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Assuming the Leadership Role on Climate Change and Energy Security

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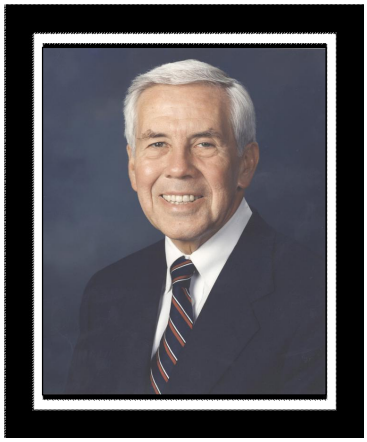

Leadership in response to challenging problems requires collaboration, often with groups and nations deemed hostile and unfriendly. In light of energy insecurity and the consequences of global warming, strong foreign policy leadership necessitates open and transparent dialogue coupled with the forging of partnerships, even in an atmosphere of challenging international relations.

SENATOR RICHARD G. LUGAR (IN)

Assuming the Leadership Role on Climate Change and Energy Security

Background

In August of 2005, I represented President Bush on a diplomatic mission to North Africa. The President had asked me to go to Algeria and Morocco to facilitate the release of the longest-held prisoners of war in the world – the 404 Moroccan soldiers, some of whom had been held since the 1970s by the Polisario Front – operating out of Algeria. American diplomats had discussed their potential release and General Jim Jones, Supreme Allied Commander in Europe, had offered to transport the prisoners of war home to their families, if we were successful. After this humanitarian mission had been fulfilled, I had the opportunity, with the administration's blessing, to continue on to Libya for meetings with Libyan officials, including Muammar Qaddafi. While staying overnight in the Corinthia Hotel in Tripoli, overlooking the Mediterranean, I came face to face with a microcosm of the new reality of global economic life. It was impossible to walk around the hotel without meeting someone who was hoping to tap into Libya's oil reserves.

The hotel was populated with representatives from China, India, and Western oil companies, who were in Libya to stake out drilling or refining operations for every pool that the government might make available. The world had come to the Corinthia Hotel to compete for the energy opportunities that were expected to develop with Libya's hopeful return to the international mainstream.

This incident underscores how rapidly the world is changing due to the expansion of energy demands. These conclaves of modern day oil prospectors can be found wherever there are proven energy supplies and a government willing to bargain. Indeed, my delegation also saw evidence of this in natural gas-rich Algeria. The

Chinese and Indians, with one-third of the world's population between them, know that their respective economic futures are directly tied to finding sufficient energy resources to sustain rapid economic growth. They are negotiating with anyone willing to sell them an energy lifeline. The gasoline price spikes following the Katrina and Rita hurricanes underscored for Americans the tenuousness of short-term energy supplies. But as yet, there is not a full appreciation of our economic vulnerability or the competition that is already occurring through the world.

The Energy Debate

In a remarkable moment during the State of the Union Address in January of 2005, President Bush caught the attention of the nation with five words: "America is addicted to oil." Those five words probably generated more media commentary than all the rest of his remarks that evening combined. I had an opportunity soon after the speech to talk to the President about energy, and he admitted that he had not anticipated the impact of that statement or that some commentators would find it incongruous. I believe he is genuine in wanting to devote more focus to pursuing alternative energy sources. But his Texas roots, his administration's high-profile advocacy of opening up the Arctic National Wildlife Refuge to drilling, and other associations with the oil industry, have created long-standing public impressions that the President is an oilman who believes in the oil economy. And though not hostile to pursuing the development of alternative energy sources, the Bush administration clearly downplayed their significance during the early part of his presidency.

Vice President Cheney, who chiefly oversaw the Bush administration energy policy, stated on April 30, 2001: "Years down the road, alternative fuels may become a great deal more plentiful than they are today. But we are not yet in any position to restate our economy and our way of life on that possibility. For now, we must take the facts as they are. Whatever our hopes for developing alternative sources or for conserving energy – and that's part of our plan – the reality is that fossil fuels provide virtually 100 percent of our transportation needs and an overwhelming share of our electricity requirements. For years down the road, this will continue to be true."

For decades, in fact, the energy debate in this country has pitted so-called pro-oil realists against idealistic advocates of alternative energy. The pro-oil commentators have attempted to discredit alternatives by saying they make up a tiny share of energy consumed and that dependence on oil is a choice of the marketplace. They assert that our government can and should do little to change this. They have implied that those who have bemoaned oil dependency do not understand that every energy alternative comes with its own problems and limitations. Lee Raymond, the former CEO of Exxon, offered an example of this line of reasoning in 2005: "There are many alternative forms of energy that people talk about that may be interesting. But they are not consequential on the scale that will be needed and they may never have a significant impact on the energy balance. To the extent that people focus too much on, for example, on solar or wind, what they are doing is diverting attention from the real issues. And 25 years from now, even with double-digit growth rates, they will still be less than one percent of the energy supplied to meet worldwide demand. I am more interested in staying focused on the 99 percent than the one percent."

Indeed, advocates of alternative energy must resist the rhetorical temptations to suggest that energy problems are easily solved. They are not. Relieving our dependence on oil in any meaningful way is going to take much greater investment of time, money and political will. There is no "silver bullet solution." But the difficulty of solving the problem does not make it any less necessary. The President's State of the Union Address indicates that he has some understanding of this situation.

Whether or not one classifies America's oil dependence as an addiction, the bottom line is that with less than 5 percent of the world's population, the United States consumes 25 percent of its oil. Most of the world's oil is concentrated in places that are either hostile to American interests or vulnerable to political upheaval and terrorism, and demand for oil will increase far more rapidly than we expected just a few years ago. Within 25 years, the world will need 50 percent more energy than it does now based upon the most current census figures. Mindful of these basic facts, my message is that the balance of realism has passed from those who argue on behalf of oil and a laissez faire energy policy that relies on market evolution, to those who recognize that in the absence of a major reorientation in the way we obtain our energy, life in America is going to be much more difficult in the coming decades.
It is critical to realize the no one who cares about United States foreign policy, national security, and long-term economic growth, can afford to ignore what is happening in Iran, Russia, Venezuela, or in the lobby of the Corinthia Hotel in Tripoli. No one who is honestly assessing the decline of American leverage around the world, due to our energy dependence, can fail to see that energy is the albatross of U.S. national security.

The Consequences of Inertia

We have entered a different energy era that requires a much different response than in past decades. What is needed is an urgent national campaign, led by a succession of presidents and congresses, who will ensure that American ingenuity and resources are fully committed to this problem. We could take our time if this were merely a matter of accomplishing an industrial conversion to more cost-effective technologies. Unfortunately, the U.S.'s dependence on fossil fuels, and their growing scarcity worldwide, has already created conditions that are threatening our security and prosperity and undermining international stability. In the absence of revolutionary changes in energy policy, we are risking multiple disasters for our country that will constrain living standards, undermine our foreign policy goals, and leave us highly vulnerable to the machinations of rogue states.
The majority of oil and natural gas in the world is not controlled by those who respect market forces. Geology and politics have created petro-superpowers that nearly monopolize the world's energy supplies. According to PFC Energy, foreign governments control up to 77 percent of the world's oil reserves through their national oil companies. These governments set prices through their investment and production decisions, and they have wide latitude to shut off the taps for political reasons.

I am not suggesting that markets will not eventually come to lure America away from its oil dependence. Eventually, because of scarcity, terrorist attacks, market shocks

and foreign manipulation, the high price of oil will lead to enormous investment and political support for alternative sources of energy. Given enough time, however, overcoming oil dependence and imbalances is well within the scope of human and indeed, American ingenuity. The problem is that such investment cannot happen overnight and even if it did, it would take years, even decades to build supporting infrastructure. In other words, by the time a sustained energy crisis fully motivates the market, we are likely to be well past the point where we can save ourselves. Our motivation will come too late and the resulting investment will come too slowly to prevent the severe economic and security consequences of our oil dependence. This is the very essence of a problem requiring government action and sound leadership.

Identifying Threats and Formulating Solutions

As a national security problem, energy is unique in that the risks we face from this single condition are diverse and are intensifying simultaneously. In fact, our energy dependence creates at least six different threats that could directly or indirectly undermine American security and prosperity. Each of these threats could be worthy of a separate discourse all by its own, but for purposes of this commentary, I will provide a much abbreviated review.

(1) Recognizing the Dilemma: The first step is to admit how grave the problem is. Hopefully, we will look back on President Bush's declaration that America is "addicted to oil" as a seminal moment in American history, when a U.S. president said something contrary to expectations and thereby stimulated change. Like President Nixon, using his anti-communist credentials to open up China, or President Johnson, using his Southern roots to help pave the way for the passage of the Civil Rights Act of 1964, President Bush's standing as an oilman would lend special power to his advocacy if he chooses to initiate an all-out campaign for renewable energy sources. As oil supplies are vulnerable to natural disasters, wars, and terrorist attacks, the lifeblood of the international community is continuously subject to profound disruption. The entire nation felt the spike in prices caused by Hurricanes Katrina and Rita in 2005. But these shocks, which helped send the price of oil to $70 a barrel, were minor compared to what would occur if major oil processing facilities in Saudi Arabia were sabotaged.

In late February, terrorists attempted such an attack. They penetrated the outer defenses of Saudi Arabia's largest oil processing facility with car bombs before being repulsed. A successful terrorist attack, either through conventional ground assaults, suicide attacks with hijacked aircraft, terrorist-inspired internal sabotage, or other means, would be devastating to the world economy. Al Qaeda and other terrorist organizations have openly declared their intent to attack oil facilities and to inflict pain on Western economies. Recently, we have also seen the shutdown of a fifth of Nigeria's production by militants and Iraq's continuing struggle to expand its oil production capacity amidst terrorist attacks.

The vulnerability of oil supplies is not a new concern but the lack of spare oil production capacity is new. As recently as five years ago, spare production capacity exceeded world oil consumption by about 10 percent. As world demand for oil has

rapidly increased in the last few years, spare capacity has declined to less than 2 percent. Thus, any major disruption of oil creates scarcity that will drive prices up. These circumstances require massive expenditures to preserve our oil lifeline. One conservative estimate puts U.S. oil-dedicated military expenditures in the Middle East at $50 billion a year.

(2) Increasing Competition and Diminishing Resources: Second, over time, even if oil and natural gas supplies are not disrupted in dramatic ways that produce local or global economic shocks, worldwide reserves are nevertheless diminishing. This is occurring within the context of explosive economic growth in China, India, Brazil, and many other countries. The demand for energy from these industrializing giants is creating unprecedented competition for oil and natural gas.

Americans paid 17 percent more for energy in 2005 than in the previous year. That increase accounted for 40 percent of the rise in the consumer price index. In November of 2005, we spent more than $24 billion on oil imports, accounting for more than a third of our trade deficit. To meet world oil demand in 2006, the International Energy Agency estimates a need for $17 trillion in investment, with the bulk going to the Middle East. But political and economic conditions may not let this investment happen. Even if some investment does occur and reserves prove to be much larger than anticipated, there is no guarantee that hostile governments will either choose to develop that new capacity or reserve or make any new oil available to the United States.

In the decades to come, price will not be the only issue. We will face the prospect that the world's supply of oil may not be sufficiently abundant and accessible to us to support continued economic growth in both the industrialized West and additionally in large, rapidly-growing economies. As we approach the point where the world's oil-hungry economies are competing for insufficient supplies of energy, oil will become an even stronger magnet for conflict and threats of military action than it already is.

(3) Confronting Hostile Forces: Third, the use of energy as an overt weapon by producing nations is not a theoretical threat of the future. It is happening now. Oil and natural gas are the currency through which energy-rich countries leverage their interests against import-dependent nations such as ours. For example, Iran has repeatedly threatened to cut off oil exports to selected nations, if economic sanctions are imposed against it. Similarly, Hugo Chavez in Venezuela has issued threats of an oil export embargo against the United States. And in January of 2006, Ukrainians were confronted by a Russian threat to cut off natural gas exports in mid-winter, if the Ukraine did not submit to a fourfold price increase. Russia took action to deny some natural gas to Ukraine. The dispute led to sharp drops in gas supplies reaching European countries that depend on natural gas moving through Ukrainian pipelines from Russia. Russia charged that Ukraine was diverting gas intended for Austria, Italy, France, Hungary and other European nations. Eventually, the confrontation was resolved with a near doubling of the price of natural gas sold by Russia to Ukraine. In contrast, Russia did not inflict such a price increase in Belarus, considered by Moscow to be a good partner, compared to the pro-Western Ukrainian government.

The episode underscored the vulnerability of consumer nations to their energy suppliers.

We are used to thinking in terms of conventional warfare between nations, but energy is becoming the weapon of choice for those who possess it. It may seem to be a less lethal weapon than military forces, but a natural gas shutdown to Ukraine, in the middle of winter, could cause death and economic loss on the scale of a military attack. Moreover, in such circumstances, nations would become desperate, increasing the chances of armed conflict and terrorism. The use of energy as a weapon might require NATO to review what alliance obligations would be in such cases.

(4) Marketplace Dominance: Fourth, even when energy is not used overtly as a weapon, energy imbalances are allowing regimes in countries that are rich in oil and natural gas to avoid democratic reforms, and to insulate themselves from international pressure and the aspirations of their own people. For instance, we are seeing in Iran and Venezuela the cultivation of energy relationships with important nations that are in a position to block economic sanctions and for decades, we have watched Saudi Arabia and other Gulf States use oil wealth to create domestic conditions that prevent movement toward democracy. Furthermore, in Russia and Nigeria, energy assets have offered opportunities for corruption. In many oil-rich nations, oil wealth has done little for the people, while ensuring less reform, less democracy, fewer free market activities and more enrichment of elites.

Beyond the internal costs to these nations, we should recognize that we are transferring hundreds of billions of dollars each year to some of the least-accountable regimes in the world. Some are using this money to invest abroad in terrorism, instability, or demagogic appeals to populism.

Now at a time when the international community is attempting to persuade Iran to live up to its nonproliferation obligations, our economic leverage on that country has declined due to its burgeoning oil revenues. If one tracks the arc of Iran's behavior over the last decade, its suppression of dissent, its support for terrorists, and its conflict with the West, have increased in conjunction with its oil revenues, which soared by 30 percent in 2005. Sometimes observers comfort themselves with the thought that most U.S. imports come from friendly nations such as Canada and Mexico, rather than from Iran or other problematic countries. But oil is a globally-priced commodity and even if our dollars not going directly to Iran, this does not mean that our staggering consumption of oil is not contributing to the price paid to Iran by other consumers.

(5) Global Responsibility and Leadership: Fifth, the threat of climate change has been made worse by inefficient and unclean use of nonrenewable energy. In the long run, this could bring drought, famine, disease, and mass migration, all of which could lead to conflict and instability. As there are no unilateral solutions to climate change, I have urged the Bush administration and my colleagues in Congress to return to a leadership role on the issue of climate change. I have advocated the United States

must be open to multilateral forums that attempt to achieve global solutions to the problem of greenhouse gases. Our scientific understanding of climate change has advanced significantly. We have better computer models, more measurements, and more evidence, from the shrinking polar caps to expanding tropical disease zones, for plants and humans. That the problem is real and is caused by manmade emissions of greenhouse gases, including carbon dioxide from fossil fuels, has been well established.

(6) Demand for International Leadership: Sixth, our efforts to stem terrorist recruitment and to prevent terrorist cells and training grounds in the developing world are being undercut by the high costs of energy. The economic impact of high oil prices is far more burdensome in developing countries than in the developed world. Generally, developing countries are more dependent on imported oil; their industries are more energy intensive and they use energy less efficiently. The United Nations Conference on Trade and Development estimates that non-OPEC developing nations spend 3.5 percent of their GDP or more on imported oil, roughly twice the percentage paid in the main OECD countries. The World Bank research shows that a sustained oil-price increase of $10 per barrel will reduce GDP by an average of 1.47 percent in countries with a per capita income of less than three hundred dollars. Some of these countries would lose as much as 4 percent of their GDP. This compares to an average loss of less than one-half of one percent of GDP in the OECD countries. Some nations, such as Nepal and the Democratic Republic of Congo, would experience GDP losses from a sustained $10 increase in the price of a barrel of oil that are twice the amount of foreign assistance they now receive from the United States. Even if a nation like Ethiopia, which receives a substantial sum of $134 million in U.S. assistance, because it is a focus country of the President's AIDS initiative, would see almost all of this offset by a $10 oil price increase.

Encouraging Innovation: Time for Action

In March of 2006, I chaired a Senate Foreign Relations Committee hearing on the nomination of Randall Tobias to be the new administrator for U.S. AID. In this capacity, he would oversee a large share of our foreign assistance budget, which now exceeds $20 billion per year. This budget is intended to meet our humanitarian goals, but its success is also directly linked to national security. But all of this effort and money, in essence, can be wiped out merely by an increase in the price of energy.

Without a diversification of energy supplies that emphasizes environmentally-friendly energy sources that are abundant in most developing countries, the national incomes of energy-poor nations will remain depressed, with negative consequences for stability, development, disease eradication and terrorism.

Each of these six threats from energy dependence is becoming more acute as time passes. Any of them could be the source of a catastrophe. Any realistic American foreign policy must redeploy diplomatic, military, scientific and economic resources toward solving the energy problem.

The basic dilemma for U.S. energy policy is how can our government speed up the transition to alternative renewable energy sources so that we can prevent irreparable harm to our nation or the world associated with these threats? And the realist must ask: "How can we shape our energy future before it shapes us in disastrous ways?"

American energy policy, to date, has suffered from two fundamental flaws. First, we have let two decades of relatively cheap oil and natural gas deepen our dependency on imports. An approach that focuses on research while ignoring deployment of new fuels will not meet our national security challenge. The second flaw is that we have lacked a truly comprehensive energy policy with energy security as a strategic goal. American energy policy has been focused on a narrow definition of energy security that strived to ensure sufficient supplies at affordable prices. This has translated into policies promoting diversification in supplies of oil and natural gas, but with little emphasis on energy alternatives. A policy that relies on a finite resource concentrated in a few countries is doomed to failure. Our long-term security and prosperity require sufficient, affordable, clean, reliable and sustainable energy.

The first component of energy security is to ensure sufficient supplies. Our energy intensity per unit of GDP has steadily decreased, but our energy consumption is still projected to increase by more than a third over the next 25 years. This demand scenario is not inevitable. Public policy can do much more to promote efficiency while still growing the economy. Expanded programs to enhance energy efficiency in appliances, building construction, and industry, are all necessary to keep our energy intensity declining.

One-third of our energy projects' growth is in oil, a majority of which we have to import. I co-sponsored a bipartisan bill with Senators Bayh and Lieberman, together with many other senators, that would require federal agencies to implement a plan to reduce U.S. oil consumption by 10 million barrels a day by 2031. The legislation contains many provisions to enhance energy conservation, from tire efficiency to reduced school bus idling and light-weight materials research.

Automakers have a central role to play in improving our oil efficiency. We are working to close the SUV CAFE standards loophole and to get more hybrids and flex-fuel vehicles on the road. A fleet of hybrids, and future plug-in hybrids, that run on E85, could reduce our oil use by 10 million barrels a day.

The bill I have co-sponsored removes the cap on the number of tax rebates for hybrid vehicles. It also fosters demand by requiring that 30 percent of the government auto fleet by hybrids and advanced diesels. With increased demand for fuel efficient cars, new manufacturing facilities will be built that provide jobs for Americans. In partnership with the American auto industry, we should provide a set of incentives that gives them the opportunity to regain their strength and save jobs through innovation. This bill offers a 35 percent tax credit for automakers to retool their factories, so that they can make fuel-efficient, advanced technology vehicles.

Affordability of energy supplies also remains a key goal for energy security. In early 2006, crude oil hovered around $60 a barrel and the price for natural gas in October of 2005 was more than double what it had been in the previous year. These high energy prices increase inflation and inhibit future economic growth. Elevated oil and natural gas prices do, however, have the benefit of making alternative fuels more competitive. With the end of 20 years of low oil and gas prices, investment in alterative fuels has surged. As more is invested, innovation in technology and production will drive prices down further. That is why it is so important to get the first cellulosic ethanol facilities up and running. The President said in his State of the Union Address that he wanted to make cellulosic ethanol "practical and competitive within six years." In fact, one plant is ready to be built in Idaho now and many others could be built within the six-year timeframe.

As alternative fuels become more competitive, oil and gas producers have strong incentive to drop prices to kill competition. Investors need to know that alternative energy initiatives will continue to be competitive. A revenue-neutral $35 per barrel price floor on oil would provide the security investors need. At this price, alternative fuels like cellulosic ethanol, shale and tar sands oil, and Fischer-Tropsch diesel, could still compete with regular gasoline. Many analysts say that expensive oil is here to stay, but most energy investors are hesitant still to take on that risk. A modest price floor for oil that we may never reach would provide a major stimulation for energy alternatives.

Long-term energy security also requires the use of clean energy, a third component of energy security. As long as we continue to consume fuels that do not burn cleanly, or cannot have their damaging gases sequestered, we will continue to pay environmental costs and will remain vulnerable to a climate change-induced disaster. To combat this result, Congress must pass legislation establishing a cap and trade mechanism. A cap and trade system would provide regulatory certainty, reward innovation to improve energy efficiency, and provide strong market incentives for clean renewable fuels. Any such system should give credit for carbon sequestration in coal-fired plants and allow farmers and foresters to sell credits for the carbon they sequester. And with new technology, we can control many greenhouse gases with proactive, pro-growth solutions, not simply draconian limitations on economic activity.

Industry and government alike recognize that progress on climate change can go hand in hand with progress on energy security, air pollution, and technology development.
Even as we strive to reduce the prevalence of fossil fuel in our energy portfolio, pragmatism requires that we diversify to the greatest extent possible our sources of oil and natural gas. While we continue to debate production there and on the outer continental shelf, we have to carefully consider both the security and economic benefits of more exploration, as well as the environmental costs.

We must also ensure that we are not wasting fossil fuel resources in end-use that could be fueled by other means. I am encouraged by DuPont's commitment to replacing petrochemicals with bio-alternatives. This wise business choice leaves

DuPont less vulnerable to price spikes than competitors who still rely exclusively on oil and gas.
With natural gas prices high, there is now a shift to coal-fired electrical generation. New plants should favor coal, which we have in abundance, over natural gas. I continue to vigorously support the deployment of clean coal technology with carbon sequestration. We can also use coal to reduce our oil dependence. The energy bill I coauthored with Senator Obama included legislation authorizing $85 million for federal research into the production of coal-based transportation fuels. One of the technologies that will be encouraged by this program, the Fischer-Tropsch process, yields a diesel fuel that is compatible with existing vehicle technology. It is superior to oil-derived fuel with respect to performance and emissions.

Another critical component of reliability is protection of the physical infrastructure and transit of our energy supplies. Terrorists have made clear their intentions to destroy refineries and pipelines worldwide. At home, in addition to power plants, ports, refineries and platforms, we have 160,000 miles of oil pipelines. As the United States considers liquefied natural gas and nuclear facilities, we must be vigilant on the security implications.
While diversity in supplies at home and abroad is necessary for more reliable energy in coming decades, diversification of sources for oil and gas is an outdated strategy that will never bring energy security. Reserves are too concentrated and infrastructure too vulnerable. Real diversity can only be achieved by an energy portfolio dominated by sustainable energy, the final component of energy security.

Partnering for Progress

As we pursue energy security at home, we must seek energy partnerships abroad. Partnerships with foreign governments can help speed our conversion to real energy security, rebalance power in geopolitics, and open new markets for fuel technologies. The "Energy Diplomacy and Security Act of 2007" calls upon the federal government to expand international cooperation on energy issues. This legislation enhances international preparedness for major disruptions in oil supplies. A particular priority offers a formal coordination agreement with China and India as they develop strategic petroleum reserves. And this will help draw them into the international system, providing supply reassurance, and thereby reducing potential for conflict. The Act also stimulates regional partnerships in the Western Hemisphere. Most of our oil, and virtually all of our gas imports, come from this hemisphere. The Act created a Western Hemisphere Energy Forum modeled on the APEC energy working group. This provides a badly-needed mechanism for hemispheric energy cooperation and consultation. And finally, the Act mandates international partnerships with both energy producers and consumers. In addition to seeking new avenues of cooperation, the Act gives focus to existing bilateral energy dialogues, which have lacked clear objectives and political backing.

We must engage major oil and natural gas producers. We should advocate more transparency, improved investment climates, and greater infrastructure security. Oil exporting states wield power for which we must account. Not working with these states will lead to unproductive political showdowns and conflict. Even in challenging

relations, such as Venezuela and Russia, we must explore how to improve our energy dialogue. And strategic energy partnerships with other major consuming countries are critical for our national security. Energy security is a priority we hold in common with other import-dependent countries, which constitute 85 percent of the world's population. Strategic partnership for energy security with the world's largest consumers will increase leverage in relation to petro-states.

Conclusion: Optimism Through Sound Leadership

I would like to express optimism for the future. Our current energy balance is the result of industrial and consumption choices of the past. Despite our import dependence today, the U.S. is in a strong position to choose a different path, a path toward real energy security. Success would free future generations of Americans from the energy dilemma that threatens to compromise our security and our prosperity. It could also lead to opportunities in many new industries that could reinvigorate our economy. These are problems that can be solved. We must act now and we must act together.

Author Biography

An individual of compassion and global insight, Senator Richard G. Lugar has forged a lifetime of distinguished leadership benefiting Hoosiers, U.S. citizens, and a much larger world audience. As a globally respected leader, Senator Lugar has been an unwavering advocate of strong national security, free-trade and economic growth, achieving the distinction of being the longest serving U.S. Senator in Indiana history. First elected to the U.S. Senate in 1976, Senator Lugar won a sixth term in 2006 with 87 percent of the vote – his fourth consecutive victory by a two-thirds majority. Lugar is the Republican leader Senate Foreign Relations Committee and has continuously won bipartisan and global support for innovative solutions to world problems.

As a key state representative, Lugar's ties to his home state of Indiana remain steadfast, bolstered by the ongoing management of his family's 604-acre Marion County, Indiana, corn, soybean and tree farm. His ties to farming coupled with his early years working in his family's food machinery manufacturing business in Indianapolis aptly qualified him to serve as Chairman of the Agriculture, Nutrition and Forestry Committee. As Committee Chairman, Senator Lugar generated bipartisan support for federal farm program reforms in 1996, ending 1930's era federal production controls. He has promoted research advancements and broader risk management options for farmers, increasing export opportunities for higher net farm income.

From his early days as Mayor of Indianapolis throughout his senatorial tenure, Senator Lugar has sought pragmatic answers to administrative and social issues. As the two-term mayor of Indianapolis (1968-75), he envisioned the unification of the city and surrounding Marion County into one government. "Unigov," as Mayor Lugar's

plan was called, set the city on a path of uninterrupted economic growth. He later served three terms on the U.S. Advisory Commission on Intergovernmental Relations, including two terms as the Vice-Chair of the Commission, and served as President of the National League of Cities.

Senator Lugar supported the emerging civil rights movement in the 1960s and his efforts subsequently led to the imposition of sanctions upon the South African government in the late 1980s, leading to the elimination of state-sponsored Apartheid and ultimately to the release of Nelson Mandela. Nationally, Senator Lugar has advocated desegregation of public schools and has helped to ensure funding for school lunch programs while comprehensively reforming the federal food stamp program. Senator Lugar's humanitarian intervention has extended to AIDs-stricken peoples of Africa and to the promotion of human rights and economic development of underdeveloped nations. As a strategic leader of the Senate Foreign Relations Committee, Senator Lugar has sparked change in oppressive governments, calling to task those nations compromising human rights.

Acknowledging the critical importance of national and world security, Senator Lugar has been an instrumental figure in the elimination of nuclear, chemical and biological weapons. In 1991, he forged a bipartisan partnership with former Senate Armed Services Chairman, Sam Nunn (D-Ga.), to destroy such weapons in the former Soviet Union. To date, the Nunn-Lugar program has deactivated more than 6,800 nuclear warheads that were once aimed at the United States. As a result of these efforts, Senator Lugar has been nominated for the Nobel Peace prize each year since 2000.

Recognizing the deleterious implications of continued U.S. dependence upon foreign oil from gas pump prices to our vulnerability to foreign terrorism, Senator Lugar has launched the Lugar Energy Initiative. This Initiative advances agricultural development, research and production of bio-fuels in an environmentally responsible manner.

Senator Lugar has promoted and continues to champion policies that spur economic growth, cut taxes, lead to job creation, eliminate wasteful government spending and reduce bureaucratic red tape for American businesses. His Hoosier commonsense has been recognized many times by the bestowal of such awards as the Guardian of Small Business, the Spirit of Enterprise, Watchdog of the Treasury, as well as 40 honorary degrees from colleges and universities in 14 states and the District of Columbia. He was the fourth person ever named Outstanding Legislator by the American Political Science Association.
