

**Statement of Vice Admiral Dennis McGinn, USN, Retired,**  
**House Select Committee on Energy Independence and Global Warming**

Hearing on the Geopolitical Implications of Rising U.S. Dependence on Imported Oil and Rising  
Global Temperature. Washington, DC, April 18, 2007

Mr. Chairman, Members of the Committee, Ladies and Gentlemen, it is an honor to appear before you today to discuss these critically important topics of energy independence and global warming. Thank you for the opportunity to share my views which are based on over thirty-five years of service to the Nation in the United States Navy and as a senior executive involved on a daily basis with the science and technology of energy, transportation and the environment.

The rationale and urgency for holding this important hearing was clearly underscored by the world's leading scientists earlier this month in their warning to the world that we have ten years to change our collision course with global warming catastrophe.

Today, I'd like to talk about the national security impacts of our oil dependency right now, and not just in ten years.

**Our continued dependence on oil constitutes a clear and present danger to our national security — economically, militarily and diplomatically.**

- Data from the Energy Information Administration indicates that we imported about 60 percent of our oil and other petroleum products in 2006. Last year alone, our net imports were more than 12 million barrels per day.
- The United States consumes 25 percent of the world's annual petroleum production and depends on oil to supply 97 percent of its transportation fuels. Yet the U.S. holds only 3 percent of the world's oil reserves, while two-thirds of reserves are situated in that core of global instability, the Persian Gulf.
- As a key member of the global economic community, we must rely on foreign energy sources, with many of them hostile and in unstable regions, to provide us with our economic lifeblood and quality of life.
- Our burgeoning demand for oil weakens U.S. diplomatic leverage around the globe, burdens our armed forces and leaves the U.S. vulnerable to unstable or hostile regimes.

**U.S. oil dependency weakens U.S. leverage, undermines foreign policy and leaves us vulnerable to unstable or hostile regimes.**

- According to a new Rice University study, 77 percent of the world's 1.148 trillion barrels of proven reserves are in the hands of the national companies; 14 of the top 20 oil-producing companies are state-controlled.<sup>1</sup>

- With oil at \$60 a barrel, \$500,000 a minute is flowing out of our country, increasing our trade deficit, and putting money into the hands of some regimes that are hostile to our interests.
- Last year Iran's supreme leader, Ayatollah Ali Khomeini warned that "if the Americans make a wrong move toward Iran, the shipment of energy will definitely face danger and the Americans would not be able to protect energy supply in the region." <sup>ii</sup>
- In the southern hemisphere, we seem to be on a collision course with Venezuela's President Hugo Chavez over access to some of the most coveted energy resources outside the Middle East. Chavez represents a direct threat to the advances of democracy and free markets in our Hemisphere. The false promises of his populist appeal in Latin America have been compared with the pan-Arabism of Col. Muammar el-Qaddafi of Libya two decades ago. <sup>iii</sup>
- Terrorist networks have openly called for and carried out attacks on the global oil infrastructure because they know oil is the economic lifeblood of the U.S.

**U.S. oil dependency burdens our military forces and exacts a huge price tag in protecting sea-lanes, military bases of operations and maintaining continuous high level of forward presence**

- Our fine men and women in the Armed Forces serve our nation with honor, protecting American interests throughout the globe. The major focus of their activities for nearly thirty years has centered in the Middle East, a region from which so much of the instability, strife, root causes of terrorism and Arabian Gulf oil flow.
- The October, 2000 terrorist attack on the USS Cole, while on a refueling stop in Yemen, was a tragic reminder of the convergence of oil, instability, terrorism and the need for ever vigilant presence by American servicemen and women who are forward deployed.
- Recent energy-market disruptions and increasing awareness of the vulnerability and insecurity of supplies world-wide have added urgency to the U.S. military's efforts to curb its use of oil and other fuels. <sup>iv</sup>
- One study estimates that in peacetime the "true" cost of oil in a given year is \$800 billion dollars, assuming 2004 oil prices.
- Retired Air Force General Charles Wald estimates that if the true cost of military security were incorporated into the price of gasoline, we would be paying between \$6.50 and \$7 a gallon.

**The economic impact of our oil dependency threatens national security**

- We lose \$25 billion from our economy every month, and oil imports now account for nearly a third of the national trade deficit. Our economy is exposed on a daily basis to oil price shocks and supply disruptions.

- Every event overseas – Iran’s capture of British soldiers, Nigeria rebels warn of attacks on oil industry – causes our stock market to roil.
- There are nightmare scenarios – likely more than conjecture at this point – that are already having an impact on our economy. The Wall Street Journal recently wrote about oil traders’ concern over an obstruction of oil traffic through the Persian Gulf. Under the scenario, Iran, in a bid to preempt or respond to U.S. military action, closes the Strait of Hormuz, the Persian Gulf chokepoint through which 20 percent of the world's oil supply passes. The consequence would be swift: by most experts' reckoning, oil prices would soar to \$100 a barrel and even higher, potentially plunging the world economy into a depression.<sup>v</sup>
- A Wall Street Journal survey of economists found strong support for government intervention in the transition away from fossil fuels. When asked to pick the greater geopolitical threat to the economy, by nearly a 3-to-1 margin the economists chose a disruption in crude oil supplies caused by tensions in the Mideast over the impact on spending and confidence that could follow a major terrorist attack.<sup>vi</sup>

### **Our oil consumption puts money in pocket of terrorists**

- Former Republic National Committee Director of Communications Clifford D. May wrote, “Every time we fill the tanks of our cars with gasoline we put money in the pockets of terrorists intent on killing Americans.”<sup>vii</sup> (SHNS) *Diversity can Pave* 1/25/07

### **There is great urgency to reverse our dependence on oil**

The urgency is two-fold. As a result of our increasing oil consumption: 1) Our dependency on unfriendly regimes is increasing not decreasing; 2) The impacts of global warming emissions, if not swiftly and significantly reduced, will have profoundly negative national security impacts.

### **The world oil supply is tightening as demand surges leaving little elasticity in a very volatile market and creating increased U.S. reliance on the Middle East.**

- Energy analysts expect global oil-demand growth to surge this year to an additional 1.39 million barrels a day from growth of 800,000 bpd in 2006, according to a new Reuters’ poll. OPEC’s biggest producer, Saudi Arabia, may be incapable of raising its production any time soon.<sup>viii</sup>
- Government data shows U.S. crude and gasoline stockpiles are much lower than analysts had forecast.<sup>ix</sup>
- Oil analysts say that the market has not fully recognized the constraints on oil supply in Venezuela, Iran and Kazakhstan. Other factors favoring higher prices: rapidly rising

demand in China and India, and the location of much of the world's oil reserves in politically volatile and unstable countries. <sup>x</sup>

- Mexico's oilfield Cantarell -- one of the largest offshore oil fields ever found -- is dying, losing a staggering one-fifth of its production, with daily output falling to 1.6 million barrels from two million within the last year. Cantarell, which currently produces one of every 50 barrels of oil on the world market, is fading so fast analysts believe Mexico may become an oil importer in eight years. <sup>xi</sup>
- The continued deterioration of the world's second-biggest field by output puts pressure on prices on the global oil market, where supplies are barely keeping up with growing demand as it is. **Our growing dependence would leave the U.S. even more dependent on Middle Eastern supplies -- and that much more vulnerable to political tumult in that region.** <sup>xii</sup>
- Some predict we will reach peak of oil production within a few years, others say peak oil won't arrive until 2030 or later. In either case, our demand is going in the opposite direction while oil is getting harder and more expensive to extract.
- OPEC, which added Angola as its newest member this year, will likely see its clout reinforced in coming years as it is poised to control more than 50 percent of the oil market in coming years, up from 35 percent today. <sup>xiii</sup>

## **The threat of climate change is a national security matter**

**Climate change acts as a threat multiplier for instability in some of the most volatile regions of the world.**

- The Center for Naval Analysis (CNA) this week released a report contracted by the federal government warning that in the national and international security environment, climate change threatens to add new hostile and stressing factors. On the simplest level, it has the potential to create sustained natural and humanitarian disasters on a scale far beyond those we see today. The consequences will likely foster political instability where societal demands exceed the capacity of governments to cope. <sup>xiv</sup>
- Not only will global warming disrupt the environment, but its effects will shift the world's balance of power and money. <sup>xv</sup>
- The world's leading scientific panel on climate change -- including more than 200 scientists and officials from more than 120 countries and the U.S. -- released its most detailed portrait on the impacts of human induced climate change, predicting widening droughts in southern Europe and the Middle East, sub-Saharan Africa, the American Southwest and Mexico, and flooding that could imperil low-lying islands and the crowded river deltas of southern Asia. <sup>xvi</sup>
- Without action to curb carbon emissions, man's livable habitat will shrink starkly, said

Stephen Schneider, a Stanford scientist and IPCC report author. "Don't be poor in a hot country, don't live in hurricane alley, watch out about being on the coasts or in the Arctic, and it's a bad idea to be on high mountains with glaciers melting." "We can fix this," by investing a small part of the world's economic growth rate, said Schneider. "It's trillions of dollars, but it's a very trivial thing." <sup>xvii</sup>

- James Hansen, a pioneering climate researcher at NASA's Goddard Institute and at Columbia University, says, "If human beings follow a business-as-usual course, continuing to exploit fossil fuel resources without reducing carbon emissions or capturing and sequestering them before they warm the atmosphere, the eventual effects on climate and life may be comparable to those at the time of mass extinctions." <sup>xviii</sup>

### **Ignoring global warming undermines U.S. international leadership and influence**

- The United States will emit about 20 percent more greenhouse gases by 2020 than it did in 2000, according to a draft report that the Bush administration was scheduled to submit to the United Nations a year ago. <sup>xix</sup>
- The harmful effects of global warming on daily life are already showing up, and within a couple of decades hundreds of millions of people will not have enough water, according to the authoritative IPCC. "Things are happening and happening faster than we expected," said Patricia Romero Lankao of the National Center for Atmospheric Research, a report co-author. <sup>xx</sup>

Climate change, national security, and energy dependence are an interrelated set of global challenges. As President Bush noted in his 2007 State of the Union speech, dependence on foreign oil leaves us more vulnerable to hostile regimes and terrorists, and clean domestic energy alternatives help us confront the serious challenge of global climate change. Because the issues are linked, solutions to one affect the other. Technologies that improve energy efficiency also reduce carbon intensity and carbon emissions. <sup>xxi</sup>

Without swift and serious legislative action and investment, the U.S. will continue barreling headlong toward the catastrophic national security, economic and human suffering effects of climate change.

### **Key principles for reducing oil dependence and greenhouse gas emissions**

**First and foremost, the size and speed of the solution must match the size and speed of the problem.**

**We must solve our oil dependency problem within the context of global warming – to do otherwise would be at the risk of our national security.**

**The solution must include market and mandates. We cannot do one without the other**

- Key players in the global market are already responding to their perception of regulation certainty. The right kind of regulations can create certainty and spur the market to a much more stable and productive future. Leading international businesses, investors and industry sectors recognize this fact and are asking for market certainty through an effective, long-term cap on emissions.
- The Electric Power Supply Association, representing one-third of U.S. power generation and some of the biggest global warming pollution emitters, concluded it is likely to get hit with a U.S. emissions cap whether it wants it or not and that it behooves it to try to shape eventual policy. <sup>xxii</sup>
- ConocoPhillips recently became the first U.S.-based oil company to join ten of the nation's largest companies, including GE, DuPont and Duke Energy, to call for mandatory cuts in global warming emissions. Such action likely means higher costs for these companies, but they fear the Administration's failure to engage will leave them with a hodgepodge of state and foreign restrictions. <sup>xxiii</sup>
- A well-structured cap and trade system would have modest economic impacts, but would create new industries and jobs and put the U.S. on the cutting edge of what will become a multi-billion dollar clean energy and environmental technology market.

**The solution must include upstream and downstream performance standards for cars and trucks, whether by CAFE or by tailpipe emissions standards. Significantly improved standards are good for reducing oil dependency AND greenhouse gas emissions, as well as for improving consumer value and automakers' competitiveness.**

- Vehicles are the source of 20 percent of U.S. greenhouse gas emissions and 40 percent of our oil dependency
- By mid-century, the world's vehicle population is expected to reach 2 billion, almost triple the current figure. To keep global vehicle emissions near today's levels, the average fuel economy of cars and trucks would have to rise to about 60 mpg in 50 years or less, according to calculations by the Carbon Mitigation Initiative at Princeton University, a research effort funded in part by Ford. <sup>xxiv</sup>
- In addressing this challenge, we must include performance standards for fuels BUT also must include vehicle performance standards – whether fuel economy or greenhouse gas tailpipe emissions standards – for both the oil industry AND the auto industry.

**Corporate Average Fuel Economy Standards (CAFE) work.**

- After Congress set fuel economy standards for vehicles in 1975, our dependence on oil imports decreased very quickly from 46 percent in 1977 to 27 percent in 1985, while consumers saved billions at the pump.
- Ten years of CAFE saved the U.S. billions in oil and money. Without standards that forced automakers to increase fuel economy from the 1975 level to today's 25 mpg, we would be using an additional 80 billion gallons of gasoline on top of the 140 billion gallons we will use this year. That would represent an increase in oil demand by 5.2

million barrels of oil per day, or a 25 percent increase in our oil addiction. At today's average price for regular gasoline, about \$2.50 per gallon, that represents \$200 billion dollars saved.

- Even today, these standards continue to save nearly 3 million barrels of oil per day, according to the National Academies of Sciences. Since 1985, however, fuel economy has been stagnant and our imports have grown.
- IF CAFE hadn't stalled, the U.S. would have saved billions more in oil and dollars, especially in light of tremendous advances in technology available to improve fuel economy.
- The United States is falling behind other nations pushing for better fuel economy as concerns mount over global warming. Even China, oft touted as the reason why the U.S. shouldn't act, has tougher fuel economy standards.<sup>xxv</sup>

#### **Voluntary action does not work.**

- Because the automakers did not meet voluntary agreements to reduce greenhouse gas emissions, the European Commission in Brussels is moving mandate automakers to limit carbon-dioxide emission to an average of 130 grams per kilometer for all new cars by 2012.<sup>xxvi</sup>

#### **Performance standards could restrict emissions rather than mileage.**

- Performance standards could follow California's lead by restricting the greenhouse gas emissions from tailpipes. Together, the populations of "clean car states" now account for more than 30 percent of the nation's market for new vehicles. Maryland's legislature recently joined the list of states adopting California's standard.<sup>xxvii</sup>
- Performance standards accomplish energy savings and pollution reduction benefits without heavy taxpayer support or the government telling consumers how to behave.

#### **Clean energy performance standards save consumers money and create new jobs.**

- Our federal appliance and equipment standards will save consumers about \$230 billion by 2030 -- \$2,300 per household.<sup>xxviii</sup>
- Automakers have spent the past twenty years using similar technologies to nearly double power and increase weight by twenty-five percent instead of increasing fuel economy.<sup>xxix</sup>
- James Hansen of NASA's Goddard Institute and at Columbia University, says that the biggest obstacles to avoiding greater climate disaster are utility plants and motor vehicles that use too much fuel. "Automakers oppose efficiency standards and prominently advertise their heaviest and most powerful vehicles, which yield the greatest short-term profits."<sup>xxx</sup>
- Americans do not have to sacrifice safety, comfort or utility in their vehicles in order to achieve much greater fuel economy. The technology advances that have been used for power and weight, which can now be directed to fuel economy. Data in the 2002 report by the National Academies of Sciences on CAFE indicate that the technology exists to

reach 37 mpg in a fleet of the same make-up as the NAS analyzed, even ignoring hybrids and cleaner diesels.<sup>xxxix</sup>

- Paul Portney, chair of the NAS committee, noted that, “It might be possible to meet more stringent fuel economy standards at lower costs than the committee foresaw.”<sup>xxxix</sup>
- Dr. Walter McManus, a former GM market analyst now at the University of Michigan, reported recently that if U.S. automakers increased their energy efficiency to accommodate increasingly conservation-minded customers, they could collectively increase profitability by \$2 billion in model year 2010. Following their current plans, Dr. McManus concluded, they are projected to lose \$3.6 billion that year.<sup>xxxix</sup>

The dilemma the Detroit automakers face is that while they may believe that they cannot afford to make fuel economy a high priority, in actuality, it turns out that they cannot afford not to. In the meantime, they continue to churn out vehicles that increase our nation’s addiction to oil – an addiction even President Bush has said compromises national security in both economic and political terms.

### **Biofuels are not a silver bullet – they are part of the solution – but not THE solution.**

#### **Corn ethanol impacts are greater and benefits are fewer than other biofuels.**

- The Proceedings of the National Academy of Sciences (PNAS) published the first comprehensive analysis of the full life cycles of soybean biodiesel and corn grain ethanol that shows biodiesel has much less of an impact on the environment and a much higher net energy benefit than corn ethanol, but that neither can do much to meet U.S. energy demand.<sup>xxxix</sup>
- Responding to the “ethanol boom”, corn prices, 75 percent of the cost of ethanol, have doubled in the past six months to more than \$4 a bushel and may head higher still.<sup>xxxix</sup>
- Soaring prices for farm goods, driven in part by demand for crop-based fuels, are pushing up the price of food worldwide and creating a new source of inflationary pressure. If the trend gathers momentum, it could contribute to slower global economic growth.<sup>xxxix</sup>
- Vehicles powered by ethanol get 20-30 percent fewer miles per gallon than they do with gasoline, so in order to reduce spending at the pump any renewable fuels mandate must be coupled with significant improvements to auto fleet efficiency.<sup>xxxix</sup>
- At present, only a tiny fraction of U.S. service stations enable a driver to fill up with ethanol, in part due to resistance from oil companies. Although some oil executives voice enthusiasm for alternative fuels, oil-company policies make it harder for many service stations to stock a fuel called E85.<sup>xxxix</sup>
- Without tighter fuel economy standards, and before ethanol fuels become widely available, the more flex-fuel cars and trucks that are produced, the more gasoline is consumed, thereby dramatically increasing greenhouse gas emissions and deepening the country's dependence on petroleum. Union of Concerned Scientists estimates that without



the flex fuel loophole in place, the U.S. would have burned 4 billion fewer gallons of gasoline since 1998. " <sup>xxxix</sup>

- An unprecedented 1.5 million alternative fuel automobiles were sold in 2006, surpassing automaker sales' expectations by 50 percent, and bringing the total number of flex-fuel vehicles on U.S. roads to 10.5 million. <sup>xi</sup>
- The automobile industry's preferred options call for conversion to biofuels, requiring them to make relatively low-investment modifications to existing technology. This shortsighted approach will not create the macro solutions needed to address both oil dependency and climate change perils.

The bottom line is we need an approach to vehicle fuel economy that incorporates both upstream fuel choices AND downstream vehicle efficiency.

**Coal to liquid is not a solution: this process increases global warming emissions and endangers public health.**

- Coal-to-liquid fuels are embraced in the president's proposal. While they may reduce reliance on oil, making the liquid coal fuels and burning them exacerbate global warming. <sup>xli</sup>
- Coal-based transportation fuels would result in double the global warming pollution per gallon of fuel as compared with the petroleum-based fuels we use today. The EPA's own recent analysis confirming that liquid coal would result in *100 percent more emissions* than gasoline. <sup>xlii</sup>
- Even with carbon capture and disposal at the production end, liquid coal fuels would still result in nearly ten percent more global warming pollution overall.
- Building a liquid coal fuel industry is expensive and would come at the expense of taxpayer subsidies, while potentially leaving private investments stranded in a technology that has no competitive edge in a carbon-constrained market.
- An 80,000 barrel per day liquid coal plant could cost as much as \$7-8 billion. Federal subsidies that support liquid coal would unfairly tilt the playing field away from clean, renewable fuels and reward a mature industry, rather than supporting cutting edge clean fuel and energy efficiency technologies.
- Every public or private dollar invested in liquid coal is a dollar unavailable for investment in efficiency, renewable energy resources, public transportation and consumer incentives that will yield real reductions in global warming pollution.
- Liquid coal fuels would also exacerbate the public health, land and water impacts of coal mining and transport, potentially resulting in doubling of coal mining in the U.S.

We must reduce oil dependence *and* global warming pollution together. Since transportation accounts for a third of U.S. global warming pollution, solving the problem will require a transition toward *lower*-carbon fuel alternatives and more efficient use of whatever fuel goes in the tank. Therefore, any new fuel we make available at the pump should have a significantly better greenhouse gas emissions footprint than the fuels we use today.

**The American people, and Michigan citizens, specifically, want the government to take action to reduce greenhouse gas emissions and increase fuel economy.**

- A new Gallup poll shows overwhelming support to strengthen government restrictions on greenhouse gas emissions and to spend more taxpayer money to develop alternative energy sources, with 79 percent supporting higher auto emissions standards. <sup>xliii</sup>
- The latest Detroit Free Press-Local 4 Michigan Poll shows a majority of Michigan citizens favor higher fuel economy standards for cars and trucks, with some supporting increases to 40 miles per gallon or more. Many would pay hundreds of dollars extra for more efficient vehicles. When asked how much they would be willing to pay for an 8-m.p.g improvement in fuel economy for vehicles similar to what they drive now, 47 percent said they would pay \$1,000 to \$2,000 more, and 20 percent said \$500 to \$700. <sup>xliv</sup>
- At least 300 bills have been filed in 40 states that address heat-trapping gases and climate change in some form, according to the National Conference of State Legislatures. <sup>xlv</sup>*(NYT) PP Bush Spits with Congress 4/4/07*

## **Policy Recommendations**

We can no longer afford an energy policy that undermines our national security by funneling billions of dollars to our enemies around the world, and continues to increase emissions of heat trapping gases that cause global warming. Our oil dependence and global warming problem require immediate and comprehensive action from Congress in order to address both challenges together.

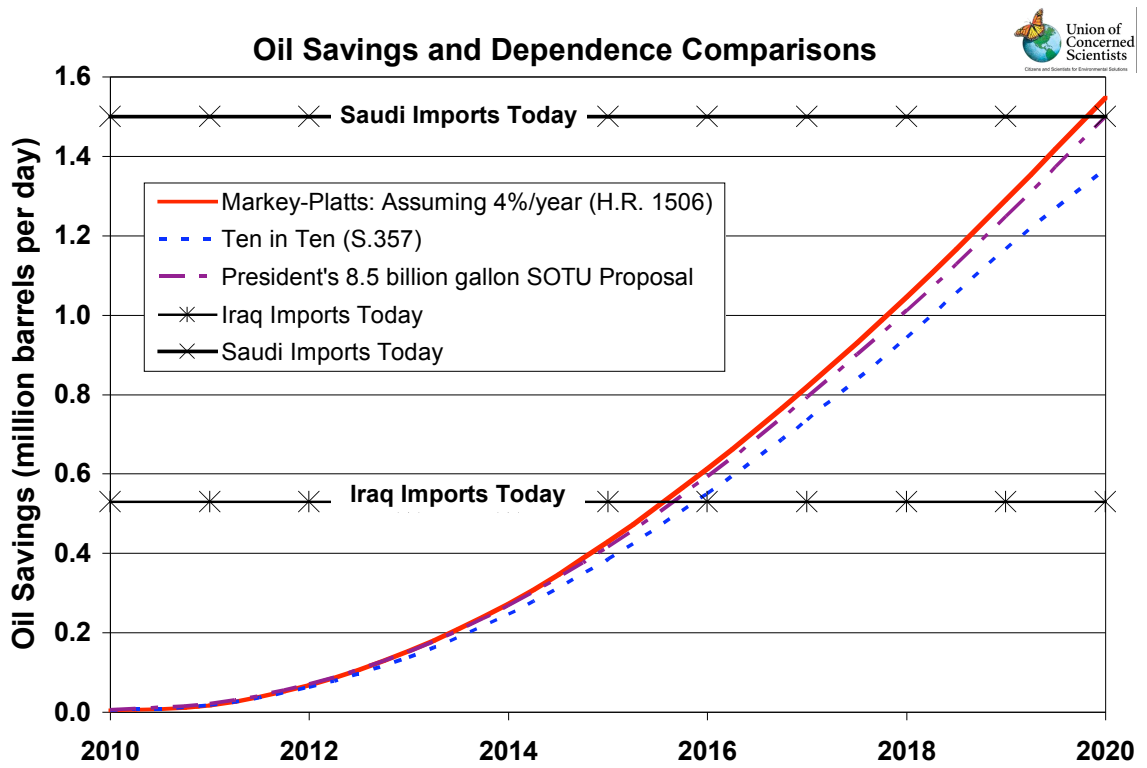
Scientists warn that we have only a short window for action to prevent catastrophic global warming. Delay -- as many recent economic studies reveal in sharp relief -- would make emissions reduction more difficult and more costly than action now.

**To address both challenges together we need both an economy-wide cap on global warming pollution that will provide long-term certainty and guarantee emissions reductions, as well as sector-specific strategies to jump-start emissions reductions. In the case of the transportation, sector performance standards for vehicles and fuels, in addition to a cap, are essential to guarantee meaningful oil savings, and thereby benefits to our national and economic security.**

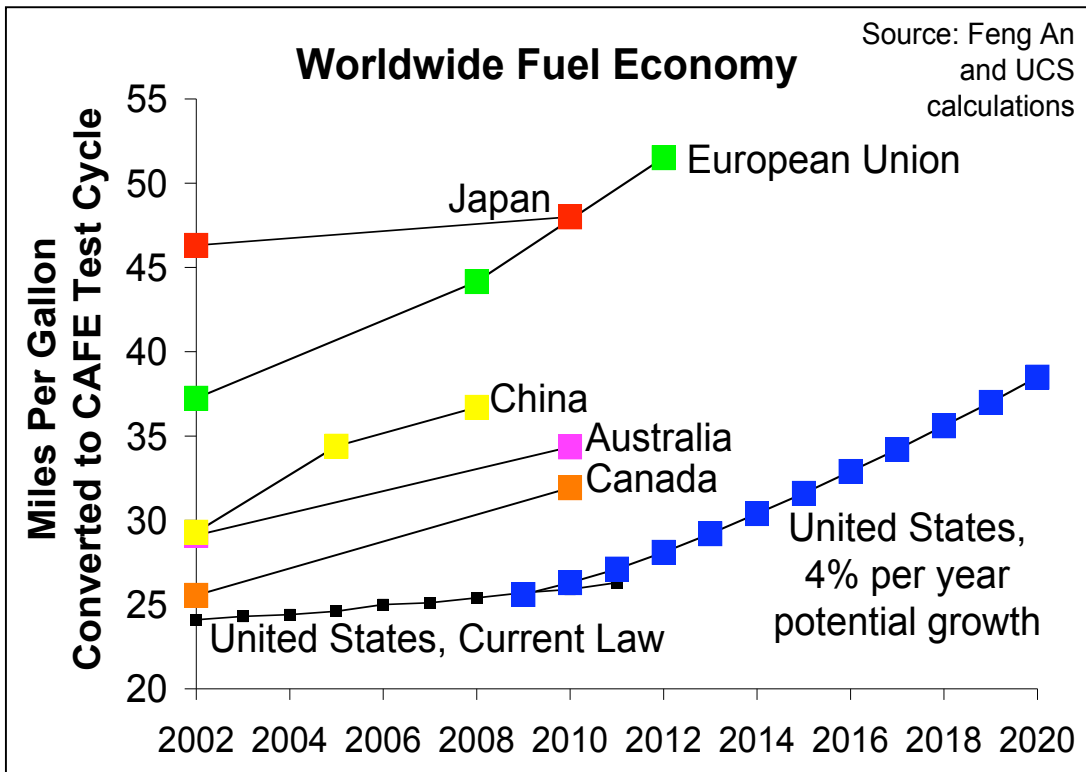
In the immediate term, I urge the Congress to:

- Enact an economy-wide, long-term declining cap on emissions from all sectors that would reduce global warming pollution by 2 percent per year from current levels, reaching an 80 percent reduction by 2050. This is the greenhouse gas emission reduction level that scientists advise is necessary to prevent catastrophic global warming.
  - ⇒ The Wall Street Journal editorialized, “By far the biggest question, however, is where the cap is set. The trading of emissions credits does nothing to lower the quantity of emissions – it merely shifts around the right to emit. It’s the cap that sets the amount of CO2 put into the air. ... When the EU started emissions trading in 2005, the price of a ton of CO2 quickly tripled before cratering when participants realized that the cap hadn’t been set low enough to create a genuine shortage.”<sup>xlvi</sup>
  
- In conjunction with an economy-wide cap, raise vehicle fuel economy standards to at least 35 miles per gallon by 2018 – the level recommended by the National Academies of Sciences and consistent with the President’s proposal of 4 percent per year improvement. By making this level of improvement binding, rather than leaving it up to the administration, we could save as much oil as we currently import from the Persian Gulf, benefiting our economy and our long-term strategic interests.
  - ⇒ Congress should follow key steps to realize oil savings and emissions benefits from available vehicle technology:
    - Require at least 35 mile per gallon fuel economy for cars and light trucks by 2018, and regular rate of improvement thereafter
    - Give the administration flexibility to restructure the standard, but do not leave goal-setting up to the administration
    - Provide consumers and/or automakers with economic incentives to invest in technology for increasing fleet wide fuel economy
  
- Establish a low-carbon performance standard for transportation fuels that will reduce the carbon content of our fuel mix over time. This will ensure that fuel providers share the obligation with auto companies in reducing emissions, and that investment flows toward cleaner, sustainably made fuel, rather than dirtier fossil fuel alternatives.
  - ⇒ Governor Schwarzenegger recently proposed such a standard in CA, requiring fuel providers to reduce the carbon intensity of their fuel mix by 10 percent by 2020. This is a good model for the federal level, since it is technology neutral and lets the market decide which low-carbon fuels are most viable.

**Current congressional proposal will have significant impact on our oil dependency.**



As the chart below shows, while a 4 percent per year path would still leave us 7 years behind Australia, 9 years behind China, and more than 15 years behind the European Union, the 4 percent per year path would cut oil dependence, slow global warming, and save consumers billions at the pump.



Finally, I urge Congress to take these additional immediate actions to

reduce global warming pollution:

- Establish a Renewable Electricity Standard (RES) requiring 20 percent of electricity to be produced from renewable energy by 2025.
- Establish Energy Efficiency Resource Standard, so electric and natural gas utilities save a certain percentage of the energy they sell through energy efficiency.
- Extend tax incentives for energy efficiency and renewable energy, using performance-based incentives that reward actual environmental benefits. These incentives should be provided in a manner that will have a positive, predictable and long lasting effect on the implementation of policies and the deployment of technologies that will make a measurable difference.

## Conclusion

Our actions as Americans cannot stop with these measures. As noted earlier – THE SIZE AND SPEED OF THE SOLUTION MUST MATCH THE SIZE AND SPEED OF THE PROBLEM.

Throughout our history, Americans have successfully met critical challenges in both war and peace. Building a new, clean energy economy has become one of the great challenges of our time. Together we can move our Nation toward clean and secure energy supplies with policies that promote energy efficiency and the greatly increased the use of renewable energy. As we have in our Nation's past struggles, dedicated and concerned Americans from every part of the country will play a key role in decisively winning the energy victory, both as citizens and as consumers.

We have ten years to reverse course – our Nation’s security depends on the swift, serious and thoughtful response of our elected leaders in Congress.

Thank you.

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#### Endnotes

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<sup>ii</sup> FARIVAR, MASOOD and IAN TALLEY. “Crisis Sparks Oil-Supply Fear/U.K.-Iran Standoff /Has Traders Pricing /In Risks of a Disruption.” *Wall Street Journal* (Apr. 2, 2007).

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<sup>xviii</sup> Brown, Peter and Harry Stoffer. “The heat is on/How global warming is closing in on the U.S. auto industry.” *Automotive News* (Feb. 7, 2007).

<sup>xix</sup> Revkin, Andrew, “U.S. Predicting Steady Increase for Emissions.” *New York Times* (Mar. 3, 2007).

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