Promoting a Global Energy System for U.S. Security

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SUMMARY
A surge in oil and gas production in the United States signals a new era of energy security. But the United States will not achieve an energy independence unrelated to other parts of the world because world energy markets today are inextricably interconnected. The United States should instead lead development of a new Global Energy Security System to spread energy development, make energy markets more responsive and efficient, and protect energy transport.

The United States is passing through an energy revolution. After years of dependence on energy imports, a surge in production of offshore oil and gas and onshore tight oil and shale gas (which are extracted from formerly unusable geological formations) raises the possibility of North American energy dominance in world markets, especially when Canadian and Mexican production are included.
U.S. production of crude oil and natural gas rose by nearly 65 and 34 percent, respectively, from 2005 to March 2015, when levels reached 78.1 billion cubic feet per day (Bcf/d) for natural gas and 9.3 million barrels per day (mmbd) for crude oil.

But this does not signal a new era of energy independence. Because the oil market is already global and the gas market is globalizing, a significant disruption anywhere in the world affects the price of the commodity elsewhere. Iran, for example, if it reaches a nuclear deal and sanctions are lifted, may contribute another 1 mmbd to the global market by late 2016, pushing oil prices lower. Similarly, changes in production in Asia and the Pacific, and the Middle East and North Africa—especially Iraq and Libya—would affect the United States.

**Importance of energy security**

A series of crises has shown that energy security should be a top priority. The run-up to World War I, when ship propulsion turned from coal to oil and newly mechanized infantry, tanks, and airplanes all depended on oil, showed us that security in oil lies in variety and variety alone, as Winston Churchill said. The 1973 Arab Oil Embargo warned us that economies cannot depend on suppliers’ cartel.

Recently new extraction technologies and sources, displacement of coal by natural gas for generating electricity, and a steep drop in oil prices have helped, but commodity prices are inherently volatile and will eventually go up as economies recover from financial downturns and energy demand is boosted. Since 2005 repeated crises over Russian gas, especially supplies going to and transiting through Ukraine, have reinforced the importance of alternative supplies. And although the North Sea, Caspian, the Middle East and North Africa, the Americas, Australia, and Southeast Asia hold large gas potential, ever-costlier investment is required to develop the resources.

How can significant disruptions be prevented? Saudi Arabia, with up to 3 mmbd of spare capacity, long helped stabilize oil prices but since November 2014 has relegated declining prices to the market. The United States is reaching equivalent capacity, which may allow it to play a market-based “swing” role in both oil and gas in the future.

**U.S. domestic steps—and beyond**

Additionally, the United States should develop a national energy policy that will apply over time, including expanded energy exploration of the offshore continental shelf, 85 percent
of which has been off limits, and shale development on more Federal lands – changes now under way with new action by the Obama administration.

The hodge-podge of federal and state agencies regulating energy development—in the White House alone five offices are involved—needs better coordination. The 2015 launch of the Quadrennial Energy Review (like the quadrennial defense, and diplomacy and development reviews) is a significant step in the right direction. U.S. energy demand has been ameliorated through fuel standards for vehicles and efficiency standards for buildings. And the United States has implemented international shale and transparency initiatives.

Toward a global system

A cohesive U.S. national energy policy must coincide with an international structure bridging suppliers and consumers, and public and private interests. The world’s energy architecture is now insufficient: the International Energy Agency (IEA) includes consumers (but not China or India, among others) as members; the Organization of Petroleum Exporting Countries (OPEC) includes producers (but not Russia or the United States, among others); and the International Energy Forum (IEF) focuses on data transparency in both oil and natural gas.

To unite these interests, the United States should promote a Global Energy Security System with seven main components:

- The United States should develop a national energy policy. The Quadrennial Energy Review can guide the coordination of the policy and monitor its implementation.

- Energy and environmental policies should be integrated—a key issue here is whether natural gas offers not just a cleaner substitute for coal but a bridge to a non-fossil future.

- The revolution in unconventional energy—specifically shale—that is improving U.S. energy security should be shared abroad.

- A competitive global gas market should be advanced, with more spot market purchasing balanced with long-term contracts (which still prevail, for example, in Asia). Greater gas security should result from flexible pricing and responsive supply.

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• Better to coordinate policies and responses to energy emergencies, the IEA should be strengthened and extended to other major consumers.

• To promote development, education, and security, the energy “haves” should mobilize to end global energy poverty and relieve over 1.3 billion people still without electricity.

• A global collaboration of consuming and producing countries must protect sea lanes, especially in the straits of Hormuz, Bab El-Mandeb, and Malacca and the South China Sea.

Endnotes