



MR. MICHAEL BREEN

**Executive Director
Truman National Security Project &
Center for National Policy**

**TESTIMONY ON U.S. SECURITY IMPLICATIONS OF
INTERNATIONAL ENERGY & CLIMATE POLICIES AND ISSUES**

**Senate Committee on Foreign Relations
Subcommittee on International Development and Foreign Assistance, Economic Affairs,
International Environmental Protection, and Peace Corps**

Tuesday, July 22, 2014

Chairman Markey, Ranking Member Barrasso, distinguished members of the Committee, thank you for the opportunity to testify today on the relationships between American foreign policy, energy policy, and climate change. I will focus my remarks today on the linkage between energy issues and America's most pressing geopolitical challenges.

The United States finds itself in a considerably better position with regard to energy than several years ago. Natural gas production in particular has expanded dramatically, putting the U.S. in a position to become a net exporter within the next several years. This is a positive development to be sure, and provides both strategic and economic opportunities. Energy continues to play a central role in many flashpoints around the world, however, including as a driver of armed conflict. While advances in technology have improved America's energy posture in the short term, many of our long-standing vulnerabilities persist and are likely to worsen in the longer term.

Lack of Energy Diversity Creates Security Risk

The lack of diversified energy sources around the world continues to create undue risk to American national security, the security of our key allies, and global stability and prosperity. In geopolitical terms, this lack of diversification creates vulnerabilities for the U.S. and our allies, and opportunities for many of our rivals and adversaries.

This dynamic is especially pronounced with regard to petroleum, since most major economies are overwhelmingly reliant on oil as a transportation fuel. The United States relies on oil for more than 93% of our transportation sector, and most advanced economies are in a roughly similar position. Given that oil is a globally traded fungible commodity, this single-source dependence on oil as a transportation fuel exposes the U.S. and our allies to the full range of risk associated with a complex and frequently manipulated global petroleum supply system. In other words, security and oil are deeply intertwined, with largely negative effects.

Iraq

Unfolding events in Iraq exemplify the ways in which energy and security are intertwined at every level of conflict. Iraq is where I first came to understand the security implications of energy dependence, as a young Army officer fighting to defend fuel convoys against insurgent attack. A decade later, those same desert roads outside of Baghdad are once again a combat zone, with fuel supplies still at the center of the fight.

As is the case in other conflicts, non-state actors in Iraq exploit energy resources as a source of funding. Reporting indicates that ISIL is raising as much as \$1 million a day from selling crude oil from oil fields in territory it controls, which is then smuggled into Turkey and Iran. In Syria, the Assad government is reportedly supplementing oil from Iran by purchasing oil from ISIL insurgents, even as its military fights them. Revenues are then directed to purchase weapons, pay insurgent fighters, and help buy the loyalties of local tribal leaders and government officials.

Oil resources and infrastructure are therefore key strategic points on the battlefield, shaping the course of the conflict at the tactical and operational levels of war. In one well-known example, one of ISIL's primary objectives during its recent offensive in Iraq was the refinery in Baiji, the largest in Iraq. Meanwhile, Kurdish military action in the conflict to date has been almost entirely defensive, with the sole exception of an early push to secure oil fields. KRG's seizure of Kirkuk oil province, in part intended to establish defense in depth for Kurdish areas, will also give the Kurds even greater financial and political autonomy from Baghdad.

This points to a third way in which access to oil supplies drives and shapes the ongoing conflict in Iraq. Regional instability and conflict within and between states across the MENA region is driven, in part, because of the uneven distribution of energy resources. This is certainly true in Iraq. Nearly 75% of Iraqi oil production is focused in the Shia-majority south, and the main export terminal in Basra is located there as well. Baghdad's failure to redistribute revenue from that oil production evenly across Iraq has been a major driver of sectarian and regional conflict.

Prized oil fields in the South currently remain productive, but are vulnerable to insurgent attacks and remain an important military prize for all parties to the conflict. Companies will most likely evacuate workers, and quickly, if there are serious security concerns in Basra. In the current climate, this continues to be a real possibility.

This is critical, because continued conflict in Iraq has a significant destabilizing effect on the deeply interdependent global oil market. This instability is already leading to economic and geopolitical consequences around the world, and could impact our economic recovery here at home given sufficient time. Dramatic increases in Iraq's oil production are an essential element in most projections of global supply growth. In IEA's World Energy Outlook, for example, the most likely scenario projects Iraq to double its oil production to 6.1mb/d by 2020, and 8.3 mb/d by 2035. According to IEA projections, Iraq makes up nearly 45% of anticipated global supply growth over the next decade.

All of that projected progress is currently at risk. In the short-term, some estimate that the loss of just a third of Iraqi oil production would cause a \$37 a barrel rise in the price of oil. Saudi Arabia, home to nearly the entire world's spare capacity, is already stretched due to unanticipated short-term global demand growth. Longer-term dynamics, while more difficult to predict, are potentially even more disturbing. Investments in the Middle East may fall short of projections if armed conflict and cascading instability across the region persist, leading to a potential supply shortfall in the 2020s.

Ukraine

Conflict in the Ukraine also illustrates the increasingly dangerous use of energy as a geopolitical weapon, in this case with respect to natural gas. Russia has repeatedly used Ukraine's energy dependence as leverage to disrupt the Ukrainian economy and exacerbate political rifts in the country. In 2012, about 60% of Ukraine's natural gas consumption and nearly 75% of its liquid fuels were imported from Russia. As tensions smoldered in Crimea and Eastern Ukraine this spring, Russia did not hesitate to capitalize on its dominant energy position for geopolitical ends, renouncing agreements establishing a natural gas

discount for Ukraine, and cutting off gas exports to Ukraine until it repays \$4.5 billion to the Russian energy giant, Gazprom.

Even as Russia has used energy dependence as a sword against Ukraine, it has employed similar dynamics as a shield against Western European interference in the conflict. 16% of Europe's total natural gas consumption comes from Russia through Ukraine. Russia's manipulations of Ukraine's energy markets have created concerns about natural gas shortages in the European Union. Up to this point, EU sanctions against Russia and other responses to aggression in Crimea have fallen well short of U.S. action. Instead, as proposed by Chairman Markey earlier this year, the U.S. government should leverage its full resources in assisting Ukraine to improve its energy efficiency, increase its domestic production, and reform its energy markets.

Northeast Asia

Despite rising tensions between Japan and China over possession of offshore islands and the continuing threat posed by North Korea, the security situation in the North China Sea region is not currently as dire as that in the Middle East and Eastern Europe. However, ongoing dynamics with respect to energy have a negative impact on U.S. interests and allies' security there as well. Earlier this year, Russia and China signed a 30-year gas supply agreement worth approximately \$400 billion. This agreement may draw the two great powers into deeper alignment, with negative repercussions for the U.S. and our allies.

Meanwhile, Japan's energy situation continues to evolve amid considerable uncertainty. More than a quarter (26%) of Japan's electricity came from nuclear power plants before the Fukushima disaster. Now, with all of its nuclear plants on indefinite suspension, Japan is the world's leading importer of liquefied natural gas. Japan alone consumed over a third (37%) of global LNG in 2012. In an effort to meet this need, Japan is reportedly considering a natural gas pipeline to Russia to bring in LNG from Siberia. While this would have some benefits for Japan, Russia's demonstrated willingness to use energy supplies for coercion should give us pause.

Future Trends

Despite dramatic advances in extractive technology, the geopolitical dynamics of energy are unlikely to move in America's favor beyond the short term, especially with regard to oil. Fundamentally, this is because demand in the developing world is projected to increase dramatically, offsetting increases in U.S. production. Oil demand is projected to grow by 19 mb/d to 109 mb/d by 2035. Virtually all of this increased demand is expected to come from non-OECD countries. China is projected to become the world's largest consumer in 2029, growing to 18mb/d by 2035, while demand from India and the Middle East will likely grow even more rapidly than China's.

Meanwhile, IEA projects that U.S. tight oil production will reach a plateau in the 2020s, before dropping to 9.2 mb/d by 2035 mb/d by 2035 – leaving us in much the same position we were in before the shale revolution. The global market is projected to remain fairly tight overall along the way, meaning price volatility will continue to be a problem over the next several decades. This places the U.S. and our allies at risk of continued overreliance on the same large-scale holders of conventional resources who

manipulate the geopolitics of energy so negatively today. Meanwhile, climate change makes our current energy system unsustainable, creating cascading risks and impacts around the globe and across the full range of human activity.

Implications for U.S. Policy

Given these dynamics, a singular focus on fossil fuels production and export simply plays into the strengths of our competitors while leaving the U.S. and our allies with continued vulnerabilities. The U.S. should also encourage investments in renewable energy and energy efficiency through technology sharing and targeted loans.

Ukraine provides an excellent example. Many advocate U.S. LNG exports as a path to reducing Russian leverage. Such a policy has limited but clear benefits, and should be pursued. However, LNG exports probably won't begin at substantial volume until 2017 at the earliest, and reaching Ukraine will be difficult. Turkey in particular is likely to resist allowing LNG tankers through the Bosphorus, due to safety, environmental, and economic concerns.

Meanwhile, Ukraine is so reliant on Russian natural gas in large part because it is the second most energy inefficient nation in Europe, with energy subsidies making up nearly 8% of GDP. If Ukraine were simply as energy efficient as the average European country, it would reduce its natural gas consumption by more than 50%. The U.S. should seize the opportunity to improve Ukraine's position by prioritizing investments in energy efficiency. We should also tap existing U.S. and international expertise to increase and diversify Ukraine's domestic energy production, including renewables.

This approach applies more broadly as well. The U.S. should place greater emphasis on encouraging efficiency, along with the development of renewable sources and more resilient distributed energy systems. The Department of Defense has been a clear leader in this respect, teaming with partner nations to improve fuel efficiency and reduce energy demand across our combined forces. At the same time, DoD has prioritized critical investments in more diverse, resilient, and reliable energy sources in order to maximize freedom of action and minimize risk. The rest of government, along with the nation as a whole, would do well to follow a similar approach.