

an end to the violence in Darfur. Now we need to act upon these intentions and pressure the Government of Sudan to cooperate in efforts to improve prospects for peace throughout Sudan and the greater east Africa region.

#### FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY ACT

Mr. OBAMA. Mr. President, I rise today to speak about the Federal Funding Accountability and Transparency Act, which passed the Senate last week.

This is an important bill that will bring badly needed transparency to Federal spending. The bill creates a user-friendly website to search all Government contracts, grants, earmarks, and loans, opening up Federal financial transactions to public scrutiny. By helping to lift the veil of secrecy in Washington, this website will help make us all better legislators. It will help make reporters better journalists. And it will help make all Americans more informed voters and more active citizens.

I am heartened to see that Government transparency can be a bipartisan issue. This bill has been cosponsored by more than 40 of our colleagues and has the support of more than 100 outside groups from all parts of the political spectrum. It has been endorsed by dozens of editorial boards across the country from the Wall Street Journal, to the Chicago Sun-Times and The Oklahoman. Most people I speak to in Illinois or here in Washington or anywhere else wonder why a public website of all Federal spending does not already exist. To them, this is just common sense.

Whether you believe the Government ought to spend more money or spend less, you should certainly be able to agree that the Government ought to spend every penny efficiently and transparently. Transparency is the first step to holding Government accountable for its actions and is a prerequisite to oversight and financial control. We can't reduce waste, fraud, and abuse without knowing how, where, and why Federal money is flowing out the door. This bill will provide that transparency, and not just to Members of Congress. Anybody with access to the Internet will be able to see how Federal funds are being spent. If Government spending can't withstand public scrutiny, then the money shouldn't be spent. The American people deserve no less.

I want to express my appreciation for the hard work that went into getting S. 2590 passed. I would like to thank the majority leader and minority leader, as well as the chairman and ranking member of the Homeland Security and Governmental Affairs Committee, for their assistance in moving this important legislation forward.

I would also like to thank the organizations that helped create a grassroots

movement in support of Government transparency and in support of this bill. Without the hard work of OMB Watch, the Project on Government Oversight, and Citizens Against Government Waste, to name just a few supporters, this bill would not have been considered and passed so quickly.

And most importantly, I would like to thank my colleague, Senator COBURN, and his outstanding staff for their diligence and dedication. Since Senator COBURN and I first met during freshman orientation, we have developed a close personal bond that has translated into a close working relationship to bring more transparency and accountability into the way that Government spends taxpayer money. I have been impressed by the commitment and tenacity with which he stands up for his principles and beliefs, and it is these qualities that enabled this bill to get passed.

The House of Representatives is expected to vote on this bill later this week, and I am confident that our bipartisan and bicameral collaboration will quickly become law. It is not often that two Senators from different parties are able to bridge the partisan divide in this town and get something accomplished. But the American people demand greater transparency and accountability, and it is our honor and privilege—indeed, it is our duty—to provide the tools to help make that possible.

#### TRIBUTE TO SORIN DUCARU

Mr. BROWNBACK. I commend the Romanian Ambassador to the United States for his service as a diplomat, a civil leader, a transatlantic thinker, and a friend of the United States.

Sorin Ducaru has served as Romania's principal diplomatic spokesman for the last 5 years. He played a key role in the Romanian Ministry of Foreign Affairs as the first head of the Division for NATO and Strategic Issues and was deeply involved in events leading to Romania's membership in NATO—ratified with the unanimous support of the U.S. Senate.

Once Romania joined NATO, Ambassador Ducaru was a part of the Romanian team that helped pave the way for the establishment of U.S. military facilities in Romania. The agreement was signed in 2005, ratified this past summer, and is currently in its implementation phase.

On this fifth anniversary of the 9/11 attacks in particular, it is important to recall our partners in the war on terrorism. In 2001, just days after 9/11 terrorist attacks, Ambassador Ducaru helped facilitate Romanian-American political dialogue that resulted in Romania's offer to put its military and logistical facilities, air corridors, and troops at the disposal of the United States in the war on terrorism. Even before Romania was a NATO member, it participated with troops and logistical support in the war on ter-

rorism. Now, Romania is the fifth largest contributor of troops in Afghanistan and Iraq.

Ambassador Ducaru has been a strong supporter of Romania's participation in the process of democratic and economic reconstruction of Afghanistan and Iraq, pointing to the lessons learned of his own country's dramatic and sometimes painful transformations in the last 16 years. He has been a constant advocate of cooperation between American businesses and the business potential of coalition countries.

His support for democracy in Afghanistan and Iraq is not surprising because Ambassador Ducaru is a long-time advocate of democratic values. He is a member of the new generation of leaders that transformed Romania to an open free society following the revolution of 1989. He has been at the forefront of a new generation of Central European leaders whose countries have evolved from nondemocratic and closed societies to countries that preserve freedom, security, and economic opportunity.

As he departs his current post to become the Romanian Ambassador to the North Atlantic Treaty Organization, I express my gratitude for his efforts to build a strong and vibrant relationship between Romania and the United States. I look forward to working with him to continue efforts to expand political, diplomatic, economic, and military cooperation and stability through NATO. Ambassador Ducaru is a true friend of the United States, and I wish him well in his new capacity.

#### REDUCING FOREIGN ENERGY RELIANCE

Mr. LUGAR. Mr. President, I rise today to request that my remarks, delivered in the keynote address to the Richard G. Lugar-Purdue University Summit on Energy Security, at Purdue University, West Lafayette, IN, on August 29, 2006, be printed in the RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

I am honored to address this assembly, which will explore an aggressive agenda to reduce our nation's dependence on foreign energy sources. I appreciate the opening words of my good friend, Governor Mitch Daniels. He and his administration have given priority to energy issues in Indiana. They are attempting to maximize the opportunities that our state has to become a leader in a broad gamut of energy technologies. I also want to thank our host, Purdue University, and President Martin Jischke for promoting this energy summit. President Jischke has provided brilliant direction to this university. His advice on energy, agriculture, education, and many other topics has been of great benefit to me personally. I will deeply miss his leadership at Purdue when he steps down as President next June, but I look forward to a very productive year immediately ahead and many mutual endeavors in years to come. I am also delighted that Congressman Pete Visclosky, will address the summit conference this noon. Pete has been a great partner on numerous issues,

ranging from local projects of special importance to Hoosiers, to the global search for an AIDS vaccine.

It is exciting to be surrounded by so many talented individuals who are committed to the objective of greater energy independence for the United States. I believe that in the future, the United States can be energy self sufficient or nearly so. Over the long term, we have the resources and the ingenuity to achieve this goal.

The crucial question is what happens between now and then. Will we achieve this goal rapidly through a coherent and resolute national policy that takes advantage of America's natural assets to create new economic opportunities, a cleaner environment, and improved national security? Or will we achieve our objective only after many years of widespread economic pain and national vulnerability caused by scarcity, terrorist attacks, market shocks, and foreign manipulation of our energy supplies?

We must move now to address our energy vulnerability because sufficient investment cannot happen overnight, and it will take years to build supporting infrastructure and to change behavior. In other words, by the time a sustained energy crisis fully motivates market forces, we are likely to be well past the point where we can save ourselves from extensive suffering. Our motivation will come too late and the resulting investment will come too slowly to prevent the severe economic and national security consequences of our oil dependence. This is the very essence of a problem requiring citizen, business, and governmental action.

I will describe our energy dilemma as a six-pronged threat to national security. First, oil supplies are vulnerable to natural disasters, wars, and terrorist attacks that can disrupt the lifeblood of the international economy. Within the last year, the international flow of oil has been disrupted by hurricanes, unrest in Nigeria, and continued sabotage in Iraq. In late February of this year, terrorists penetrated the outer defenses of Saudi Arabia's largest oil processing facility with car bombs before being repulsed. Al-Qaeda and other terrorist organizations have openly declared their intent to attack oil facilities to inflict pain on Western economies.

Second, as large industrializing nations such as China and India seek new energy supplies, oil and natural gas will become more expensive. In the long run we will face the prospect that the world's supply of oil may not be abundant and accessible enough to support continued economic growth in both the industrialized West and 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.

Third, adversarial regimes from Venezuela, to Iran, to Russia are using energy supplies as leverage against their neighbors. We are used to thinking in terms of conventional warfare between nations, but energy is becoming a weapon of choice for those who possess it. Nations experiencing a cutoff of energy supplies, or even the threat of a cutoff, may become desperate, increasing the chances of armed conflict, terrorism, and economic collapse.

Fourth, the revenues flowing to authoritarian regimes often increase corruption in those countries and allow them to insulate themselves from international pressure and the democratic aspirations of their own peoples. 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.

Fifth, the threat of climate change has been made worse by inefficient and unclean use of non-renewable energy. In the long run this could bring drought, famine, disease, and mass migration, all of which could lead to conflict and instability.

Sixth, much of the developing world is being hit hard by rising energy costs, which often cancel the benefits of our foreign assistance. 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 a source of catastrophe for the United States and the world.

The vulnerability of the United States rests on some basic factors. With less than 5 percent of the world's population, our nation consumes 25 percent of its oil. World demand for oil and other forms of energy is rapidly increasing. Within 25 years, the world will need 50 percent more energy than it does now. If oil prices average \$60 a barrel through 2006—a figure that we are currently well above—we will spend about \$320 billion on oil imports this year. This is roughly the same amount that the United States has spent on the war and reconstruction effort in Iraq during the first three years of conflict.

These conditions might be negotiable in the short and medium terms if oil resided with responsible, secure producers who maximize production during periods of elevated demand. But just the opposite is true. According to PFC Energy, about 79 percent of the world's oil supply is controlled by state-run oil companies. These governments profoundly affect prices through politicized investment and production decisions. The vast majority of these oil assets are afflicted by at least one of three problems: lack of investment, political manipulation, or the threat of instability and terrorism.

As recently as four years ago, spare production capacity exceeded world oil consumption by about ten percent. As world demand for oil has rapidly increased in the last few years, spare capacity has declined to less than two percent. Thus, even minor disruptions of oil can drive up prices. Earlier this month, a routine inspection found corrosion in a section of BP's Prudhoe Bay oil pipeline that shut down 8 percent of U.S. oil output, causing a \$2 spike in oil prices. That the oil market is this vulnerable to something as mundane as corrosion in a pipeline is evidence of the precarious conditions in which we live.

Our current dependence on imported oil has put the United States in a position that no great power should tolerate. Our economic health is subject to forces far beyond our control, including the decisions of hostile countries. We maintain a massive military presence overseas, partly to preserve our oil lifeline. One conservative estimate puts U.S. oil-dedicated military expenditures in the Middle East at \$50 billion per year. But there is no guarantee that even our unrivaled military forces can prevent an energy disaster. We have lost leverage on the international stage and are daily exacerbating the problem by participating in an enormous wealth transfer to authoritarian nations that happen to possess the commodity that our economy can least do without.

Rising energy prices, news reports of hostile oil producers, and the energy shocks experienced after the Katrina and Rita hurricanes, have awakened Americans to our energy vulnerability.

Almost six months ago, I delivered an address at the Brookings Institution in which I described "a shifting balance of realism" from those who believe in the immutability of oil domination of our economy and a *laissez faire* approach to energy policy to those who recognize that our nation has no choice but to seek a major reorientation in the way we get our energy. With oil at \$72 a barrel and multiple crises flaring in the Middle East, fewer pro-oil commentators still assert that dependence on oil is simply a choice of the marketplace and government can and should do little to change it.

I believe that there is a growing consensus behind the new energy realism. There are clear signs that policy makers and a majority of the public recognize that our oil dependence is dangerously unsustainable.

The media is filled with examples of enterprising individuals who are making ethanol or biodiesel, erecting windmills, installing solar panels, or otherwise establishing personal control over their energy resources. A review of the nation's five largest newspapers revealed that twice as many energy-related stories appeared in July 2006 as appeared in July 2003.

Gasoline prices are beginning to have some effect on the automobile choices of American consumers. Sales of SUV's were down fifteen percent in the first half of 2006 compared with the same period in 2005. Sales of compact cars, by comparison, rose eight percent. These statistics were reinforced by a May 2006 Consumer Reports survey, which found that 37 percent of Americans were considering trading in their current cars for more fuel efficient cars. Almost half of these consumers were considering the purchase of a hybrid car or another alternative to traditional gasoline powered cars.

Progress is also appearing in the investment world. The entrepreneurial vanguard that brought us the internet and transformed telecommunications is turning its attention to alternative energy. According to data compiled by VentureOne, venture capital targeted at alternative energy projects more than tripled to \$315 million in the first half of 2006 compared to the first half of 2005. Alternative energy investment is no longer just a niche area for environmental idealists and companies trying to improve their public image.

As a political issue, energy has been elevated to a status that is roughly equivalent to health care or education. A check of all one hundred Senators' websites in early August found that at least 85 of them had either issued a press release on energy this summer or had an energy section prominently displayed on their homepage. No politician on the national scene can afford to ignore energy.

Unfortunately, although many Americans are embracing the idea of changing our energy destiny, they have not committed themselves to the action steps required to achieve an alternative future. This is an important distinction, because although national acceptance that there is a problem is a necessary condition for solving the problem, it does not guarantee that the problem will be solved.

In fact, advancements in American energy security have been painfully slow during 2006, and political leadership has been defensive, rather than pro-active. One can point with appreciation to a few positive trends, as I have just done, but these are small steps forward in the context of our larger vulnerability. If our economy is crippled by an oil embargo, if terrorists succeed in disrupting our oil lifeline, or if we slide into a war because oil wealth has emboldened anti-American regimes, it will not matter that before disaster struck, the American public and its

leaders gained a new sense of realism about our vulnerability. It will not matter that we were producing marginally more ethanol than before or that consumers are more willing to consider hybrids and other alternative vehicles.

Not all indices and measures of energy progress are even moving in the right direction. The American people are angered by \$3.00 gasoline, but they are still buying it in record quantities. In a recent *Business Week* article, writer Peter Coy points out that gasoline consumption during the 2006 July 4th holiday was up 2 percent from a year earlier and consumers bought ten percent more gasoline in the first half of 2006 than they did in the first half of 2000, even though the price of gasoline was 75 percent higher.

Neither American oil companies, nor American car companies have shown an inclination to dramatically transform their businesses in ways that will achieve the degree of change we need to address a national security emergency. In fact, a number of the major oil companies have written to me to explain why they are not enthusiastic about installing pumps that can accommodate E85—a blend of gasoline and up to 85 percent ethanol. Some are distinctly hostile to any such idea.

General Motors launched a new “Live Green, Go Yellow” ad campaign to promote the purchase of flexible fuel vehicles. But its strategy for overall corporate recovery appears to depend on the sale of pickup trucks. Earlier this month, General Motors CEO Richard Wagoner called a new redesigned line of pickup trucks “the most important part of our North American turnaround plan.” According to the *New York Times*, to counter GM’s new line, Ford Motors plans to cut the price of its 2007 F-Series pickups, add two more body styles, and increase towing capacity. Moreover, earlier in the summer, GM attempted to tap into consumer worries about gasoline costs by offering to subsidize gasoline for purchasers of certain gas guzzlers in Florida and California. Under the deal, GM would cap the price of gasoline at \$1.99 per gallon for one year for buyers of Hummers, Yukons, Tahoes, and other large vehicles.

Within State governments, dropping speed limits or raising gas taxes are non-starters almost everywhere. In fact, speed limits are rising in some states. Recently, Texas raised speed limits on some sections of rural interstate highways to 80 miles per hour, effectively ensuring that many motorists will be traveling closer to 90 miles per hour on those stretches and using more gasoline per mile.

Most importantly, the Federal Government is not treating energy vulnerability as a crisis, despite an increase in energy related proposals. Consider that the only major energy legislation taken up by Congress so far this year was legislation to encourage offshore oil and gas production in the Gulf of Mexico. I supported passage of the bill, but it was offered in a format that did not allow for amendments, and no bill has emerged from a House-Senate conference. If the bill passes, we would be addressing only a small corner of the energy picture. Issues such as energy efficiency, renewable fuels, and alternative energy technology had no chance to be discussed.

Even when the Congress and the President establish programs that would produce meaningful results, bureaucratic inertia and turf-consciousness within the Federal agencies have added delays. Groundbreaking for the first commercial-scale cellulosic ethanol plant has been on hold for a year while investors wait for the Federal government to establish the regulations and application procedure for a loan guarantee program that was passed last summer. The program was

meant to jump start the commercialization of cellulosic ethanol—a key goal of President Bush and Congress. But despite the urgency of this mission, the Energy Department’s glacial implementation of the program has frustrated potential investors and those of us who are urging the transition to gasoline alternatives. In fairness, Secretary Bodman announced in early August that the Energy Department will accept proposals this fall for cellulosic plant pilot projects, even before regulations are complete. The Department estimates that construction of the first plants could begin early next year.

We could all take our time if this were merely a matter of accomplishing an industrial conversion to more cost effective technologies. Unfortunately, in the absence of far-reaching changes in energy policy, we are risking multiple disasters for our country.

The energy debate is afflicted with what writer Jonathan Rauch has called “Demosclerosis”—the phenomenon of competing interest groups protecting their perceived interests so effectively that policy can achieve only least common denominator outcomes that do not solve the problem threatening the whole nation. Rauch used the concept of *demosclerosis* to describe the gridlock afflicting efforts to cut the federal budget and restructure entitlement programs. But it is also applicable to the energy debate. The competing interests of oil companies, car companies, environmentalists, truckers, farmers, consumers, and governmental agencies cancel out initiatives or compromises that serve the broader public interest.

Even in California, where voters tend to be environmentally sensitive and where pollution provides a strong extra impetus to cut gasoline use, entrenched business interests have succeeded in discouraging alternative fuels and transportation technologies. Since 1979, California lawmakers have tried a variety of approaches, only to be frustrated by the oil and auto industries that resisted change. A proposal there to cut oil use 15 percent by 2020 is supported by Governor Schwarzenegger, but opposed by the major oil companies, and has not made it through the legislature. California consumes more gasoline than any other state. Yet the number of E85 stations open to the public, after all the conflicting cross-currents, is exactly one.

Overlaying these elements of gridlock are memories of President Jimmy Carter’s unpopular energy program from the 1970s. His dour calls for sacrifice remain a cautionary example for many office holders, editorial writers, and political strategists. Conventional political wisdom holds that the American public will punish anyone who forces significant energy sacrifices on them. This is a major oversimplification, but it is true that Americans are not eager to pay higher prices for energy, wait in gas lines, or see their driving or horsepower curtailed. A recent Bloomberg/Los Angeles Times poll asked about 1,500 people which of five options were “the best way to reduce U.S. reliance on foreign oil.” Two percent chose increasing the gas tax. Building new nuclear plants or enforcing stricter mileage standards fared little better at 6 and 8 percent respectively. Respondents gravitated toward general trends that were unlikely to affect them personally, with 52 percent endorsing increased government investments in alternative energy sources and 20 percent choosing to relax environmental standards for oil and gas drilling.

Breaking through a political logjam often requires a crisis that focuses the nation in a way that achieves a consensus. But consider that the combination of September 11, 2001, the war in Iraq, the conflict on the Israeli-

Lebanese border, the nuclear standoffs with Iran and North Korea, the Katrina and Rita hurricanes, sustained \$3.00 per gallon gasoline, and several other severe problems have not created a consensus on energy policy. This leads one to the sobering conclusion that a disaster capable of sufficiently energizing public opinion and our political structures will have to be something worse than the collective maladies I just mentioned—perhaps extreme enough to push the price of oil to triple digits and set in motion a worldwide economic downturn. None of us want to experience this or any of the nightmare scenarios that await us. It is time to summon the political will to overcome the energy stalemate.

In most areas of national policy we are concerned far more with trends than with a discernable national goal. For example, we watch the effects of President Bush’s “No Child Left Behind Act” and debate whether more American school children are reading at grade level than before. Despite the name of that bill, we realize that not every school or every child will succeed. We measure success or failure in trends and those trends have meaning because they can be translated into progress for real individuals. The same is true for most aspects of health care policy, environmental protection, job creation, highway construction, and numerous other policy areas. Even when goals aren’t met completely, we are rarely disappointed if we achieve measurable improvements.

Our energy dilemma is different. Although every gallon of ethanol, every E-85 pump, every flex fuel vehicle that comes on line moves us closer to safety, they do not necessarily make us safer right now. Marginally reducing our reliance on imported oil over the course of the next few decades will be welcome, but we will still be vulnerable to disaster at any time, and our national security and economic policy options will be constrained accordingly.

Our energy vulnerability is analogous to rowing a boat to shore in rough seas. Each stroke moves us closer to safety, but until we reach the shore, we can be capsized. We have to measure progress not against where we have been, but against the distance to our goals. Achieving a positive trend line is almost inevitable as long as energy costs remain high, because these costs will lead to some improvements in investment and conservation. We need to have the discipline to understand that a modestly positive trend line is not enough. With the storm bearing down on them, the occupants of a threatened boat do not put up their oars and relax because the current has caused them to drift a little closer to shore.

To bolster public motivation and to connect our efforts to rational outcomes, we must work much harder to establish meaningful goals. Americans need to know exactly what the plan is and how we will achieve it. We not only must understand how to bring alternatives to the market, we must establish what degree of change would improve our national security situation, then tailor national policy to achieve that goal.

Although the energy debate is multifaceted, the heart of our geostrategic problem is reliance on imported oil in a market that is dominated by volatile and hostile governments. This is where we must devote our national effort, because it is our most intense short term vulnerability. It also could bring the most collateral benefits, including reinvigorating the American automobile and agricultural industries and helping to reduce carbon emissions. This is not to minimize the challenges facing our electricity grid or other energy problems, but as we marshal our political capital for a difficult task, this should be our first focus.

To this end, the United States should adopt a national program that would make virtually every new car sold in America a flexible fuel vehicle. We should ensure that at least one quarter of filling stations in America have E85 pumps. We should expand ethanol production to 100 billion gallons a year by 2025, a figure that could be achieved by doubling output every five years. We should also create an approximate \$45 per barrel price floor on oil through a variable ethanol tax credit to ensure that investments keep flowing to alternatives. And we should enact stricter vehicle mileage standards to point automobile innovation toward conservation. The plan I am proposing today would achieve the replacement of 6.5 million barrels of oil per day by volume—the rough equivalent of one third of the oil used in America and one half of our current oil imports.

I am aware that these are ambitious goals, and that achieving them will take political breakthroughs and intensive government oversight. But if we have the political will, America can end its oil addiction through technology, the new economics of energy, and targeted government incentives and regulations to focus market forces on the problem.

As former Federal Reserve Chairman Alan Greenspan told the Senate Foreign Relations Committee earlier this year, almost one out of every seven barrels of oil produced in the world is consumed on American highways. To break oil's monopoly on American roads, some experts favor a giant leap in technology to hydrogen. But that will require new engines, new distribution systems, new production technologies, and is decades away from commercialization. Instead, we can start to break petroleum's grip right now. The key is making ethanol as important as gasoline in our transportation fuel mix.

To start with, every new car can be easily fitted with proven technology that enables it to burn E85. Millions of these cars are on the road today, and the factory cost of making each vehicle capable of burning E85 is probably less than \$150. Because these flex-fuel cars can run on either gasoline or E85, or any combination, the driver can fill up with E85 when it is available, and with regular gasoline when it is not. So the first step should be to require that all new cars sold in America be flex-fuel vehicles.

We applaud the efforts of American automakers to increase their flexible fuel offerings. On June 28, Daimler-Chrysler, Ford, and General Motors issued a statement announcing that they will double their production of flexible fuel vehicles by 2010. This pledge is significant within the context of the auto company's business objectives, but it is inadequate in the context of pursuing the national security benefits of replacing a large share of gasoline with ethanol. The Federal government should work with both foreign and domestic car companies on a plan to rapidly achieve the goal of equipping all new vehicles sold in America with flex-fuel technology. The Federal government should be willing to offer incentives to help make a voluntary plan work. But if car manufacturers do not respond with a sufficient plan in a short time period, Congress should mandate that all new autos sold in the United States have flex-fuel capability.

I do not suggest this lightly. But my observations of the post-Katrina response by car companies, oil companies, and consumers is that in the short run, the evolution of market forces won't be capable of producing the progress that we need to achieve our national security goals, particularly since the car fleet turns over slowly.

Next, we need to make E85 more widely available. Major oil companies have resisted

installing E85 pumps. Indeed, most of the 897 E85 fuel stations in the country are independently-owned. As the profits of oil companies have increased with the price of oil, members of Congress have discussed increasing taxes on oil companies or requiring that a certain percentage of profits be devoted to research, exploration, or alternative energy sources.

Some of these ideas may have merit. I would suggest, however, that our first requirement of oil companies should be to use some of their recent profits to install E85 pumps in at least 25 percent of the nation's fuel stations within ten years. Unfortunately, this may also require an outright mandate. The majors have, thus far, shown little willingness to take this step.

The oil companies have argued that installing these pumps is too expensive and should wait until sufficient supplies of ethanol and flex-fuel vehicles are available. It does cost money to turn a gas pump into an E85 pump, primarily to replace the underground storage tank. But the cost is generally far less than the oil companies have portrayed. A recent Wall Street Journal article cited Chevron as estimating that installing an E85 pump costs \$200,000. In fact, last year I helped inaugurate an E85 outlet in Terre Haute, and the owner said it cost her less than five thousand dollars to retrofit her station. Moreover, according to oil industry sources, installing a new E85 pump costs only about \$5,000 more than installing a new gasoline pump. This suggests that stations on the drawing board would be low-cost candidates for E85 pumps. Conversion of some pumps will be much more expensive, and there are numerous price variables to consider. But by making use of retrofits and by devoting one pump to E85 at newly constructed fuel stations, the average conversion cost nationwide would be a fraction of what oil companies have implied.

In addition, gasoline companies can take advantage of an existing tax credit for the installation of renewable fuel pumps. I would support increasing this tax credit if a mandate were enacted. Gasoline companies also would be able to hold costs down by selecting the least expensive locations for adding E85 pumps, as long as they met geographic distribution requirements.

If the six largest gasoline companies installed E85 pumps in half of their stations, we would get to the 25 percent fuel station goal. For the sake of argument, if we estimated that the average marginal cost of opening an E85 pump after tax credits was \$15,000, then establishing the pumps at one quarter of the nation's 170,000 fuel stations would cost approximately \$637 million over ten years. That is just one percent of the combined \$64 billion profit made during 2005 alone by the three largest American oil companies—Exxon-Mobil, Chevron, and Conoco-Phillips. Even if the average cost is somewhat more than \$15,000, these figures illustrate that the cost of a nationwide E85 pump conversion for the major oil companies would be far from prohibitive.

My intent here is not to punish the oil companies. As a Senator who has favored new drilling and other initiatives designed to help the oil companies produce more domestic oil, I am suggesting that they need to alter their thinking. In the best circumstances, they would embrace ethanol and work hard to diversify their investments and operations—partly for the good will they would receive from Congress and the public—but also to prepare for the coming decades of greater American prosperity and security.

If the mandate can be effectively linked to the increasing availability of ethanol, so much the better. But to achieve our larger goal, we must be prepared to tolerate a cer-

tain level of disconnect between cars, pumps, and ethanol in the early stages of this effort. Some pumps may be underutilized at first, but this cannot be an excuse not to move forward.

Incidentally, virtually every gas-powered vehicle in America today can run on gasoline blended with 10 percent ethanol, or E10. By requiring that all gasoline be E10 as ethanol supplies become available, we could accommodate significantly more ethanol production even before most flex-fuel vehicles and E85 pumps are in place. Our neighbors in Illinois have passed such legislation, and I have urged my friends in Indianapolis to follow suit.

Now how do we produce enough ethanol to supply these stations and fuel these cars? The good news is we can let the market do a lot of the work. When oil is above \$70 a barrel, making ethanol from corn or sugar, even before subsidies, is less costly than producing gasoline. That is true even if oil drops substantially from today's level.

But the long term advancement of ethanol as a national transportation fuel requires a focused effort to perfect and commercialize cellulosic technology, which will enable us to make ethanol from switch grass, agricultural waste and other inexpensive biomass. The addition of cellulosic ethanol has the potential to substantially reduce the overall production cost of ethanol, while greatly expanding the volume produced. Although scientists and technicians are confident of the possibilities for cellulosic ethanol, efforts at commercialization have lagged behind basic research. The time is long past due for the Federal government to step in and prime the pump for commercial production through an aggressive loan program. The experience gained by the first production plants will provide the knowledge we need to rapidly expand the cellulosic industry.

Studies have shown that we will have enough land for energy crops, given the expected increases in yields and improvements in processing efficiency. If we could reach a target of 100 billion gallons of ethanol a year—a 13-fold increase over current capacity in operation or under construction—that would be equivalent to 71 percent of current gasoline consumption by volume. The two are not directly comparable because ethanol has lower energy content than gasoline, but over time, I expect automakers will improve the efficiency of their engines for E85 fuel.

Although many investors are currently lining up to jump into the ethanol business, many are still hesitating to take the plunge. They fear that foreign oil producers might, as they have before, manipulate the oil market to temporarily cut the price and drive ethanol producers out of business. Therefore, another step we should take is to ensure market certainty for investors by setting a price floor for crude oil at about \$45 a barrel through a variable ethanol tax credit that would rise as the price of oil dropped. I am developing legislation to achieve this goal and have benefited from the contributions of Dr. Wallace Tyner of Purdue University, who will appear in the afternoon panel.

Finally, it will be far easier to alter the mix of fuel supplies if we can slow or stop the growth in overall fuel demand. It has been more than twenty years since there was a change in the Corporate Average Fuel Efficiency standards for cars. Over that time, American gas mileage has largely stagnated. In 1987, the average light duty vehicle got 22.1 miles per gallon, according to the EPA. Nineteen years later, in 2006, the figure has fallen to 21 miles per gallon. Yet during that time, automobile technology has greatly advanced, only in other directions. For instance, today a family car like the Toyota Camry has faster acceleration than a muscle car of the 1970s.

We need to channel the technical prowess of America's auto industry in the direction of greater fuel efficiency so that we can grow our economy without growing our fuel consumption. Therefore, Congress should enact modern mileage standards that set a target of steadily improving fuel economy every year. It should also continue to encourage research, development, and deployment of hybrids, plug-in technology, ultra-light auto materials, biodiesel, and coal-based transportation fuels, among other promising technologies.

This package of proposals would dramatically improve America's security posture. It would not dismantle the automobile culture that Americans cherish, nor would it create a vast bureaucracy with a bottomless appetite for taxpayer dollars. In fact, if it is accompanied by strong leadership and thoughtful explanation, I am confident that Americans will recognize that this is the way that we will preserve our cars and our economy over the long run. It would provide more jobs for Americans instead of sending a deluge of money to hostile countries, support our farmers instead of foreign terrorists, and promote green fuels over fossil fuels.

It should not surprise you to learn that I have proposed or co-sponsored legislation on these ideas. But this is just a start. None of these bills has passed, or even been put to a vote in the Senate. For instance, the Fuel Economy Reform Act, which I co-sponsored with my friend Sen. Barack Obama and other Democrats and Republicans, seeks a four percent annual increase in fuel economy. Last month, Sen. Obama tried to amend the offshore oil drilling bill with our legislation, but Senate procedures prevented him from doing so. While we are asking for greater statesmanship from our automobile and oil companies, we must demand the same from our Federal legislators and administrators.

Far in the future, historians may point to the energy policy of the last several decades as the major national security failing of the American government in this era. In the absence of decisive policy changes, historians will rightly ask how the wealthiest and most powerful nation on earth with abundant land, a magnificent industrial infrastructure, and the world's best universities and research institutions simply would not reorient itself over the course of decades despite repeated warning signs. Our failure to act will be all the more unconscionable given that success would bring not only relief from the geopolitical threats of energy-rich regimes, but also restorative economic benefits to our farmers, rural areas, automobile manufacturers, high technology industries, and many others.

We must be very clear that this is a political problem. We now have the financial resources, the industrial might, and the technological prowess to shift our economy away from oil dependence. What we are lacking is coordination and political will. We have made choices, as a society, which have given oil a near monopoly on American transportation. Now we must make a different choice in the interest of American national security and our economic future. As the vanguard of concerned and informed experts in this field, I call upon each of you to apply your talents and energies to solving this fundamental problem threatening the well-being of our nation. I look forward to working with you as we achieve this goal.

#### ADDITIONAL STATEMENTS

##### REMEMBERING MADONNA ARCHAMBEAU

• Mr. JOHNSON. Mr. President, today I wish to honor the life of Madonna

Archambeau. Madonna was a member of the Ihanktonwan Dakota Nation who passed away just over a week ago.

Mrs. Archambeau was born in 1934 in Ravinia, SD just a few miles off the Missouri River near the Nebraska border. Mrs. Archambeau was then educated at St. Paul's Indian Mission in nearby Marty, SD. From there, she began her service to her community which culminated in her election as the first woman to chair the Yankton Sioux Tribe.

Mrs. Archambeau began her career at the post office in Greenwood, SD, then moved to the Indian Health Service where she served for 31 years. Although she didn't end her career there; after her retirement from IHS she ran for chairperson of the Yankton Sioux Tribe and eventually tribal members elected her as the first woman to serve in that position.

This exceptionally strong woman was an especially strong advocate for the health and wellness of the Yankton Sioux Tribe and some of her greatest contributions to the tribe were in the health care arena. A tireless advocate of the health needs of her people, Mrs. Archambeau fought for adequate health care by working to ensure that emergency services remained at the Wagner Service Unit of the IHS. She was also a major influence in the establishment of a dialysis center for members of the Yankton Sioux Tribe.

It was my pleasure to have worked with her during her term and I would like to offer my condolences to the family, friends, and fellow advocates whom Madonna touched with her efforts on behalf of her people. They have much to be proud of, and it is my hope that their memories will be rich with the great many accomplishments she achieved during her career. Her memory will serve as a beacon to young Native women in the Yankton Sioux tribe and throughout Indian Country.●

#### MEASURES PLACED ON THE CALENDAR

The following bills were read the second time, and placed on the calendar:

H.R. 503. An act to amend the Horse Protection Act to prohibit the shipping, transporting, moving, delivering, receiving, possessing, purchasing, selling, or donation of horses and other equines to be slaughtered for human consumption, and for other purposes.

S. 3882. A bill to amend title 18, United States Code, to support the war on terrorism, and for other purposes.

#### MEASURES READ THE FIRST TIME

The following bills were read the first time:

S. 3884. A bill to impose sanctions against individuals responsible for genocide, war crimes, and crimes against humanity, to support measures for the protection of civilians and humanitarian operations, and to support peace efforts in the Darfur region of Sudan, and for other purposes.

S. 3886. A bill to authorize military commissions to bring terrorists to justice, to

strengthen and modernize terrorist surveillance capabilities, and for other purposes.

#### EXECUTIVE AND OTHER COMMUNICATIONS

The following communications were laid before the Senate, together with accompanying papers, reports, and documents, and were referred as indicated:

EC-8152. A communication from the President of the United States, transmitting, pursuant to law, a report relative to his intention to enter into a free trade agreement with the Republic of Columbia; to the Committee on Finance.

EC-8153. A communication from the Secretary of Health and Human Services, transmitting, pursuant to law, the report entitled "The Medicare Quality Improvement Organization (QIO) Program—Response to IOM Study"; to the Committee on Finance.

EC-8154. A communication from the Secretary of Health and Human Services, transmitting, pursuant to law, the report entitled "Report to Congress on the Evaluation of the Quality Improvement Organization (QIO) Program for Medicare Beneficiaries for Fiscal Year 2005"; to the Committee on Finance.

EC-8155. A communication from the Chief of Publications and Regulations, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "Special Depreciation Allowance" ((RIN1545-BB57) (TD9283)) received on September 5, 2006; to the Committee on Finance.

EC-8156. A communication from the Chief of Publications and Regulations, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "Examples Under Section 937(b)" (Notice 2006-76) received on September 5, 2006; to the Committee on Finance.

EC-8157. A communication from the Chief of Publications and Regulations, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "User Fee for Form 8802, Application for the United States Residency Certification" (Rev. Proc. 2006-35) received on September 5, 2006; to the Committee on Finance.

EC-8158. A communication from the Chief of Publications and Regulations, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "Dividends Paid Deduction for Stock Held in Employee Stock Ownership Plan" ((RIN1545-BE74) (TD9282)) received on September 5, 2006; to the Committee on Finance.

EC-8159. A communication from the Chief of Publications and Regulations, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "Recomputed Differential Earnings Rate for 2004 under Section 809" (Rev. Rul. 2006-45) received on September 5, 2006; to the Committee on Finance.

EC-8160. A communication from the Chief of Publications and Regulations, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "Modifications to Weighted Average Interest Rate—Section 301 of Pension Protection Act of 2006" (Notice 2006-75) received on September 5, 2006; to the Committee on Finance.

EC-8161. A communication from the Chief of Publications and Regulations, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "Announcement: Overview of the IRS's Use of Private Collection Agencies (PCAs) in 2006" (Announcement