Testimony of General Charles F. Wald United States Air Force (Ret.) Member, Energy Security Leadership Council Before the U.S. Senate Committee on Foreign Relations May 12, 2009

Mr. Chairman, members of the Committee, thank you for inviting me to be here today.

As you are all acutely aware, our country is now confronting a range of pressing challenges, both at home and abroad. The financial crisis, health care reform, and climate change are all serious issues that demand leadership and careful attention.

But based on my career and professional experience, I can think of no more pressing threat, no greater vulnerability, than America's heavy dependence on a global petroleum market that is unpredictable, to say the least.

In 2006, I retired from the United States Air Force after 35 years of service. In my final assignment, I served as the Deputy Commander of United States European Command. Currently, EUCOM's jurisdiction covers more than 50 countries and over 20 million square miles spanning the region north of the Middle East and Subcontinent from the North Sea all the way to the Bering Strait. Though EUCOM is no longer responsible for Africa, it included that continent during my tenure.

During my tenure at EUCOM, I saw firsthand the dangers posed by our nation's dependence on oil. And those dangers have only become more acute in the time since.

The implicit strategic and tactical demands of protecting the global oil trade have been recognized by national security officials for decades, but it took the Carter Doctrine of 1980, proclaimed in response to the Soviet Union's invasion of Afghanistan, to formalize this critical military commitment.

President Carter—whom I am honored to speak after—can, of course, explain the Carter Doctrine better than anyone in this room. In short, it committed the U.S. to defending the Persian Gulf against aggression by any 'outside force.' President Reagan built on this foundation by creating a military command in the Gulf and ordering the U.S. Navy to protect Kuwaiti oil tankers during the Iran-Iraq War. The Gulf War of 1991, which saw the United States lead a coalition of nations in ousting Iraq from Kuwait, was an expression of an implicit corollary of the Carter Doctrine: the U.S. would not allow Persian Gulf oil to be dominated by a radical regime—even an 'inside force'—that posed a dangerous threat to the international order.

The United States military has been extraordinarily successful in fulfilling its energy security missions, and it continues to carry out those duties with great professionalism and courage. But, ironically, this very success may have weakened the nation's strategic posture by allowing America's political leaders and the American public to believe that energy security can be achieved by military means alone. In the case of our oil dependence problem, however, military

responses are by no means the only effective security measures, and in some case are no help at all.

The U.S. now consumes nearly 20 million barrels of petroleum a day. About 11 million barrels or 60 percent of the total—are imported. In 2008, we sent 386 billion dollars overseas to pay for oil. Our oil and refined product, in fact, accounted for 57 percent of the entire U.S. trade deficit. This is an unprecedented and unsustainable transfer of wealth to other nations.

Our transportation system accounts for 70 percent of the petroleum we consume, and 97 percent of all fuel used for transport is derived from oil. In other words, we have built a transportation system that is nearly 100 percent reliant on a fuel that we are forced to import and whose highly volatile price is subject to geopolitical events far beyond our control.

In my time as a military leader, I labored to develop a proactive risk-mitigation strategy for just those kinds of geopolitical events. It was an unwieldy challenge. Petroleum facilities in the Niger Delta were subject to terrorist attacks, kidnappings and sabotage on a routine basis—just as they are today. Export routes in the Gulf of Guinea were plagued by piracy, just as routes in the Gulf of Aden have been more recently. We can share intelligence and train security forces, but our military reach is limited by cost, logistics, and national sovereignty.

In 2008, the one-million-barrel-per-day BTC pipeline—which runs from the Caspian Sea in Azerbaijan to the Turkish port of Ceyhan—was knocked offline for three weeks after Turkish separatists detonated explosives near a pumping station, despite the best efforts of local security forces. The pipeline spewed fire and oil for days. The following week, Russian forces launched a month-long incursion into the Republic of Georgia during which the pipeline was reportedly targeted a number of times.

And sitting in the heart of the Middle East is the greatest strategic challenge facing the United States at the dawn of a new century: the regime in Tehran. We cannot talk about energy security, national security, or economic security without discussing Iran. From nuclear proliferation to support for Hezbollah, oil revenue has essentially created today's Iranian problem. I recently participated in a study group sponsored by the Bipartisan Policy Center that produced a report titled, "Meeting the Challenge: U.S Policy Toward Iranian Nuclear Development." I encourage you and your staff to review the report in its entirety. It is entirely possible that events related to Iran could produce an unprecedented oil price spike in the future, a spike that—given the fragility of the domestic and global economy—could very well be catastrophic.

With 90 percent of global oil and gas reserves held by state-run oil companies, the marketplace alone will not act preemptively to mitigate the enormous damage that would be inflicted by a serious and sudden increase in the price of oil. What is required is a more fundamental, long-term change in the way we use oil to drive our economy.

The Energy Security Leadership Council has advocated for a transformation of our transportation sector from one almost entirely dependent on oil to one powered by the domestic sources of energy that fuel our electric system.

Some may be surprised to hear a former general talk about electric cars, but they shouldn't be. In the military, you learn that force protection isn't just about protecting weak spots; it's about reducing vulnerabilities before you get into harm's way. That's why reducing America's oil dependence is so important. If we can lessen the oil intensity of our economy, making each dollar of GDP less dependent on petroleum, we would be less vulnerable if and when our enemies do manage to successfully attack elements of the global oil infrastructure. The best ways to reduce oil intensity are to bring to bear a diversity of fuels in the transportation sector, and this is best achieved by the electrification of transportation.

That's not all. The U.S. needs a comprehensive policy for achieving genuine energy security. This policy should include (1) increases in oil and natural gas production in places like the Outer Continental Shelf along with strict new environmental protections; (2) implementing fuel efficiency standards for all on-road transport that were signed into law last year; and (3) electricity infrastructure upgrades, particularly to our transmission grid, that will be required for a new energy future.

Oil dependence is a very real threat. But it is a threat we can confront. It will take a great effort, and most of all, it will take leadership on the part of the people in this room and all of your colleagues. I thank you for allowing me to address this committee, and more importantly, I thank you for your attention and action on this crucial issue.