year, a boat owned by PetroVietnam was surveying the ocean floor about 120 kilometres south of Vietnam and 600 kilometres from China’s Hainan Island. Three Chinese patrol vessels intercepted the Vietnamese ship and cut its cables to the seabed. China’s foreign ministry blamed Vietnam for the clash, claiming its oil and gas operations “undermined China’s interests and jurisdictional rights.” That incident came 10 months after the U.S. and Vietnam began joint naval exercises in the South China Sea. “I think China has realized the open hostility has been a mistake and you’re seeing it take a more moderate approach now,” Fravel says. “It’s unarmed or lightly armed vessels, the Chinese version of the coast guard, who are responding to conflicts, not its navy.” Fravel says China is also becoming better at international diplomacy, using civilian maritime law agencies to press its claims in conjunction with its navy, which is becoming formidable. In 1990, China’s navy amounted to two Soviet-era destroyers. By 2011, China had 71 frigates and destroyers and 71 submarines, as well as its first aircraft carrier.

#### Territorial disputes go nuclear

Chakraborty 10 Tuhin Subhro, Research Associate at Rajiv Gandhi Institute for Contemporary Studies (RGICS), his primary area of work is centered on East Asia and International Relations. His recent work includes finding an alternative to the existing security dilemma in East Asia and the Pacific and Geo Political implications of the ‘Rise of China’. Prior to joining RGICS, he was associated with the Centre for Strategic Studies and Simulation, United Service Institution of India (USI) where he examined the role of India in securing Asia Pacific. He has coordinated conferences and workshops on United Nation Peacekeeping Visions and on China’s Quest for Global Dominance. He has written commentaries on issues relating to ASEAN, Asia Pacific Security Dilemma and US China relations. He also contributed in carrying out simulation exercise on the ‘Afghanistan Scenario’ for the Foreign Service Institute (FSI). Tuhin interned at the Indian Council of World Affairs (ICWA), Sapru House, wherein he worked on the Rise of People’s Liberation Army (PLA) military budget and its impact on India. He graduated from St. Stephen’s College, Delhi and thereafter he undertook his masters in East Asian Studies from University of Delhi. His areas of interest include China, India-Japan bilateral relations, ASEAN, Asia Pacific security dynamics and Nuclear Issues, The United States Service Institution of India, 2010, “The Initiation & Outlook of ASEAN Defence Ministers Meeting (ADMM) Plus Eight”, <http://www.usiofindia.org/Article/?pub=Strategic%20Perspective&pubno=20&ano=739>

The first ASEAN Defence Ministers Meeting Plus Eight (China, India, Japan, South Korea, Australia, New Zealand, Russia and the USA) was held on the 12th of October. When this frame work of ADMM Plus Eight came into news for the first time it was seen as a development which could be the initiating step to a much needed security architecture in the Asia Pacific. Asia Pacific is fast emerging as the economic center of the world, consequently securing of vulnerable economic assets has become mandatory. The source of threat to economic assets is basically unconventional in nature like natural disasters, terrorism and maritime piracy. This coupled with the conventional security threats and flashpoints based on territorial disputes and political differences are very much a part of the region posing a major security challenge. As mentioned ADMM Plus Eight can be seen as the first initiative on such a large scale where the security concerns of the region can be discussed and areas of cooperation can be explored to keep the threats at bay. The defence ministers of the ten ASEAN nations and the eight extra regional countries (Plus Eight) during the meeting have committed to cooperation and dialogue to counter insecurity in the region. One of the major reasons for initiation of such a framework has been the new face of threat which is non-conventional and transnational which makes it very difficult for an actor to deal with it in isolation. Threats related to violent extremism, maritime security, vulnerability of SLOCs, transnational crimes have a direct and indirect bearing on the path of economic growth. Apart from this the existence of territorial disputes especially on the maritime front plus the issues related to political differences, rise of China and dispute on the Korean Peninsula has aggravated the security dilemma in the region giving rise to areas of potential conflict. This can be seen as a more of a conventional threat to the region. The question here is that how far this ADMM Plus Eight can go to address the conventional security threats or is it an initiative which would be confined to meetings and passing resolution and playing second fiddle to the ASEAN summit. It is very important to realize that when one is talking about effective security architecture for the Asia Pacific one has to talk in terms of addressing the conventional issues like the territorial and political disputes. These issues serve as bigger flashpoint which can snowball into a major conflict which has the possibility of turning into a nuclear conflict.

#### Guam is the key pivot point for the Asia-Pacific strategy

Halloran 11 Richard, New York Times Foreign Correspondent, “Pacific Push”, January, http://www.airforce-magazine.com/MagazineArchive/Pages/2011/January%202011/0111pacific.aspx

A force buildup on Guam anchors a broad US military strategy to keep China in check. In its strategy to deter China from driving the US out of Asia and the Western Pacific, US Pacific Command has quietly shifted its focus from Northeast to Southeast Asia, especially the South China Sea and nations along its littoral areas. To dissuade China, the US has begun positioning forces which could threaten China’s supply lines through the South China Sea. The oil and raw materials transported through those shipping lanes are crucial to a surging Chinese economy—an economy paying for Beijing’s swiftly expanding military power. The pivot point of this emerging strategy is Guam, the US territory in the central Pacific within striking distance of the South China Sea. The island is also 1,800 miles from the coast of China, and therefore, within range of Chinese missiles. Asked why the US was expanding Andersen Air Force Base and other bases on Guam, sites that could be hit by intermediate-range ballistic missiles, a senior US officer replied, "The message to China is that we are here and we mean to stay." Despite North Korea’s episodic provocations and fiery rhetoric, the primary objective of the new US focus is a China that has become more belligerent toward the US since the Beijing Olympics in August 2008. That event, especially its elaborate opening ceremony, is seen by some senior US officers now as a nationalistic declaration of China’s sense of pre-eminence. That attitude was reflected in a somewhat testy exchange between Secretary of Defense Robert M. Gates and Gen. Ma Xiaotian of the People’s Liberation Army at the Shangri-La conference of Defense Ministers in Singapore in June. With China, Gates said, the US wanted "sustained and reliable military-to-military contacts at all levels that reduce miscommunication, misunderstanding, and miscalculation. There is a real cost to the absence of military-to-military relations." In rebuttal, Ma said: "If anyone has been setting up barriers to cooperation, it is certainly not us." Territorial Overreach The general asserted, "There are three main obstacles in the development of military relations: The first is the sales of arms to Taiwan, the second is the intense spy and patrol behaviors of US planes and ships in South China Sea and East China Sea."The third, Ma said, was the 2000 National Defense Authorization Act and the amendment introduced by then-Rep. Tom DeLay (R-Tex.) that set restrictions on US military contact with the PLA. DeLay sponsored another amendment the next year, prohibiting the US from paying the $1 million demanded by China for repatriating the Navy reconnaissance aircraft and crew that landed on Hainan Island after the EP-3 and a Chinese fighter shadowing it collided in international airspace. In addition to harassing US ships in international waters, the Chinese have startled senior US officers with harsh rhetoric in private. Officers who analyze the PLA said Chinese military leaders have their own tactics, not controlled by the Communist Party or government, for dealing with Americans. Despite their bluster, some Chinese appear to recognize that their swelling economic might has made them vulnerable. By the end of 2010, China will be importing about half the 8.2 million barrels of oil a day it consumes to keep the economy humming. Some 80 percent of that will have come through the Strait of Malacca. That lifeline could be cut with relative ease by air and sea power; a single B-52, for instance, can deliver a wide range of cruise missiles, torpedoes, and anti-ship mines. Thus, President Hu Jintao once pointed to Beijing’s "Malacca dilemma" and during a visit to Malaysia went out to the strait to see for himself. Within the last six months, China has elevated its territorial claim to most of the international waters of the South China Sea by calling the sea a "core interest." In rebuttal, Secretary of State Hillary Rodham Clinton said in Hanoi in July that the US "has a national interest in freedom of navigation, open access to Asia’s maritime commons, and respect for international law in the South China Sea." If Chinese shipping in the South China Sea were disrupted, ships would be forced to navigate the tricky waters of the Arafura Sea between Indonesia and Australia or to sail around Australia, at enormous cost. Moreover, the shipping would still be vulnerable to attack on the long sea-lane north in what strategists call a "distant blockade." Some US naval thinkers have shown new interest in the "Heartland Theory" propounded by the British geographer Halford J. Mackinder more than a century ago. Mackinder argued that whoever controlled the heartland of Eastern Europe could control the "world island," or Eurasian continent. Applying that strategy to Asia, students of Mackinder contend that controlling the South China Sea would enable an air and naval power to control East Asia, including China, and therefore the "world island." In 2006, Maj. Lawrence Spinetta, a student at the Air War College, came to a similar conclusion. "To counter China’s growing naval power, the United States can exploit a critical vulnerability—China’s dependence on sea lines of communication," notably the Strait of Malacca, he wrote. Guam is critical to this strategy. The latest addition to Guam’s arsenal was the arrival in September of the first of three RQ-4 Global Hawk unmanned surveillance aircraft that will be based on the island by mid-2011. Together, the three Global Hawks will be able to maintain a 24-hour watch, seven days a week, over the South China Sea or wherever Pacific Command deems necessary. USAF Gen. Gary L. North, commander of Pacific Air Forces, flew from Hawaii in September to tell a crowd at Andersen that Global Hawk missions would include humanitarian, anti-piracy, and if necessary, "combat operations." Global Hawk is packed with sensors that can cover 40,000 square miles in a day from an altitude of 60,000 feet. The intelligence aircraft has a range of 10,900 miles, enough to recon the East Asian littoral from Seoul to Singapore. It operates day and night, in all weather, and produces high-resolution images that can be transmitted to a ground station at Joint Base Pearl Harbor-Hickam, the Pacific Air Forces headquarters in Hawaii, and several others almost instantly. Persistent Presence While new to Andersen, Global Hawk provides a proven capability, North said. The general, who commanded the aircraft in the air war over Iraq for three years, said Global Hawk had flown 35,000 hours over Iraq and Afghanistan—and another 10,000 hours elsewhere. Lt. Gen. Herbert J. Carlisle, commander of 13th Air Force at Hickam, which oversees the operations on Guam, suggested an added benefit from Global Hawk: "People have a tendency to behave" when they know they are being watched. Still to come on Guam are a wharf and maintenance facilities for transiting nuclear-powered aircraft carriers and escorting warships. This support unit is intended to keep the ships on station longer without having to return to Pearl Harbor or to rely on bases in Japan and Singapore. An Army missile defense unit of 600 soldiers, plus families, is due to be stationed on Guam, according to an environmental impact statement (EIS), to be a direct counter to the Chinese missile threat. Further, senior US officers said plans to move 8,600 marines, plus 9,000 dependents from Okinawa to Guam by 2014, were on track despite dithering by successive governments in Tokyo. (At least, that is the official view. Privately, US senior officers have expressed skepticism that the schedule will be maintained.)

#### That’s key to solve war over Taiwan, and seizure of the Strait of Malacca

Spinetta 6 Major Lawrence, “The Malacca Dilemma-Countering China’s String of Pearls with Land Based Air Power”, <http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA476931>

With regard to Japan, China has made repeated incursions into Japanese territorial waters and the country's economic zones in order to warn its neighbor in unusually blunt terms that any interference with Beijing's designs over disputed territory will be met with force.30 Tensions between China and Japan over the enforcement of territorial claims and the exploitation of disputed natural resources could erupt in a conflict with wide regional repercussions.31 Japan's unilateral declaration of an exclusive economic zone in the East China Sea, the site of intensive hydrocarbon prospecting, may spark military confrontation. Energy as a Driver of China’s National Security Policy 32 No longer inward looking, China shifted its foreign policy focus towards achieving regional dominance, bolstering national prestige, ensuring diplomatic ascension, and safeguarding economic interests. With regard to the last, economic considerations are intimately intertwined with Chinese security strategy. As such, energy concerns loom large in Chinese foreign policy calculations. China’s desire to secure energy imports to fuel its economy remains a prime driver of its security policy. China’s demand for energy grew by more than 30 percent in 2003, and Chinese automobile ownership increased 80 percent during the past four years. China is the second largest consumer of oil in the world and the third largest importer of oil. Importing 60 percent of its oil from the Middle East, China is heavily dependent on foreign oil, particularly Middle Eastern sources.33 As China’s economy expands, its dependence on foreign oil will increase, exacerbating pressures to secure energy resources. In the near term, China is projected to remain the fastest growing energy consumer in the world. Oil industry experts expect Chinese imports to rise from 6 million barrels in 2004 to 16-20 million barrels per day in 2020. If this projection proves accurate, China will have to import eighty percent of its total oil consumption. Even if both China’s economy and oil consumption grows at a rate below expectations, many experts agree that China “faces acute and unavoidable energy vulnerabilities.”34 The specter of an impending energy crisis is not remote; China is already experiencing oil shortages. In 2004, 24 of China’s 31 provinces experienced power cuts as demand surpassed energy grid capacities. The Chinese government introduced energy rationing in industrial centers near Guangzhou and Shanghai, ordered six thousand factories to take a one-week break or operate at non-peak hours, and mandated shopping malls in Beijing reduce their air conditioning by one-third to conserve energy.35 The Chinese government recognizes “a growing reliance on Middle Eastern suppliers for stable energy supplies is problematic and must be mitigated through a comprehensive diversification strategy.”36 But, its diversification strategy has made little progress. China lost bids to buy stakes in oil fields outside the Middle East, such as its July 2005 failed attempt to buy UNOCAL.37 Similarly, a deal to build a land pipeline from Russia to China collapsed after Japan entered the competition and offered more money to reroute the pipeline. Because regional energy grids in Southeast Asia have been built in a piecemeal fashion, Chinese efforts to connect grids and facilitate regional energy interdependence have produced only marginal benefits. China’s dependence on sea lanes to import oil is a critical strategic vulnerability. Almost all of the oil that China imports passes through maritime chokepoints and hence, is susceptible to disruption. Eighty percent of China’s oil imports pass through the Strait of Malacca. In a 2003 speech to the Chinese Communist Party leadership, President Hu Jintao identified this dependence on sea lanes as a critical vulnerability and directed national security officials to figure out a solution for the “Malacca Dilemma.” Predictably, China is allocating substantial resources to its military, buying sophisticated weapons, and seeking to expand its influence in the Western Pacific and Indian Ocean based on fears that the United States will exploit this economic vulnerability in a potential conflict. A Strategic Crossroads China’s aggressive strategy to challenge US maritime superiority suggests traditionalists who view national security as a zero-sum game with the United States are triumphing over integrationists who favor cooperation. Traditionalists view security issues more narrowly through a military filter, whereas integrationists emphasize cooperation and interdependence.38 Traditionalists and integrationists advocate different methods of securing access to energy imports. Traditionalists support a policy of direct physical control. They advocate the resolution of territorial disputes with force if necessary and encourage Chinese companies to acquire equity in foreign natural resources.39 In contrast, integrationists argue China “must expand ties to foreign supplies through diverse market arrangements, encourage foreign suppliers to pursue ‘linking’ projects in China, expand cooperation with the International Energy Agency to better anticipate and respond to international energy crises, and increase reliance on markets.”40 Although China seems to be pursuing elements of both the traditionalist and integrationist approaches, its weight of effort and magnitude of military spending suggests the government is prioritizing a military approach over cooperation. China is at a strategic crossroads. China’s break-neck military build-up has given it the capability to increasingly threaten its neighbors and US regional influence.41 The government can either choose a martial path to an expanded sphere of influence, or it can broaden its definition of security and focus on economic growth through commercial rather than military means. Based on recent antagonistic actions, it is far from a forgone conclusion that the integrationists will eventually triumph in the policy debate and China will embark upon a path of benign competition. Ideological differences with the United States increase the risk that China will choose a martial path. Additionally, the 2005 Department of Defense annual report to Congress on Chinese military power identifies other factors that could lead to conflict. These include: ƒ Nationalistic fervor bred by expanding economic power and political influence ƒ Structural economic weakness and inefficiencies that undermine economic growth ƒ An inability to accommodate the forces of an open, transparent market economy ƒ A government that is still adapting to great power roles ƒ An expanding military-industrial complex that proliferates advanced weapons.42 The interactions of complex political, economic, and social forces within China and their influence on Chinese strategic behavior are difficult to predict. For example, economic stagnation could aggravate domestic political problems for Communist Party leaders, leading Beijing to reduce military spending. Conversely, Chinese leaders could shift investments to the military in a bid to sustain domestic support through nationalistic assertions abroad.43 An economic downturn and demographic change may catalyze the government to focus on internal rather than external threats to regime survival. Alternatively, an economic downturn may cause Chinese leaders to advocate the acquisition by force of natural resources to fuel their economy. The unpredictability of Taiwanese politics may provoke China to act militarily despite a willingness of certain factions within the Chinese government to negotiate a settlement. The point is that US action will not be the sole determinant or driver of Chinese foreign policy. The United States needs to be prepared for the contingency that China follows a less than friendly path. The Need for US Action The stakes are high; the United States cannot cede control of the region’s strategic waterways without incurring immeasurable risk to vital US interests. First, failure to respond to China’s “String of Pearls” strategy threatens US power projection capability. Emphasizing preparations to fight and win short-duration, high-intensity conflicts, China hopes to negate the United States’ ability to intervene in the region, especially during a conflict with Taiwan. The US military cannot perform its primary missions—peacetime engagement, deterrence and conflict prevention, and fighting and winning the nation’s wars—unless it maintains the ability to deploy forces in a timely and effective manner. China enjoys the enduring advantage of proximity and interior lines of communication in Asia.44 The United States must overcome the tyranny of distance to project power and to protect the region’s sea lines of communication. In a China-Taiwan conflict, delaying or harassing a US carrier task force may create conditions sufficient for PRC victory. Unimpeded access through the South China Sea is strategically important not only in the event of conflict in the region, but also as a route to the Persian Gulf. Sixty-four percent of the known global oil reserves are concentrated in the Middle East. Surrendering maritime control to China would effectively give it a vote in US foreign policy. Even if China did not actively oppose US forces transiting through strategic chokepoints, it could impose significant time delays and costs. For example, a naval battle group proceeding from Yokosuka, Japan to Bahrain forced to sail around Australia would require an additional 15 days of transit. The extra fuel costs alone would amount to almost $10 million.45 More critical than the monetary cost, the loss of speed and responsiveness may prove difficult to overcome.46 Second, failure to respond to China’s “String of Pearls” strategy would jeopardize freedom of navigation through chokepoints that are critically important to global economic interests. One quarter of the world’s trade passes through the Strait of Malacca. Over 1,100 fully laden supertankers, many with only a meter or two of clearance between their keels and the channel bottom, pass eastbound through the Strait each year.47 If China succeeds in gaining control of the Strait, then half of the world’s merchant fleet would be required to seek alternative routes. This situation would result in huge economic losses, delays in shipping, and generate a substantial increase in the requirement for vessel capacity. If the Chinese threaten to close the Strait of Malacca and merchant ships are re-routed, commercial transportation costs will increase by 60 percent.48 More importantly, China would be able to harm the economies of close allies, most notably Japan and South Korea. Threats to exert control over sea lanes would have an enormous impact, giving Beijing tremendous bargaining leverage. Japan and South Korea rely on US naval power to help protect the transit of their goods to market and the flow of resources. Seventy percent of Japan’s trade passes through the Strait of Malacca. The Japanese and South Korean economies are heavily dependent on the free passage of commercial traffic through the Strait of Malacca, yet neither country has the naval forces necessary to adequately protect its long-haul commercial shipping in the region. Not only does it benefit the United States to protect the vital interests of its close allies, the United States is bound by treaty to secure Japanese and South Korean sea lines of communication.49 An American failure to protect Japanese and South Korean interests would weaken strategic alliances and encourage those nations to take their own defensive measures, potentially setting the conditions for a spiraling arms race. Ross Terrill, a national security expert at Harvard’s Asia Center says, “A Japan that saw China eclipse the U.S. -- its major ally and whose primacy in East Asia explains six decades of Japanese restraint -- would surely challenge China.”50 If a regional arms race does not come to fruition and Japan chooses a conciliatory approach, then Japan may be forced into political accommodation as a result of overt Chinese threats or soft power influence. Developing a Hedge Strategy A Chinese national security strategist closely tied to the People’s Liberation Army stated, “When a nation embarks upon a process of shifting from an ‘inward-leaning economy’ to an ‘outward-leaning economy,’ the arena of national security concerns begins to move to the oceans. Consequently, people start to pay attention to sea power. This is a phenomenon in history that occurs so frequently that it has almost become a rule rather than an exception.”51 In an Atlantic Monthly article, “How We Would Fight China,” Robert Kaplan predicts a future conflict as the Chinese navy increasingly seeks to project power and control the region’s sea lanes. He warns, “Given the stakes, and given what history teaches us about the conflicts that emerge when great powers all pursue legitimate interests, the result is likely to be the defining military conflict of the twenty-first century: if not a big war with China, then a series of Cold War-style standoffs that stretch out over years and decades.”52 Many political scientists argue it’s a question of “when,” not “if” US-China relations sour (i.e., relations are defined by more than benign competition). As a result, some neo-conservatives advocate the United States follow a strategy that seeks to prevent or at least moderate China’s rise. Max Boot chides the Pentagon for failing to recognize China’s nefarious plotting and accuses “Chinese strategists, in the best tradition of Sun Tzu, [of] working on crafty schemes to topple the American hegemon.”53 In response, Richard Haas, president of the Council on Foreign Relations, points out, “One problem with this thinking is that the rise and fall of countries is largely beyond the ability of the United States or any other outsider to control. The performance of states is mostly the result of demographics, culture, natural resources, educational systems, economic policy, political stability, and foreign policy. It is not clear the United States could prevent China's rise even if it wanted to.”54 Either way, strained relations between the two countries are likely. While war with China is not inevitable, it would be a serious mistake for the United States not to protect its vital interests and create a hedge against the risk of some sort of conflict—military and/or diplomatic. China stands at a strategic crossroads, and the United States must be prepared to respond to the uncertainties of any Chinese course of action. The dispute over Taiwan is an obvious flashpoint, but countering Chinese soft power requires strategic considerations beyond preparing against direct military confrontation. The United States must be prepared to fully engage China, but also capable of responding to potential Chinese attempts to attain regional hegemony through force or intimidation. The United States has little influence over the pace and scope of Chinese military spending, but it can strive to maintain a strategic advantage in the region to protect trade, preserve regional influence, and threaten China’s strategic vulnerabilities if required. China’s ultimate goal is to control strategic chokepoints in the South China Sea and Indian Ocean. China’s “String of Pearls” strategy supports efforts to exclude the United States from the region. To offset the ability of Beijing to leverage its emergent military capabilities, the United States needs a sustained and robust naval and air presence in the region to prevent China from having the option of threatening US and allied interests. The United States should take steps to encourage a peaceful and prosperous China while pursuing a hedge strategy to reduce the risks associated with a China that chooses a belligerent attitude in the realm of foreign policy. Ross Terrill remarked, “The expansionist claims of Beijing are unique among today's powers. But the Chinese regime is a rational dictatorship that has, for the past quarter century, been patient in fulfilling its goals. It surely realizes that others -- such as the U.S., Japan, Russia and India -- have a variety of reasons for denying China the opportunity to be a 21st century Middle Kingdom. If Beijing continues to be faced with a countervailing equilibrium that keeps the peace in East Asia, it will probably act prudently.”55

#### Taiwan conflict goes nuclear

Glaser 11 Professor of Political Science and International Affairs – George Washington University, “Will China’s Rise Lead to War?” *Foreign Affairs* Vol. 9 Iss. 2, March/April

THE PROSPECTS for avoiding intense military competition and war may be good, but growth in China's power may nevertheless require some changes in U.S. foreign policy that Washington will find disagreeable--particularly regarding Taiwan. Although it lost control of Taiwan during the Chinese Civil War more than six decades ago, China still considers Taiwan to be part of its homeland, and unification remains a key political goal for Beijing. China has made clear that it will use force if Taiwan declares independence, and much of China's conventional military buildup has been dedicated to increasing its ability to coerce Taiwan and reducing the United States' ability to intervene. Because China places such high value on Taiwan and because the United States and China--whatever they might formally agree to--have such different attitudes regarding the legitimacy of the status quo, the issue poses special dangers and challenges for the U.S.-Chinese relationship, placing it in a different category than Japan or South Korea. A crisis over Taiwan could fairly easily escalate to nuclear war, because each step along the way might well seem rational to the actors involved. Current U.S. policy is designed to reduce the probability that Taiwan will declare independence and to make clear that the United States will not come to Taiwan's aid if it does. Nevertheless, the United States would find itself under pressure to protect Taiwan against any sort of attack, no matter how it originated. Given the different interests and perceptions of the various parties and the limited control Washington has over Taipei's behavior, a crisis could unfold in which the United States found itself following events rather than leading them. Such dangers have been around for decades, but ongoing improvements in China's military capabilities may make Beijing more willing to escalate a Taiwan crisis. In addition to its improved conventional capabilities, China is modernizing its nuclear forces to increase their ability to survive and retaliate following a large-scale U.S. attack. Standard deterrence theory holds that Washington's current ability to destroy most or all of China's nuclear force enhances its bargaining position. China's nuclear modernization might remove that check on Chinese action, leading Beijing to behave more boldly in future crises than it has in past ones. A U.S. attempt to preserve its ability to defend Taiwan, meanwhile, could fuel a conventional and nuclear arms race. Enhancements to U.S. offensive targeting capabilities and strategic ballistic missile defenses might be interpreted by China as a signal of malign U.S. motives, leading to further Chinese military efforts and a general poisoning of U.S.-Chinese relations.

**Collapse of Asian trade from Malacca causes nuclear war**

Auslin 9 Michael, resident scholar at AEI, “Averting Disaster”, The Daily Standard, 2/6, http://www.aei.org/publications/filter.all,pubID.29339/pub\_detail.asp

As they deal with a collapsing world economy, policymakers in Washington and around the globe must not forget that when a depression strikes, war can follow. Nowhere is this truer than in Asia, the most heavily armed region on earth and riven with ancient hatreds and territorial rivalries. **Collapsing trade flows** can lead to political tension, nationalist outbursts, growing distrust, and ultimately, military miscalculation. The result would be disaster on top of an already dire situation. Asia's political infrastructure may not be strong enough to resist the slide towards confrontation and conflict. No one should think that Asia is on the verge of conflict. But it is also important to remember what has helped keep the peace in this region for so long. Phenomenal growth rates in Japan, South Korea, Hong Kong, Singapore, China and elsewhere since the 1960s have naturally turned national attention inward, to development and stability. This has gradually led to increased political confidence, diplomatic initiatives, and in many nations the move toward more democratic systems. America has directly benefited as well, and not merely from years of lower consumer prices, but also from the general conditions of peace in Asia. Yet policymakers need to remember that even during these decades of growth, moments of economic shock, such as the 1973 Oil Crisis, led to instability and bursts of terrorist activity in Japan, while the uneven pace of growth in China has led to tens of thousands of armed clashes in the poor interior of the country. Now **imagine such instability multiplied region-wide**. The economic collapse Japan is facing, and China's potential slowdown, **dwarfs any previous economic troubles,** including the 1998 Asian Currency Crisis. Newly urbanized workers rioting for jobs or living wages, conflict over natural resources, further saber-rattling from North Korea, all can take on lives of their own. This is the nightmare of governments in the region, and particularly of democracies from newer ones like Thailand and Mongolia to established states like Japan and South Korea. How will overburdened political leaders react to internal unrest? What happens if Chinese shopkeepers in Indonesia are attacked, or a Japanese naval ship collides with a Korean fishing vessel? Quite simply, Asia's political infrastructure may not be strong enough to resist the slide towards confrontation and conflict. This would be a political and humanitarian disaster turning the clock back decades in Asia. It would almost certainly drag America in at some point, as well. First of all, we have **alliance responsibilities** to Japan, South Korea, Australia, and the Philippines should any of them come under armed attack. Failure on our part to live up to those responsibilities could mean the end of America's credibility in Asia. Secondly, peace in Asia has been kept in good measure by the continued U.S. military presence since World War II. There have been terrible localized conflicts, of course, but nothing approaching a systemic conflagration like the 1940s. Today, such a conflict would be far more bloody, and it is unclear if the American military, already stretched too thin by wars in Afghanistan and Iraq, could contain the crisis. Nor is it clear that the American people, worn out from war and economic distress, would be willing to shed even more blood and treasure for lands across the ocean. The result could be a historic changing of the geopolitical map in the world's most populous region. Perhaps China would emerge as the undisputed hegemon. Possibly democracies like Japan and South Korea would link up to oppose any aggressor. India might decide it could move into the vacuum. All of this is guess-work, of course, but it has happened repeatedly throughout history. There is no reason to believe we are immune from the same types of miscalculation and greed that have destroyed international systems in the past.

### 1AC – Hegemony Advantage

#### CONTENTION 2: HEGEMONY

#### Marine nuclear progress spills over to other military sectors

Roberts 11 David, Staff Writer for Grist, "THE MARINES GO RENEWABLE", Outside Magazine, December 2011, www.outsideonline.com/outdoor-adventure/natural-intelligence/Natural-Intelligence-Charge.html?page=all

The effort has covered ground so quickly in part because of the Corps’s relentless, non-ideological pragmatism. They have looked everywhere for good ideas, including the other armed services, development groups, and … Burning Man. In August, Marine Corps representatives traveled to the alternative arts festival to visit the Playagon, a camp where humanitarian-minded futurists and gear geeks, many ex-military, test disaster-relief technology in the austere conditions of the Nevada desert. ¶ “They’re reaching out into all the non-traditional venues they can find,” says Eric Rasmussen, a 25-year Navy veteran who now leads relief efforts in places like Haiti and Indonesia. “That’s pretty damn smart.”¶ THE MARINE CORPS is the smallest of the armed forces, with just over 200,000 active-duty soldiers and a budget of less than $30 billion—around 4 percent of U.S. military spending. In terms of sheer numbers, energy markets will likely be more affected by the Air Force seeking alternative fuels for its planes, the Navy for its ships, or the Army for its large, enduring bases. But the Marines’ progress in expeditionary energy could have an impact well beyond the gallons or dollars involved. ¶ For one thing, battlefield success will focus attention on the tactical advantages of small-scale, distributed renewable energy. Christine Parthemore, a fellow at the independent Washington, D.C.–based Center for a New American Security, credits India 3/5 with accelerating a “shift in thinking” that has military brass willing to go beyond merely using fossil fuels more efficiently. This was apparent in the Operational Energy Strategy, released by the Department of Defense in June, which prioritizes diversifying energy sources and, specifically, hails the Marines’ experience in Helmand province. ¶ For another, the Marines’ efforts will drive R&D that could bring down prices for the kinds of technologies desperately needed in regions affected by war, poverty, or natural disasters. The same solar panels and LED lights that worked for India 3/5 could be utilized in remote villages or refugee camps. This is of more than altruistic interest to the Pentagon. Even under Donald Rumsfeld’s leadership, the Department of Defense acknowledged that “stability operations are a core U.S. military mission.”

#### SMRs resolve grid and convoy risks---islanding and reduced fuel needs

Bourget 11 Remy, worked at Center for Advanced Defense Studies, “Small Modular Reactors: Opportunity for Global Leadership and Innovation”, 7/1, Google Cache

Small Modular Reactors offer unambiguous national security advantages. Unlike other alternative energy sources such as solar and wind power, nuclear reactors can be relied on for energy 24/7, making them a very stable source of energy. The fragility of the U.S. electric grid was underscored in 2003 by a blackout which swept the north-east United States, affecting 45 million Americans. The electric grid is especially vulnerable to cyber-attack, though some experts claim it has already been penetrated and “prepared in advance” for cyber war. Putting greater military reliance on nuclear energy mitigates this risk. Small reactors would help to “island” domestic bases, making them invulnerable to such attacks. Another security advantage is independence from oil. Currently, cutting off the oil supply would cripple US defenses. Reactors deployed to Forward Operating Bases would reduce the need for fuel convoys, saving American lives and eliminating the possibility of a crisis on the scale of Pakistan's 2008 closure of the Khyber Pass. Proliferation is another important security concern, and there are two opposing views in the SMR debate. Some claim that because thorium is not a fissile material and there is only low-grade uranium used to start the fission reaction, the Liquid Fluoride Thorium Reactor model will avoid many of the security and proliferation concerns associated with traditional reactors. Ninety percent enriched uranium is needed for weapons, but only 20% (at most) would be used in the thorium reactions. Other scientists dispute this claim, saying that it is relatively easy to enrich uranium from 20% to 90%, which is weapons-grade. The environmental aspects of SMRs are also hotly debated. The smaller size of the modular reactors means they have smaller “radiological footprints” - a strong environmental case for the use of SMRs. However, opponents argue that more small reactors will produce more hazardous waste because they use more fuel per unit of energy produced than traditional reactors. They also argue that the radioactivity of thorium is 200 times that of the same mass of uranium. This point is still in dispute because other scientific models indicate that thorium reactors are more efficient and could produce 10,000 times less waste than a pressurized water reactor. This would help military bases achieve their goal of reducing carbon emissions 28% by 2020. Their small size also allows them to be buried underground to contain potential leaks. Additionally, Molten Salt Reactors that use thorium have a natural safety mechanism which does not require a cooling system run by vulnerable computers. This makes disastrous meltdowns like Fukushima, Three Mile Island and Chernobyl next to impossible. Naval vessels have been operating similar small reactors for decades without a single disaster. Proponents of SMRs argue that they overcome many of the financial drawbacks faced by traditional reactors. The overhead costs are lower, requiring only several hundred million compared to the $10 billion required for a traditional twin-core complex. However, opponents dispute this calculation, saying that the material cost per kilowatt of a reactor goes up as the size goes down, making the same amount of energy produced by numerous small reactors ultimately more expensive than one big one. If the reactors turn out to be economical, it could save the DoD billions in electric bills. The air conditioning bill alone for Iraq and Afghanistan is $20 billion each year. Another benefit is construction time. They take only three years to become operational, instead of five to six. It would also take less time to repair the reactors if they were damaged during an attack. Having a decentralized system of modular reactors makes it more difficult for enemies to achieve a decisive hit that will cripple a base's energy supply. Some argue that as a highly advanced industrialized nation, the US would be one of the few countries with the capabilities to manufacture the reactors, stimulating job growth. Others say that contracts would inevitably be given to another country like China that competes with lower wages. Congress must first decide what the nation's energy priorities are, then weigh the costs and benefits of developing Small Modular Reactors. This process will involve defining the precise scientific aspects of SMRs more clearly than has been done in the past. Ultimately, DOD and Congress must assess the question of whether the security benefits of SMRs are worth the potential costs. The United States has a history of bold innovation, but now the Chinese are trailblazing the development of thorium-based reactors, which could have major implications on great-power politics. The US still has the chance to lead the way in the next generation of nuclear energy, but recent budgetary decisions suggest a missed opportunity.

#### Fewer fuel convoys and sustainable operations boost mission effectiveness

Pompilio 12 Natalie, Freelance Writer and co-author of More Philadelphia Murals and the Stories They Tell, citing Retired Brigade General Steven Anderson, "The real reason the military is going green", June 8, www.energybulletin.net/stories/2012-06-08/real-reason-military-going-green

Cleaner Energy, A More Secure World¶ In the Middle East, realities in the field lend immediacy and urgency to new strategies that can break America’s oil habits. By Anderson’s count, more than 1,000 Americans have been killed moving fuel in Iraq and Afghanistan, usually in convoys that some soldiers call “Taliban Targets.” ¶ After writing an op-ed on the subject that appeared in The New York Times, Anderson received an email from an Army company commander in Afghanistan. The commander explained that every two weeks, he had to shut down his combat operations to get fuel and, while he was gone, the enemy would re-entrench their positions. “I have to start over every two weeks,” he wrote.¶ Energy efficiency and military effectiveness go hand in hand. When there are fewer soldiers spending their time protecting fuel convoys, there’s more time for them to do hearts-and-minds-type missions. ¶ Anderson stressed it’s not just foreign oil that’s the enemy; fossil fuels, in general, are the problem. He has publicly come out against domestic developments like the Keystone XL pipeline because, he said, they would only feed our oil addiction.¶ In an editorial co-written with other former military officers and published in multiple newspapers, Anderson noted that “clean energy is a solution we must pursue.”¶ “Without changing our energy mix,” he wrote, “we will continue to undermine our economic stability—and with it, our stature in the world.”

#### Loss of mission effectiveness results in nuclear war in every hotspot

Kagan and O’Hanlon 7 Frederick, resident scholar at AEI and Michael, senior fellow in foreign policy at Brookings, “The Case for Larger Ground Forces”, April 2007, http://www.aei.org/files/2007/04/24/20070424\_Kagan20070424.pdf

We live at a time when wars not only rage in nearly every region but threaten to erupt in many places where the current relative calm is tenuous. To view this as a strategic military challenge for the United States is not to espouse a specific theory of America’s role in the world or a certain political philosophy. Such an assessment flows directly from the basic bipartisan view of American foreign policy makers since World War II that overseas threats must be countered before they can directly threaten this country’s shores, that the basic stability of the international system is essential to American peace and prosperity, and that no country besides the United States is in a position to lead the way in countering major challenges to the global order. Let us highlight the threats and their consequences with a few concrete examples, emphasizing those that involve key strategic regions of the world such as the Persian Gulf and East Asia, or key potential threats to American security, such as the spread of nuclear weapons and the strengthening of the global Al Qaeda/jihadist movement. The Iranian government has rejected a series of international demands to halt its efforts at enriching uranium and submit to international inspections. What will happen if the US—or Israeli—government becomes convinced that Tehran is on the verge of fielding a nuclear weapon? North Korea, of course, has already done so, and the ripple effects are beginning to spread. Japan’s recent election to supreme power of a leader who has promised to rewrite that country’s constitution to support increased armed forces—and, possibly, even nuclear weapons— may well alter the delicate balance of fear in Northeast Asia fundamentally and rapidly. Also, in the background, at least for now, Sino Taiwanese tensions continue to flare, as do tensions between India and Pakistan, Pakistan and Afghanistan, Venezuela and the United States, and so on. Meanwhile, the world’s nonintervention in Darfur troubles consciences from Europe to America’s Bible Belt to its bastions of liberalism, yet with no serious international forces on offer, the bloodletting will probably, tragically, continue unabated. And as bad as things are in Iraq today, they could get worse. What would happen if the key Shiite figure, Ali al Sistani, were to die? If another major attack on the scale of the Golden Mosque bombing hit either side (or, perhaps, both sides at the same time)? Such deterioration might convince many Americans that the war there truly was lost—but the costs of reaching such a conclusion would be enormous. Afghanistan is somewhat more stable for the moment, although a major Taliban offensive appears to be in the offing. Sound US grand strategy must proceed from the recognition that, over the next few years and decades, the world is going to be a very unsettled and quite dangerous place, with Al Qaeda and its associated groups as a subset of a much larger set of worries. The only serious response to this international environment is to develop armed forces capable of protecting America’s vital interests throughout this dangerous time. Doing so requires a military capable of a wide range of missions—including not only deterrence of great power conflict in dealing with potential hotspots in Korea, the Taiwan Strait, and the Persian Gulf but also associated with a variety of Special Forces activities and stabilization operations. For today’s US military, which already excels at high technology and is increasingly focused on re-learning the lost art of counterinsurgency, this is first and foremost a question of finding the resources to field a large-enough standing Army and Marine Corps to handle personnel intensive missions such as the ones now under way in Iraq and Afghanistan. Let us hope there will be no such large-scale missions for a while. But preparing for the possibility, while doing whatever we can at this late hour to relieve the pressure on our soldiers and Marines in ongoing operations, is prudent. At worst, the only potential downside to a major program to strengthen the military is the possibility of spending a bit too much money. Recent history shows no link between having a larger military and its overuse; indeed, Ronald Reagan’s time in office was characterized by higher defense budgets and yet much less use of the military, an outcome for which we can hope in the coming years, but hardly guarantee. While the authors disagree between ourselves about proper increases in the size and cost of the military (with O’Hanlon preferring to hold defense to roughly 4 percent of GDP and seeing ground forces increase by a total of perhaps 100,000, and Kagan willing to devote at least 5 percent of GDP to defense as in the Reagan years and increase the Army by at least 250,000), we agree on the need to start expanding ground force capabilities by at least 25,000 a year immediately. Such a measure is not only prudent, it is also badly overdue.

#### Marines independently key to overall US power projection

Hagee 4 General Michael W, Commandant of the Marine Corps, "Before the Senate Armed Services Committee Concerning Posture", February 10, www.au.af.mil/au/awc/awcgate/usmc/posture\_feb04.pdf

The Navy-Marine Corps team continues to play a critical role in the Global War On Terrorism and in the establishment of stability and security throughout the world. During this past year, the Marine Corps, both active and reserve, was engaged in operations from Afghanistan, to the Arabian Gulf, the Horn of Africa, Liberia, the Georgian Republic, Colombia, Guantanamo Bay, and the Philippines. Most prominent in highlighting the value and power of the Nation’s naval expeditionary capability was the Marine Corps’ participation in Operation IRAQI FREEDOM. Success in this operation underscored the unique contributions of our multidimensional naval dominance, our expeditionary nature, our flexibility to deal with complex situations and challenges, and the adaptability of our forces and individuals in order to defeat the challenges posed by adaptive, asymmetric enemies and long-term threats. ¶ Early last year, the I Marine Expeditionary Force deployed a combat ready force of almost 70,000 Marines and Sailors in less than 60 days using the full array of our complementary power projection capabilities. Forward deployed Marine Expeditionary Units (Special Operations Capable) again demonstrated their proven value for immediate response. Eleven strategically located Maritime Prepositioned Force ships were unloaded in 16 days to provide the equipment and sustainment for two Marine Expeditionary Brigades. A seven ship amphibious force from each coast embarked a total of 11,500 Marines, Sailors, and their equipment and within thirty days these fourteen ships began to arrive and offload in Kuwait. Strategic sea and air lift was also vital to our success in this effort. Exploiting the operational speed, reach, and inherent flexibility of seapower, the Navy-Marine Corps team achieved a rapid buildup of sustained warfighting power that was combat ready to support U.S. Central Command on 1 March 2003. ¶ Closely integrated with our joint and coalition partners, as well as Special Operations Forces, the I Marine Expeditionary Force provided the Combatant Commander with a potent combined arms force comprising a balance of ground, aviation, and combat service support elements all coordinated by a dynamic command element. This teamwork – the product of demanding and realistic Service and joint training – presented a multi-dimensional dilemma for the Iraqi regime’s forces and loyalists. It also greatly increased the range of options available to our leadership as they addressed each unique and complex situation. The integration of the 1st United Kingdom Division within the I Marine Expeditionary Force provides outstanding lessons for achieving merged coalition capabilities and consistent goals in the future. ¶ The combat power of I Marine Expeditionary Force generated an operational tempo that our enemy could not match. With short notice that operations would commence early, the Marines and their joint and coalition partners rapidly secured key strategic objectives. The I Marine Expeditionary Force then engaged in 26 days of sustained combat operations. Using the tenets of maneuver warfare, they executed four major river crossings, fought ten major engagements, and destroyed eight Iraqi divisions before stopping in Tikrit – almost 500 miles inland. In support of Joint Special Operations Forces Northern Iraq, the 26th Marine Expeditionary Unit inserted a Marine-Air Ground Task Force from the Eastern Mediterranean into Northern Iraq – almost 1,200 miles distance. The sustained resources of the Marine force, which were derived primarily from our seaborne logistics, provided us unrivaled advantages. While our logistics were stretched by the operational commanders, our combat service support units demonstrated flexibility and resourcefulness. ¶ Highlighting the expeditionary mindset of Marines, our combined arms force successfully operated in desert, urban, swamp, and rural environments while effectively conducting combat, peacekeeping, and humanitarian operations – at times simultaneously. Marines also demonstrated the ability to re-task and reorganize to conduct unanticipated missions like the taking of the city of Tikrit. Following major combat operations, I Marine Expeditionary Force assumed responsibility for security and stability in five Central Iraq provinces until they were relieved of the last province by coalition forces this past September. Flexibility and adaptability are key characteristics of an expeditionary force, and they are critical advantages that we must seek to optimize for the future, particularly in this era of global uncertainty. ¶ Recent operations also emphasize the increased importance of access to key regions for projecting our Nation’s power. With global interests, the United States must retain the capability to secure access as needed. Power projection from the sea greatly increases the range of options available to avert or resolve conflicts. A credible naval forcible-entry capability is critical to ensure that we are never barred from a vital national objective or limited to suboptimal alternatives.

#### Extinction

Barnett 11 (Thomas P.M., Former Senior Strategic Researcher and Professor in the Warfare Analysis & Research Department, Center for Naval Warfare Studies, U.S. Naval War College American military geostrategist and Chief Analyst at Wikistrat., worked as the Assistant for Strategic Futures in the Office of Force Transformation in the Department of Defense, “The New Rules: Leadership Fatigue Puts U.S., and Globalization, at Crossroads,” March 7 <http://www.worldpoliticsreview.com/articles/8099/the-new-rules-leadership-fatigue-puts-u-s-and-globalization-at-crossroads>)

Events in Libya are a further reminder for Americans that we stand at a crossroads in our continuing evolution as the world's sole full-service superpower. Unfortunately, we are increasingly seeking change without cost, and shirking from risk because we are tired of the responsibility. We don't know who we are anymore, and our president is a big part of that problem. Instead of leading us, he explains to us. Barack Obama would have us believe that he is practicing strategic patience. But many experts and ordinary citizens alike have concluded that he is actually beset by strategic incoherence -- in effect, a man overmatched by the job. It is worth first examining the larger picture: We live in a time of arguably the greatest structural change in the global order yet endured, with this historical moment's most amazing feature being its relative and absolute lack of mass violence. That is something to consider when Americans contemplate military intervention in Libya, because if we do take the step to prevent larger-scale killing by engaging in some killing of our own, we will not be adding to some fantastically imagined global death count stemming from the ongoing "megalomania" and "evil" of American "empire." We'll be engaging in the same sort of system-administering activity that has marked our stunningly successful stewardship of global order since World War II. Let me be more blunt: As the guardian of globalization, the U.S. military has been the greatest force for peace the world has ever known. Had America been removed from the global dynamics that governed the 20th century, the mass murder never would have ended. Indeed, it's entirely conceivable there would now be no identifiable human civilization left, once nuclear weapons entered the killing equation. But the world did not keep sliding down that path of perpetual war. Instead, America stepped up and changed everything by ushering in our now-perpetual great-power peace. We introduced the international liberal trade order known as globalization and played loyal Leviathan over its spread. What resulted was the collapse of empires, an explosion of democracy, the persistent spread of human rights, the liberation of women, the doubling of life expectancy, a roughly 10-fold increase in adjusted global GDP and a profound and persistent reduction in battle deaths from state-based conflicts. That is what American "hubris" actually delivered. Please remember that the next time some TV pundit sells you the image of "unbridled" American military power as the cause of global disorder instead of its cure. With self-deprecation bordering on self-loathing, we now imagine a post-American world that is anything but. Just watch who scatters and who steps up as the Facebook revolutions erupt across the Arab world. While we might imagine ourselves the status quo power, we remain the world's most vigorously revisionist force. As for the sheer "evil" that is our military-industrial complex, again, let's examine what the world looked like before that establishment reared its ugly head. The last great period of global structural change was the first half of the 20th century, a period that saw a death toll of about 100 million across two world wars. That comes to an average of 2 million deaths a year in a world of approximately 2 billion souls. Today, with far more comprehensive worldwide reporting, researchers report an average of less than 100,000 battle deaths annually in a world fast approaching 7 billion people. Though admittedly crude, these calculations suggest a 90 percent absolute drop and a 99 percent relative drop in deaths due to war. We are clearly headed for a world order characterized by multipolarity, something the American-birthed system was designed to both encourage and accommodate. But given how things turned out the last time we collectively faced such a fluid structure, we would do well to keep U.S. power, in all of its forms, deeply embedded in the geometry to come. To continue the historical survey, after salvaging Western Europe from its half-century of civil war, the U.S. emerged as the progenitor of a new, far more just form of globalization -- one based on actual free trade rather than colonialism. America then successfully replicated globalization further in East Asia over the second half of the 20th century, setting the stage for the Pacific Century now unfolding.

### 1AC – Water Advantage

#### CONTENTION 3: WATER

#### Water shortages are coming and cause instability

AFP 9/10, “World water crisis must be top UN priority: report”, http://www.google.com/hostednews/afp/article/ALeqM5gcIGn59te-BGkDoG1uG6XrAMXO\_A?docId=CNG.96ef5382d53f44338468570447594103.851

WASHINGTON — A **rapidly worsening** water shortage threatens to destabilize the planet and should be a top priority for the UN Security Council and world leaders, a panel of experts said in a report.¶ The world's diminishing water supply carries serious security, development and social risks, and could adversely affect global health, energy stores and food supplies, said the report titled "The Global Water Crisis: Addressing an Urgent Security Issue," published Monday.¶ The study was released by the InterAction Council (IAC), a group of 40 prominent former government leaders and heads of state, along with the United Nations University's Institute for Water, Environment and Health, and Canada's Walter and Duncan Gordon Foundation.¶ "As some of these nations are already politically unstable, such crises may have regional repercussions that extend well beyond their political boundaries," said Norway's former Prime Minister Gro Harlem Brundtland, a member of the group.¶ The Norwegian leader underscored that the danger is particularly acute in sub-Saharan Africa, western Asia and North Africa, where critical water shortages already exist.¶ She added that water insecurity could wreak havoc "even in politically stable regions."

#### Especially in China, Egypt, and Pakistan --- goes nuclear

NPR 10 (1/3/10, https://www.npr.org/templates/story/story.php?storyId=122195532)

Just as wars over oil played a major role in 20th-century history, a new book makes a convincing case that many 21st century conflicts will be fought over water. In Water: The Epic Struggle for Wealth, Power and Civilization, journalist Steven Solomon argues that water is surpassing oil as the world's scarcest critical resource. Only 2.5 percent of the planet's water supply is fresh, Solomon writes, much of which is locked away in glaciers. World water use in the past century grew twice as fast as world population. "We've now reached the limit where that trajectory can no longer continue," Solomon tells NPR's Mary Louise Kelly. "Suddenly we're going to have to find a way to use the existing water resources in a far, far more productive manner than we ever did before, because there's simply not enough." One issue, Solomon says, is that water's cost doesn't reflect its true economic value. While a society's transition from oil may be painful, water is irreplaceable. Yet water costs far less per gallon — and even less than that for some. "In some cases, where there are large political subsidies, largely in agriculture, it does not [cost very much]," Solomon says. "In many cases, irrigated agriculture is getting its water for free. And we in the cities are paying a lot, and industries are also paying an awful lot. That's unfair. It's inefficient to the allocation of water to the most productive economic ends." At the same time, Solomon says, there's an increasing feeling in the world that everyone has a basic right to a minimum 13 gallons of water a day for basic human health. He doesn't necessarily have an issue with that. "I think there's plenty of water in the world, even in the poorest and most water-famished country, for that 13 gallons to be given for free to individuals — and let them pay beyond that," he says. Solomon says the world is divided into water haves and have-nots. China, Egypt and Pakistan are just a few countries facing critical water issues in the 21st century. In his book he writes, "Consider what will happen in **water-distressed, nuclear-armed, terrorist-besieged, overpopulated, heavily irrigation dependent and already politically unstable Pakistan** when its single water lifeline, the Indus river, loses a third of its flow from the disappearance from its glacial water source."

#### Middle East war causes World War 3

The Earl of Stirling 11, hereditary Governor & Lord Lieutenant of Canada, Lord High Admiral of Nova Scotia, & B.Sc. in Pol. Sc. & History; M.A. in European Studies, “General Middle East War Nears - Syrian events more dangerous than even nuclear nightmare in Japan”, http://europebusines.blogspot.com/2011/03/general-middle-east-war-nears-syrian.html

Any Third Lebanon War/General Middle East War is apt to involve WMD on both side quickly as both sides know the stakes and that the Israelis are determined to end, once and for all, any Iranian opposition to a 'Greater Israel' domination of the entire Middle East. It will be a case of 'use your WMD or lose them' to enemy strikes. Any massive WMD usage against Israel will result in the usage of Israeli thermonuclear warheads against Arab and Persian populations centers in large parts of the Middle East, with the resulting spread of radioactive fallout over large parts of the Northern Hemisphere. However, the first use of nukes is apt to be lower yield warheads directed against Iranian underground facilities including both nuclear sites and governmental command and control and leadership bunkers, with some limited strikes also likely early-on in Syrian territory.¶ The Iranians are well prepared to launch a global Advanced Biological Warfare **terrorism based strike** against not only Israel and American and allied forces in the Middle East but also against the American, Canadian, British, French, German, Italian, etc., homelands. This will utilize DNA recombination based genetically engineered **'super killer viruses'** that are designed to spread themselves throughout the world using humans as vectors. There are very few defenses against such warfare, other than total quarantine of the population until all of the different man-made viruses (and there could be dozens or even over a hundred different viruses released at the same time) have 'burned themselves out'. This could kill a third of the world's total population.¶Such a result from an Israeli triggered war would almost certainly cause a Russian-Chinese response that would eventually finish off what is left of Israel and begin a truly global war/WWIII with multiple war theaters around the world. It is highly unlikely that a Third World War, fought with 21st Century weaponry will be anything but the Biblical Armageddon.

#### Pakistan water scarcity causes war with India

Dr Akmal Hussain 11, The Express Tribune, “Pakistan’s water crisis”, 8-25, http://tribune.com.pk/story/231905/pakistans-water-crisis/

A water crisis is emerging which could have major implications for Pakistan’s economy and society. Effective management of this crisis first requires urgent mitigation and adaptation measures with close cooperation amongst Pakistan’s provinces of Khyber-Pakhtunkhwa, Punjab and Sindh on the one hand and then between Pakistan and India on the other. If the necessary collaboration for cooperative management of the Indus basin water resources is not undertaken expeditiously, the resultant economic crisis could lead to a war with India.¶ The problem of water scarcity in the Indus basin is predicated partly on the inherent limitations of water supply in the Indus River System and partly on the growing water demand associated with inefficient water use in the process of economic and population growth. Unsustainable development practices have exacerbated the problem with intrusion of salinity into the ground water, contamination of aquifers with harmful chemicals such as fluoride and arsenic and pollution of surface water due to lack of an institutional framework for environmentally safe disposal of urban and industrial waste. An important dimension of the water issue in the years ahead is the phenomenon of climate change, which could take the crisis to a critical level.¶ Water scarcity can be measured by the availability of water compared with the generally accepted minimum per capita requirement of 1,700 cubic metres per person per year. In their book, Freshwater Under Threat: South Asia, Mukand S Babel and Shahriar M Wahid have estimated that the per capita availability of water in the Indus basin is 1,329 cubic metres per capita per year. This is significantly below the threshold requirement. Another interesting indicator of the water problem is the measure of development pressure on water resources, which is the percentage of available water supply relative to the total water resources. This ratio is as high as 89 per cent for the Indus basin compared to only 15 per cent for the Ganges-Brahmaputra-Meghna (GBM) basin. This indicates the relatively greater development pressure on the Indus basin.¶ Worse, the utilisation of water for production is also highly inefficient by global standards. Water use efficiency is measured in terms of the GDP per unit of water used. In the case of the five top food producers in the world (Brazil, China, France, Mexico and the US) the water use efficiency is $23.8 per cubic metre. The figure is as low as $3.34 for the Indus basin.¶ The problem of water scarcity is expected to become more acute in the future due to the adverse impact of climate change. Dr Leena Srivastava, in a recent research paper, provides evidence to show that some of the Himalayan glaciers are melting more rapidly than the global average and this could increase the frequency of floods in the short run and increase water shortages in the long term by reducing river flows in South Asia. Furthermore, according to the UN’s Intergovernmental Panel on Climate Change report, given the sensitivity of existing seeds to heat, global warming could result in a 30 per cent reduction in the yield per acre of food crops in South Asia.¶ Science and empirical evidence make clear that existing water scarcity, when combined with the impact of climate change, could place critical stress on the economy and society of Pakistan in particular and South Asia in general: major food shortages, increased frequency of natural disasters, large scale dislocations of population and destabilising contention between upper and lower riparian regions.¶ Effective management of this crisis in Pakistan requires close cooperation with India in joint watershed management, increasing the efficiency of irrigation and water use, joint development of technologies, sustainable agriculture practices and institutional arrangements to manage food shortages as well as natural disasters. When faced with a common threat, ideology must be replaced by rationality in the conduct of governance. If we fail to do so, natural disasters could **trigger the man-made catastrophe of war.**

#### Indo-Pak war causes extinction

Greg Chaffin 11, Research Assistant at Foreign Policy in Focus, July 8, 2011, “Reorienting U.S. Security Strategy in South Asia,” online: http://www.fpif.org/articles/reorienting\_us\_security\_strategy\_in\_south\_asia

The greatest threat to regional security (although curiously not at the top of most lists of U.S. regional concerns) is the possibility that increased India-Pakistan tension will **erupt into all-out war** that could **quickly escalate into a nuclear exchange**. Indeed, in just the past two decades, the two neighbors have come perilously close to war on several occasions. India and Pakistan remain **the most likely** belligerents in the world to engage in **nuclear war**. ¶ Due to an Indian preponderance of conventional forces, Pakistan would have a **strong incentive to use its nuclear arsenal very early** on before a routing of its military installations and weaker conventional forces. In the event of conflict, Pakistan’s only chance of survival would be the early use of its nuclear arsenal to inflict unacceptable damage to Indian military and (much more likely) civilian targets. By raising the stakes to unacceptable levels, Pakistan would hope that India would step away from the brink. However, it is equally likely that India would respond in kind, with escalation ensuing. Neither state possesses tactical nuclear weapons, but **both possess scores of city-sized bombs** like those used on Hiroshima and Nagasaki. ¶ Furthermore, as more damage was inflicted (or as the result of a decapitating strike), command and control elements would be disabled, leaving **individual commanders to respond** in an environment increasingly **clouded by the fog of war** and decreasing the likelihood that either government (what would be left of them) would be able to guarantee that their forces would follow a negotiated settlement or phased reduction in hostilities. As a result any such conflict would likely **continue to escalate** until one side incurred an unacceptable or wholly debilitating level of injury or **exhausted its nuclear arsenal**. ¶ A nuclear conflict in the subcontinent would have **disastrous effects on the world** as a whole. In a January 2010 paper published in Scientific American, climatology professors Alan Robock and Owen Brian Toon forecast the **global repercussions** of a regional nuclear war. Their results are strikingly similar to those of studies conducted in 1980 that conclude that a nuclear war between the United States and the Soviet Union would result in a **catastrophic** and prolonged **nuclear winter**, which could very well place the survival of the human race in jeopardy. In their study, Robock and Toon use computer models to simulate the effect of a nuclear exchange between India and Pakistan in which each were to use roughly half their existing arsenals (50 apiece). Since Indian and Pakistani nuclear devices are strategic rather than tactical, the likely targets would be major population centers. Owing to the population densities of urban centers in both nations, the number of direct casualties could climb as high as 20 million. ¶ The fallout of such an exchange would not merely be limited to the immediate area. First, the detonation of a large number of nuclear devices would propel as much as seven million metric tons of ash, soot, smoke, and debris as high as the lower stratosphere. Owing to their small size (less than a tenth of a micron) and a lack of precipitation at this altitude, ash particles would remain aloft for as long as **a decade**, during which time the world would remain perpetually overcast. Furthermore, these particles would soak up heat from the sun, generating intense heat in the upper atmosphere that would **severely damage the earth’s ozone layer**. The inability of sunlight to penetrate through the smoke and dust would lead to **global cooling** by as much as 2.3 degrees Fahrenheit. This shift in global temperature would lead to more drought, worldwide food shortages, and widespread political upheaval.¶ Although the likelihood of this doomsday scenario remains relatively low, the consequences are dire enough to warrant greater U.S. and international attention. Furthermore, due to the ongoing conflict over Kashmir and the **deep animus** held between India and Pakistan, it might not take much to set them off. Indeed, following the successful U.S. raid on bin Laden’s compound, several members of India’s security apparatus along with conservative politicians have argued that India should emulate the SEAL Team Six raid and launch their own cross-border incursions to nab or kill anti-Indian terrorists, either preemptively or after the fact. Such provocative action could very well lead to **all-out war** between the two that could **quickly escalate**.

#### SMRs enhance desalination --- enables mission effectiveness and prevents water wars

Pfeffer and Macon 2 Robert A, physical scientist at the Army Nuclear and Chemical Agency in Springfield, Virginia, working on nuclear weapons effects, a graduate of Trinity University and has a master's degree in physics from The Johns Hopkins University and William A, project manager at the Nuclear Regulatory Commission, formerly the acting Army Reactor Program Manager at the Army Nuclear and Chemical Agency, "Nuclear Power: An Option for the Army's Future", Jan 16 2002 is last date modified, [www.almc.army.mil/alog/issues/SepOct01/MS684.htm](http://www.almc.army.mil/alog/issues/SepOct01/MS684.htm)

The idea of using nuclear power to produce synthetic fuels, originally proposed in 1963, remains feasible today and is gaining significant attention because of recent advances in fuel cell technology, hydrogen liquefaction, and storage. At the same time, nuclear power has become a significant part of the energy supply in more than 20 countries—providing energy security, reducing air pollution, and cutting greenhouse gas emissions. The performance of the world's nuclear power plants has improved steadily and is at an all-time high. Assuming that nuclear power experiences further technological development and increased public acceptance as a safe and efficient energy source, its use will continue to grow. Nuclear power possibly could provide district heating, industrial process heating, **desalination of seawater, and marine transportation**.¶ Demand for cost-effective chemical fuels such as hydrogen and methanol is expected to grow rapidly. Fuel cell technology, which produces electricity from low-temperature oxidation of hydrogen and yields water as a byproduct, is receiving increasing attention. Cheap and abundant hydrogen eventually will replace carbon-based fuels in the transportation sector and eliminate oil's grip on our society. But hydrogen must be produced, since terrestrial supplies are extremely limited. **Using nuclear power to produce hydrogen offers the potential for a limitless chemical fuel supply with near-zero greenhouse gas emissions**. As the commercial transportation sector increasingly moves toward hydrogen fuel cells and other advanced engine concepts to replace the gasoline internal combustion engine, DOD eventually will adopt this technology for its tactical vehicles.¶ The demand for desalination of seawater also is likely to grow as inadequate freshwater supplies become an urgent global concern. Potable water in the 21st century will be what oil was in the 20th century—a limited natural resource subject to intense international competition. In many areas of the world, rain is not always dependable and ground water supplies are limited, exhausted, or contaminated. Such areas are likely to experience conflict among water-needy peoples, possibly prompting the deployment of U.S. ground forces for humanitarian relief, peacekeeping, or armed intervention. **A mobile desalination plant using waste heat from a nuclear reactor could help prevent conflicts** or provide emergency supplies of freshwater to indigenous populations, and to U.S. deployed forces if necessary.¶ Promising Technology for Tomorrow¶ Compact reactor concepts based on high-temperature, gas-cooled reactors are attracting attention worldwide and could someday fulfill the role once envisioned for the energy depot. One proposed design is the pebble bed modular reactor (PBMR) being developed by Eskom in South Africa. Westinghouse, BNFL Instruments Ltd., and Exelon Corporation currently are supporting this project to develop commercial applications.¶ A similar design is the remote site-modular helium reactor (RS-MHR) being developed by General Atomics. If proven feasible, this **technology could be used to replace retiring power plants, expand the Navy's nuclear fleet, and provide mobile electric power for military or disaster relief operations**. Ideally, modular nuclear power plants could be operated by a small staff of technicians and monitored by a central home office through a satellite uplink.¶ The technology of both the PBMR and the RS-MHR features small, modular, helium-cooled reactors powered by ceramic-coated fuel particles that are **inherently safe and cannot melt under any scenario**. This results in simpler plant design and lower capital costs than existing light water reactors. The PBMR, coupled with a direct-cycle gas turbine generator, would have a thermal efficiency of about 42 to 45 percent and would produce about 110 megawatts of electricity (MWe). The smaller RS-MHR would produce about 10 to 25 MWe, which is sufficient for powering remote communities and military bases. Multiple modules can be installed on existing sites and refueling can be performed on line, since the fuel pebbles recycle through the reactor continuously until they are expended. Both designs also feature coolant exit temperatures high enough to support the thermochemical water-splitting cycles needed to produce hydrogen.¶ For military applications, RS-MHR equipment could be transported inland by truck or railroad, or single modules could be built on barges and deployed as needed to coastal regions. The Army's nuclear reactor on the barge Sturgis, which provided electric power to the Panama Canal from 1968 to 1976, demonstrated the feasibility of this concept. In fact, the military previously used several power barges (oil-fired, 30-MWe power plants) during World War II and in Korea and Okinawa as emergency sources of electric power.¶ Research teams around the world also are examining other reactor concepts based on liquid-metal-cooled reactor systems with conventional sodium or lead-alloy coolants and advanced water-cooled systems. The Department of Energy (DOE) is supporting research and development of innovative concepts that are based on ultra-long-life reactors with cartridge cores. These reactors would not require refueling, and they could be deployed in the field, removed at the end of their service life, and replaced by a new system. The proposed international reactor innovative and secure (IRIS) design, funded by DOE's Nuclear Energy Research Initiative, would have a straight burn core lasting 8 years and may be available by 2010. Based on increasing costs of fossil fuels, a growing consensus that greenhouse gas emissions must be reduced, and a growing demand for energy, there is little doubt that we will continue to see significant advances in nuclear energy research and development.¶ Nuclear power is expected to grow in the 21st century, with potential benefits applicable to the military**. Small, modular nuclear power reactors in mobile or portable configurations, coupled with hydrogen production and desalination systems, could be used to produce fuel and potable water for combat forces deployed in remote areas and reduce our logistics requirements**. Assuming the inevitability of hydrogen fuel replacing fossil fuels, a clearly defined objective that was missing in 1966 now exists.¶ The partnership between DOD and the former AEC to develop Army nuclear reactors contributed to the technology of both military and small commercial power plants. This historical relationship should be renewed based on recent technological advances and projected logistics requirements. DOD logistics planners should reconsider military applications of nuclear power and support ongoing DOE research and development initiatives to develop advanced reactors such as RS-MHR, IRIS, and others. For the Army **to fight and win on tomorrow's distant battlefields,** **nuclear power will have to play a significant role.**

#### Only SMR’s solve desalinization

IAEA 7 “Economics of Nuclear Desalination: New Developments and Site Specific Studies”, July, <http://www-pub.iaea.org/MTCD/publications/PDF/te_1561_web.pdf>

Seventy percent of the planet is covered with water, but only 2.5% of that is fresh water. Nearly 70% of this fresh water is frozen in the icecaps of Antarctica and Greenland. Most of the rest is in the form of soil moisture or in deep inaccessible aquifers or comes in the form of heavy rains and floods that are difficult to contain and exploit. Consequently, only less than 0.008% (about 70 000 km3) of the world’s water is readily accessible for direct human use, and even that is very unevenly distributed. Recent statistics show that currently 2.3 billion people live in water-stressed areas and among them 1.7 billion live in water-scarce areas, where the water availability per person is less than 1000 m3/year. In fact, the situation is expected to worsen further since, by 2025, the number of people suffering from water stress or scarcity could swell to 3.5 billion, out of which 2.4 billion would live in water-scarce regions. Water scarcity is a global issue. Every year new countries are affected by growing water problems.¶ It is for this reason that the Millennium Declaration by UN General Assembly in 2000 set up a target¶ to halve, by the year 2015, the world population, which is unable to reach, or to afford, safe drinking¶ water. Vision 21: shared vision for Hygiene, Water Supply and Sanitation, has a target to provide¶ water, sanitation and hygiene for all by 2025.¶ Better water conservation, water management, pollution control and water reclamation are all part of the integrated solution to projected water stresses. So too are new sources of fresh water, including the desalination of seawater.¶ Desalination technologies have been well established since the mid-20th century and widely deployed in the Middle East and North Africa. The contracted capacity of desalination plants has increased steadily since 1965 and is now about 36 million m3/day worldwide, as shown in Figure 1. This capacity could cater to world’s population roughly 6 litres a day per capita of fresh potable water. If this capacity were available to 1.5 billion in the world without direct access to drinking water, it would provide approximately 20 litres/day/capita.¶ Large scale commercially available desalination processes can generally be classified into two categories: (a) distillation processes that require mainly heat plus some electricity for ancillary equipment, and (b) membrane processes that require only electricity. In the first category (distillation) there are two major processes: multi-stage flash (MSF) and multi-effect distillation (MED). In both processes, seawater is heated; the steam that evaporates is condensed and collected as freshwater; and the residual brine is discharged.¶ In the second category (membranes) is the reverse osmosis process (RO), in which pure water passes from the high-pressure seawater side of a semi-permeable membrane to the low-pressure freshwater side. The pressure differential must be high enough to overcome the natural tendency for water to move from the low concentration freshwater side of a membrane to the high concentration seawater side in order to balance osmotic pressures.¶ The energy for the desalination plants is generally supplied in the form of either steam or electricity. Conventional fossil fuel-powered plants have normally been utilized as the primary sources but their intensive use raises increasing environmental concerns, specifically in relation to greenhouse gas emissions (Section 1.3.3). The depleting sources and the future price uncertainty of the fossil fuels and their better use for other vital industrial applications are also the factors to be considered.¶ 1.3. THE ROLE OF NUCLEAR POWER IN DESALINATION¶ The world energy requirements are presently met from oil, coal, gas, hydro, nuclear and renewable energies in that order as shown in Table 1.¶ It is now universally recognized that there will be an increase in the world’s requirement for electricity over the next few decades. The present trend towards meeting this demand includes the building of fossil fuel plants, particularly combined cycle gas fired plants.¶ However, the spiralling increase in greenhouse gas (GHG) emissions has resulted in setting the emission targets in international meetings held at Toronto, Rio de Janeiro and Kyoto. The IAEA predicts that the GHG emissions would be 36-50% higher by 2010 compared to 1990 levels. Many analysts, therefore, feel that the only viable alternative to fossil fuels is nuclear energy to reduce the rate of increase of GHG, particularly, carbon dioxide.¶ Yet another incentive for nuclear power is to maintain diversity of supply. A national strategy limited to one particular form of energy (fossil fuels) will be vulnerable to increased fuel costs and pressures from exporting countries.¶ Nuclear power is a proven technology, which has provided more than 16% of world electricity supply in over 30 countries. More than ten thousand reactor-years of operating experience have been accumulated over the past 5 decades.¶ There are many reasons which favour a possible revival of the nuclear power production in the years to come. It is thus expected that this revival would also lead to an increased role of nuclear energy in non-electrical energy services, which, at the moment, are almost entirely dominated by fossil energy sources. Among various utilization of nuclear energy for non-electrical products, using it for the production of freshwater from seawater (nuclear desalination) has been drawing broad interest in the IAEA Member States as a result of acute water shortage issues in many arid and semi-arid zones worldwide. With technical co-ordination or support of the IAEA, several demonstration programs of nuclear desalination are also in progress in several Member States to confirm its technical and economical viability under country-specific conditions¶ The desalination of seawater using nuclear energy is a feasible option to meet the growing demand for potable water. Over 175 reactor-years of operating experience on nuclear desalination have already been accumulated worldwide.¶ 1.3.1. Nuclear desalination¶ In the IAEA terminology, nuclear desalination is defined to be the production of potable water from seawater in a facility in which a nuclear reactor is used as the source of energy for the desalination process. Electrical and/or thermal energy may be used in the desalination process on the same site. The facility may be dedicated solely to the production of potable water, or may be used for the generation of electricity and production of potable water, in which case only a portion of the total energy output of the reactor is used for water production.¶ The design approaches for a nuclear desalination plant are essentially derived from those of the nuclear reactor alone, with some additional aspects to be considered in the design of a desalination plant and its integration with the nuclear system.¶ All nuclear reactor types can provide the energy required by the various desalination processes. In this regard, it has been shown that Small and Medium Reactors (SMRs) offer the largest potential as coupling options to nuclear desalination systems in developing countries. The development of innovative reactor concepts and fuel cycles with enhanced safety features as well as their attractive economics are expected to improve the public acceptance and further the prospects of nuclear desalination.¶ The coupling with nuclear system is not difficult technically but needs some consideration in (a)¶ avoiding cross-contamination by radioactivity, (b) providing backup heat or power sources in case the¶ nuclear system is not in operation (e.g. for refuelling and maintenance), (c) incorporation of certain¶ design features, minimising the impact of the thermal desalination systems’ coupling to the nuclear¶ reactors (Section 1.6).¶ 1.3.2. Why nuclear desalination?¶ The International Atomic Energy Agency is a specialized organization of the UN system that seeks to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world. The institutional basis for the IAEA’s involvement in nuclear desalination is in its Statute and Medium Term Strategy.¶ Article II of the IAEA Statute provides that:¶ “ The Agency shall seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world”.¶ This refers implicitly to nuclear desalination as an option for the use of nuclear technologies.¶ The same applies to the Article III of the Statute, which authorizes the IAEA:¶ “ To encourage and assist research on, and development and practical application of, atomic energy for peaceful uses throughout the world….”; (Article III, A.1); and¶ “To foster the exchange of scientific and technical information on peaceful uses of atomic energy.” (Article III, A.3).¶ In addition, Objective A.3 of the Agency’s Medium Term Strategy requires the Agency:¶ “ To support and facilitate the development of new and emerging applications of nuclear technologies by co-generation and heat applications, including seawater desalination”.¶ Request of assessing feasibility of using nuclear energy for seawater desalination was first made by the five North African countries to the IAEA in 1989 and the General Conference adopted its resolution to resume the study. These countries are located in semi-arid zones and already suffer from water shortages.¶ In recent years, interests have been also been indicated by Member States in South and South East Asia for the feasibility, as well as the demonstration, of nuclear desalination projects. The issue has since then been repeatedly stressed at the General Conference (Committee on the Whole) and supported by many Member States including most members of Group-77. The support stems not only from their expectation of its possible contribution to the freshwater issue but has also been motivated by a variety of reasons that include: the economic competitiveness of nuclear desalination in areas lacking cheap hydropower or fossil fuel resources, energy supply diversification, conservation of fossil fuel resources and spin-off effects of nuclear technology for industrial development.¶ Looking to the future, there are several reasons for focusing now on expanding nuclear power’s contribution to desalination. Apart from the expanding demand for freshwater and the increasing concern about GHG emissions and pollution from fossil fuels, there is a renewed and growing emphasis on small and medium sized nuclear reactors, and this is particularly important for desalination because the countries most in need of new sources of freshwater often have limited industrial infrastructures and relatively weaker electricity grids. The size of the grid limits the possibilities for integrating a co-generating nuclear power plant into the grid to supply the electricity market, in addition to meeting the energy requirements of a desalination plant. The largest power unit that can be integrated into an electricity grid must not exceed about 10-20 % of the total grid capacity. Of course, smaller nuclear reactors would be more appropriate for remote areas that are not suitable for connections to the grid.¶ For nuclear desalination to be attractive in any given country, two conditions have to be satisfied simultaneously: a lack of water and the ability to use nuclear energy for desalination. In most regions, only one of the two is present. Both are present for example in China, the Republic of Korea, India and Pakistan. These regions already account for almost half the world’s population, and thus represent a potential long term market for nuclear desalination. The market will expand further to the extent that regions with high projected water needs, such as the Middle East and North Africa, increase their nuclear expertise and capabilities.¶ 1.3.3. Environmental impact of desalination by fossil fuelled energy sources¶ Desalination is an energy intensive process. A future desalination strategy based only on the use of fossil fuelled systems is not sustainable: Fossil fuel reserves are finite and must be conserved for more important uses such as transport, petrochemical industry etc. Besides, the demands for desalted water would continue increasing as population grows and standards of living improve. Conservation measures such as the modernisation of water networks to minimise leakages, the recycling of used water etc. will certainly reduce the future water demands slightly but they would not be able to halt the dissemination of desalination plants and consequently of the fossil fuelled based systems for the production of needed electricity and heat.¶ The following paragraphs illustrate the damaging consequences of such a policy by taking the example of the Mediterranean region.¶ Following the recent “Blue Plan” [2], the total available natural water resources (1), based on the statistics from 1990 to 1998, in the principle countries of the Mediterranean region, are as shown in Table 2.¶ The projected demands (3) for the year 2025 [31] are also included in Table 1.¶ It is obvious that available natural water resources would rather decrease in 2025 because of increased pollution, over exploitation and other human activities. However, to keep matters simple, it would be supposed that they would remain at the same level as in 1998.¶ It can be observed that, in 2025, the total projected water deficit (balance) in the Mediterranean region would of the order of 294 km3/per year.¶ Not all this required capacity would be met by desalination plants. Current contribution of desalination is of the order of 1 to 2 %. If it is supposed that in 2025, this contribution would be about 2.5 %, then the total required desalting capacity would be 7.3 km3/year (20.1 million m3/day).¶ According to the EC ExternE study2, the total emissions of GHG per MW(e).h of electricity produced by representative fossil fuelled power plants in France, are as presented in Table 3.¶ The specific heat and electricity consumptions of three main desalination plants are given in Table 4, [3].¶ The data presented in the above Tables allows to calculate the approximate3 total GHG emissions produced by the fossil fuelled plants and the three desalination plants.¶ Results for a total desalting capacity of 20.1 million m3/day are presented in Table 5.¶ It can thus be concluded that for a desalting capacity of 20.1 million m3/day in the Mediterranean region alone, required in 2025, one would produce, depending upon the energy source and the desalination process used,¶ 13 to 264 million tonnes/year of CO2.¶ 1350 to 1 310 000 tonnes/year of SOx.¶ 21 100 to 540 000 tonnes/year of NOx.¶ 1190 to 40 000 tonnes/year of particles.¶ The potential levels of GHG and particle emissions on the world scale could then be more than double these figures.¶ These could naturally be avoided through the use of nuclear energy.

### Plan

#### The Executive branch of the United States should provide enhanced use leases and energy savings performance contracting partnerships for deployment of small modular nuclear reactors on Marine Corps installations in the United States.

### 1AC – Solvency

#### CONTENTION 4: SOLVENCY

#### Marines should lead SMR deployment--- ensures base security, desalination and service spillover

Butler 11Lt. Col. Glen Butler, USMC, NORAD Strategy, Policy, and Plans Directorate, Security Cooperation Integration Branch, Chase Prize Essay Winner for this Article, 18 Mar 2011, Marine Corps Gazette, Not Green Enough, “Why the Marine Corps should lead the environmental and energy way forward and how to do it”, http://www.mca-marines.org/gazette/not-green-enough \*\*\*Edited: Footnote included\*\*\*

Consider Nuclear Power¶ On 16 March 1979, The China Syndrome opened in theaters across the country, depicting a fictitious story about a reporter witnessing an accident at the Ventanna nuclear plant outside Los Angeles and the subsequent evil plot to suppress the truth. Twelve days later the Three Mile Island partial core meltdown in Pennsylvania helped propel The China Syndrome to theatrical success and permanently scarred the American psyche. The nail in the nuclear energy coffin was the nuclear disaster 7 years later at Chernobyl, in the Ukrainian Soviet Socialist Republic.17 But despite these stains on the nuclear power industry, the time has never been better for the Marine Corps (and Navy) to dive in than now. Here’s why.¶ First, the political climate, though still tenuous, is shifting to favorable, with the change coming from the top down. During his 27 January 2010 State of the Union address, President Barack Obama echoed themes from his campaign trail by clearly voicing his intention to include nuclear power in American’s playbook of energy security options.18 Similarly, as the Department of Energy’s (DoE’s) Secretary of Energy, Steven Chu has articulated similar sentiments, declaring that “President Obama and I are committed to restarting the nuclear industry in the United States.”19 Many other political leaders and policymakers indeed support a true “nuclear renaissance,”20 and the growing momentum stands a chance to bury the ghosts of Chernobyl once and for all.¶ Second, with our well-replicated but limited pursuit of the standard renewable energies,21 we’re putting all energy eggs in one basket, a vessel unlikely to hold a sufficient load for success. Currently pursued renewable energy sources do have limitations.22 More importantly, with military installations relying almost exclusively on external sources for energy, and those sources largely unpredictable, unsecured, and reliant on foreign-based oil,23 if energy security is truly a national security issue, then nuclear power should be considered. Solar demonstrations at Miramar and Barstow are not enough.¶ Third, nuclear technology today has advanced well beyond the days of Three Mile Island. Specifically, small modular reactors (SMRs) offer great potential to safely and effectively provide energy island/net zero capabilities to Marine Corps and Navy installations across the country.24¶ SMRs have relatively low plant cost, can replace aging fossil plants, and do not emit greenhouse gasses. Some are as small as a “hot tub” and can be stored underground, dramatically increasing safety and security from terrorist threats.25 Encouragingly, in fiscal year 2010 (FY10) the DoE allocated $0 to the U.S. SMR Program; in FY11, they’ve requested $38.9 million. This funding is to support two main activities—public/private partnerships to advance SMR designs and research and development and demonstrations. According to the DoE’s website, one of the planned program accomplishments for FY11 is to “collaborate with the Department of Defense (DoD) . . . to assess the feasibility of SMR designs for energy resources at DoD installations.”26 The Marine Corps should vigorously seek the opportunity to be a DoD entity providing one platform for this feasibility assessment.27¶ Fourth, SMR technology offers the Marine Corps another unique means to lead from the front—not just of the other Services but also of the Nation, and even the world.28 This potential Pete Ellis moment should be seized. There are simple steps we could take,29 and others stand ready to lead if we are not.30 But the temptation to “wait and see” and “let the others do it; then we’ll adopt it” mentality is not always best. Energy security demands boldness, not timidity.¶ To be fair, nuclear technology comes with challenges, of course, and with questions that have been kicked around for decades. An April 1990 Popular Science article asked, “Next Generation Nuclear Reactors—Dare we build them?” and included some of the same verbiage heard in similar discussions today.31 Compliance with National Environment Policy Act requirements necessitates lengthy and detailed preaction analyses, critical community support must be earned, and disposal challenges remain. Still, none of these hurdles are insurmountable.32¶ Yet despite the advances in safety, security, and efficiency in recent years, nuclear in the energy equation remains the new “n-word” for most military circles. And despite the fact that the FY10 National Defense Authorization Act called on the DoD to “conduct a study [of] the feasibility of nuclear plants on military installations,” the Office of the Secretary of Defense has yet to fund the study.33¶ Fifth, the cumbersome, bureaucratic certification process of the Nuclear Regulatory Commission (NRC), often enough to scare away potential entrepreneurs and investors, is not necessarily a roadblock to success. The NRC is “responsible for licensing and regulating the operation of commercial nuclear power plants in the United States.” Military installations offer unique platforms that could likely bypass an extended certification process. With established expertise and a long safety record in nuclear reactor certification, operations, training, and maintenance, the Naval Nuclear Propulsion Program comprises the civilian and military personnel who:¶ . . . design, build, operate, maintain, and manage the nuclear-powered ships and the many facilities that support the U.S. nuclear-powered naval fleet.”34¶ Bypassing the NRC and initiating SMR experimentation under ADM Hyman Rickover’s legacy umbrella of naval reactors could shorten the process to a reasonable level for Marine and naval installations.35¶ Finally, Marine Corps-SMR technology opens the pathway for related endeavors and synergetic undertakings. The Army has several smart and influential individuals poised to partner in nuclear energy endeavors, and our naval brethren enjoy a long history of nuclear reactor expertise. Partnerships and enhanced use leases to support SMR deployments should be leveraged.36 As the collective military expertise in SMR technology grows, additional capabilities, such as expeditionary and vehicular power sources, could be explored. And related technologies, such as hybrid/electric vehicle power storage and recharging facilities and water desalination plants, could collocate with nuclear plants on installations to both use the energy.37¶ Explore Desalination¶ Desalination is another evolving technology that many avoid discussing, mainly because it is still a very expensive and immature technology with problems such as high energy consumption, brine disposal, and potential for harm to marine life. But once again, fear of the challenges should not prevent expanded exploration in this area. Worldwide, there are over 13,000 desalination plants, collectively producing more than 12 billion gallons of water each day, many of them in the Middle East, but the trend is spreading to the United States.38¶ Camp Pendleton surfaced in 2009 as a potential desalination plant location, but the official Marine Corps stance has been hesitant rather than an eager courtship of the opportunity.39 Indeed, many major Marine bases are in coastal areas and could benefit from SMR/desalination cogeneration plants. Potential future Marine sites like Guam could undeniably benefit from such advancements,40 and as the number of reverse osmosis sites increases, the cost per unit will decrease.¶ Footnote Begins…¶ 40. Guam’s poor infrastructure is no secret, as is its substandard health and environmental conditions. Rapid growth there over the next several years will exacerbate several problems, including drinking water supply; desalination might provide one solution.¶ Footnote Ends…¶ The CMC has repeatedly explained how the Marine Corps Warfighting Laboratory looked 25 years into the future and believes that, by then, water will be as precious a commodity as oil, so the time to start preparing for that dire situation is now.41¶ Overall, the Navy-Marine Team has made huge strides in the E2 fields, yet much remains to be accomplished. E2 is more than compact fluorescent lightbulbs and protection of sea turtles and tern nests. The warfighting mission will always come first, but combat mission accomplishment and E2 goals are not mutually exclusive; the first can be strengthened through the latter. When considering the Marine Corps’ Service Campaign Plan 2009–2015,42 we should remember that one of the CMC’s seven main focus areas in his planning guidance is to “Posture the Marine Corps for the Future.”¶ A decade ago, some discussed the “Revolution in Military Affairs.” Now is the time to be bold and daring, to recognize that the Marine Corps is not yet green enough. Now is the time to embark on a revolution in environmental and energy affairs. Our natural, and national, security depends on it.43

#### EULs and ESPCs solve Marine SMRs ---offer expertise, bypass NRC ---other renewables fail

Butler and Rice 12 Lt. Col Glen, Marine officer and director, operations and training, at Marine Corps Base Hawaii and Col Robert D, commanding officer at Marine Corps Base Hawaii, "The Nuclear Option", www.armedforcesjournal.com/2010/11/4847032/

But the focus on more widely accepted “renewable” energy sources, while a step in the right direction, does not go far enough. Not only will the services be unable to achieve their ambitious goals with these more traditional renewable energy sources, but each source is burdened with its own share of problems. The wind and sun are intermittent (the sun does not always shine; the wind does not always blow), and at best they will provide no more than 20 percent to 30 percent of our electricity, after many years. (In 2009, wind contributed only 2 percent of total generation, and solar gave us less than 0.1 percent of total U.S electrical production.) Wind farms cause conflicts with low-flying aircraft, surveillance radars and sensitive land areas, and they don’t solve the storage problem. Northern Command’s former commanding officer, Gen. Gene Renuart, recently voiced some of these concerns when he told the House Armed Services Committee that wind farms cause radar interference and can inhibit the defense of North America. They also often require significant new electrical distribution lines, a challenge daunting enough it famously convinced investor T. Boone Pickens to abandon his massive Texas wind farm plan last year.¶ Solar power causes some similar, overlapping concerns, and also suffers from vulnerability of photovoltaic and solar technology systems. Ocean Thermal Energy Conversion raises fears of restricted fishing access and dangers to sea life, and because the technology is still fairly new, wave power can cost as much as five or six times as wind power.¶ To be sure, most every other form of emerging, renewable energy suffers some degree of restrictions and has challenges — including potential conflict with local utility providers and unassured grid interface. Given all of these issues, the likelihood of actually achieving our ambitious energy goals without additional generation sources and technology is questionable.¶ Beyond these limitations and the obvious “doing the right thing” aspect of traditional renewable energy, another reason — the key reason — for the military to consider nuclear energy on our installations is to strengthen national security. President Obama, former National Security adviser James Jones and other political and military leaders have said energy security is national security. If this is true, then our bases and stations — so largely reliant on external power sources — are at risk, and there is much work to be accomplished.¶ The elephant in today’s energy room is the fact that many military communities rely disproportionately on foreign oil for energy. Hawaii is a prime example, a state strategically located in the middle of the Pacific (and where the military passed tourism last year as the No. 1 economic source), yet a state with the highest dependence in the nation on fossil fuels — approximately 90 percent, mostly from Indonesian oil.¶ To achieve the kind of energy independence — and thus security — our leaders are calling for requires much more than compact fluorescent light bulbs, photovoltaic panels, biofuel plants and wind farms. Nuclear energy is a promising, yet rarely mentioned, option.¶ Of course, the U.S. is not the only country striving for energy advancements. China, India, Brazil, Japan, South Korea, France and many other nations, including our adversaries, are ambitiously moving forward with renewable — and yes, nuclear — power production. France generates almost 80 percent of its power from nuclear energy. Some sources indicate that the nuclear energy sector is likely to grow to a trillion-dollar market by 2030.¶ This means there will be growing international competition to provide this energy source. American entrepreneurs understand the nature of this competition, too. Bill Gates identified nuclear power as one attractive avenue while discussing energy and climate issues. He specifically mentioned new technology he was investing in — developing nuclear technology that ran on its own waste. However, recognizing the lack of apparent interest and expertise in the U.S., he acknowledged that he’s been looking to Russia, India and China for ideas.¶ SMALL MODULAR REACTORS¶ While fears of nuclear energy remain, some forward thinkers are pressing on and helping emerging technology to gain momentum. Small Modular Reactors (SMRs) are being developed by several companies and offer attractive energy options for military installations. These reactors are defined by the Department of Energy (DoE) as “nuclear power plants that are smaller in size [300 megawatts or less] than current generation base load plants [1,000 megawatts or higher]. These smaller, compact designs are factory-fabricated reactors that can be transported by truck or rail to a nuclear power site … ‘modular’ ... refers to a single reactor that can be grouped with other modules to form a larger nuclear power plant ... [they] require limited on-site preparation ... [and will be] ‘plug and play.’”¶ Although acquiring SMRs might remain fiscally prohibitive for individual bases, there are ways to make this option feasible. U.S. Rep. Jim Marshall inserted text into the fiscal 2010 National Defense Authorization Act that directed the defense secretary to “conduct a study to assess the feasibility of developing nuclear power plants on military installations ... summarize options available to the Department to enter into public-private partnerships or other transactions for the construction and operation of the nuclear power plants; estimate the potential cost per kilowatt-hour and life-cycle cost savings to the Department; consider the potential energy security advantages of generating electricity on military installations through the use of nuclear power plants.”¶ In October 2009, the president signed a provision to facilitate a study on the development of nuclear power plants for military installations. Despite a less-than-enthusiastic reception of this provision by the Pentagon, sources indicate the study is ongoing but will not be completed until later this year.¶ Energy Secretary Steven Chu, meanwhile, has proven to be a nuclear energy champion. He has emphatically advocated SMRs, and penned a Wall Street Journal op-ed (“America’s New Nuclear Option,” March 23, 2010), which highlighted the potential significant advantages of SMR technology. Chu called SMRs “one of the most promising areas” in new energy technologies, and said “most importantly, investing in nuclear energy will position America to lead in a growing industry. ... Our choice is clear: develop these technologies today or import them tomorrow.”¶ In the fiscal 2010 budget, no funds were allocated to the U.S. SMR program, but $38.9 million has been allocated for fiscal 2011. This is to support two primary activities: public/private partnerships to advance SMR designs, and for research and development and demonstrations. According to the DoE’s website, one of the planned program accomplishments for fiscal 2011 is to “collaborate with the Department of Defense ... to assess the feasibility of SMR designs for energy resources at DoD installations.”¶ HOW TO PROCEED¶ So how should the military begin exploring the advantages of SMRs on their installations?¶ First, a multiservice nuclear energy working group should be formed, perhaps similar in spirit to the Global Nuclear Energy Partnership. This joint group should include knowledgeable and empowered individuals from each branch of the service interested in exploring nuclear energy possibilities, and would develop a plan of action and milestones for required resources and the way ahead for this endeavor.¶ The Air Force has installations and experts dedicated to far-reaching, advanced technology such as space research, quantum physics, nuclear fission and even the holy energy grail of nuclear fusion. With places like Albuquerque’s Sandia National Laboratories, and an energy strategy vision catchphrase “make energy a consideration in all we do” as one of its centerpieces, this technologically savvy service might make a good partner with which to cross into SMR exploration.¶ The Marines pride themselves on innovation and “out-of-the-box” approaches, and with their naval partners including many experts in the nuclear propulsion and power fields, offer not only enthusiasm but expertise and possibly even administrative acceleration, if plant certifications can be achieved through the Naval Nuclear Propulsion Program (NNPP; “Naval Reactors”) and not the Nuclear Regulatory Commission. The NRC is responsible for “licensing and regulating the operation of commercial nuclear power plants in the United States.” Military installations, however, offer unique platforms that could very possibly bypass an extended certification process. This option should be explored.¶ With established expertise and a long safety record in nuclear reactor certification, operations, training and maintenance, “Naval Reactors” comprises the civilian and military personnel who “design, build, operate, maintain and manage the nuclear-powered ships and the many facilities that support the U.S. nuclear-powered naval fleet.” The program responsibilities are specified in Executive Order 12344 (Feb. 1, 1982) and Public Laws 98-525 (Oct. 19, 1984) and 106-65 (Oct. 5, 1999). E.O. 12344 explains that the NNPP is an “integrated program carried out by two organizational units, one in the Department of Energy (DOE) and the other in the Department of the Navy.” So, Naval Reactors should adopt an additional mission: coordinating with the Joint Nuclear Energy Working Group to research and pursue SMR technology on military installations.¶ Finally, partnerships and Enhanced Use Leases (EULs) to support SMR deployments should be explored. As the overall expertise in SMR technology grows, additional capabilities such as expeditionary and vehicular power sources should be explored. Other technologies — including hybrid/electric vehicle power storage and recharging facilities, and water desalination plants — could possibly even co-locate with nuclear plants on installations to co-use the energy. Many external challenges do exist; compliance with the National Environmental Policy Act (NEPA) of 1969 takes time, and community support would be a critical piece of this undertaking — but neither are impediments to success if planning and execution are conducted smartly.¶ The idea of putting nuclear power plants on military installations is by no means new, yet the time has never been better and the technology never as promising as now. The president and Chu continue to voice support for new nuclear energy initiatives, and a large, bipartisan group of political leaders stands poised to back such a plan. This inviting climate is the open door and momentum the DoD should capitalize on by aggressively pursuing what could truly be the next Apollo program. If we fail to explore this promising frontier, we are likely to lose this modern energy “space race” to the Chinese and other eager competitors. That is something the U.S. cannot afford to do.¶ Look no further for guidance than the current National Military Strategy, released in May, in which the commander in chief declares: The United States has a window of opportunity to lead in the development of clean energy technology. If successful, the United States will lead in this new Industrial Revolution in clean energy that will be a major contributor to prosperity ... We must continue to transform our energy economy ... increase use of renewable and nuclear power. ... We will invest in research and next-generation technology. ... Our effort begins with the steps we are taking at home. We will stimulate our energy economy at home, reinvigorate the U.S. domestic nuclear industry ... and provide incentives that make clean energy the profitable kind of energy.¶ The military, with its self-sufficient mini-communities across the country, offers perfect beta-test platforms and has the requisite expertise and pioneering spirit to take the nuclear energy helm. Beyond the economic value cited above by the president, putting nuclear SMRs on military installations would greatly improve our energy security — which, in turn, would strengthen our national security. After all, energy security is national security.¶ The time for the long-anticipated nuclear renaissance is now … and the military should enthusiastically seize the opportunity to lead the way.

#### SMRs solve nuclear downsides

Ringle 10 John, Professor Emeritus of Nuclear Engineering at Oregon State University, "Reintroduction of reactors in US a major win", November 13, robertmayer.wordpress.com/2010/11/21/reintroduction-of-reactors-in-us-a-major-win/

Small nuclear reactors will probably be the mechanism that ushers in nuclear power’s renaissance in the U.S.¶ Nuclear plants currently supply about 20 percent of the nation’s electricity and more than 70 percent of our carbon-free energy. But large nuclear plants cost $8 billion to $10 billion and utilities are having second thoughts about how to finance these plants.¶ A small modular reactor (SMR) has several advantages over the conventional 1,000-megawatt plant:¶ 1. It ranges in size from 25 to 140 megawatts, hence only costs about a tenth as much as a large plant.¶ 2. It uses a cookie-cutter standardized design to reduce construction costs and can be built in a factory and shipped to the site by truck, railroad or barge.¶ 3. The major parts can be built in U.S. factories, unlike some parts for the larger reactors that must be fabricated overseas.¶ 4. Because of the factory-line production, the SMR could be built in three years with one-third of the workforce of a large plant.¶ 5. More than one SMR could be clustered together to form a larger power plant complex. This provides versatility in operation, particularly in connection with large wind farms. With the variability of wind, one or more SMRs could be run or shut down to provide a constant base load supply of electricity.¶ 6. A cluster of SMRs should be very reliable. One unit could be taken out of service for maintenance or repair without affecting the operation of the other units. And since they are all of a common design, replacement parts could satisfy all units. France has already proved the reliability of standardized plants.¶ At least half a dozen companies are developing SMRs, including NuScale in Oregon. NuScale is American-owned and its 45-megawatt design has some unique features. It is inherently safe. It could be located partially or totally below ground, and with its natural convection cooling system, it does not rely on an elaborate system of pumps and valves to provide safety. There is no scenario in which a loss-of-coolant accident could occur.

# 2AC

## Asia

### AT: China Impact D

#### Economic interdependence doesn’t solve---Chinese belligerence causes miscalc and crisis escalation

Medcalf & Heinrichs 11 - Rory Medcalf is Director of the International Security Programme at the Lowy Institute, Sydney. Raoul Heinrichs is Sir Arthur Tange Scholar at the Strategic and Defence Studies Centre, Australian National University, and editor of the Lowy Institute Strategic Snapshot series, June 27, 2011, “Asia’s Maritime Confidence Crisis,” online: http://the-diplomat.com/2011/06/27/asia%E2%80%99s-maritime-confidence-crisis/?print=yes

To the casual observer, recent security tensions in Asian waters might seem a storm in a Chinese teacup. The spectacle of opposing vessels – often motley flotillas of civilian patrol boats, fishing trawlers and survey ships – jostling near contested reefs, rocks and islets in the South and East China seas is the kind of activity that was likened back in Cold War days to a game of ‘nautical chicken’. Surely, in an age of economic interdependence and nuclear weapons, this petty posturing wouldn’t lead to great-power war?

Yet such wishful thinking ignores the real dangers of Asia’s China-centric maritime incidents. In the absence of effective mechanisms for crisis-management and confidence-building, these events are increasing in frequency and intensity. The harassment by Chinese civilian vessels of the USNS Impeccable in 2009 presaged a serious set of encounters in 2010, including North Korea’s sinking of the Cheonan and a diplomatic crisis between China and Japan over the ramming of a Japanese customs vessel near the disputed Senkaku/Diaoyu islands.

Though major power tensions have eased somewhat in 2011, encounters have continued. Chinese helicopters have continued to ‘buzz’ Japanese naval units, even in the sensitive period following Japan’s earthquake and tsunami. In March, a Philippine survey ship was shadowed and harassed by Chinese patrol boats, eliciting formal diplomatic protests from Manila. More recently, in May and June, Chinese patrol boats have allegedly severed seismic cables aboard Vietnamese vessels operating near disputed territories in the South China Sea. Washington has weighed in, particularly with signals of reassurance to its ally Manila – prompting Chinese warnings about fanning flames and getting burned.

At the weekend, Sino-US and Sino-Vietnamese talks seem to have put a lid on the simmering tensions. And the chance that such incidents will lead to major military clashes shouldn’t be overstated. But each encounter involves risks, however small, of miscalculation and casualties. As the number and tempo of incidents increases, so does the likelihood that an episode will escalate to armed confrontation, diplomatic crisis or possibly even conflict. An accumulation of incidents could also play into a wider deterioration of relations among major powers, with dangerous implications for regional peace and stability.

## Heg

### AT: Sequestration Crushes Guam/Marines

#### No impact---sequester cuts don’t hurt modernization

CIP 11 Center for International Policy, "Myths vs. Realities of Pentagon Spending", 2011 is last date cited, www.ciponline.org/images/uploads/publications/CIP\_Fact\_Sheet\_Myths\_vs\_Realities\_of\_Pentagon\_Spending.pdf

Myth: The military has been cut to the bone. Any more cuts would be “doomsday.”¶ Reality: Nearly all of the purported ‘cuts’ to the Pentagon’s budget are actually reductions in the rate of growth, rather than true cuts in funding levels. In reality, even if sequestration is fully enacted as planned under the 2011 Budget Control Act, the Pentagon’s base budget would only return to 2006 levels (adjusted for inflation), which at the time was among the highest levels of spending since World War II.1¶ The Pentagon has asked for $525 billion in funding for fiscal year 2013 – a reduction of only $6 billion from the current year. The Pentagon budget would then resume its upward climb, rising to $567 billion in 2017.2 As former Assistant Secretary of Defense Lawrence J. Korb has noted, “even when adjusted for inflation, Panetta’s reductions halt the growth in the Pentagon’s budget, but they… do not bring the budget down much from its current level.”3 And while Congress has yet to enact funding for fiscal year 2013, it appears ready to increase the Pentagon’s budget, replacing the Defense Department’s extremely modest reductions with another year of growth.¶ Current reductions must also be measured against the unprecedented growth in Pentagon spending over the past 13 years. Since 1998, the Pentagon’s base budget has grown by 54% (adjusted for inflation).4 Moreover, with the country turning the page on a long decade of war in Iraq and Afghanistan, the planned reductions represent a historically small drawdown when compared with those following the end of Korea, Vietnam, and the Cold War.5

## Solvency

### AT: Workforce

#### No workforce shortage

ITA 11 International Trade Administration, “The Commercial Outlook for U.S. Small Modular Nuclear Reactors” Manufacturing and Services Competitiveness Report, February, US Department of Commerce

A serious obstacle to the resurgence of traditional nuclear power in the United States is the eroded domestic manufacturing capacity for the major nuclear components. A robust program of building SMRs, however, could make use of existing domestic capacity that is already capable of completely constructing most proposed SMR designs. **SMRs would not require the ultra-heavy forgings that currently can only be made overseas.** U.S. suppliers say that firms could retool using existing capabilities and resources and could source most of the components of SMRs here in the United States. This ability could mean tremendous new commercial opportunities for U.S. firms and workers.¶ A substantial SMR deployment program in the United States could result in the creation of many new jobs in manufacturing, engineering, transportation, construction (for site preparation and installation) and craft labor, professional services, and ongoing plant operations. As SMR manufacturers prove their designs in the domestic market, **they will likely consider export opportunities**. The modular nature of SMRs and their relative portability means that locating export-oriented SMR manufacturing and assembly could make sense for U.S. companies, as opposed to the localiza-tion that is typically necessary for building larger reactors.

### AT: Cost/Feasibility/Time

#### Finishing Ringle

It is inherently safe. It could be located partially or totally below ground, and with its natural convection cooling system, it does not rely on an elaborate system of pumps and valves to provide safety. There is no scenario in which a loss-of-coolant accident could occur.

### AT: NG

#### SMR key to help nuclear beat-out natural gas

Lamonica 12—Tech Review Writer. 20 years of experience covering technology and business (8/9/12, Martin, A Glut of Natural Gas Leaves Nuclear Power Stalled, [www.technologyreview.com/news/428737/a-glut-of-natural-gas-leaves-nuclear-power/](http://www.technologyreview.com/news/428737/a-glut-of-natural-gas-leaves-nuclear-power/))

The nuclear renaissance is in danger of petering out before it has even begun, but not for the reasons most people once thought. Forget safety concerns, or the problem of where to store nuclear waste—the issue is simply cheap, abundant natural gas.¶ General Electric CEO Jeffrey Immelt caused a stir last month when he told the Financial Times that it's "hard to justify nuclear" in light of low natural gas prices. Since GE sells all manner of power generation equipment, including components for nuclear plants, Immelt's comments hold a lot of weight.¶ Cheap natural gas has become the fuel of choice with electric utilities, making building expensive new nuclear plants an increasingly tough sell. The United States is awash in natural gas largely thanks to horizontal drilling and hydraulic fracturing, or "fracking" technology, which allows drillers to extract gas from shale deposits once considered too difficult to reach. In 2008, gas prices were approaching $13 per million BTUs; prices have now dropped to around $3. ¶ When gas prices were climbing, there were about 30 nuclear plant projects in various stages of planning in the United States. Now the Nuclear Energy Institute estimates that, at most, five plants will be built by 2020, and those will only be built thanks to favorable financing terms and the ability to pay for construction from consumers' current utility bills. Two reactors now under construction in Georgia, for example, moved ahead with the aid of an $8.33 billion loan guarantee from the U.S. Department of Energy. ¶ What happens after those planned projects is hard to predict. "The question is whether we'll see any new nuclear," says Revis James, the director of generation research and development at the Electric Power Research Institute. "The prospects are not good."¶ Outside the United States, it's a different story. Unconventional sources of natural gas also threaten the expansion of nuclear, although the potential impact is less clear-cut. Around the world, there are 70 plants now under construction, but shale gas also looms as a key factor in planning for the future. Prices for natural gas are already higher in Asia and Europe, and shale gas resources are not as fully developed as they are the United States.¶ Some countries are also blocking the development of new natural gas resources. France, for instance, which has a strong commitment to nuclear, has banned fracking in shale gas exploration because of concerns over the environmental impact.¶ Fast-growing China, meanwhile, needs all the energy sources available and is building nuclear power plants as fast as possible.¶ Even in United States, of course, super cheap natural gas will not last forever. With supply exceeding demand, some drillers are said to be losing money on natural gas, which could push prices back up. Prices will also be pushed upward by utilities, as they come to rely on more natural gas for power generation, says James.¶ Ali Azad, the chief business development officer at energy company Babcock & Wilcox, thinks the answer is making nuclear power smaller, cheaper, and faster. His is one of a handful of companies developing small modular reactors that can be built in three years, rather than 10 or more, for a fraction of the cost of gigawatt-size reactors. Although this technology is not yet commercially proven, the company has a customer in the Tennessee Valley Authority, which expects to have its first unit online in 2021 (see "A Preassembled Nuclear Reactor").¶ "When we arrive, we will have a level cost of energy on the grid, which competes favorably with a brand-new combined-cycle natural gas plants when gas prices are between $6 to $8," said Azad. He sees strong demand in power-hungry China and places such as Saudia Arabia, where power is needed for desalination.¶ Even if natural gas remains cheaper, utilities don't want to find themselves with an overreliance on gas, which has been volatile on price in the past, so nuclear power will still contribute to the energy mix. "[Utilities] still continue [with nuclear] but with a lower level of enthusiasm—it's a hedging strategy," says Hans-Holger Rogner from the Planning and Economics Studies section of the International Atomic Energy Agency. "They don't want to pull all their eggs in one basket because of the new kid on the block called shale gas."

## CP

### 2AC HIA/EIS CP

#### The review process causes delays

Dill 5 Jennifer, PhD in Urban Studies, “What Influences the Length of Time to Complete NEPA Reviews? An Examination of Highway Projects in Oregon and the Potential for Streamlining,” http://dot.alaska.gov/stwddes/desenviron/assets/pdf/resources/nepareviewtime.pdf

How long does the environmental review process take? The Louis Berger Group sampled 100 EISs from the 1970s, 1980s, and 1990s, to help FHWA obtain a baseline for measuring performance (2). They estimated the length of time taken to complete the NEPA process based on the information in the EIS. The end date was the date on the final EIS. The start date varied. In Phase II of the project, the Louis Berger Group collected data on 244 projects from 1995 to 2001 and calculated the length of the NEPA process using the Notice of Intent (NOI) as the start date and the Record of Decision (ROD) as the end date. In addition, for the past five years, FHWA has tracked the length of time to complete the NEPA process, also using the NOI and ROD dates (7). The data from these three sources is shown in FIGURE 1. The two studies by the Louis Berger Group noted that the time to complete NEPA was not normally distributed, and that a handful of very lengthy projects often skewed the data. In such cases, the median may be a better indication of central tendency. For example, the median time to complete NEPA for the projects from the 1970s through 1990s was 3.0 years, compared to a mean of 3.6 years for all three decades. FIGURE 2 shows the medians from the same three data sources. In addition, in 1994 the General Accounting Office (GAO) reviewed 76 projects with EISs completed between 1988 and 1993 (5). The average time from NOI to ROD was about 4.5 years. This figure is consistent with the Berger Group data. At the request of the American Association of State Highway and Transportation Officials (AASHTO), in 2003 TransTech Management, Inc. surveyed 31 state departments of transportation about their most recent final EIS document (8). They found a median time taken from NOI to ROD of 3.7 years, ranging from just over two years to almost 12 years. The difference from the FHWA/Berger Group data was not explained.

#### Perm do both

#### Certainty is key – crucial for investment

Trembath 11 Alex, Policy associate in the Energy and Climate Program at Breakthrough. He is the lead or co-author of several Breakthrough publications, including the 2012 report, 2/4/11, [Nuclear Power and the Future of Post-Partisan Energy Policy](http://leadenergy.org/2011/02/the-nuclear-option-in-a-post-partisan-approach-on-energy/), "Beyond Boom and Bust: Putting Clean Tech on a Path to Subsidy Independence" and "Where the Shale Gas Revolution Came From”, <http://leadenergy.org/2011/02/the-nuclear-option-in-a-post-partisan-approach-on-energy/>

If there is one field of the energy sector for which certainty of political will and government policy is essential, it is nuclear power. High up front costs for the private industry, extreme regulatory oversight and public wariness necessitate a committed government partner for private firms investing in nuclear technology. In a new [report](http://www.thirdway.org/publications/370) on the potential for a “nuclear renaissance,” Third Way references the failed cap-and-trade bill, delaying tactics in the House vis-a-vis EPA regulations on CO₂, and the recent election results to emphasize the difficult current political environment for advancing new nuclear policy. The report, “The Future of Nuclear Energy,” makes the case for political certainty: “It is difficult for energy producers and users to estimate the relative price for nuclear-generated energy compared to fossil fuel alternatives (e.g. natural gas)–an essential consideration in making the major capital investment decision necessary for new energy production that will be in place for decades.” Are our politicians willing to match the level of certainty that the nuclear industry demands? Lacking a suitable price on carbon that may have been achieved by a cap-and-trade bill removes one primary policy instrument for making nuclear power more cost-competitive with fossil fuels. The impetus on Congress, therefore, will be to shift from demand-side “pull” energy policies (that increase demand for clean tech by raising the price of dirty energy) to [supply-side “push” policies](http://leadenergy.org/2010/09/supply-demand-energy-innovation/), or industrial and innovation policies. Fortunately, there are signals from political and thought leaders that a package of policies may emerge to incentivize alternative energy sources that include nuclear power. One place to start is the recently deceased American Power Act, addressed above, authored originally by Senators Kerry, Graham and Lieberman. Before its final and disappointing incarnation, the bill [included](http://www.huffingtonpost.com/2010/05/12/american-power-act-photos_n_573643.html#s90041&title=undefined) provisions to increase loan guarantees for nuclear power plant construction in addition to other tax incentives. Loan guarantees are probably the most important method of government involvement in new plant construction, given the high capital costs of development. One wonders what the fate of the bill, or a less ambitious set of its provisions, would have been had Republican Senator Graham not abdicated and removed any hope of Republican co-sponsorship. But that was last year. The changing of the guard in Congress makes this a whole different game, and the once feasible support for nuclear technology on either side of the aisle must be reevaluated. A New York Times [piece](http://www.nytimes.com/2010/11/17/business/energy-environment/17NUCLEAR.html) in the aftermath of the elections forecast a difficult road ahead for nuclear energy policy, but did note Republican support for programs like a waste disposal site and loan guarantees. Republican support for nuclear energy has roots in the most significant recent energy legislation, the Energy Policy Act of 2005, which passed provisions for nuclear power with wide bipartisan support. Reaching out to Republicans on policies they have supported in the past should be a goal of Democrats who wish to form a foundational debate on moving the policy forward. There are also signals that key Republicans, notably [Lindsey Graham](http://washingtonindependent.com/99171/graham-circulating-clean-energy-standard) and [Richard Lugar](http://www.plattsenergyweektv.com/story.aspx?storyid=132784&catid=293), would throw their support behind a clean energy standard that includes nuclear and CCS. Republicans in Congress will find intellectual support from a group that AEL’s Teryn Norris coined [“innovation hawks,”](http://leadenergy.org/2011/01/the-rise-of-innovation-hawks/) among them Steven Hayward, David Brooks and George Will. Will has been [particularly outspoken](http://www.newsweek.com/2010/04/08/this-nuclear-option-is-nuclear.html) in support of nuclear energy, writing in 2010 that “it is a travesty that the nation that first harnessed nuclear energy has neglected it so long because fads about supposed ‘green energy’ and superstitions about nuclear power’s dangers.” The extreme reluctance of Republicans to cooperate with Democrats over the last two years is only the first step, as any legislation will have to overcome Democrats’ traditional opposition to nuclear energy. However, here again there is reason for optimism. Barbara Boxer and John Kerry bucked their party’s long-time aversion to nuclear in a precursor bill to APA, and Kerry continued working on the issue during 2010. Jeff Bingaman, in a speech earlier this week, reversed his position on the issue by calling for the inclusion of nuclear energy provisions in a clean energy standard. The Huffington Post [reports](http://www.huffingtonpost.com/2011/02/01/sen-jeff-bingaman-backs-n_n_816864.html) that “the White House reached out to his committee [Senate Energy] to help develop the clean energy plan through legislation.” This development in itself potentially mitigates two of the largest obstacle standing in the way of progress on comprehensive energy legislation: lack of a bill, and lack of high profile sponsors. Democrats can also direct [Section 48C](http://leadenergy.org/2010/12/clean-energy-financing-first-steps-towards-post-partisan-effort/#more-3320) of the American Recovery and Reinvestment Act of 2009 towards nuclear technology, which provides a tax credit for companies that engage in clean tech manufacturing. Democrats should not give up on their policy goals simply because they no longer enjoy broad majorities in both Houses, and Republicans should not spend all their time holding symbolic repeal votes on the Obama Administration’s accomplishments. The lame-duck votes in December on “Don’t Ask, Don’t Tell,” the tax cut deal and START indicate that at least a few Republicans are willing to work together with Democrats in a divided Congress, and that is precisely what nuclear energy needs moving forward. It will require an agressive push from the White House, and a concerted effort from both parties’ leadership, but the road for forging bipartisan legislation is not an impassable one. The politician with perhaps the single greatest leverage over the future of nuclear energy is President Obama, and his rhetoric matches the challenge posed by our aging and poisonous energy infrastructure. “This is our generation’s Sputnik moment,” announced Obama recently. Echoing the calls of presidents past, the President used his [State of the Union](http://www.slate.com/id/2281847/) podium to signal a newly invigorated industrialism in the United States. He advocated broadly for renewed investment in infrastructure, education, and technological innovation. And he did so in a room with many more members of the opposition party than at any point during the first half of his term. The eagerness of the President to combine left and right agendas can hopefully match the hyper-partisan bitterness that dominates our political culture, and nuclear power maybe one sector of our economy to benefit from his political leadership.

#### Perm do CP

#### Links to politics

Dreher 5 Robert, Deputy Executive Director of the Georgetown Environmental Law & Policy Institute. He served as Deputy General Counsel of the U.S. Environmental Protection Agency, “The Political Assault on the National Environmental Policy Act,” http://www.law.georgetown.edu/gelpi/research\_archive/nepa/NEPAUnderSiegeFinal.pdf

NEPA is justly regarded as the foundation for U.S. environmental protections. In addition to establishing our nation’s basic commitment to a policy of environmental protection, NEPA creates a framework for informed and responsive government decision-making based on extensive public input. The assault on the Act that is taking place on Capitol Hill and within some federal agencies threatens to destroy this basic environmental framework. After 35 years, it is worthwhile to consider how NEPA should be improved. Thoughtful improvements in agency practices and renewed commitments of federal resources can make the Act more effective. The goal should be to improve and strengthen this bedrock environmental law, not to undermine and weaken it.

#### No solvency - no authority and tons of alt causes

Rosenbaum, Professor of Political Science at Univ of Florida, 5 [Walter A, Environmental Policymaking, Ed. Hatch, p202-203]

The impact of the EIS process on federal policymaking has been diminished by both Congress and the White House when political expediency and opportunity were compelling. Indeed, political intervention has been an important reason for federal circumvention of the NEPA process over the last several decades. This political intervention assumes several forms. For instance, legislators have increasingly used appropriations riders in the last decade to overturn federal public lands policies negotiated through the NEPA process among federal agencies, private interests, and state governments (Zellmer, 1997). President Clinton, in turn made numerous public land decisions, including National Park and National Monument designations, during his terms in office under authority of the American Antiquities Act (1906), which he asserted exempted the agencies with jurisdiction over such land from requirements of the NEPA process. Additionally, all federal agencies have rejected the nation – with consistent presidential approval – that the NEPA process should apply to their overseas actions as well as their domestic decisions. Thus, Department of Defense military installations pollute soil and groundwater throughout Europe without any NEPA review and, elsewhere abroad, “other federal agencies support actions such as hydroelectric development, mining, and pesticide spraying without informing the public – or learning themselves – of the environmental damages.

#### EIS won't be enforced

Davis 6 (Wendy B. Davis, Visiting Associate Professor of Law, Albany Law School, 06, “The Fox is Guarding the Henhouse: Enhancing the Role of the EPA in FONSI Determinations Pursuant to NEPA,” Akron Law Review, 39 Akron L. Rev. 35)

NEPA does not provide effective protection for the environment. n150 It merely creates a procedural hurdle that wastes agency time and resources, with no corresponding assurance that environmental harm will be prevented. This problem is particularly apparent when airport projects are involved. The FAA has been successful in convincing courts that airline safety, convenience, and the prevention of commercial flight delays are more important than any resulting damage to the environment. Courts have accorded such a high degree of deference to the FAA's determinations that the environmental protection laws have been rendered meaningless. n151 Whether the goal of airport expansion is to prevent delays in commercial flights n152 or to provide training opportunities for military pilots, n153 courts support FAA decisions despite significant environmental impact. For example, courts have upheld FAA orders that (1) threatened significant disturbance of livestock or migratory birds; n154 (2) allowed hundreds of acres of wetlands to be filled [\*56] in; n155 (3) created a noise level that was expected to cause some people to be "highly annoyed;" n156 and (4) increased the noise level at historic national parks. n157 NEPA would have more of a substantive impact if courts gave less deference to the decisions of the FAA and other non-environmental lead agencies.

#### Zero risk of a net benefit

Falkner 5 (November 15, 2005. “American Hegemony and the Global Environment” International Studies Review. Volume 7, Issue 4. JSTOR.)

Throughout the history of international environmental politics, the United States has played an active role in the creation and design of international regimes and has used its power to pursue its preferred policy objectives. To be sure, US hegemony has not translated into international policy outcomes in a straightforward manner. Nor has US foreign environmental policy been consistent over time in terms of its overall direction. Depending on the environmental issue that is the focus of attention and its broader international context, America’s hegemony has formed the basis for both international leadership and veto power in environmental regime formation. There is, thus, no simple correlation between the US position in the international system and its environmental objectives. As will be argued below, the inﬂuence of competing domestic interest groups and the fragmented nature of the foreign policy system in the United States are largely responsible for the considerable variation in US foreign environmental policy over time and across issue areas.

#### Conflating security with the EIS crushes environmentalism and health

Vest 1 (Gary, Acting Deputy Under Secretary of Defense for Environmental Security – United States, Arms Control and the Environment, Ed. Guruswamy and Grillot, p. 235-236)

War is bad for the environment. Battlefields remain dangerous decades after combat. French and Belgian farmers still find unexploded ordnance from the First World War. The production of weapons affects the environment just as the production of other industrial products does. Modern weapons and other by-products of war can leave poi­sonous residue, with effects that last for years. Trying to achieve envi­ronmental or other goals through subterfuge will not, and ought not, work. The CTBT or some other treaty that constrains or flies in the face of the right of self-defense will fail. Historically, states have accepted defeat and occupation when the costs of fruitless fighting seemed too great. Sometimes, a different choice seemed better after the fact. 12 But no example comes to mind of a country refusing to engage in self-defense in order to avoid damaging the environment or refusing to use or manufacture a weapon, thought to be indis­pensable for defense, because it was environmentally destructive. Countries like the United States have the luxury of more choice in this regard than a poorer, smaller, technologically less advanced state having, nonetheless, precisely the same right to defend itself. Accordingly, one should continue to work to find appropriate, real­istic balances between the requirements of national security and those of environmental protection. Pursuing unrealistic goals, such as requir­ing environmental impact assessments in every case involving national security, will lead to ridicule and potentially important setbacks to the effort to encourage worldwide sensitivity to the need to protect the environment.

#### No impact – climate leadership is a hoax

#### They’ll say no – nuclear perceived as not clean so govt will say no

#### Links to oil – results in nuclear

## K

### 2AC Neolib K

#### Incentives-based environmental action in the context of nuclear power is good---key to policy effectiveness

Economist 5 (The Economist, April 21, “Rescuing environmentalism”, http://www.economist.com/node/3888006)

“THE environmental movement's foundational concepts, its method for framing legislative proposals, and its very institutions are outmoded. Today environmentalism is just another special interest.” Those damning words come not from any industry lobby or right-wing think-tank. They are drawn from “The Death of Environmentalism”, an influential essay published recently by two greens with impeccable credentials. They claim that **environmental groups are politically adrift and dreadfully out of touch.**

**They are right**. In America, greens have suffered a string of defeats on high-profile issues. They are losing the battle to prevent oil drilling in Alaska's wild lands, and have failed to spark the public's imagination over global warming. Even the stridently ungreen George Bush has failed to galvanise the environmental movement. The solution, argue many elders of the sect, is to step back from day-to-day politics and policies and “energise” ordinary punters with talk of global-warming calamities and a radical “vision of the future commensurate with the magnitude of the crisis”.

Europe's green groups, while politically stronger, are also starting to lose their way intellectually. Consider, for example, their invocation of the woolly “precautionary principle” to demonise any complex technology (next-generation nuclear plants, say, or genetically modified crops) that they do not like the look of. **A more sensible green analysis of** nuclear power **would weigh its** (very high) economic **costs and** (fairly **low**) **safety risks against the important benefit of generating electricity with no greenhouse-gas emissions.**

Small victories and bigger defeats

The coming into force of the UN's Kyoto protocol on climate change might seem a victory for Europe's greens, but it actually masks a larger failure. The most promising aspect of the treaty—its innovative use of market-based instruments such as carbon-emissions trading—was resisted tooth and nail by Europe's greens. With courageous exceptions, American green groups also remain deeply suspicious of market forces.

**If environmental groups continue to reject pragmatic solutions and instead drift toward Utopian** (or dystopian) **visions of the future,** they will lose **the battle of ideas**. And that would be a pity, for the world would benefit from having a thoughtful green movement. It would also be ironic, because far-reaching advances are already under way in the management of the world's natural resources—changes that add up to a different kind of green revolution. This could yet save the greens (as well as doing the planet a world of good).

“Mandate, regulate, litigate.” That has been the green mantra. And it explains the world's top-down, command-and-control approach to environmental policymaking. Slowly, this is changing. Yesterday's failed hopes, today's heavy costs and tomorrow's demanding ambitions have been driving public policy quietly towards market-based approaches. One example lies in the assignment of property rights over “commons”, such as fisheries, that are abused because they belong at once to everyone and no one. Where tradable fishing quotas have been issued, the result has been a drop in over-fishing. Emissions trading is also taking off. America led the way with its sulphur-dioxide trading scheme, and today the EU is pioneering carbon-dioxide trading with the (albeit still controversial) goal of slowing down climate change.

These, however, are obvious targets. What is really intriguing are efforts to value previously ignored “ecological services”, both basic ones such as water filtration and flood prevention, and luxuries such as preserving wildlife. At the same time, advances in environmental science are making those valuation studies more accurate. Market mechanisms can then be employed to achieve these goals at the lowest cost. Today, countries from Panama to Papua New Guinea are investigating ways to price nature in this way (see article).

Rachel Carson meets Adam Smith

If this new green revolution is to succeed, however, three things must happen. The most important is that prices must be set correctly. The best way to do this is through liquid markets, as in the case of emissions trading. Here, politics merely sets the goal. How that goal is achieved is up to the traders.

A proper price, however, requires proper information. So the second goal must be to provide it. The tendency to regard the environment as a “free good” must be tempered with an understanding of what it does for humanity and how. Thanks to the recent Millennium Ecosystem Assessment and the World Bank's annual “Little Green Data Book” (released this week), that is happening. More work is needed, but thanks to technologies such as satellite observation, computing and the internet, green accounting is getting cheaper and easier.

Which leads naturally to **the third goal, the embrace of cost-benefit analysis**. At this, greens roll their eyes, complaining that it reduces nature to dollars and cents. In one sense, they are right. Some things in nature are irreplaceable—literally priceless**. Even so, it is essential to consider trade-offs when analysing almost all green problems**. The marginal cost of removing the last 5% of a given pollutant is often far higher than removing the first 5% or even 50%: **for public policy to ignore such facts would be inexcusable.**

If governments invest seriously in green data acquisition and co-ordination, they will no longer be flying blind. And **by advocating data-based, analytically rigorous policies rather than pious appeals to “save the planet”, the green movement could overcome** the **scepticism** of the ordinary voter. It might even move from the fringes of politics to the middle ground where most voters reside.

Whether the big environmental groups join or not, the next green revolution is already under way. Rachel Carson, the crusading journalist who inspired greens in the 1950s and 60s, is joining hands with Adam Smith, the hero of free-marketeers. The world may yet leapfrog from the dark ages of clumsy, costly, command-and-control regulations to an enlightened age of **informed, innovative, incentive-based greenery**.

#### a) No political crises

Stelzer 9 Irwin Stelzer is a business adviser and director of economic policy studies at the Hudson Institute, “Death of capitalism exaggerated,” http://www.theaustralian.news.com.au/story/0,25197,26174260-5013479,00.html

A FUNNY thing happened on the way to the collapse of market capitalism in the face of the worst economic crisis since the Great Depression. It didn't. Indeed, in Germany voters relieved Chancellor Angela Merkel of the necessity of cohabiting with a left-wing party, allowing her to form a coalition with a party favouring lower taxes and free markets. And in Pittsburgh leaders representing more than 90 per cent of the world's GDP convened to figure out how to make markets work better, rather than to hoist the red flag. The workers are to be relieved, not of their chains but of credit-card terms that are excessively onerous, and helped to retain their private property - their homes. All of this is contrary to expectations. The communist spectre that Karl Marx confidently predicted would be haunting Europe is instead haunting Europe's left-wing parties, with even Vladimir Putin seeking to attract investment by re-privatising the firms he snatched. Which raises an interesting question: why haven't the economic turmoil and rising unemployment led workers to the barricades, instead of to their bankers to renegotiate their mortgages? It might be because Spain's leftish government has proved less able to cope with economic collapse than countries with more centrist governments. Or because Britain, with a leftish government, is now the sick man of Europe, its financial sector in intensive care, its recovery likely to be the slowest in Europe, its prime credit rating threatened. Or it might be because left-wing trade unions, greedily demanding their public-sector members be exempted from the pain they want others to share, have lost their credibility and ability to lead a leftward lurch. All of those factors contribute to the unexpected strength of the Right in a world in which a record number of families are being tossed out of their homes, and jobs have been disappearing by the million. But even more important in promoting reform over revolution are three factors: the existence of democratic institutions; the condition of the unemployed; and the set of policies developed to cope with the recession. Democratic institutions give the aggrieved an outlet for their discontent, and hope they can change conditions they deem unsatisfactory. Don't like the way George W. Bush has skewed income distribution? Toss the Republicans out and elect a man who promises to tax the rich more heavily. Don't like Gordon Brown's tax increases? Toss him out and hope the Tories mean it when they promise at least to try to lower taxes. Result: angry voters but no rioters, unless one counts the nutters who break windows at McDonald's or storm banks in the City. Contrast that with China, where the disaffected have no choice but to take to the streets. Result: an estimated 10,000 riots this year protesting against job losses, arbitrary taxes and corruption. A second factor explaining the Left's inability to profit from economic suffering is capitalism's ability to adapt, demonstrated in the Great Depression of the 1930s. While a gaggle of bankers and fiscal conservatives held out for the status quo, Franklin D. Roosevelt and his experimenters began to weave a social safety net. In Britain, William Beveridge produced a report setting the stage for a similar, indeed stronger, net. Continental countries recovering from World War II did the same. So unemployment no longer dooms a worker to close-to-starvation. Yes, civic institutions were able to soften the blow for the unemployed before the safety net was put in place, but they could not cope with pervasive protracted lay-offs. Also, during this and other recessions, when prices for many items are coming down, the real living standard of those in work actually improves. In the US, somewhere between 85 per cent and 90 per cent of workers have kept their jobs, and now see their living costs declining as rents and other prices come down. So the impetus to take to the streets is limited. Then there are the steps taken by capitalist governments to limit the depth and duration of the downturn. As the economies of most of the big industrial countries imploded, policy went through two phases. The first was triage - do what is necessary to prevent the financial system from collapse. Spend. Guarantee deposits to prevent runs on banks and money funds, bail out big banks, force relatively healthier institutions to take over sicker ones, mix all of this with rhetorical attacks on greedy bankers - the populist spoonful of sugar that made the bailouts go down with the voters - and stop the rot. Meanwhile, have the central banks dust off their dog-eared copies of Bagehot and inject lots of liquidity by whatever means comes to mind. John Maynard Keynes, meet Milton Friedman for a cordial handshake. Then came more permanent reform, another round of adapting capitalism to new realities, in this case the malfunctioning of the financial markets. Even Barack Obama's left-wing administration decided not to scupper the markets but instead to develop rules to relate bankers' pay more closely to long-term performance; to reduce the chance of implosions by increasing the capital banks must hold, cutting their profits and dividends, but leaving them in private hands; and to channel most stimulus spending through private-sector companies. This leaves the anti-market crowd little room for manoeuvre as voters seem satisfied with the changes to make capitalism and markets work better and more equitably. At least so far. There are exceptions. Australia moved a bit to the left in the last election, but more out of unhappiness with a tired incumbent's environmental and foreign policy. Americans chose Obama, but he had promised to govern from the centre before swinging left. And for all his rhetorical attacks on greedy bankers and other malefactors of great wealth, he sticks to reform of markets rather than their replacement, with healthcare a possible exception. Even in these countries, so far, so good for reformed capitalism. No substitutes accepted.

#### Neolib’s inevitable and movements are getting smothered out of existence—no alternative economic system

Jones 11—Owen, Masters at Oxford, named one of the Daily Telegraph's 'Top 100 Most Influential People on the Left' for 2011, author of "Chavs: The Demonization of the Working Class", The Independent, UK, "Owen Jones: Protest without politics will change nothing", 2011, www.independent.co.uk/opinion/commentators/owen-jones-protest-without-politics-will-change-nothing-2373612.html

My first experience of police kettling was aged 16. It was May Day 2001, and the anti-globalisation movement was at its peak. The turn-of-the-century anti-capitalist movement feels largely forgotten today, but it was a big deal at the time. To a left-wing teenager growing up in an age of unchallenged neo-liberal triumphalism, just to have "anti-capitalism" flash up in the headlines was thrilling. Thousands of apparently unstoppable protesters chased the world's rulers from IMF to World Bank summits – from Seattle to Prague to Genoa – and the authorities were rattled.

Today, as protesters in nearly a thousand cities across the world follow the example set by the Occupy Wall Street protests, it's worth pondering what happened to the anti-globalisation movement. Its activists did not lack passion or determination. But they did **lack a coherent alternative to the neo-liberal project**. With no clear political direction, **the movement was easily swept away** by the jingoism and turmoil that followed 9/11, just two months after Genoa.

Don't get me wrong: the Occupy movement is a glimmer of sanity amid today's economic madness. By descending on the West's financial epicentres, it reminds us of how a crisis caused by the banks (a sentence that needs to be repeated until it becomes a cliché) has been cynically transformed into a crisis of public spending. The founding statement of Occupy London puts it succinctly: "We refuse to pay for the banks' crisis." The Occupiers direct their fire at the top 1 per cent, and rightly so – as US billionaire Warren Buffett confessed: "There's class warfare, all right, but it's my class, the rich class, that's making war, and we're winning."

The Occupy movement has provoked fury from senior US Republicans such as Presidential contender Herman Cain who – predictably – labelled it "anti-American". They're right to be worried: those camping outside banks threaten to refocus attention on the real villains, and to act as a catalyst for wider dissent. But a **coherent alternative to the tottering global economic order remains,** it seems, **as distant as ever.**

**Neo-liberalism crashes around, half-dead, with no-one to administer the killer blow.**

There's always a presumption that a crisis of capitalism is good news for the left. Yet in the Great Depression, fascism consumed much of Europe. The economic crisis of the 1970s did lead to a resurgence of radicalism on both left and right. But, spearheaded by Thatcherism and Reaganism, the New Right definitively crushed its opposition in the 1980s.This time round, there doesn't even seem to be an alternative for the right to defeat. That's not the fault of the protesters. In truth, the left has never recovered from being virtually **smothered out of existence**. It was the victim of a perfect storm: the rise of the New Right; neo-liberal globalisation; and the repeated defeats suffered by the trade union movement.

But, above all, it was the aftermath of the collapse of Communism that did for the left. As US neo-conservative Midge Decter triumphantly put it: "It's time to say: We've won. Goodbye." From the British Labour Party to the African National Congress, left-wing movements across the world hurtled to the right in an almost synchronised fashion. It was as though the left wing of the global political spectrum had been sliced off. That's why, **although we live in an age of revolt, there remains no left to give it direction and purpose.**

####  [ ] No environment impact

Ben Ridder 8, Phd School of Geography and Environmental Studies, University of Tasmania, “Questioning the ecosystem services argument for biodiversity conservation” Biodiversity and conservation yr:2008 vol:17 iss:4 pg:781

**\*ES = environmental services**

The low resilience assumption

Advocates of the conservation of biodiversity tend not to acknowledge the distinction between resilient and sensitive ES. This ‘low resilience assumption’ gives rise to, and is reinforced by the almost ubiquitous claim within the conservation literature that ES depend on biodiversity.

An extreme example of this claim is made by the Ehrlichs in Extinction. They state that “all [ecosystem services] will be threatened if the rate of extinctions continues to increase” then observe that attempts to artificially replicate natural processes “are no more than partially successful in most cases. Nature nearly always does it better. When society sacrifices natural services for some other gain… it must pay the costs of substitution” (Ehrlich and Ehrlich 1982, pp. 95–96). This assertion—that the only alternative to protecting every species is a world in which all ES have been substituted by artificial alternatives—is an extreme example of the ‘low resilience assumption’. Paul Ehrlich revisits this flawed logic in 1997 i nhis response (with four co-authors) to doubts expressed by Mark Sagoff regarding economic arguments for species conservation (Ehrlich et al. 1997, p. 101).

The claim that ES depend on biodiversity is also notably present in the controversial Issues in Ecology paper on biodiversity and ecosystem functioning (Naeem et al. 1999) that sparked the debate mentioned in the introduction. This appears to reflect a general tendency among authors in this field (e.g., Hector et al. 2001; Lawler et al. 2002; Lyons et al. 2005). Although such authors may not actually articulate the low resilience assumption, presenting such claims in the absence of any clarification indicates its influence.

That the low resilience assumption is largely false is apparent in the number of examples of species extinctions that have not brought about catastrophic ecosystem collapse and decline in ES, and in the generally limited ecosystem influence of species on the cusp of extinction. These issues have been raised by numerous authors, although given the absence of systematic attempts to verify propositions of this sort, the evidence assembled is usually anecdotal and we are forced to trust that an unbiased account of the situation has been presented. Fortunately a number of highly respected people have discussed this topic, not least being the prominent conservation biologist David Ehrenfeld. In 1978 he described the ‘conservation dilemma’, which “arises on the increasingly frequent occasions when we encounter a threatened part of Nature but can find no rational reason for keeping it” (Ehrenfeld 1981, p. 177). He continued with the following observation:

Have there been permanent and significant ‘resource’ effects of the extinction, in the wild, of John Bartram’s great discovery, the beautiful tree Franklinia alatamaha, which had almost vanished from the earth when Bartram first set eyes upon it? Or a thousand species of tiny beetles that we never knew existed before or after their probable extermination? Can we even be certain than the eastern forests of the United States suffer the loss of their passenger pigeons and chestnuts in some tangible way that affects their vitality or permanence, their value to us? (p. 192)

Later, at the first conference on biodiversity, Ehrenfeld (1988) reflected that most species “do not seem to have any conventional value at all” and that the rarest species are “the ones least likely to be missed… by no stretch of the imagination can we make them out to be vital cogs in the ecological machine” (p. 215). The appearance of comments within the environmental literature that are consistent with Ehrenfeld’s—and from authors whose academic standing is also worthy of respect—is uncommon but not unheard of (e.g., Tudge 1989; Ghilarov 1996; Sagoff 1997; Slobodkin 2001; Western 2001).

The low resilience assumption is also undermined by the overwhelming tendency for the protection of specific endangered species to be justified by moral or aesthetic arguments, or a basic appeal to the necessity of conserving biodiversity, rather than by emphasising the actual ES these species provide or might be able to provide humanity. Often the only services that can be promoted in this regard relate to the ‘scientific’ or ‘cultural’ value of conserving a particular species, and the tourism revenue that might be associated with its continued existence. The preservation of such services is of an entirely different order compared with the collapse of human civilization predicted by the more pessimistic environmental authors**.**

The popularity of the low resilience assumption is in part explained by the increased rhetorical force of arguments that highlight connections between the conservation of biodiversity, human survival and economic profit. However, it needs to be acknowledged by those who employ this approach that a number of negative implications are associated with any use of economic arguments to justify the conservation of biodiversity.

#### The squo is structurally improving

Goklany 9**—**Worked with federal and state governments, think tanks, and the private sector for over 35 years. Worked with IPCC before its inception as an author, delegate and reviewer. Negotiated UN Framework Convention on Climate Change. Managed the emissions trading program for the EPA. Julian Simon Fellow at the Property and Environment Research Center, visiting fellow at AEI, winner of the Julian Simon Prize and Award. PhD, MS, electrical engineering, MSU. B.Tech in electrical engineering, Indian Institute of Tech. (Indur, “Have increases in population, affluence and technology worsened human and environmental well-being?” 2009, http://www.ejsd.org/docs/HAVE\_INCREASES\_IN\_POPULATION\_AFFLUENCE\_AND\_TECHNOLOGY\_WORSENED\_HUMAN\_AND\_ENVIRONMENTAL\_WELL-BEING.pdf)

Although global population is no longer growing exponentially, it has quadrupled since 1900. Concurrently, affluence (or GDP per capita) has sextupled, global economic product (a measure of aggregate consumption) has increased 23-fold and carbon dioxide has increased over 15-fold (Maddison 2003; GGDC 2008; World Bank 2008a; Marland et al. 2007).4 But contrary to Neo- Malthusian fears, average **human well-being,** measured by any objective indicator, **has never been higher**. Food supplies, Malthus’ original concern, are up worldwide. Global food supplies per capita increased from 2,254 Cals/day in 1961 to 2,810 in 2003 (FAOSTAT 2008). This helped reduce hunger and malnutrition worldwide. The proportion of the population in the developing world, suffering from chronic hunger declined from 37 percent to 17 percent between 1969–71 and 2001–2003 despite an 87 percent population increase (Goklany 2007a; FAO 2006). The reduction in hunger and malnutrition, along with improvements in basic hygiene, improved access to safer water and sanitation, broad adoption of vaccinations, antibiotics, pasteurization and other public health measures, helped reduce mortality and increase life expectancies. These improvements first became evident in today’s developed countries in the mid- to late-1800s and started to spread in earnest to developing countries from the 1950s. The infant mortality rate in developing countries was 180 per 1,000 live births in the early 1950s; today it is 57. Consequently, global life expectancy, perhaps the single most important measure of human well-being, increased from 31 years in 1900 to 47 years in the early 1950s to 67 years today (Goklany 2007a). Globally, average **annual per capita incomes tripled** since 1950. The proportion of the world’s population outside of high-income OECD countries living in absolute poverty (average consumption of less than $1 per day in 1985 International dollars adjusted for purchasing power parity), fell from 84 percent in 1820 to 40 percent in 1981 to 20 percent in 2007 (Goklany 2007a; WRI 2008; World Bank 2007). Equally important, the world is more literate and better educated. Child labor in low income countries declined from 30 to 18 percent between 1960 and 2003. In most countries, people are freer politically, economically and socially to pursue their goals as they see fit. More people choose their own rulers, and have freedom of expression. They are more likely to live under rule of law, and less likely to be arbitrarily deprived of life, limb and property. Social and professional mobility has never been greater. It is easier to transcend the bonds of caste, place, gender, and other accidents of birth in the lottery of life. People work fewer hours, and have more money and better health to enjoy their leisure time (Goklany 2007a). Figure 3 summarizes the U.S. experience over the 20th century with respect to growth of population, affluence, material, fossil fuel energy and chemical consumption, and life expectancy. It indicates that population has multiplied 3.7-fold; income, 6.9-fold; carbon dioxide emissions, 8.5-fold; material use, 26.5-fold; and organic chemical use, 101-fold. Yet its life expectancy increased from 47 years to 77 years and infant mortality (not shown) declined from over 100 per 1,000 live births to 7 per 1,000. It is also important to note that not only are people living longer, they are healthier. The disability rate for seniors declined 28 percent between 1982 and 2004/2005 and, despite better diagnostic tools, major diseases (e.g., cancer, and heart and respiratory diseases) occur 8–11 years later now than a century ago (Fogel 2003; Manton et al. 2006). If similar figures could be constructed for other countries, most would indicate qualitatively similar trends, especially after 1950, except Sub-Saharan Africa and the erstwhile members of the Soviet Union. In the latter two cases, life expectancy, which had increased following World War II, declined after the late 1980s to the early 2000s, possibly due poor economic performance compounded, especially in Sub-Saharan Africa, by AIDS, resurgence of malaria, and tuberculosis due mainly to poor governance (breakdown of public health services) and other manmade causes (Goklany 2007a, pp.66–69, pp.178–181, and references therein). However, there are signs of a turnaround, perhaps related to increased economic growth since the early 2000s, although this could, of course, be a temporary blip (Goklany 2007a; World Bank 2008a). Notably, in most areas of the world, the healthadjusted life expectancy (HALE), that is, life expectancy adjusted downward for the severity and length of time spent by the average individual in a less-than-healthy condition, is greater now than the unadjusted life expectancy was 30 years ago. HALE for the China and India in 2002, for instance, were 64.1 and 53.5 years, which exceeded their unadjusted life expectancy of 63.2 and 50.7 years in 1970–1975 (WRI 2008). Figure 4, based on cross country data, indicates that contrary to Neo-Malthusian fears, both life expectancy and infant mortality improve with the level of affluence (economic development) and time, a surrogate for technological change (Goklany 2007a). Other indicators of human well-being that improve over time and as affluence rises are: access to safe water and sanitation (see below), literacy, level of education, food supplies per capita, and the prevalence of malnutrition (Goklany 2007a, 2007b).

## DA

### 2AC Oil DA

#### Price collapse inevitable – diversification is only way to survive

Paikin 12 Zach Paikin is a columnist for Canada's iPolitics and contributes research on international affairs to several Washington-based think tanks and institutes, April 11, 2012, “Coping in an increasingly competitive global economy”, http://www.ipolitics.ca/2012/04/11/zach-paikin-coping-with-less-revenues-in-an-increasingly-competitive-global-economy/

It gets worse. **The price of oil is about to collapse due to the increasing extraction of unconventional oil**. Roughly 250 billion barrels of oil shale — and possibly as much as twice that figure — have been discovered in Israel and will begin to flow into the global market in about a decade **at an estimated $30-40 per barrel**, merely one third of the current price of oil. This gives Israel the third largest oil shale reserves in the world after the United States and China. The U.S. has already become a net exporter of gasoline and could surpass both Russia and Saudi Arabia as the world’s largest supplier of oil in the near future thanks to its unconventional oil reserves.¶ **The upcoming decline in the price of oil will result in the near-total collapse of non-diversified economies**, such as the Middle East’s oil-exporting countries. For instance, roughly 75 per cent of Saudi Arabia’s governmental revenue and 90 per cent of its export earnings come from the oil industry. Natural gas doesn’t provide these Mid-East states with much solace: Canadian exports of natural gas to the United States last year alone accounted for half the rate of all natural gas exports from the Middle East and North Africa.

#### Nuclear doesn’t tradeoff with oil---electricity not liquid fuel

Styles 12 Geoffrey, Managing Director of GSW Strategy Group, LLC, an energy and environmental strategy consulting firm, "How Helpless Are We in the Face of Rising Oil Prices?", February 24, energyoutlook.blogspot.com/2012/02/how-helpless-are-we-in-face-of-rising.html

To see why requires a sense of how the oil market works, as well as the uses to which we put oil today, rather than a generation ago. For starters, although the President has worked hard to improve conditions for renewable energy sources like wind and solar power--sources that certainly have an important role to play in our long-term energy mix--these technologies, along with nuclear power, are out of place in a conversation about oil prices in 2012. That's because they produce electricity rather than liquid fuels, and less than 1% of US electricity is generated from oil today, compared to more than 10% in 1980. Electricity from renewable and nuclear power doesn't compete with imported oil or any other kind of oil; it competes with domestic energy sources like coal and natural gas, most of which now comes from conventional and unconventional gas fields, rather than as a byproduct of producing oil. So by all means lets have a conversation about renewables in the context of reducing greenhouse gas emissions today and displacing oil from transportation when there are tens of millions of electric vehicles on the road in the future, but in terms of oil prices now and in the near future, they are a rhetorical diversion.

#### Military oil doesn’t link

Kreutzer 12 David, Research Fellow in Energy Economics and Climate Change, Heritage Foundation, “Military Biofoolishness”, May 21, <http://energy.nationaljournal.com/2012/05/powering-our-military-whats-th.php>

The entire U.S. military currently consumes about 360,000 barrels per day of petroleum-based fuel, with 175,000 barrels per day (or less) going to the Air Force’s jets. A single platform in the Gulf of Mexico (Thunderhorse) produces as much petroleum as these jets consume and at a much lower cost than the biofuel replacements. The Keystone XL Pipeline would bring enough petroleum from a very secure Canada to meet our total military consumption two or three times over. The same story holds for other potential sources of conventional petroleum, such as the Arctic National Wildlife Refuge. The Air Force’s target is to replace about 26,000 barrels per day with biofuels. Whatever energy security that may provide could be doubled by a single well in the Gulf of Mexico. As a strategic policy, switching the military to biofuels can only make our enemies think we are not serious. If the entire military consumption were switched away from petroleum, that would cut worldwide demand by 0.4 percent. This cut would reduce revenues to oil producers by about 1.5 percent. Let’s hope biofuels are not anti-terrorism Plan A. Though some energy technologies that are too expensive for general civilian use may make sense for the military, biofuels are not among them. The military needs to rethink its biofuels program.

#### Reduced US oil demand doesn't affect global prices

Nordhaus 11 William D, Sterling Professor of Economics; Cowles Foundation, Yale University, October 27, “Energy: Friend or Enemy?,” http://www.nybooks.com/articles/archives/2011/oct/27/energy-friend-or-enemy/?pagination=false

If we look at both the rhetoric and substance of oil policy, particularly oil dependency, much thinking is misguided because of misconceptions about the nature of oil dependency. We can usefully think of the oil market as a single integrated world market—like a giant bathtub of oil. In the bathtub view, there are spigots from Saudi Arabia, Russia, and other producers that introduce oil into the inventory. And there are drains from which the United States, China, and other consumers draw oil. Nevertheless, the dynamics of the price and quantity are determined by the sum of these demands and supplies, and are independent of whether the faucets and drains are labeled “US,” “Russia,” or “China.” In other words, prices are determined by global supply and demand, and the composition of supply and demand is irrelevant.7¶ Why is crude oil an integrated world market? The reasons are that the costs of transporting oil are low, different crude oils are largely interchangeable, and the different crudes can be blended. This means that crude oil is fungible, like dollar bills. A shortfall in one region can be made up by shipping a similar oil there from elsewhere in the world. US oil policies make no more sense than trying to lower the water level in one end of the bathtub by taking a few cups of water from that end.¶ We know that the world oil market is unified because there is a single price of crude oil that holds no matter what the source. For example, we can look at whether prices (with corrections for gravity and sulfur) in fact move together. A good test of this view would be to ask whether a benchmark crude price predicts the movement of other prices. Looking at crude oil from twenty-eight different regions around the world from 1977 to 2009, I found that a 10.00 percent change in the price of the “Brent” crude oil—a blend of crude often used as a benchmark for price—led to a 9.99 percent change in the price of other crude oils. These correlations among crude oil prices are markedly higher than are observed for virtually any other traded good or service.¶ The implication of the bathtub view is profound. It means that virtually no important oil issue involves US dependency on foreign oil. Whether we consider pollution, macroeconomic impacts, price volatility, supply interruptions, or Middle East politics, our vulnerability depends upon the global market. It does not depend upon the fraction of our consumption that is imported.¶ I will use two examples to illustrate this point. A first hardy perennial is the idea that we should limit our consumption to oil from “secure sources.” This might mean concentrating on Canada and Mexico, or perhaps relying only on our own output, or we might even exclude Alaska lest it someday decide to secede.¶ These policies make no sense in an integrated world oil market. Suppose that the United States limited its imports to completely reliable sources—ones that would never, ever cut off supplies—and specifically prohibited imports from unreliable country A. This would lead country A to send its oil to other countries. In an integrated world market, the result would be simply to reallocate production from non-A countries to the United States to make up the shortfall here and eliminate the excess there. Unless a country actually changes its flow into the world bathtub, there will be no impact on the United States of sourcing imports from secure regions only.

### AT: Russia Oil---2AC

#### Plan doesn’t collapse Russian oil – doesn’t get close to the $13 threshold

IHT 4 (1/7, Lexis)

Given its dependence on oil revenue, a steep decline in oil prices would pose a threat to the economy, analysts say. Russia can withstand a serious crisis as long as oil remains above $13.50, according to one economist. After oil prices averaged $28.80 a barrel in 2003, Russia's GDP could still grow a healthy 5.5 percent even if the price of Brent crude falls to $23 a barrel this year.

### 2AC Obama Good – Elections

#### Romney win

Horowitz 10/26—writes for the Madison Project (Daniel, A Wide Electoral/Popular Vote Split Won’t Happen, [www.redstate.com/2012/10/26/a-wide-electoralpopular-vote-split-wont-happen/](http://www.redstate.com/2012/10/26/a-wide-electoralpopular-vote-split-wont-happen/))

There is an emerging narrative percolating throughout the political world; the prospect that Romney could win the popular vote but lose the Electoral College. The theory is predicated on the seemingly contradictory data between state and national polls. National polls seem to show Romney with a consistent 2-4% lead, while state polls show the candidates tied or Obama slightly ahead in Ohio, Iowa, and Wisconsin.¶ Some analysts are attempting to harmonize the state and national polls by theorizing that Romney’s national lead is driven by historic gains among whites in red states and a strong showing in Pennsylvania and Michigan. They suggest that ultimately the Electoral College boils down to Ohio (or Wisconsin, if Romney loses Ohio), a state where Obama’s much-vaunted ground game and oversaturation of ads could flip the state and the entire election to Obama.¶ This analysis is dead wrong. Either the state polls are correct, and this is a dog fight, or the national polls are correct, and this is a Romney win. The both cannot reflect reality.¶ It’s not just that the national polls show Romney ahead by 3%; it’s that 3 respected, yet diverse, national polls converged yesterday on the exact same number in one day – Romney 50% Obama 47% (today Gallup is Romney +5 and ABC/WaPost is Romney +1). So Romney is at 50% and the incumbent is at 47% (how ironic!) with undecided voters likely to break against him in an election defined by the stagnating economy. But it’s more than that. The Washington Post poll has Romney leading by 19-20 among Independents; Rasmussen shows him with a 17-point lead. Romney is now crushing Obama on the economy and even leading in favorability. It is almost impossible to lose the Electoral College under normal circumstances when leading by more than 1% nationally. It’s certainly impossible to lose when polling this well in all the internals.¶ In order for Romney to win by such margins in the popular vote, yet lose the Electoral College, he would have to outperform Bush in a number of non-swing-states, though he is unlikely to do so.¶ The math doesn’t add up.¶ Bush won the popular vote by 2.46% in 2004. In order to assume that Romney wins by roughly the same margin as Bush (or probably more, based on the internal numbers of the national polls), yet loses the Electoral College, one has to find a number of places where Romney outperforms Bush. But look around the map. Bush did really well in red states and probably won a number of them by more than Romney will. Bush won Montana by 21 points – something Romney will not do. The latest Rasmussen poll had him up just 8.¶ What about the blue states? People forget that Bush did pretty well in many Democrat states. He came within 7.6 in Delaware; 6.7 in NJ, 4 in Oregon, 3.5 in MN, and 9 in Maine. Heck, he only lost California by 10 points – a somewhat unlikely outcome for Romney.¶ What about the swing states? He won CO by 4.5; VA by 8; FL by 5; and NC by a whopping 13. He even won New Mexico – a state that Romney will not come close to winning (unless the Gallup national poll is correct).¶ What about Romney dramatically overperforming in Wis, MI, and PA, yet still losing? Well, that’s already baked into Bush’s 2.46% national margin. He lost Wis. by the slimmest of margins, PA by 2.5, and MI by 3.5.¶ Across the board, this is a much better showing in many states than Romney is expected to win, even in the best case scenario. Yet, he still only won the popular vote by 2.46% overall. So the idea that Romney could match this margin or even more nationally, yet lose the Electoral College, but make up the difference by overperfroming Bush in a number of areas, is crazy talk. Where would those votes come from?¶ Bottom line: if Romney wins the popular vote by 2-3%, he will clearly run the table on all the swing states, and possibly come very close in MI or PA, if not win them outright. Oh, and what’s all that talk of ads running in Minnesota?¶ So what about the state polls? If you look at most of the samples, they are more Democratic than the 2008 turnout model. It’s becoming clear that the early voting, which is disproportionately comprised of Democrats, is distorting the likely voter screens of most state polls. That’s why they are all showing a high D turnout, despite the ubiquitous enthusiasm gap.¶ Additionally, notice how Romney’s surge has stalled out in the state polls even as it continues in the national polls. He has even stalled in some Colorado and Virginia polls, states where Obama is clearly losing. The stagnation in all the state polls began right around the time when early voting picked up in earnest. If we are to believe the national polls, which are hard to disregard due to the convergence, the only plausible theory about the divergence of state polling is that they are inflating Democrat strength by 2-4% due to early voting.¶ If you reconstruct a turnout model that is only slightly more favorable for Republicans than 2008, Romney is ahead in most of the important states. Take this Gravis Marketing poll of Iowa, for example. They show Obama up 4 points, but the party ID is D +6 (D 41, R 35, I 24). In 2008, it was D +1 (D 34, R 33, I 33), and in 2004 it was R +2 (D 34, R 36, I 30). Here’s the kicker: the poll shows Romney leading by 12 among independents. Remember that of all swing states, Republicans improved their voter registration edge the most in Iowa. Additionally, there is a tremendous enthusiasm gap. Yet, if we merely reconstruct the 2008 turnout, which was evenly split among all three affiliations, a 12-point Indy win would clearly tip the state to Romney.¶ We’re seeing the same thing with the latest ARG poll in Ohio. They have Obama up 49-47, yet Romney is winning Independents by a gargantuan 21 points. The sample is D+9, even though it was D+5 in 2008.¶ It’s becoming clear that the national polls could easily work with the state polling data if we adjust for the likely turnout distortions from early voting. To a certain extent, we are seeing a reflection of the national polling in the Rasmussen state polls that factor in respondents who are certain to vote. However, whether this theory is correct or not, one thing is certain: Romney will not win Independents nationally by 15-19 points and lose the Electoral College.

#### Jobs and gas prices ensure public support---not an election issue but if it was Obama’s already seen as a supporter

Johnson 12 John, Nuclear Energy Insider, April 25, "US Campaign Trail: is nuclear in the equation?", analysis.nuclearenergyinsider.com/new-build/us-campaign-trail-nuclear-equation

In the next Presidential election, American voters will be voting with their pockets. We look at how the campaign so far has revealed which candidate will support nuclear R&D, nuclear new-build projects and ultimately preserve and create nuclear sector jobs.¶ As the U.S. Presidential election draws closer, Americans are most concerned about job creation and how the candidates plan to boost the U.S. economy.¶ Alternative energy policies have received a fair amount of publicity from the Obama administration, although nuclear power specifically is rarely mentioned on the campaign trial, primarily due to perceived safety questions.¶ Just the same, the Obama Administration is considered a nuclear supporter, having made several moves to help jumpstart America’s nuclear energy industry.¶ Obama plugged nuclear power during his first State Of The Union speech several years ago, and has generally been upbeat about the energy source’s future in the U.S.¶ ¶ The Campaign¶ ¶ Obama, a Democrat, will face Mitt Romney in the November election. Romney is expected to be named the official Republican nominee in August.¶ ¶ While Romney has not taken a stance on nuclear energy during his campaign, the Obama administration has made significant investments in the sector, including a $450m budget request in March intended to advance the development of American-made small modular reactors (SMRs). Congress still needs to approve the authorization for funding.¶ ¶ The SMRs are expected to be ready for commercial use within 10 years, and are intended for small electric grids and for locations that cannot support large reactors, offering utilities the flexibility to scale production as demand changes.¶ ¶ “The Obama Administration and the Energy Department are committed to an all-of-the-above energy strategy that develops every source of American energy, including nuclear power, and strengthens our competitive edge in the global clean energy race,” U.S. Energy Secretary Steven Chu said when the program was announced. ¶ ¶ “Through the funding for small modular nuclear reactors, the Energy Department and private industry are working to position America as the leader in advanced nuclear energy technology and manufacturing.” ¶ ¶ John Keeley, manager of media relations for the Nuclear Energy Institute, said that the Obama administration has done what it can to support the deployment on new build-outs in the United States to build out nuclear, as well as supporting research and development efforts, such as those in the small reactor space. ¶ ¶ Research support¶ ¶ In addition, the U.S. has invested $170 million in research grants at more than 70 universities, supporting research and development into a full spectrum of technologies, from advanced reactor concepts to enhanced safety design.¶ ¶ “The President was explicit in his State Of The Union speech about the virtues of nuclear as a technology and its role in clean air generation,” said Keeley. “And he has been supportive of developing more nuclear plants in this country. Those initiatives have to be identified as significant evidence of support for the nuclear sector.”¶ ¶ There are currently 104 nuclear power reactors operating in the U.S. in 31 states, operated by 30 different utilities. There are four new nuclear reactors being built in the U.S., including two in George at total expected cost of $14bn. ¶ ¶ In another sign of the U.S support for the industry, the federal government provided utility company Southern with an $8.3bn loan guarantee for the Vogtle Units 3 and 4, the first new nuclear plants to be built in the U.S. in the last 30 years. They are expected to be operational in 2016 and 2017.¶ ¶ The U.S. Energy Department has also supported the Vogtle project and the development of the next generation of nuclear reactors by providing more than $200m through a cost-share agreement to support the licensing reviews for the Westinghouse AP1000 reactor design certification. ¶ ¶ In addition to the Vogtle plants, SCANA, a subsidiary of South Carolina Electric & Gas Co. plans to add two reactors to its nuclear power plant near Jenkinsville, S.C., by 2016 and 2019.¶ ¶ “There is certainly political consensus in support of clean generation, and large scale cultural consensus as well,” said Keeley. ¶ ¶ Political benefits of nuclear support¶ ¶ As gas prices in the U.S. continue to soar, it’s possible that the tide will turn more in favor of nuclear and other clean energy sources, especially as electric cars take a stronger foothold. In addition, the job creation benefits from nuclear could work their way into the political landscape as well.¶ ¶ The two new Vogtle nuclear plants are expected to create approximately 5,000 on-site jobs during the peak of construction, with 800 high paying jobs remaining over the life of the plant.

#### Plan shields controversy

Appelbaum 12 Binyamin, Defense cuts would hurt scientific R&D, experts say, The New York Times, 1-8, http://hamptonroads.com/2012/01/defense-cuts-would-hurt-scientific-rd-experts-say

Sarewitz, who studies the government's role in promoting innovation, said the Defense Department had been **more successful** than other federal agencies because it is the **main user of the innovations that it finances**. The Pentagon, which spends billions each year on weapons, equipment and technology, has an **unusually direct stake in the outcome** of its research and development projects.¶ "The central thing that distinguishes them from other agencies is that they are the customer," Sarewitz said. "You can't pull the wool over their eyes."¶ Another factor is the Pentagon's relative insulation from politics, which has allowed it to sustain a long-term research agenda **in controversial areas.** No matter which party is in power, the Pentagon has continued to invest in clean-energy technology, for example, in an effort to find ways to reduce one of its largest budget items, energy costs.

#### SMRs popular—their generic links don’t apply

Covert 12 Adrian is the Editorial Assistant at Gizmodo Magazine, “The US Government Is Banking on Small Nuclear Reactors for Future Energy”, March 12, 2012, http://gizmodo.com/5890394/the-us-government-is-banking-on-small-nuclear-reactors-for-future-energy

Ever since Fukushima, nuclear power has not been a warmly-received concept when it comes to energy solutions. But still, small modular reactors have remained one iteration of nuclear power that people are optimistic about due to their relative safety and manageability. That's why the US Department of Energy has entered into partnerships with the top SMR makers to help nurture the tiny wonders.¶ According to Ars Technica, the governement is going to offer up land at the Savannah River Nuclear Lab to work on research and build test sites for development. In addition to their size and relative stability, SMRs are popular because reactors are never opened on site, and are sent back to a central facility for refueling, which eases concerns about security. Sure they may not generate Gigawatts, but Megawatts aren't so bad either.

#### Energy policy won’t switch votes—it’s all about the economy

AP 12 (Associated Press, “Climate change not a presidential election issue yet”, 8/12, http://www.cbsnews.com/8301-250\_162-57489676/climate-change-not-a-presidential-election-issue-yet/)

Barack Obama promised to tackle climate change when he first ran for the White House four years ago, but - battling this summer for a second term - he speaks little of the issue even as the United States suffers through a drought of historic proportions, wild storms and punishing heat that topples temperature records almost daily. As late as April, Obama told Rolling Stone magazine climate change would be a central campaign issue. "I will be very clear in voicing my belief that we're going to have to take further steps to deal with climate change in a serious way," he said. But as the campaign against Republican challenger Mitt Romney reaches an early boil, even before the parties hold their nominating conventions, climate change is little spoken of by incumbent candidate Obama, who four years ago foresaw millions of new jobs through investments in "renewable sources of energy like solar power, wind power and advanced biofuels." Instead Obama is fighting a Romney challenge in a tight race over the struggling American economy and stubbornly high unemployment. Gallup polling repeatedly shows the economy as the chief concern among American voters at 65 percent, while environmental and pollution issues were mentioned by less than 1 percent of those polled. Even without a big push on climate change, Obama has the support of environmentalists. Sierra Club executive director Michael Brune said Obama "has done a substantial amount in his three years to fight the climate crisis." Romney, he said, "is taking his lead from fossil fuel companies and does not even acknowledge there is a climate problem." Romney has been accused of changing positions on the issue to curry favor with the most conservative Republicans, many of whom deny that climate change exists. As governor of the liberal-leaning state of Massachusetts, Romney imposed restrictions on carbon dioxide emissions on power plants in the state. But as a presidential candidate, he has said the "idea of spending trillions and trillions of dollars to try to reduce CO2 emissions is not the right course for us." He acknowledges that the globe is warming, but says "we don't know what's causing climate change on this planet." Early in his administration, Obama was more bullish on tackling climate change. He pushed through tough new fuel economy standards for cars and trucks and promoted alternative energy. But the first years of Obama's presidency were dominated by the political fight over his plan to overhaul the country's health care system. Obama managed to pass health care over intense Republican objections while Democrats controlled both houses of Congress. But after Republicans - fueled by the conservative tea party movement's anti-government, small-tax message - seized control of the House of Representatives in the 2010 elections, the president's legislative agenda has been blocked. The United States is now more politically riven and gripped in partisanship than at any time in recent history. Legislation on a deeply controversial issue like curbing greenhouse gases stands no chance of passage in Congress at a time when Republicans are accusing Obama of reckless spending and burdening businesses with unnecessary regulations. Obama was bitten badly when Solyndra, a solar energy firm that received a $500 million federal loan guarantee, went bankrupt and left taxpayers with the bill. Republicans painted Obama's drive for alternative energy as a waste of time and money in an economy that was struggling to pull out of the worst downturn since the Great Depression. Obama hasn't totally ignored climate change on the campaign trail. As recently as this week he was promoting a drive to expedite seven solar and wind energy projects in the American West. His interior secretary, Ken Salazar, said Tuesday that the administration had in the past three years "approved more utility-scale renewable energy projects on public lands than in the past two decades combined." But there is little chance that the few undecided American voters who will decide the razor-close election will cast their ballots based on the candidates' position on climate change. James Riddlesperger, a political scientist who studies the juncture of science and politics at Texas Christian University, said the political lines are already drawn. "Everybody already knows where the parties, the candidates stand on global warming," he said. "What is done about it awaits the outcome of this election."

#### Winners win – the plan key to consolidate Obama’s momentum

**Creamer 12** (Robert, political organizer and strategist, "Why GOP Collapse on the Payroll Tax Could be a Turning Point Moment", 1/2, [www.huffingtonpost.com/robert-creamer/why-gop-collapse-on-the-p\_b\_1167491.html](http://www.huffingtonpost.com/robert-creamer/why-gop-collapse-on-the-p_b_1167491.html))

Strength and victory are enormous political assets. Going into the New Year, they now belong to the President and the Democrats. One of the reasons why the debt ceiling battle inflicted political damage on President Obama is that it made him appear ineffectual - a powerful figure who had been ensnared and held hostage by the Lilliputian pettiness of hundreds of swarming Tea Party ideological zealots. In the last few months -- as he campaigned for the American Jobs Act -- he has shaken free of those bonds. Now voters have just watched James Bond or Indiana Jones escape and turn the tables on his adversary. Great stories are about a protagonist who meets and overcomes a challenge and is victorious. The capitulation of the House Tea Party Republicans is so important because it feels like the beginning of that kind of heroic narrative. Even today most Americans believe that George Bush and the big Wall Street Banks - not by President Obama -- caused the economic crisis. Swing voters have never lost their fondness for the President and don't doubt his sincerity. But they had begun to doubt his effectiveness. They have had increasing doubts that Obama was up to the challenge of leading them back to economic prosperity. The narrative set in motion by the events of the last several weeks could be a turning point in voter perception. It could well begin to convince skeptical voters that Obama is precisely the kind of leader they thought he was back in 2008 - a guy with the ability to lead them out of adversity - a leader with the strength, patience, skill, will and resoluteness to lead them to victory. That now contrasts with the sheer political incompetence of the House Republican Leadership that allowed themselves to be cornered and now find themselves in political disarray. And it certainly contrasts with the political circus we have been watching in the Republican Presidential primary campaign. 3). This victory will inspire the dispirited Democratic base. Inspiration is the feeling of empowerment - the feeling that you are part of something larger than yourself and can personally play a significant role in achieving that goal. It comes from feeling that together you can **overcome** challenges and win. Nothing **will do more to inspire** committed **Democrats than** the sight of their leader -- President Obama - out **maneuvering** the House **Republicans and forcing them into complete capitulation.** The events of the last several weeks will send a jolt of electricity through the Progressive community. The right is counting on Progressives to be demoralized and dispirited in the coming election. The President's victory on the payroll tax and unemployment will make it ever more likely that they will be wrong. 4). When you have them on the run, that's the time to chase them. The most important thing about the outcome of the battle over the payroll tax and unemployment is that it shifts the political momentum at a critical time. Momentum is an independent variable in any competitive activity - including politics. In a football or basketball game you can feel the momentum shift. The tide of battle is all about momentum. The same is true in politics. And in politics it is even more important because the "spectators" are also the players - the voters. People follow - and vote -- for winners. The bandwagon effect is enormously important in political decision-making. Human beings like to travel in packs. They like to be at the center of the mainstream. Momentum shifts affect their perceptions of the mainstream. For the last two years, the right wing has been on the offensive. Its Tea Party shock troops took the battle to Democratic Members of Congress. In the Mid-Terms Democrats were routed in district after district. Now the tide has turned. And when the tide turns -when you have them on the run - that's the time to chase them.

### 2AC – AT: Russia Relations

#### Romney’s all talk---he’d work with Russia

Gasyuk 12 (Gasyuk, Rossiyskaya Gazeta’s Washington D.C. correspondent, 6-13, “Romney keeps the gloves off”, http://rbth.ru/articles/2012/06/13/romney\_keeps\_the\_gloves\_off\_15854.html)

Given the sharp disagreements between the United States and Russia on Syria, which is now careening toward civil war, Republicans will harshly criticize every attempt by Obama to further emphasize any progress in bilateral relations. “Some realism regarding U.S.-Russia relations would be constructive for the White House if it wants to avoid Republican attacks,” Simes told Russia Now. But this doesn’t mean that presumptive GOP nominee Mitt Romney, if elected, will transform his public anti-Russian statements into political practice. “I believe that most likely Governor Romney believes in the statements he made, but that does not mean that in practice this rhetoric will be his guide for action,” Simes said. “Many statements from the GOP candidates including those on foreign affairs surely have to be taken in the context of the political and electoral reality in the U.S.,” Aron said. “It is not only possible, but highly probable,” that Mitt Romney’s views on Russia will evolve if he is elected, Simes said. American political history is rife with examples of strategic U-turns

that begin the morning after the inauguration balls. When Dwight Eisenhower ran for president, his advisers—such as the famous John Foster Dulles—spoke of Harry Truman’s “cowardly” policy of containment of the Soviet Union and called for the speedy liberation of Eastern Europe. However President Eisenhower instead started the process of normalizing relations through personal meetings with Nikita Khrushchev in 1955 and 1959. President Richard Nixon was viewed as a leading anti-Communist, but it was Nixon who found the way toward detente. Nixon made the first-ever trip by an American president to then-Communist Russia in 1972, but also opened the door to dialogue with Communist China. No one should be too surprised that Mitt Romney, if elected, might rethink his position. When needed for supply routes, Russia is no longer America’s “number one geopolitical foe.” As a president, many observers believe he would take a more realistic approach to handling bilateral ties.

#### Relations useless – don’t solve anything

Ostapenko 9---Trend Daily News staff writer (E., 7/7, “Normalization In U.s.-russian Relations Not To Change Political Situation In World: Analyst At French Studies Institute”, http://www.turkishweekly.net/news/83734/-normalization-in-u-s-russian-relations-not-to-change-political-situation-in-world-analyst-at-french-studies-institute-.html)

Normalization of relations between the United States and Russia will not assume a global significance and will not change the situation in the world, since today Russia does not play the role

 it played formerly, Dominic Moisi, analyst on Russian-American relations, said. "There is a country that is essential for the future of the world, it is not Russia, but it is China," Moisi, founder and senior advisor at the French Institute for International Relations (IFRI), told Trend News in a telephone conversation from Paris

Speaking of the growing role of China, Moisi said that the Chinese are soon going to be the number two economy in the world. Russian economy can not compete. As another important aspect of the increasing weight of China in the world, Moisi considers the absence of problems with the aging of population, unlike European countries, including Russia.

# 1AR

## Solvency

### AT: Cost Overruns

#### Increasing nuclear construction orders will drive overall costs down

Spencer 8 Jack, Research Fellow in Nuclear Energy at The Heritage Foundation, 3/19**,** “Finland's Rational Approach to Nuclear Power”, http://www.heritage.org/Research/Energyandenvironment/bg2117.cfm

Critics have questioned the economic viability of nuclear power based on delays associated with Fin­land's reactor.[8] At $1.4 billion over budget and two years behind schedule, Finland's reactor has had its problems.[9] However, these **delays and cost over­runs are not necessarily indicative of the future eco­nomic viability of nuclear power**. Olkiluoto 3 is a first-of-a-kind, large, multibil­lion-dollar power station. Assigning all of the costs of the first plant to future plants would not be accu­rate. Construction costs will be reduced as lessons learned from initial construction projects are inte­grated into future ones. Some of the overruns are simply a reflection of rising labor and material costs. These increases, which are **not unique to the nuclear industry**, would affect **any** project. Building **the 3,200 windmills that would be needed** to produce the same amount of electric­ity as Olkiluoto 3 will produce would likely **suffer from the same price volatility**.[10] A lack of skilled personnel, shortages of nuclear-qualified components and materials, and inexperi­enced vendors and subcontractors have also slowed progress.[11] Very few reactors have been ordered over the past three decades, and the industrial base and skill sets are simply not yet available to support the growing demand for commercial nuclear power. Although these risks should have been expected for a project like Olkiluoto 3, they are also correctable and will **be resolved by the market over time.**¶ As backlogs are created by new orders, nuclear suppliers will **invest to expand capacity.** For exam­ple, Japan Steel Works has already announced that it will expand its capacity to produce the large forg­ings used to manufacture reactor components. It is the sole supplier of these forgings on the world mar­ket. Other companies have made similar announce­ments to provide expanded uranium enrichment, mining, manufacturing, and used-fuel services. This growth in capacity will eventually meet demand and moderate some of the inflationary pressures that are driving up costs for Finland's newest reactor.

### AT: Natural Gas

#### New nuclear is cheaper than gas even at present prices

Conca 12 James, Forbes, 8/11, "Nuclear Waste Confidence -- NRC Ruling No Big Deal", www.forbes.com/sites/jamesconca/2012/08/11/nuclear-waste-confidence-nrc-ruling-no-big-deal/print/

Huh? Re-licensing nuclear reactors is the absolute cheapest form of energy, about 2¢/kWhr for 20 years. They are obviously referring to new natural gas plants versus new nuclear GenIII plants which is not impacted by this ruling at all. New nuclear is actually cheaper than new gas in the long run, e.g., 20 years or more, even at present gas prices, but our society doesn’t like to plan for the long-term so it usually gets these things wrong. And why anyone thinks gas plants are environmentally preferable to nuclear is odd from a carbon-emissions standpoint.

## China

### AT: No Guam Move

#### Marines are moving---recent progress

ADC 12 Association of Defense Communities, "Marine Corps Realignment to Guam "Coming Together," DOD Official Says", July 22, www.defensecommunities.org/marine-corps-realignment-to-guam-coming-together-dod-official-says/#

During meetings with the governor of Guam and other leaders last week, Deputy Defense Secretary Ashton Carter described the planned relocation of almost 5,000 Marines from Okinawa to Guam as “in a much better place than it was even six months ago,” according to a senior DOD official traveling with Carter.¶ The plan now calls for transferring about 4,800 Marines to the island, rather than the 8,000 originally projected. About two-thirds of the relocating troops will do so on a rotational basis, meaning the island will not need to accommodate as many family members as had initially been planned, the official told American Forces Press Service on background.¶ In turn, Guam will require a smaller number of community-support facilities such as schools and childcare centers. While previous environmental impact studies have determined Guam has sufficient space to support training, housing and headquarters requirements for the Marines, the Navy needs to conduct a supplemental impact study to see if some smaller sites, that had not been considered previously when a larger footprint was required, will be feasible.¶ On Friday before leaving for Japan, Carter took a helicopter tour of possible sites on Guam. DOD officials are trying to place Marine Corps facilities so as to minimize inconvenience on the island’s residents, according to the story.¶ The processes involved in carrying out the realignment, including coordination with Japanese officials and congressional authorization, “all seem to be coming together,” the official said.

## Oil DA

### Impact D

#### No war

David E. Hoffman 10/22/12, contributing editor to Foreign Policy and the author of The Dead Hand: The Untold Story of the Cold War Arms Race and Its Dangerous Legacy, which won the 2010 Pulitzer Prize for general non-fiction, "Hey, Big Spender," Foreign Policy, www.foreignpolicy.com/articles/2012/10/22/hey\_big\_spender?page=full

Despite tensions that flare up, the United States and Russia are no longer enemies; **the chance of nuclear war or surprise attack is nearly zero**. We trade in each other's equity markets. Russia has the largest audience of Facebook users in Europe, and is open to the world in a way the Soviet Union never was.

#### No impact – won’t alter their foreign policy

Blackwill 9 – former associate dean of the Kennedy School of Government and Deputy Assistant to the President and Deputy National Security Advisor for Strategic Planning (Robert, RAND, “The Geopolitical Consequences of the World Economic Recession—A Caution”, http://www.rand.org/pubs/occasional\_papers/2009/RAND\_OP275.pdf)

Now on to Russia. Again, five years from today. Did the global recession and Russia’s present serious economic problems substantially modify Russian foreign policy? No. (President Obama is beginning his early July visit to Moscow as this paper goes to press; nothing fundamental will result from that visit). Did it produce a serious weakening of Vladimir Putin’s power and authority in Russia? No, as recent polls in Russia make clear. Did it reduce Russian worries and capacities to oppose NATO enlargement and defense measures eastward? No. Did it affect Russia’s willingness to accept much tougher sanctions against Iran? No. Russian Foreign Minister Lavrov has said there is no evidence that Iran intends to make a nuclear weapon.25 In sum, Russian foreign policy is today on a steady, consistent path that can be characterized as follows: to resurrect Russia’s standing as a great power; to reestablish Russian primary influence over the space of the former Soviet Union; to resist Western eff orts to encroach on the space of the former Soviet Union; to revive Russia’s military might and power projection; to extend the reach of Russian diplomacy in Europe, Asia, and beyond; and to oppose American global primacy. For Moscow, these foreign policy first principles are here to stay, as they have existed in Russia for centuries. 26 None of these enduring objectives of Russian foreign policy are likely to be changed in any serious way by the economic crisis.

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#### Low prices inev – Saudi and demand

LeVine 12 Steve LeVine, writer for Foreign Policy, June 20, 2012, “Why oil prices are keeping Putin up at night”, http://oilandglory.foreignpolicy.com/posts/2012/06/20/why\_oil\_prices\_are\_keeping\_putin\_up\_at\_night

Citigroup's Morse thinks that prices can fall further from where they are now, but not as low as Verleger forecasts because, he told me, today's market conditions are different from 2008 -- the decline in demand is not as steep, and inventories are not as large. Morse calculates that Brent can fall into the $70s-per-barrel range and U.S.-traded oil into the $60s-a-barrel range. "**There is a good chance Saudi Arabia continues to produce enough to force [a rise in oil inventories]**. And there's a good chance, between Europe and China, that demand growth could come to a halt," Morse said. OPEC might respond by reducing production, **but its actions would be late**. "Add to the scenario no more supply disruptions (or only modest ones) and no military conflict involving Iran," Morse said, "and **prices could fall another $20 a barrel fairly easily**.

## Elections

### AT Nationalism – Inevitable

#### Nationalism inevitable – political incentives mean leaders will work to preserve it

Corcoran 9 [Ed Corcoran, editor of Survivalist magazine, “Engaging Russia,” March 23 2009, http://sitrep.globalsecurity.org/articles/090323252-engaging-russia.htm]

Economic frustrations were compounded by the loss of international prestige – the Soviet Union had been one of the two superpowers dominating global politics, but Russia was at best a bit player. Its once feared army was reduced to a shadow of its former self, barely able to control tiny Chechnya. The choice of NATO as a major vehicle for Western support of the newly independent East European countries was unfortunate; its origin as a military organization focused against Russia made it an unnecessary provocation which the leadership was quick to exploit.

Against this background, with a thousand-year tradition of autocratic leaders and a cultural tradition of a special mission for Russia, it was only natural that a strong leader who stood up to the West would get wide support. Vladimir Putin, only too ready to provide such leadership, received a huge boost by the fortuitous rise of energy prices in the last decade. This allowed him to once again have Russia play a prominent and independent role on the world stage, a role which provided very satisfying psychological rewards to the Russian people, but little economic or social benefit.

It is to the regime's benefit to maintain an adversarial or confrontational stance vis-a-vis the West, promoting nationalistic attitudes and intensifying internal controls. Hard line Russian leaders stress the need for military modernization, eliciting matching calls from hard line Western leaders. The popular support these measures engender allows the regime to suppress opposition and democratic elements. This situation will not change until the underlying attitudes of the Russian people change significantly, and that obviously is a long term project.

### Romney = Rhetoric

#### Reject apocalyptic elections impacts---they’re just campaign stunts

Gibson 10/24 Ginger is a national political reporter at Politico. “Election doomsday scenarios abound,” 2012, http://www.politico.com/news/stories/1012/82848.html

It doesn’t matter who wins the election, the result will be apocalyptic.¶ If Mitt Romney seizes victory, the nation will be in a state of constant war — a result of rampant voter disenfranchisement — and widespread rioting will erupt. If Barack Obama wins, he’s going to round up every gun in the country, the United States will report to the United Nations and civil war will break out.¶ No, **these scenarios** aren’t part of the doomsday prophecies on the Mayan calendar.¶ They**’re the wildly exaggerated and factually baseless fictions laid out by extreme factions in both parties should the other side win**. As the use of Twitter has exploded in the 2012 campaign, coupled with more expansive use of Facebook and other social networks, the rumble of extreme partisans propagating strange conspiracy theories is getting louder.¶ “I don’t think there are any more conspiracy theorist stories floating around than in past cycles, just more channels for them to play out on,” said Republican strategist Greg Mueller. “With social media, everyone has a broadcast outlet.”

#### Romney’s anti-Russia policy is just rhetoric

LA Times 12 (Maeve Reston and Seema Mehta, “Mitt Romney struggles to differentiate his foreign policy from the president's”, 5/31, http://articles.latimes.com/2012/may/31/nation/la-na-romney-foreign-policy-20120531)

In 2008, Romney called for more collaboration with China and Russia. In a debate four months ago, he put Russian leader Vladimir Putin in the same category — among the "world's worst actors" — as Cuba's Fidel Castro and Iran's Mahmoud Ahmadinejad. He labeled Russia the United States' "No. 1 geopolitical foe," in a March interview on CNN. The latter statement drew widespread scorn as a throwback to Cold War-era politics.¶ Yet Russia represents another instance in which Romney and Obama don't differ much, despite the rhetoric. Romney has assailed Obama as trying to appease the Russians by scrapping a George W. Bush-era plan to build a missile-defense system in Eastern Europe, and replacing it with a different plan to be completed by 2020. Yet Romney says he is willing to commit to the same timeline.

#### Romney won’t change policy

NYT 12(New York Times, Peter Baker, “Romney and Obama Strain to Show Gap on Foreign Policy”, 7/28, http://www.nytimes.com/2012/07/29/us/politics/obama-and-romney-strain-to-assert-foreign-policy-differences.html?pagewanted=all)

Mr. Romney has called Russia “our No. 1 geopolitical foe” and declared Mr. Obama’s effort to improve relations a failure. Mr. Romney promises to challenge Mr. Putin’s authoritarianism. But he has not suggested cutting off cooperation between the countries’ space programs or counterterrorism agencies, nor shutting down the Afghanistan supply route through Russia negotiated by Mr. Obama. He supports Mr. Obama’s drive to normalize trade relations, though with a human rights amendment the president initially resisted.¶ Mr. Romney’s visit to Poland is intended to highlight what he called Mr. Obama’s “sudden abandonment of friends in Poland” under Russian pressure by canceling Mr. Bush’s missile defense program partly based there. But Mr. Obama did not abandon missile defense altogether; he substituted a reconfigured system devised by Mr. Bush’s last defense secretary.

### No Switch

#### No internal link in the 1NC – even if plan unpopular, doesn’t change votes

Sawyers 10/25—publisher of the Times-Tribune (Willie, Publisher's Notebook: Voters’ minds already made up, http://www.sentinel-echo.com/opinion/x1400199904/Publishers-Notebook-Voters-minds-already-made-up)

The political blather will increase ten fold the next two weeks approaching the November 6 election. But it won’t matter much. This presidential campaign has been going on for two years now and most people, like me, already have made up their minds up about who they are going to vote for.¶ People should realize they are wasting their time at this stage trying to sway others to their point of view. After watching three debates and thousands of political advertisements, voters surely have picked their candidate. So, the next thousand ads until the 6th will just be overkill.

#### Neither side will campaign on it

Wood 12 (Elisa, "What Obama and Romney Don’t Say About Energy", AOL Energy, 9-13, http://energy.aol.com/2012/09/13/what-obama-and-romney-dont-say-about-energy/)

Fossil fuels and renewable energy have become touchy topics in this election, with challenger Mitt Romney painting President Barack Obama as too hard on the first and too fanciful about the second – and Obama saying Romney is out of touch with energy's future.¶ But two other significant resources, nuclear power and energy efficiency, are evoking scant debate.¶ What gives?¶ Nuclear energy supplies about 20 percent of US electricity, and just 18 months ago dominated the news because of Japan's Fukushima Daiichi disaster – yet neither candidate has said much about it so far on the campaign trail.¶ Romney mentioned nuclear power only seven times in his recently released white paper, while he brought up oil 150 times. Even wind power did better with 10 mentions. He pushes for less regulatory obstruction of new nuclear plants, but says the same about other forms of energy.¶ Obama's campaign website highlights the grants made by his administration to 70 universities for research into nuclear reactor design and safety. But while it is easy to find his ideas on wind, solar, coal, natural gas and oil, it takes a few more clicks to get to nuclear energy.¶ The Nuclear Energy Institute declined to discuss the candidates' positions pre-election. However, NEI's summer newsletter said that both "Obama and Romney support the use of nuclear energy and the development of new reactors."¶ It was unimaginable what hit that plant." - Krueger, Accenture¶ Still, nuclear is unlikely to become a bigger slice of the energy pie in the US over the next two decades because of the high cost to build new plants, according the US Energy Information Administration.¶ That may explain part of the campaign silence about nuclear. Another is lingering public worry about Fukushima, say industry observers. Even those who see nuclear as safe, say they understand why the candidates would want to steer clear of the discussion.

#### Energy won’t switch votes even if they campaign on it

Farnam 12 T.W. is a writer at WashPost politics. “Energy ads flood TV in swing states,” 6/27, http://www.washingtonpost.com/politics/energy-ads/2012/06/27/gJQAD5MR7V\_story.html

**Energy issues don’t spark much excitement among voters**, ranking below health care, education and the federal budget deficit — not to mention jobs and the economy.¶ And yet those same voters are being flooded this year with campaign ads on energy policy. Particularly in presidential swing states, the airwaves are laden with messages boosting oil drilling and natural gas and hammering President Obama for his support of green energy. The Cleveland area alone has heard $2.7 million in energy-related ads.¶ The disconnect between what voters say they care about and what they’re seeing on TV lies in the money behind the ads, much of it coming from oil and gas interests. Those funders get the double benefit of attacking Obama at the same time they are promoting their industry.¶ Democrats also have spent millions on the subject, defending the president’s record and tying Republican candidate Mitt Romney to “Big Oil.”¶ Overall, more than $41 million, about one in four of the dollars spent on broadcast advertising in the presidential campaign, has gone to ads mentioning energy, more than a host of other subjects and just as much as health care, according to ad-tracking firm Kantar Media/Cmag.¶ In an election focused heavily on jobs and the economy, all of this attention to energy seems a bit off topic. But the stakes are high for energy producers and environmentalists, who are squared off over how much the government should regulate the industry. And attention has been heightened by a recent boom in production using new technologies such as fracking and horizontal drilling, as well as a spike in gas prices this spring just as the general election got underway.¶ When asked whether energy is important, more than half of voters say yes, according to recent polls. But asked to rank their top issues, **fewer than 1 percent mention energy.**