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Rethinking a Key U.S. Strategic Interest: Energy Stability, Energy Independence, and the United States as a Net Exporter

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Rethinking a Key U.S. Strategic Interest: Energy Stability, Energy Independence, and the United States as a Net Exporter

Anthony H. Cordesman

Ever since the oil embargo following the October 1973 Arab-Israeli conflict, the United States has tended to measure its strategic interests in energy in terms of its dependence on direct imports of oil and gas. The new *Annual Energy Outlook* of the U.S. Energy Information Administration was issued on January 5, 2017.¹ Taken at face value, it reports that United States has reversed its past dependence on energy imports in spite of massive cut in world oil prices. (Please note that the following can be downloaded as a PDF on the CSIS website at ??????????????????????)

Continued U.S. Strategic Dependence on the Stable Flow of Petroleum Exports on a Global Basis

Face value, however, is not an accurate summary of the United States government's official new estimate of continuing U.S. dependence on the petroleum imports—imports that are critical to the U.S. transport sector, and the global stability of world oil prices and the flow of oil to the world economy and key U.S. sources of imported manufactured goods. The report's executive summary summarizes the complex interactions involved as follows:

- The United States is projected to become a net energy exporter by 2026 in the Reference case projections, but the transition occurs earlier in three of the AEO2017 side cases.
- Net exports are highest in the High Oil and Gas Resource and Technology case as favorable geology and technological developments combine to produce oil and natural gas at lower prices.
- The High Oil Price case includes favorable economic conditions for producers, but consumption is lower in response to higher prices. Without substantial improvements in technology and more favorable resource availability, U.S. energy production declines in the 2030s.
- In the Low Oil Price and Low Oil and Gas Resource and Technology cases, the United States remains a net importer over the analysis period.
- In the Low Oil and Gas Resource and Technology case, the conditions are unfavorable for U.S. crude oil production at levels that support exports.
- In the Low Oil Price case, prices are too low to provide a strong incentive for high U.S. production.
- The United States has been a net energy importer since 1953, but declining energy imports and growing energy exports make the United States a net energy exporter by 2026 in the Reference case projection.
- Crude oil and petroleum products dominate U.S. energy trade. The United States is both an importer and exporter of petroleum liquids, importing mostly crude oil and exporting mostly petroleum products such as gasoline and diesel throughout the Reference case projection.
- Natural gas trade, which has historically been mostly shipments by pipeline from Canada and to Mexico, is projected to be increasingly dominated by liquefied natural gas exports to more distant destinations.

- The United States continues to be a net exporter of coal (including coal coke), but its exports growth is not expected to increase significantly because of competition from other global suppliers closer to major markets.

Continued U.S. Strategic Dependence on the Stable Flow of World Energy Exports and the Gulf

Estimating energy import dependence is highly complex and has major uncertainties involving demand, prices, technology, and all the other inputs to market forces. In 2015, the United States still imported approximately 9.4 million barrels per day (MMb/d) of petroleum from about 88 countries. About 78% of gross petroleum imports were crude oil. It exported about 4.7 MMb/d of petroleum to 147 countries. Most of the exports were petroleum products. The resulting net imports (imports minus exports) of petroleum were about 4.7 MMb/d.²

The comparisons of different economic contingencies shown in **Figure One** make it clear that the EIA still projects that the United States will import several million barrels a day of crude oil through 2040, or about 10% of its liquid fuels in the reference case.

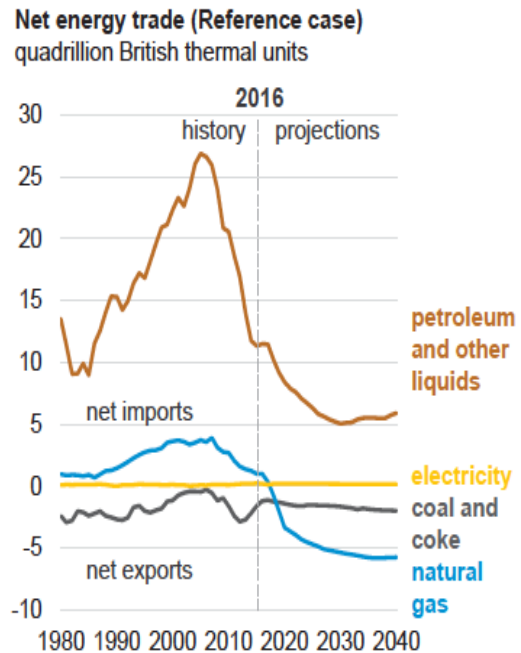
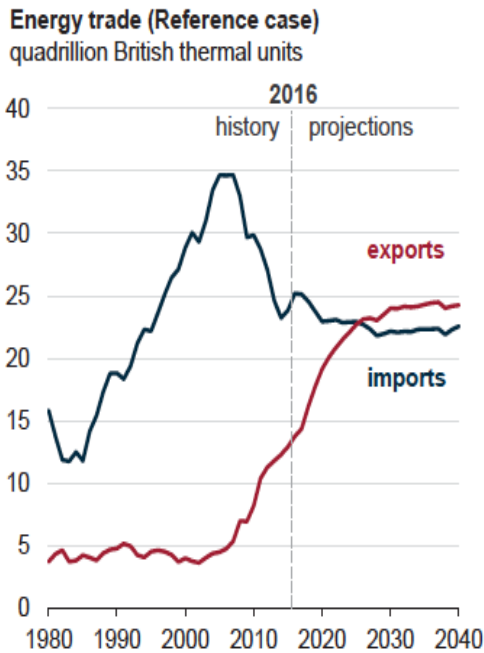
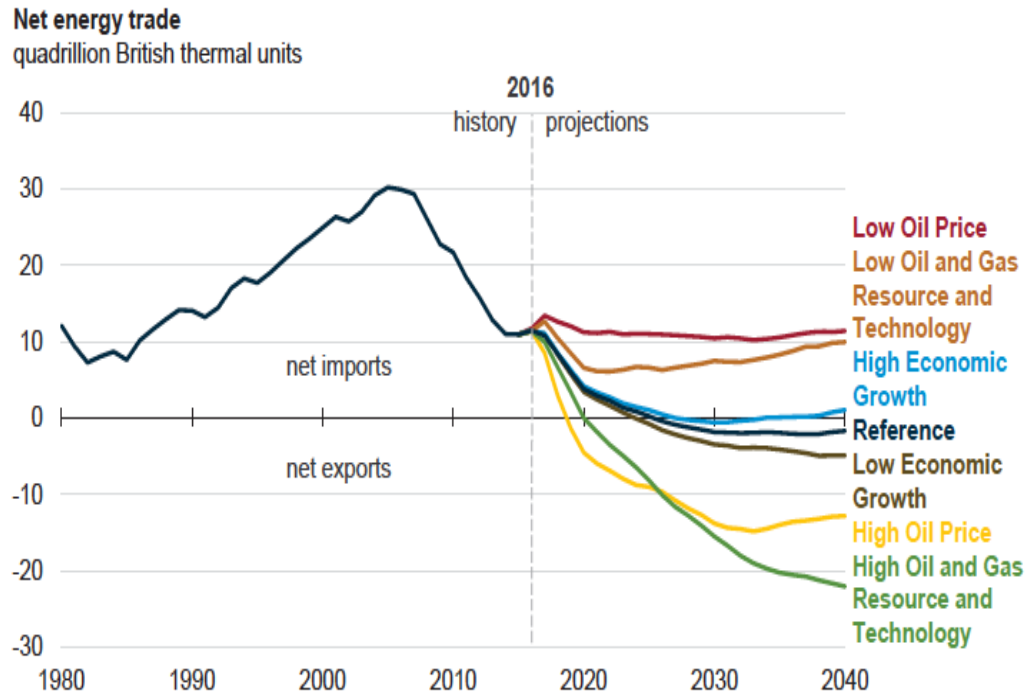
They also show that the United States would not be ready to maximize its own production of liquids if the world suddenly shifts from a prolonged period of low global prices to the kind of crisis that could occur as the result of a major war that shut off much or all of the 17 million barrels a day of exports that flow out of the Gulf and through the Strait of Hormuz.

More broadly, one of the many lessons of the global recession in 2008 is that the U.S. economy is steadily more dependent on the overall health of the global economy, and whether one likes free trade or not, U.S. global interdependence is already a reality. In 2015, the United States exported \$1.6 trillion and imported \$2.3 trillion, out of a GDP of \$18.7 trillion. Trade accounted for 21% of the U.S. economy.³

There are four other critical factors that also continue to make the U.S. role in the security of world energy traffic—and Middle Eastern energy exports—a critical U.S. strategic interest:

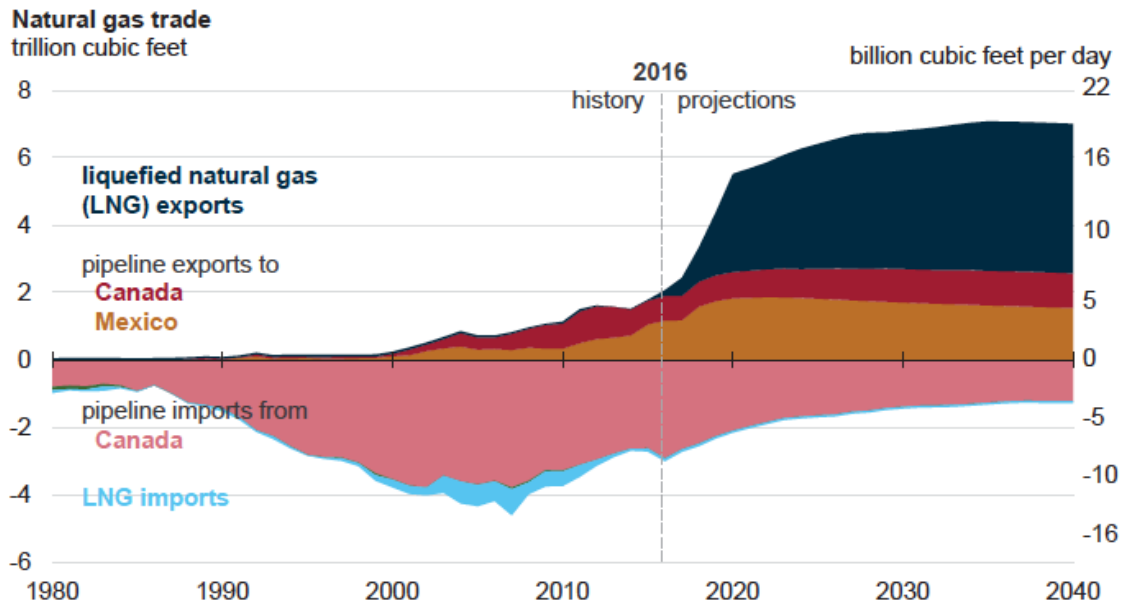
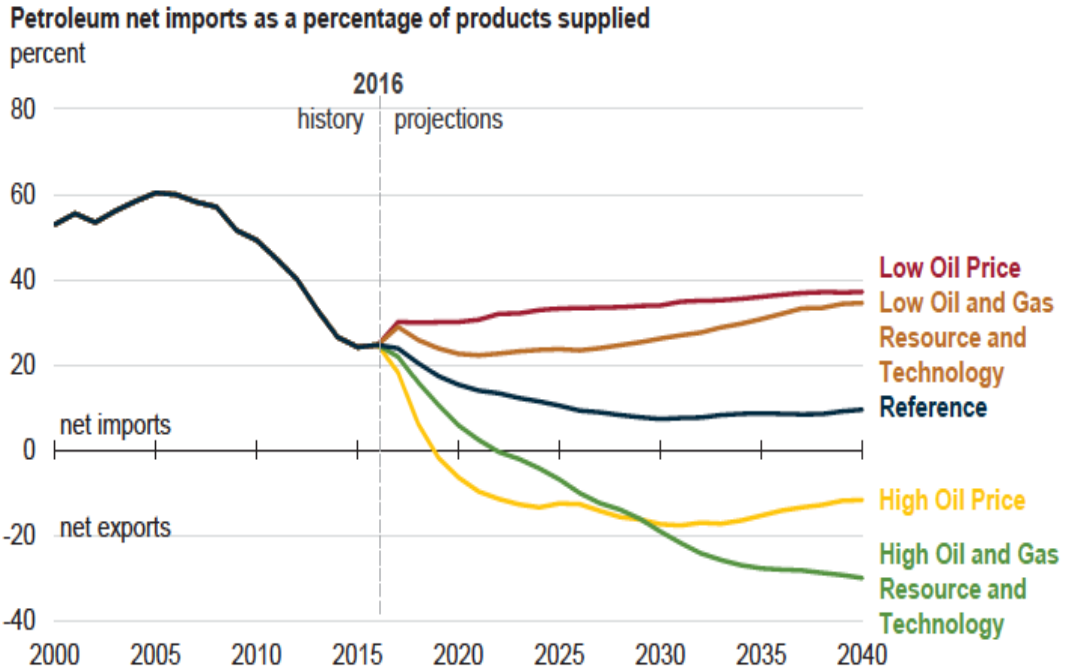
- The U.S. operates in a global market. Any massive swing in energy prices affect U.S. prices just as much as other countries.
- Iran continues to challenge the U.S. and its Arab neighbors by creating a mix of asymmetric naval-missile-and air forces that can threaten Gulf shipping and oil and gas exports. The U.S. strategic partnerships with the Arab Gulf states are critical to deterring and defending against this Iranian threat.
- Key Asian exporters to the U.S. – China (20.5%), South Korea (3.4%), Japan (6.0%) , Taiwan (1.8%), Singapore, Thailand, Malaysia (1.7%), and the Philippines – and many other exports are dependent on the stable flow of Gulf oil and gas exports.⁴ U.S. imports of manufactured goods totaled 62.2% of U.S. trade. U.S. crude oil imports (total not net) were 8.2%. Trade in manufactured goods was at least 7.6 times more important to the U.S. economy.
- China and Russia are the only potential sources the Arab states have in matching U.S. security guarantees. Any such shift away from the U.S. would pose critical strategic risks.

Figure One: The U.S. Becomes a Net Exporter of Energy, But... Part One



Source: U.S. Energy Information Administration: *Annual Energy Outlook* of the U.S. Energy Information Administration pp. 17-18, 48.

Figure One: The U.S. Becomes a Net Exporter of Energy, But... Part Two



Source: U.S. Energy Information Administration: *Annual Energy Outlook* of the U.S. Energy Information Administration pp. 17-18, 48, 66

¹ <http://www.eia.gov/outlooks/aeo/>

² EIA, "How much petroleum does the United States import and export?," <http://www.eia.gov/tools/faqs/faq.cfm?id=727&t=6>, October 4, 2016.

³ CIA, World Factbook, United States, accessed 4.1.17.

<https://www.cia.gov/library/publications/the-world-factbook/geos/us.html>.

⁴ Percentages are U.S. Census Bureau estimates of total percentage of U.S. imports as of August 2016 from top 15 exporters. <https://www.census.gov/foreign-trade/statistics/highlights/top/top1608yr.html>.