

Remarks by the Honorable Ray Mabus  
Secretary of the Navy  
Energy Security Forum  
Pentagon  
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Good morning. Sharon Burke, thank you so much for putting this conference together. Thank you also for all the work you've done on this issue not only since you've been at the Pentagon, but before. And I had a chance to listen to part of the panel and I know that you all have had a great conference here. And I particularly want to thank the chairman of the Joint Chiefs for most of his earlier remarks but also for his attention to the issues of energy security and energy independence.

Today is the Navy's 235<sup>th</sup> birthday. My birthday was Monday; I'm a couple years behind the Navy, but I feel as though I'm catching up pretty rapidly. It's also Energy Day for the Navy and Marine Corps. In addition to this speech, this afternoon I'm going over to the Reagan Building and speaking at the Navy's energy forum.

And I know that having both of these on the Navy's birthday is a scheduling coincidence, but I do think it's very, very appropriate because as the most recent QDR [Quadrennial Defense Review] pointed out, how our military uses and produces energy is a matter of national security. And it will affect the strategic and operational capability of our forces long into the future.

I want to start by saying something that is completely self-evident to this audience; our military and our country both rely too much on fossil fuels. That dependency degrades our national security, it negatively affects our economy, and through carbon emissions - and as we have learned from the past couple of months, catastrophic oil spills - our dependence on oil is harming the planet in a lot of ways.

For the military, that dependence has tremendous strategic and tactical implications. Strategically, too much of our oil comes from potentially volatile places on earth. There's no way Congress or the American public or our common sense here in this building would allow some of those same countries that sell us oil to design, to produce and to sell the weapons systems that we use. But in buying oil from these places we give them some say in whether our ships will sail or whether our airplanes will fly.

And this isn't just an American issue. How many of our NATO [North Atlantic Treaty Organization] allies and our partners in the Partnership for Peace Initiative are dependent on somebody else for large percentages of their energy?

I just got back from an overseas trip to Belgium where I visited the NATO and SHAPE [Supreme Headquarters Allied Powers Europe] Headquarters. And I went from there to the government and military leaders in the three Baltic republics: Estonia, Latvia and Lithuania. And throughout that visit, what was reinforced to me was that energy security affects every

single country. And make no mistake, energy policy or more specifically denial of energy can be used as a weapon. A weapon, perhaps, as effective as tanks and planes.

Now that's the strategic level, but at the tactical level, our dependence affects us just as much. I've been in office now almost a year and a half and over that time I've been honored to visit with literally tens of thousands of Sailors and Marines all over the world. I've held more than a hundred all hands calls on bases from Okinawa to Afghanistan. And I've seen up close the evidence of our military's dependence on oil and our insatiable demand for energy.

If you think about it from an operational commander's perspective, right now we have to refuel our ships at sea or take them into port every couple of days. And during refueling operations, that ship is at its most vulnerable. Yesterday was the 10<sup>th</sup> anniversary of the bombing of the COLE. It was in port at Aden, Yemen specifically to be refueled. It's a lesson we've learned all too well.

If we can change our engines so that they are more efficient or add stern flaps to improve fuel economy on our ships – both of which of we're doing – then we can increase the days between refueling. And if we do that, we will improve both the security and the combat capability of that ship and give the strike group and fleet commander a unit that's ready for tasking and that's capable of staying on station longer and able to do more things.

If we can improve the efficiency of our engines on our aircraft – which we're doing – then we can extend the range of our strike missions and move just a little bit farther from shoreline or the leading edge of the fight.

But perhaps the most significant impact of a dependence on fossil fuels is on our people. Getting a gallon of gasoline to a Marine at Forward Operating Base in Afghanistan is not easy. Every single day, young Sailors, Marines, soldiers and airmen guard those vulnerable fuel convoys as they move from the logistics hubs to our FOBs. Gasoline is the single thing we import the most into Afghanistan.

Those convoys represent the very last link of a supply system that starts thousands of miles away because before that – before we put that gasoline into a generator or into a fuel tank on the frontlines – we've got to get it to the coast of Pakistan or to one of the logistics hubs in Central Asia. And then, either way, the fuel has got to be offloaded onto trucks for a long, slow journey either north up and over the Hindi Kush or south across the Amu Darya into Afghanistan – and it's dangerous.

A lot of these convoys are hit by IEDs [Improvised Explosive Device] or ambushes sometime before they reach Afghanistan and the cost to the people is significant. In the past three months, six Marines have been wounded guarding fuel convoys. The Army quantified the reality in a study published last year in September of '09 - for every 24 convoys we lose an American – killed or wounded. One for every 24 convoys. That is too high of a price to pay for energy.

We have to change the way we operate. We have to change the way we produce and we use energy. And in doing so, we're not only going to save some lives – and some injuries in Afghanistan – we'll also free up those Marines, those soldiers and Sailors and airmen to do what they were sent to do which is to fight, to build capacity with the Afghan National Security Forces and to engage with the local populations.

As a military we have an incredible opportunity to lead the country toward a new-energy future because all together, this department, the Department of Defense, consumes about 2 percent of all the fossil fuels that America consumes. That's a pretty significant market share.

If we work together to support alternative-energy technology and make the coordinated effort to move toward things like biofuels for our vehicles, ships and aircraft and things like wind, geothermal, hydrothermal, ocean and solar power for our bases and expeditionary forces, we can cause change in the much broader American market. To paraphrase a line from the *Field of Dreams*, if the American military comes, they will build it.

You've got some folks who say that this is going to be too hard – that biofuel is not yet viable, that we're stuck with things like fossil fuels for the next 20, 30 or more years. It's just going to happen. It's just inevitable. But if that attitude is allowed to prevail then they'll be right. That prophecy will become a reality or as I've learned to say in this building, it will become a self-licking ice-cream cone.

If we reject that assumption and work together to create markets, work together to invest in research, work together to focus on cost, we will create that new-energy future. We're a military who's figured out how to stuff a nuclear reactor inside a submarine. We figured out how to shoot down ballistic missiles in flight. We can do energy.

For the Navy and the Marine Corps, we started in on our own path to create a new-energy future last year. In October 2009, I issued five energy targets for my department, the most important of which is that by the year 2020 – a decade from now – half of all the energy we use afloat and ashore, in the air, on the sea, under the sea or on land will come from nonfossil-fuel sources.

And we're on track to meet those goals. Last spring we flew an F-18 Hornet – the Green Hornet – on a 50/50 blend of camelina-based biofuel and gas. A few days ago we ran one of our Riverine Control Boats on a similar blend, but this time the biofuel came from algae. In both cases the engines didn't care. They were just fine.

At Quantico, the Marines built an expeditionary testing ground, an expeditionary experimental FOB, to look at new energy-efficient technologies. And as the chairman mentioned, several of the most promising clean-energy and energy-efficient equipment tested at the site were deployed to Afghanistan with the 3<sup>rd</sup> Battalion, 5<sup>th</sup> Marines, two weeks ago – just over six months from when they were tested. That's pretty good. That's pretty fast for this government.

Across the country, we're building new, alternative-energy power plants to help our bases with their energy needs. Through recovery act funds and other funds that we've put to that purpose we're making investments in solar, we're making investments in geothermal and waste-energy projects. We plan to continue these investments over 2011 to continue to move toward our energy goals.

And finally, we're working with universities and with industries. We're working with states and other departments of the federal government like Energy and Agriculture and SBA [Small Business Administration], to advance research development and, most importantly, to field alternative-energy fuels and energy-efficiency projects.

Because of our work, the Navy and Marine Corps will improve the range and endurance of our planes and our ships. We'll reduce our reliance on a very vulnerable supply chain and we'll create a resistance to external shocks that comes from overreliance on a very fragile, global oil infrastructure.

We're not going green just for green's sake. Energy reform and the new energy future aren't about politics or slogans. It's about protecting the lives of our troops. It's about making our military better and more capable fighters. It's about making our country more secure and more independent. That's why we're doing this. That's why we have to change.

For the Navy and the Marine Corps, we're placing our faith in a 235-year history of meeting every need and overcoming every challenge. We, and the military as a whole, have to do the same thing here. The heritage and the legacy of bold thinkers permeates the history of every one of the services here. We owe it to them. But more, especially, we owe it to every Marine, every Sailor, every airman, every soldier to move forward and create a better reality.

Thank you all. Godspeed.