



U.S. DEPUTY SECRETARY OF ENERGY DANIEL PONEMAN

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White House Energy Security Stakeholders Forum
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Good afternoon. Thank you Secretary Mabus and Carol Browner for your leadership on these important issues. It's a pleasure to be here today with all of our distinguished panelists and guests.

Before I begin my remarks, I want to take a moment to thank all the men and women here today who work day in and day out to keep our country safe. We greatly appreciate your sacrifice and service.

It is fitting that today's forum includes representatives from both the energy and defense sectors, from academia and the business community. Our energy challenges don't affect just one agency or one industry - they affect all of us - from the small businessman hoping gas prices don't shoot up and raise his operating costs, to the parent sitting around her kitchen table, worried about paying the utility bill, to the soldier driving a fuel convoy through a war zone, battling the elements of sandstorms and a roasting sun, as well as IEDs and hostile fire.

The security and the prosperity of the United States are directly tied to energy. That is why we must break our excessive dependence on fossil fuels and put our country on the path to a clean energy future. This path will lead to a more secure nation, a stronger economy, and a healthier environment for generations to come.

The status quo is unsustainable. A May 2009 CNA report entitled *Powering America's Defense: Energy and the Risks to National Security*, issued by a respected group of distinguished retired flag officers called our national energy posture a serious and urgent threat to national security.

There are many dimensions to this threat. The first dimension, which Secretary Mabus spoke about, is the most immediate, the most personal, and unfortunately, one we know all too well - the vulnerability of our troops as they travel through areas of conflict to deliver fuel to the warfighter.

The second dimension is economic. The more we spend on energy, the less we can spend on other urgent priorities. I'll give you just a few statistics.

- A gallon of fuel can cost \$40 or more in theater.
- Every \$10 increase we pay per barrel of oil adds more than \$1.3 billion in additional energy costs for the Department of Defense.
- Overall, the United States spends about \$1 billion a day to import oil.

And, as we all know, the beneficiaries of the global appetite for oil include governments that do not always share our values or interests. In 2008, Iran earned approximately \$73 billion for its oil exports.

Even in a carbon-constrained world, oil demand will continue to grow in coming decades as the world's population continues to grow.

The final dimension I want to mention is the threat of climate change. In their earlier report on *National Security and the Threat of Climate Change*, the CNA Military Advisory Board concluded that, "Climate change can act as a threat multiplier for instability in some of the most volatile regions of the world, and it presents significant national security challenges for the United States."

We could see millions of refugees displaced by drought or flooding, triggering significant regional conflicts. We could see humanitarian crises as agricultural patterns are disrupted. And we could see tension between countries intensify as water resources grow scarcer. Climate change knows no boundaries, and its effects around the world will have a bearing on our security.

While the energy challenges we face are great, they are by no means insurmountable. In fact, solving these challenges presents opportunities to enhance security and promote prosperity.

As President Obama and Secretary Chu have made clear, it is in our national interest to play a leading role in the clean energy revolution. China, the European Union, and other countries are moving aggressively on clean energy.

Instead of spending billions to import oil or import clean energy technologies, we should invest these dollars in America's workers, industries, and innovations. We should invest these dollars in creating clean, homegrown sources of energy that will increase our energy security and curb the carbon pollution threatening the planet.

Under President Obama's leadership, we have taken strong action to build a clean energy future. The America Recovery and Reinvestment Act made an \$90 billion down-payment on this future, and is putting Americans to work making our homes and businesses more energy efficient, doubling our capacity to generate renewable electricity, and modernizing the electric grid.

Now we need to build on this momentum. At the Department of Energy, we are actively pursuing clean energy development, including new ways to harness the sun, the wind, and the soil, and we are working to reduce energy demand through significant investments in energy efficiency.

We are not alone in these efforts. All branches of our Armed Forces are taking steps to "green" their operations. As the nation's single largest consumer of energy, Department of Defense leadership in this area will have a significant impact.

For example, the military has begun insulating tents in forward operating bases, reducing energy use and the number of convoys needed to deliver fuel. This simple act can save money and help make our troops safer. And as you heard from Secretary Mabus, the U.S. Navy and Marine Corps have an ambitious plan to achieve a new energy posture, including the goal of obtaining half of their energy from alternative sources by 2020.

The Department of Energy and the Department of Defense's shared vision of a safe, secure energy future has provided us with a strong foundation to work together on energy issues.

For example, we are working with the Air Force to assess the feasibility of installing solar photovoltaic systems and wind turbines on some bases. We are joining with the Army and the Navy to work on microgrid technology. And we are providing technical assistance to Fort Campbell on its "Zero Energy Home Project."

Building on this partnership, today I am pleased to announce that Deputy Secretary of Defense Bill Lynn and I have signed a Memorandum of Understanding between the Department of Energy and the

Department of Defense to strengthen the coordination of our efforts to enhance energy security. This agreement will allow us to expand our already strong cooperation in areas ranging from energy efficiency to smart grids to renewable energy and many others.

Our two agencies are taking a broad look about where and how we can partner to accelerate clean energy innovation. Through this Memorandum of Understanding, we can develop joint initiatives for major energy technology research, development, and demonstration programs of mutual interest. We can collaborate on science and technology projects at Department of Defense and Department of Energy research institutions, so we can better synchronize our efforts. And we can promote exchanges of knowledge and personnel to learn from each other.

Robust cooperation between our agencies will benefit both the service member and the civilian. Solving military challenges through innovation has the potential to yield spin-off technologies that benefit the civilian community as well. Our efforts in everything from vehicle electrification to building longer, lighter batteries to grid security could have both military and civilian applications.

Right now, our troops may carry 20 pounds of battery in theater. Let's build lighter batteries that not only will improve advanced vehicles, but will allow our troops to move further and faster with less fatigue.

The Department of Energy and our national laboratories have deep technical expertise to support the military's clean energy initiatives.

On the other side, the Department of Defense, with its purchasing power, far-flung installations, and extensive fleets of vehicles on land, sea, and air, can serve as a test bed for innovation, helping demonstrate clean energy technologies and move them to the marketplace. This in turn will help promote a broader adoption of technologies that can strengthen our national energy security.

This is a win-win-win situation. We gain energy security, strengthen the warfighter, and promote American prosperity.

There are enormous opportunities here. Take the area of advanced fuels, for example. To reduce our dependence on imported oil, to cut pollution, and to create good jobs, it is in the national interest to develop clean, domestic sources of fuel.

At the Department of Energy, we are supporting a range of activities in this area, from developing the next generation of biofuels to supporting pilot projects.

Just last week, I announced that the California Institute of Technology and Lawrence Berkeley National Laboratory will lead an Energy Innovation Hub focused on finding a cost-effective method to produce fuels directly from sunlight. Our ARPA-E program, based on the Defense Department's successful DARPA program, is supporting innovative research into ways to use microorganisms to harness chemical or electrical energy to convert carbon dioxide into liquid fuels. And the Department's biomass program is helping develop cost-competitive advanced biofuels.

Additionally, through the Recovery Act, we are helping support the construction and operation of 19 biorefinery plants that will produce advanced biofuels, biopower, and bioproducts using biomass feedstocks.

In order to have a thriving advanced fuels industry here in the United States, we not only need to figure out the technology piece, we also need to have sufficient aggregate demand.

The Department of Defense can help in these areas. The Air Force consumes about 2.5 billion gallons of aviation fuel per year. Each day, more than 170,000 barrels of oil are delivered to our war theaters, and overall, the Defense Department uses about 300,000 barrels of oil a day.

As you heard from Secretary Mabus, the Navy and Marine Corps will be testing biofuels in jets, combat boats, and gas turbines to cut down on its reliance on oil. So, the military can not only help test out new biofuels and advanced fuel technologies, but can help create a demand for them.

Overcoming our energy challenges will require various parts of the government to cooperate in new ways that advance clean energy and efficiency. We can do more by working together than we can do alone - and we can do it faster and cheaper.

Building a new energy future is the right thing to do to strengthen our national security, to promote economic prosperity, and to save our climate. It is also the right thing to do for America's men and women in uniform.

Just imagine a future where we're powering jets with biofuels from America's tremendous biomass resources instead of fossil fuels purchased from abroad. A future where young soldiers rely on solar panels at zero energy installations instead of driving fuel convoys through war zones. A future where our country is prosperous, secure, and healthy, fueling our own future and not our adversaries' ambitions.

Working together, we can create this future. The Nation expects from us no less.

Thank you.