### Prez powers good

**Prez powers inevitable – congress won’t check growth**

**Sulmasy, law prof, 9**—law faculty of the United States Coast Guard Academy (Glenn, Anniversary Contributions: Use of Force: Executive Power: the Last Thirty Years, 30 U. Pa. J. Int'l L. 1355, Summer 2009, Lexis, AMiles)

Supporting a strong executive in foreign affairs does not necessarily mean the legislature has no role at all. In fact, their dominance in domestic affairs remains strong. Additionally, besides the traditional roles identified in the Constitution for the legislature in foreign affairs - declaring war, ratifying treaties, overseeing appointments of ambassadors, etc. - this growth of executive power now, more than ever, necessitates an enhanced, professional, and apolitical oversight of the executive. An active, aggressive oversight of foreign affairs, and warfare in particular, by the legislature is now critical. Unfortunately, the United States - particularly over the past decade - has witnessed a legislature unable to muster the political will necessary to adequately oversee, let alone check, the executive branch's growing power. Examples are abundant: lack of enforcement of the War Powers Resolution abound the executive's unchecked invasions of Grenada, Panama, and Kosovo, and such assertions as the Authorization for the Use of Military Force, the USA Patriot Act, military commissions, and the updated Foreign Intelligence Surveillance Act ("FISA"). There have been numerous grand-standing complaints registered in the media and hearings over most, if not all, of these issues. However, in each case, the legislature has all but abdicated their constitutionally mandated role and allowed the judicial branch to serve as the only real check on alleged excesses of the executive branch. This deference is particularly dangerous and, in the current environment of foreign affairs and warfare, tends to unintentionally politicize the Court.

**Presidential power is key to arms control.**

James **Graybeal,** senior scientist @ Science Applications International Corporation, chief scientist @ SAIC, director if Office of Strategic Research at CIA (Presidents and Arms Control) pg. 63-4, 19**94**

Kissinger believed that the role of the NSC staff was to develop a set of options for the President. Kissinger restructured the staff, creating interdepartmental groups to study problem areas and formulate policy choices; the groups would develop and assess alternatives. He created a verification panel and a senior review group at the undersecretary level-which he chaired-to deal with recommendations coming up the ladder from the interdepartmental groups, various departments, and various government agencies. In this manner the control of national security decision making was centered in the White House, which dearly the President wanted, as well as Kissinger, because President Nixon, like President Kennedy, without question gave top priority to foreign affairs. Kissinger also created various special groups that were subordinate to the NSC-such as the Vietnam Special Studies Group-which strengthened the NSC and helped the NSC staff attempt to dominate the Department of State. Kissinger's success in this regard can be seen in a statement made at that time by President Nixon to the effect that, "Kissinger covers not only foreign policy, but national security policy-the coordination of those policies." Of course, Kissinger remained a key player in the Ford administration. During both administrations, while Kissinger's personal influence was virtually unassailable, the NSC staff had markedly less power during the Ford administration, with no direct access to the president. Arms control during this period, while conducted by ACDA negotiators, was not removed from the intervention of the powerful Henry Kissinger. Although career diplomats might have felt neglected during the Kissinger era, or indeed stung by it, it can be argued that the positive outcome of that period was an extraordinary set of arms control agreements based on the premise that arms control really worked**. Only a strong president could have brought such an ambitious arms control agenda through congressional ratification**. During the height of the Nixon years, the agreements reflected the power of the President, his international interests, and the power of Henry Kissinger. Presidents Ford and Carter, who for very different reasons had single-term presidencies, were unable to achieve the depth and the span of the Nixon arms control initiatives. As an example, the SALT I agreements represented the first U.S.-Soviet agreements to place limits and restraints on some of those countries' central and most important strategic offensive and defensive weapons. The agreements were a diplomatic achievement because there were large asymmetries in the Soviet and American weapon systems, and material differences in the two countries'defense needs and defense commitments.

**The collapse of global arms control agreements risks extinction**

**Muller 2k** (Harald, Director of Peace Research Institute—Frankfurt + Prof of Int'l Relations @ Goethe University, "Compliance Politics: A Critical Analysis of Multilateral Arms Control Treaty Enforcement," Nonproliferation Review, Summer, p. 78)

At the global level, arms limitation or prohibition agreements, notably in the field of weapons of mass destruction, are needed to ban existential dangers for global stability, ecological safety, and maybe the very survival of human life on earth. In an age of increasing interdependence and ensuing complex networks that support the satisfaction of basic needs, international cooperation is needed to secure the smooth working of these networks. Arms control can create underlying conditions of security and stability that reduce distrust and enable countries to commit themselves to far-reaching cooperation in other sectors without perceiving undesirable risks to their national security.

**Turns econ**

James D. Humphrey II, J.D., University of Michigan Law School; M.A.L.D., The Fletcher School of Law & Diplomacy, Fall 1995 (17 Mich. J. Int'l L. 181)

Answering these questions requires a careful rethinking of the relationship of authority and necessity in economic security issues. Obviously, reconciling authority and necessity neatly is impossible in this "frontier" area of concurrent power; the tension results not so much from the subject matter or situation, as from the Constitution itself. Guiding this reconciliation are the twin principles of timely action and accountability, and the Mexican crisis provides lessons regarding both. The new kind of crisis we face is not only economic, but also psychological; it is a crisis of market confidence. While Congress maintains control of foreign affairs largely through its appropriations power, and seeks to limit disbursements to both tighten control and maintain budgetary discipline, this new kind of crisis requires that vast resources will be committed. At least initially, the fact of the assistance is more important than its details. In such circumstances, large off-budget contingency funds and the broad executive authority to use them, subject to later congressional oversight and political and market risk, appear necessary and advantageous. Such crises also require careful consideration of timing - specifically, the need for speed. To paraphrase Robert Bartley, we think of trade as it slowly splashes along in ships, while its inevitable complement - capital - now travels at the speed of light. 176 Clearly, to cope with this reality, the government must be able to respond in a timely [\*216] manner, relative to the circumstances. The recent experience with Mexico demonstrates that these new crises require executive leadership and authority. However unhappy it may be, under the Constitution's separation of power structure, democracy comes from the Congress, while security comes from the President. 177 History provides a long list of the "undemocratic" actions of presidents taken in the name of national security, but such questionable unilateral actions in the economic field are clearly less desirable due to constitutional, political, and practical limitations. It is important to remember that "undemocratic" does not mean "unconstitutional." The framers believed the president could use military force "to repel sudden attacks" 178 and an appropriate analogy could be made to economic emergencies, especially those, like Mexico's, that threaten global instability.

#### Turns terror

**Rose, 1997** (Gary, professor of political science at Sacred Heart, The American Presidency Under Siege, p. 172-173)

Terrorist acts throughout the world, as well as within the United States, will require constant attention and decisive action on the part of future presidents. Cecil V. Crab and Kevin Mulcahy note that the United States “is the wealthiest and most powerful nation known to history, and this fact inevitably creates resentment and hostility toward it.”103 Terrorist acts waged against American citizens and property are perpetrated by a variety of organizations and sects. The common denominator, if one exists, is that each is motivated by a rigid ideological or religious doctrine combined with a fanatical devotion to their cause. For the last two decades, the fundmentalist, anti-western religious sects of the Middle East presented the most direct threat to the lives of American civilians, diplomats, and military personnel. To citizens of the United States, terrorism and Middle East religious fundamentalism seemed synonymous. At the same time, terrorism against Americans appeared to be an activity that occurred in airports and cities in countries far from the shores of the United States. Perceptions of terrorism changed with the decade of the nineties. The bombing of the World Trade Center in New York City in 1993 by Islamic extremists demonstrated in no uncertain terms that terrorism within the borders of the United States was more than possible. This was further confirmed by the brutal bombing of a federal building in Oklahoma City in 1995 which claimed 169 lives, many of whom were pre-schoolers enrolled in the building’s day care center. The Oklahoma bombing also brought to an end the terrorist stereotype, as the intensive manhunt which ensued resulted in the arrest of three American citizens with links to right wing militia groups. Although it is difficult to assess the strength and potential danger of the heavily armed militias due to their confederative structure, it is reasonable to surmise that the next wave of terrorist acts directed against American citizens and federal property will emanate from radical militia groups based on American soil. Terrorism takes many forms, including assassination, indiscriminate bombings of men, women, and children, bank robberies, liberation of imprisoned comrades, kidnapping for ransom, and hijacking. 104 Whether they involve bullets, a bomb, or garrote, acts of terrorism directed against the United States government and the American people will undoubtedly remain a pressing issue for future presidents. Only a strong presidency employing the force of federal power will ensure that the American people will be safe against the terrorist threat. A president’s control over the federal bureaucracy, particularly the Department of Justice and the attorney general, is especially relevant.

### 1nc Terrorism f/l

#### No Risk of nuclear terror – 4 reasons

* States won’t give
* No chance they can be stolen
* If they are stolen we can stop it
* Cant successfully attack

**Mearsheimer 11,**January, John J., Wendell Harrison Distinguished Service Professor of Political Science at the University of Chicago. He is on the Advisory Council of The National Interest, “Imperial by Design,”http://nationalinterest.org/article/imperial-by-design-4576?page=3,

The fact is that states have strong incentives to distrust terrorist groups, in part because they might turn on them someday, but also because countries cannot control what terrorist organizations do, and they may do something that gets their patrons into serious trouble. This is why there is hardly any chance that a rogue state will give a nuclear weapon to terrorists. That regime’s leaders could never be sure that they would not be blamed and punished for a terrorist group’s actions. Nor could they be certain that the United States or Israel would not incinerate them if either country merely suspected that they had provided terrorists with the ability to carry out a WMD attack. A nuclear handoff, therefore, is not a serious threat. When you get down to it, there is only a remote possibility that terrorists will get hold of an atomic bomb. The most likely way it would happen is if there were political chaos in a nuclear-armed state, and terrorists or their friends were able to take advantage of the ensuing confusion to snatch a loose nuclear weapon. But even then, there are additional obstacles to overcome: some countries keep their weapons disassembled, detonating one is not easy and it would be difficult to transport the device without being detected. Moreover, other countries would have powerful incentives to work with Washington to find the weapon before it could be used. The obvious implication is that we should work with other states to improve nuclear security, so as to make this slim possibility even more unlikely. Finally, the ability of terrorists to strike the American homeland has been blown out of all proportion. In the nine years since 9/11, government officials and terrorist experts have issued countless warnings that another major attack on American soil is probable—even imminent. But this is simply not the case.3 The only attempts we have seen are a few failed solo attacks by individuals with links to al-Qaeda like the “shoe bomber,” who attempted to blow up an American Airlines flight from Paris to Miami in December 2001, and the “underwear bomber,” who tried to blow up a Northwest Airlines flight from Amsterdam to Detroit in December 2009. So, we do have a terrorism problem, but it is hardly an existential threat. In fact, it is a minor threat. Perhaps the scope of the challenge is best captured by Ohio State political scientist John Mueller’s telling comment that “the number of Americans killed by international terrorism since the late 1960s . . . is about the same as the number killed over the same period by lightning, or by accident-causing deer, or by severe allergic reactions to peanuts.”

#### Your evidence is all hype - there’s a 1 in 3.5 billion chance of a terrorist strike

Schneidmiller 9 (Chris, GSN Writer, Citing John Mueller of Ohio State, “Experts Debate Threat of Nuclear, Biological Terrorism,” January 13th, http://www.globalsecuritynewswire.org/gsn/nw\_20090113\_7105.php)

There is an "almost vanishingly small" likelihood that terrorists would ever be able to acquire and detonate a nuclear weapon, one expert said here yesterday (see GSN, Dec. 2, 2008). In even the most likely scenario of nuclear terrorism, there are 20 barriers between extremists and a successful nuclear strike on a major city, said John Mueller, a political science professor at Ohio State University. The process itself is seemingly straightforward but exceedingly difficult -- buy or steal highly enriched uranium, manufacture a weapon, take the bomb to the target site and blow it up. Meanwhile, variables strewn across the path to an attack would increase the complexity of the effort, Mueller argued. Terrorists would have to bribe officials in a state nuclear program to acquire the material, while avoiding a sting by authorities or a scam by the sellers. The material itself could also turn out to be bad. "Once the purloined material is purloined, [police are] going to be chasing after you. They are also going to put on a high reward, extremely high reward, on getting the weapon back or getting the fissile material back," Mueller said during a panel discussion at a two-day Cato Institute conference on counterterrorism issues facing the incoming Obama administration. Smuggling the material out of a country would mean relying on criminals who "are very good at extortion" and might have to be killed to avoid a double-cross, Mueller said. The terrorists would then have to find scientists and engineers willing to give up their normal lives to manufacture a bomb, which would require an expensive and sophisticated machine shop. Finally, further technological expertise would be needed to sneak the weapon across national borders to its destination point and conduct a successful detonation, Mueller said. Every obstacle is "difficult but not impossible" to overcome, Mueller said, putting the chance of success at no less than one in three for each. The likelihood of successfully passing through each obstacle, in sequence, would be roughly one in 3 [and a half] 1/2 billion, he said, but for argument's sake dropped it to 3 1/2 million. "It's a total gamble. This is a very expensive and difficult thing to do," said Mueller, who addresses the issue at greater length in an upcoming book, Atomic Obsession. "So unlike buying a ticket to the lottery ... you're basically putting everything, including your life, at stake for a gamble that's maybe one in 3 1/2 million or 3 1/2 billion." Other scenarios are even less probable, Mueller said. A nuclear-armed state is "exceedingly unlikely" to hand a weapon to a terrorist group, he argued: "States just simply won't give it to somebody they can't control." Terrorists are also not likely to be able to steal a whole weapon, Mueller asserted, dismissing the idea of "loose nukes." Even Pakistan, which today is perhaps the nation of greatest concern regarding nuclear security, keeps its bombs in two segments that are stored at different locations, he said (see GSN, Jan. 12). Fear of an "extremely improbable event" such as nuclear terrorism produces support for a wide range of homeland security activities, Mueller said. He argued that there has been a major and costly overreaction to the terrorism threat -- noting that the Sept. 11 attacks helped to precipitate the invasion of Iraq, which has led to far more deaths than the original event. Panel moderator Benjamin Friedman, a research fellow at the Cato Institute, said academic and governmental discussions of acts of nuclear or biological terrorism have tended to focus on "worst-case assumptions about terrorists' ability to use these weapons to kill us." There is need for consideration for what is probable rather than simply what is possible, he said.

#### Terrorists don’t want wmd

Frost 05 – (Robin, teaches political science at Simon Fraser University, British Colombia, “Nuclear Terrorism after 9/11,” Adelphi Papers, December)

Psychotic terrorist killers. The overwhelming majority of terrorists are as psychologically healthy, rational and intelligent as the rest of us; indeed, mentally ill terrorists would be far less dangerous and much easier to deal with. Terrorists are typically neither psychopathic nor psychotic, nor are they driven by mere bloodlust. Furthermore, terrorists have not historically been particularly interested in WMD, and no terrorist use of WMD of any kind has resulted in mass casualties, unless the airliners used in New York and Washington on 11 September 2001 (‘9/11’) count as weapons of mass destruction. States, on the other hand, have used WMD to great effect. This is not to say that terrorists are not interested in killing large numbers of people; clearly, some are. Much of the concern about nuclear terrorism derives from the reasonable fear that al-Qaeda might be planning an attack even more lethal than those of 9/11. However, neither al-Qaeda nor any of the organisations linked to it has ever used WMD, and the evidence that they have the will or technical capacity to do so is limited and unconvincing.

### 2NC China Impact

#### Split with the Saudis pushes them to China – causes great power conflict

Luft 2004 (Gal, executive director of the Institute for the Analysis of Global Security (IAGS) a Washington based think tank focused on energy security, specializes in strategy, geopolitics, terrorism, Middle East and energy security, Los Angeles Times, “US, China Are on Collision Course Over Oil” http://www.globalpolicy.org/security/natres/oil/2004/0202collision.htm)

Optimists claim that the world oil market will be able to accommodate China and that, instead of conflict, China's thirst could create mutual desire for stability in the Middle East and thus actually bring Beijing closer to the U.S. History shows the opposite: Superpowers find it difficult to coexist while competing over scarce resources. The main bone of contention probably will revolve around **China's relations with Saudi Arabia**, home to a quarter of the world's oil. The Chinese have already supplied the Saudis with intermediate range ballistic missiles, and they played a major role 20 years ago in a Saudi financed Pakistani nuclear effort that may one day leave a nuclear weapon in the hands of a Taliban-type regime in Riyadh or Islamabad. Since 9/11, a deep tension in U.S.-Saudi relations has provided the Chinese with an opportunity to win the heart of the House of Saud. The Saudis hear the voices in the U.S. denouncing Saudi Arabia as a "kernel of evil" and proposing that the U.S. seize and occupy the kingdom's oil fields. The Saudis especially fear that if their citizens again perpetrate a terror attack in the U.S., there would be no alternative for the U.S. but to terminate its long-standing commitment to the monarchy - and perhaps even use military force against it. The Saudis realize that to forestall such a scenario they can no longer rely solely on the U.S. to defend the regime and must diversify their security portfolio. In their search for a new patron, they might find China the most fitting and willing candidate. The risk of Beijing's emerging as a competitor for influence in the Middle East and a Saudi shift of allegiance are things Washington should consider as it defines its objectives and priorities in the 21st century. Without a comprehensive strategy designed to prevent China from becoming an oil consumer on a par with the U.S., **a superpower collision is in the cards**. The good news is that we are still in a position to halt China's slide into total dependency.

### 1nc Oil Dependence f/l

#### Status quo tech solves shortages and even if the plan displaces oil as an energy source it can't solve dependence

**Wagner 11** – White House Correspondent for Politics Daily, cultural correspondent for the Center for American Progress (Alex, August 11, "Apple vs. Exxon: The Battle for America's Most Valuable Company Isn't Over Yet," http://www.huffingtonpost.com/2011/08/11/apple-vs-exxon-the-battle\_n\_924764.html?ir=Canada%20Lifestyle&utm\_medium=referral&utm\_source=pulsenews)

As fossil fuels become more limited in supply, energy companies, including Exxon, are using methods such as [ultra-deep water drilling](http://videos.howstuffworks.com/medialink/14668-ultra-deep-water-oil-drilling-video.htm) and [sub-salt drilling](http://www.gomr.boemre.gov/homepg/offshore/gulfocs/subsalt/subsalt.html) to find new reserves, according to [Frank A. Verrastro](http://csis.org/expert/frank-verrastro), the director of the energy and national security program at the Center for Strategic and International Studies.

"You've also started to see a movement in shale gas," he said. "A lot of these oil companies have seen the writing on the wall that the world is changing, so they need to adjust their strategy."

Despite the pressures of climate change, the global economy's dependence on oil isn't likely to wane anytime soon, Green said.

"There is the **inescapable reality** that even if we didn’t use oil for energy, it is the basis for our entire chemistry," said Green. "From fertilizer to the materials used to make, well, **everything,** our chemistry is petrochemistry. There is nothing on the horizon that is going to displace that. There's no magic gizmo that does that for you -- and there's no evidence that there's anything around the corner that will."

#### A litany of recent factors mean oil dependency will end

* Efficiency
* Biofuels
* Electric Cars
* Domestic Natural Gas
* Domestic Oil Production

**Krauss 11** – correspondent for The New York Times, he worked as a foreign correspondent for The Wall Street Journal and was the Edward R. Murrow fellow at the Council on Foreign Relations, has published articles in Foreign Affairs, GQ and Wilson Quarterly, along with other publications. (Clifford, 3-30-11, “Can We Do Without the Mideast?” <http://www.nytimes.com/2011/03/31/business/energy-environment/31FUEL.html?pagewanted=all>) Jacome

The 2007 Energy Independence and Security Act, the most serious energy legislation in a generation, went a long way toward reaching those goals. It raised auto and light truck efficiency requirements to 35 miles a gallon by 2020, from the current 27.5. It obliged producers of transportation fuels to gradually increase blending of biofuels into gasoline to replace oil, from nine billion gallons a year in 2008 to 36 billion gallons in 2022, a goal that will require the production of advanced biofuels in commercial quantities. Pilot-scale plants are working on producing various kinds of advanced cellulosic ethanol, butanol and other biofuels made out of plant and other wastes.

The results could be revolutionary, as the American vehicle fleet is replaced over the next 15 years. Several car companies are working on improvements to the internal combustion engine that could yield 50 miles to the gallon, or more, in a few years.

Genetically modified crops promise to improve yields for ethanol. Every major auto manufacturer has a hybrid or plug-in electric car planned for the marketplace, and utilities and other companies are working on building a charge-up infrastructure in cities across the country. Battery prices are coming down significantly.

A recent study by the consulting firm Accenture estimated that it would be possible to replace 30 percent of gasoline demand by 2030 by adopting a fuel-efficiency standard of 40 miles a gallon over the next 20 years and gradually doubling the current blending of biofuels to 30 billion gallons by 2030.

Research breakthroughs are occurring across a wide range of alternative fuels and vehicles, but barriers to reaching commercial scale remain. Competitiveness with oil-based technologies is not guaranteed unless there is some government intervention, like subsidies or taxes on carbon.

“We are on the trajectory to reduce our imports substantially, but it’s not going to be an easy journey,” said Melissa Stark, partner and senior energy analyst at Accenture, “because the new technologies will have to compete with our very efficient oil industry. There has to be a pathway to competitiveness.”

In the meantime, natural gas has the greatest promise to replace diesel fuel in trucks. Clean Energy Fuels, a natural gas distributor, estimates that the country’s eight million trucks use up to 40 billion gallons of diesel a year. The company figures it would take five trillion cubic feet of gas a year to replace that amount of diesel, which alone would displace 2.3 million barrels of oil a day.

With natural gas reserves of 284 trillion cubic feet (and with estimates rising), the country would have little trouble producing the gas, presuming that the oil and gas industry can answer growing environmental concerns surrounding their hydraulic fracturing practices.

The government would also need to provide billions of dollars of incentives for truck companies to convert their trucks and for filling stations to install the fueling equipment.

A conversion may be beginning. United Parcel Service recently announced that it would add 48 trucks fueled on liquid natural gas to its fleet and would add more once the fueling infrastructure was in place. It took $5.5 million in government grants for the project, and more research is needed to develop pump technology and onboard storage tanks to prevent methane escapes.

Then, of course, there is the “drill baby drill” approach — not the best, many environmentalists would argue, to protect the environment and reduce climate change but one that is already working to decrease imports.

In 2009, the United States produced more oil than the year before for the first since 1985 because of the combined increase in production from deepwater Gulf of Mexico production and drilling in a giant shale field in North Dakota.

Domestic production again rose in 2010, by 3 percent, while imports have fallen slowly but steadily since 2006. Edward Westlake, a Credit Suisse managing director for energy research, calculates that the United States will be producing an additional 2.4 million barrels of oil and other liquid fuels by 2016, on top of the 8.6 million barrels a day produced in 2010, even with a natural decline in existing domestic oil fields.

At the same time he forecasts a small increase in demand for transportation fuels. “Bottom line, we’re becoming more independent but more work needs to be done,” he said. The blowout on a BP well in the Gulf of Mexico last year that left 11 workers dead and spilled millions of barrels of crude will undoubtedly slow development offshore for at least a few years, and was a setback to energy independence.

#### Multiple sources ensure dependence will come

**Krauss 11** – correspondent for The New York Times, he worked as a foreign correspondent for The Wall Street Journal and was the Edward R. Murrow fellow at the Council on Foreign Relations, has published articles in Foreign Affairs, GQ and Wilson Quarterly, along with other publications (Clifford, Oct 25, “New Technologies Redraw the World’s Energy Picture” <http://www.nytimes.com/2011/10/26/business/energy-environment/new-technologies-redraw-the-worlds-energy-picture.html?_r=2>) Jacome

GOLDA MEIR, the former prime minister of Israel, used to tell a joke about how Moses must have made a wrong turn in the desert: “He dragged us 40 years through the desert to bring us to the one place in the Middle East where there was no [oil](http://topics.nytimes.com/top/news/business/energy-environment/oil-petroleum-and-gasoline/index.html?inline=nyt-classifier).’ ”

As it turns out, Moses may have had it right all along. In the last couple of years, vast amounts of [natural gas](http://topics.nytimes.com/top/news/business/energy-environment/natural-gas/index.html?inline=nyt-classifier) have been found deep under Israel’s Mediterranean waters, and studies have begun to test the feasibility of extracting synthetic oil from a large kerogen-rich rock field southwest of Jerusalem.

Israel’s swing of fate is just one of many big energy surprises developing as a new generation of unconventional fossil fuels take hold. From the high Arctic waters north of Norway to a shale field in Argentine Patagonia, from the [oil sands](http://topics.nytimes.com/top/reference/timestopics/subjects/o/oil_petroleum_and_gasoline/oil_sands/index.html?inline=nyt-classifier) of western Canada to deepwater oil prospects off the shores of Angola, giant new oil and gas fields are being mined, steamed and drilled with new technologies. Some of the reserves have been known to exist for decades but were inaccessible either economically or technologically.

Put together, these fuels **should bring hundreds of billions of barrels** of recoverable reserves to market in coming decades and shift geopolitical and economic calculations around the world. The new drilling boom is expected to diversify global sources away from the Middle East, just as the growth in consumption of fuels shifts from the United States and Europe to China, India and the rest of the developing world.

“Use whatever hackneyed phrase you want, like tectonic shift or game-changer,” said Edward L. Morse, global head of commodity research at Citigroup. “These sources will dramatically change the energy supply outlook, and there is little debate about that.”

This striking shift in energy started in the 1990s with the first deepwater wells in the Gulf of Mexico and Brazil, but it has taken off in the last decade as a result of declining conventional fields, climbing energy prices and swift technological change.

The United States may now have the means to reduce its half century of dependence on the Middle East. China and India may have the means to fuel the development of their growing middle classes. Japan and much of Europe may have the chance to reduce dependence on nuclear power. And, at least theoretically, poor African countries might be able to lift themselves out of poverty.

For consumers around the world, the new fuels should moderate future price increases.