U.S. politicians often work the topic of oil import independence into their campaign rhetoric as an ideal that would help separate U.S. economic prosperity and military responsibility from the volatility of Middle Eastern politics. In theory, oil independence would mean that events such as the Iranian revolution or internal political unrest in key Arab oil producers would have much less direct impact on the flow of oil to the United States, and thus U.S. prosperity (even if, in a global market for oil, the price impact of any supply disruption is shared by all consuming countries). More importantly, intra-state conflicts such as the Iraq–Iran war or the Iraqi invasion of Kuwait would not necessarily require large-scale U.S. military involvement to ensure oil production and exports to the United States and its allies. This linkage between U.S. oil import dependence and military commitment to the Gulf region has given rise to a myth favored by policymakers, markets, and the public that if the United States could attain oil independence, we could also reduce our military responsibilities around the world. Recent and ongoing changes in both the oil sector and in political-military strategy are for the first time in forty years combining in a manner that is leading some to believe this story could come true.

Three circumstances augur change. The first is the current supercycle in North American oil production, which includes tremendous growth in U.S.
shale liquids (usually referred to as tight oil) and continued growth in Canadian oil sands. This dramatic growth in North American crude oil production is having a significant impact on U.S. crude oil imports, which will eventually include the reduction of imports from the Persian Gulf—at least for a time. The second are the changes in U.S. defense priorities and postures, as well as the domestic political and economic constraints under which U.S. foreign commitments will operate for at least the next decade. Finally, these first two changes yield the third: the re-direction of global oil trade will cause some countries to become strikingly more dependent than the United States on imported crude oil from potentially unstable regions, including the Persian Gulf, causing them to pursue different policies and postures toward the region, not to mention the sea lanes more generally. These changes in both global trade flows and U.S. political-military commitments will likely impact Persian Gulf stability and great power relations in ways that will force analysts and policymakers to rethink both energy and foreign policy decisions.

The Rise and Fall of U.S. Crude Oil Imports

Recent growth in U.S. oil production, decline in U.S. crude oil imports, and the resulting implications for global crude flows elsewhere are transforming global oil markets. The U.S. security role in the Persian Gulf has changed as well, and the question is whether that role will change radically going forward as a result of the changes in the oil sector. After having a modest security role in the Persian Gulf region since 1945, the United States began a buildup in commitments and military capabilities in the late 1970s. Seen through the lens of the Cold War, the Carter administration began establishing the rationale for rapidly deploying military forces to the Persian Gulf, focusing on three U.S. interests in the Middle East: 1) assuring continuous access to petroleum resources; 2) preventing another power from establishing hegemony over the region; and 3) assuring the survival of Israel. In the wake of the Soviet Union’s 1979 invasion of Afghanistan, President Carter ultimately enunciated the “Carter Doctrine”—a declaration that the United States would consider any attempt by an outside force to gain control of the Persian Gulf region as a threat to U.S. vital interests to be met with military force.¹

The 1979 Iranian revolution interrupted Iranian oil production and triggered a three-fold increase in global oil prices. These higher world prices stimulated non-OPEC production and cut global oil demand, which in turn led to falling prices. Eventually, Saudi Arabia abandoned the role of swing producer, which was propping up prices, a market-share war ensued, and oil prices collapsed in 1986. With low oil prices, markets dictating trade flows, and strong economic growth, U.S. crude oil imports grew steadily over the next twenty years, topping
out in 2005 at 10.1 million b/d, or roughly 49 percent of total U.S. oil demand. This compares to 19 percent at the time of the first oil crisis in 1973.2

As the United States became increasingly integrated with the global market through the tremendous growth in crude oil imports, deploying military assets to protect the flow of Persian Gulf oil from disruption by hostile states became the centerpiece of U.S. energy policy, and as such, a dominant theme of U.S. foreign policy.

The terrorist attacks of September 11 raised the visibility of another U.S. post-Cold War threat—non-state actors—to a level demanding a large-scale military response. The horrific potential for terrorist groups acquiring weapons of mass destruction was a particular concern to Washington policymakers even in the early 1990s, but it gained new salience in 2001 and after operations in Afghanistan turned up evidence that al-Qaeda had been seeking a nuclear weapon.3 The United States used the military infrastructure it had spent decades building in the Persian Gulf to support its wars in both Afghanistan and Iraq, while it simultaneously continued to monitor Iran’s military buildup. Immediately after the fall of Saddam Hussein, the United States pulled its forces out of Saudi Arabia, but enhanced its cooperation with the smaller Gulf states, retaining a visible and significant regional military posture.4

Greatly diminished U.S. military operations in Afghanistan, military budget cuts, an announced pivot (or rebalance) to Asia, and the possibility of a deal with Iran on its nuclear program could be harbingers of a drawdown in U.S. military presence in the Persian Gulf. Yet, Secretary of Defense Hagel has promised Gulf Arab rulers that the U.S. military presence—largely naval but with air force and ground force elements—will remain at current levels for the foreseeable future.5 This reassurance is logical in the short-term since the P5 + 1 of the UN Security Council have negotiated only an interim nuclear accord with Iran. But significant changes in U.S. political interest and close-in military presence in the region may be near, given broader forces at play, including the potential for a longer-term agreement with Iran and, perhaps most significantly, dramatic changes in the oil market.

Lower oil demand triggered by the great recession of 2008–09 dovetailed with renewed environmental activism. The U.S. Supreme Court ruled that carbon-dioxide was indeed a pollutant subject to regulation, and renewable fuels got a shot in the arm from the Renewable Fuels Standard under the Energy Independence and Security Act.6 New vehicle technologies and tighter fuel economy standards were initiated by the state of California, echoed by the Bush administration, and finalized by a 2011 deal between automakers and the Obama administration. In short, the path of U.S. oil demand growth was entirely rewritten.7
Over the next decade, we project U.S. oil demand to end up at the about the same level in 2025 as it was in 2013, following a recovery in the next few years and then a gradual decline after that. Notably, the Energy Information Administration’s long-term reference forecast sees modest growth of about 450,000 b/d from 2013 to 2025. Other forecasters have pointed to somewhat more dramatic contraction in U.S. oil demand in the next decade.

After the recession, oil prices recovered to $90 per barrel and higher, encouraging development of more expensive unconventional oil, especially shale liquids, which are developed through the combination of horizontal drilling and hydraulic fracturing (fracking). Previously uneconomic resources of oil trapped in shale are now relinquishing oil (and natural gas liquids) in several states, and the impact on U.S. oil production is remarkable. After years of decline, U.S. oil production is rising. Thus far, the greatest output growth has occurred in primarily two places: the Bakken rock formation in North Dakota and Eastern Montana, and Eagle Ford in Texas. Production in the Bakken has grown from under 300,000 b/d in 2010 to over 1.0 million b/d in December 2013. Eagle Ford crude and condensate production was just 90,000 b/d at the beginning of 2011, but finished 2013 over ten times higher at roughly 950,000 b/d. We forecast Bakken crude production to reach an annual peak near 1.35 million b/d in 2018 and Eagle Ford liquids output to average nearly 1.3 million b/d by 2016.

Overall, U.S. shale liquids output is likely to peak near 5.0 million b/d in the 2020–2025 timeframe, and help push total U.S. liquids production to 12.8 million b/d or more than 65 percent of U.S. oil demand by 2020. In its 2014 long-term outlook, the EIA reference case projects a peak in output at about 12.3 million b/d, a year or two before 2020. In sum, after years of decline, U.S. oil production is finally rising, and quickly.

In 1979, the Persian Gulf countries supplied 31 percent of U.S. crude oil imports, Latin America 13 percent, and Canada 4 percent; but by 2005, the Persian Gulf accounted for 22 percent, Latin America 35 percent, and Canada up to 16 percent. The United States had substantially diversified its sources of foreign crude oil before the current boom in tight oil output. Since 2010, weak demand and rising domestic production in the United States has lowered foreign crude oil imports further. According to our analysis, U.S. crude imports will fall from 10.0 million b/d in the 2005–2008 period to less than 6.0 million b/d by 2020 (see Chart 1).

If one reinterprets “foreign” as non-Canadian, the impact on foreign imports is even more impressive. Non-Canadian imports will fall from a high of 8.5 million b/d in 2005 to under 2.0 million b/d by 2020. Adding U.S. petroleum product exports, the future decline in “net oil imports” is even more striking. Since the United States does not allow the export of crude oil, U.S.
domestic crude prices have weakened in response to the increase in production. These lower prices have incentivized U.S. refiners to increase their throughput and export petroleum products, which are allowed. U.S. refiners have successfully placed growing volumes of petroleum products in Latin America, Europe, and Africa—further reducing the United States’ total “oil” deficit, impacting our oil trade balance, and underscoring the view that the country is more and more oil self-sufficient.

Meanwhile, in the Rest of the World…

To understand the impact of these developments on U.S. foreign policy and military deployment decisions, one must consider the impact on global trade in crude oil, which underscores the U.S. role in the world as guarantor of the sea-lines of communication. As the United States reduces crude oil imports from countries other than Canada, the main exporting regions of Latin America, Africa, the former Soviet Union, and the Persian Gulf will focus intently on selling to Asia. As a result, by 2025, based on our analysis of trade flows, Asian net crude oil imports could rise over 21 million b/d, while net imports to Europe and North America fall below 8.0 million b/d, and 2.0 million b/d, respectively (see Chart 2). U.S. imports from the Persian Gulf will fall below 800,000 b/d just as Asia becomes the destination for 90 percent of Persian Gulf exports (compared to 75 percent in 2012). China’s net crude oil

Asia will become the destination for 90 percent of Persian Gulf exports by 2025.
imports alone could reach 8.0 million b/d with the greatest volume coming from the Persian Gulf. Absent policies to counteract these trends, Asia and specifically China will become dramatically more dependent on crude oil imports from the Persian Gulf than either North America or Europe.

The energy security implications for China are significant. Beijing will likely accelerate efforts to reduce oil import dependence, continuing the development of renewables and initiating development of shale gas while also clamping down on consumption. China could also take a more active military role in securing energy flows by increasing its maritime military presence in the Persian Gulf and Indian Ocean writ large. As a strategic rival to the United States, this latter development could lead to new challenges. At a minimum, this might include more frequent and dangerous encounters between U.S. and Chinese naval forces, such as those that have occurred in the South China Sea. More broadly, it could bring great power rivalry into the Indian Ocean on a level not seen since the Cold War.

Great power rivalry could come to the Indian Ocean on a level not seen since the Cold War.

Indian Ocean on a level not seen since the U.S.–Soviet competition in the 1980s. Meanwhile, to the degree that China and other Asian countries respond to their growing dependence on Persian Gulf oil by adopting policies to reduce crude oil imports, the loss of revenues to the oil-exporting countries, including more economically vulnerable economies in Latin America and Africa, could be substantial.

The implications for Russia, another rival of the United States, are likewise significant. After decades of selling crude oil to Europe, Russia is turning its
attention squarely on China—it has completed overland crude pipelines to China and the Russian port of Kozmino on the Sea of Japan, and developed East Siberian Pipeline Ocean (ESPO) crude, a new crude export blend for Asia that provides an alternative crude stream and pricing point for Asian customers who have historically had to pay an “Asian premium” to Persian Gulf producers of a couple of dollars per barrel. Russia’s ESPO blend therefore has become an important crude supply alternative that has tied Russia closer to the region. More recently, there are new joint ventures between China and Russia, especially with Rosneft, a Russian majority-owned oil company, to develop East Siberian oil reserves. Just as the United States is looking more inward with regard to petroleum, China and Russia are looking outward while strengthening their bilateral energy ties. Meanwhile, Russia remains both antagonist and collaborator for the United States in the Persian Gulf region, given its ties to Iran and Syria.

**Changing Global Roles Ahead?**

This marked change in U.S. dependency on oil from the Persian Gulf does not mean that the United States will lose interest in the region entirely—as noted above, it has not been involved in the security of the region solely because of oil. In addition, the United States continues to see itself as the indispensable nation. It has developed a series of national, defense, and military service strategies that argue that the United States has a vested interest in the upkeep of the global system of economics and trade. A critical part of this global system is the continued free flow of oil, petroleum products, and increasingly liquefied natural gas (LNG) regardless of its destination. However, given that the United States is less directly dependent on oil from outside of North America, the question for Washington is whether U.S. military protection of oil flows remains necessary for U.S. security and economic prosperity, or would market systems keep any short-term decrease in exports manageable?

Washington also wants to be seen as a reliable ally and a leader in building coalitions which help to create and protect global public goods. However, few states can afford to continue all international commitments (energy or otherwise) at the same level in times of shifting interests and declining resources. Therefore, with the U.S. commitments created both in the Cold War and after difficult to divest from, Washington has updated its relationships to use their value to meet shifting interests. For instance, NATO, a transatlantic alliance, has helped build stability in Afghanistan and contributed a task force to counter piracy in the Gulf of Aden, while U.S. troop levels in NATO Europe have declined dramatically. In another case, access and basing agreements in Kuwait and Qatar—created to help contain Iraq (and Iran)—have since
supported U.S. forces fighting the Taliban and al-Qaeda in Afghanistan. As the nature of U.S. interests and resources change, implementation of these agreements will similarly evolve. In other words, even if the United States may no longer care about the flow of oil in quite the same way it used to, it cares about the relationships it built to help protect that flow of oil. These relationships will almost never be terminated abruptly, but their content will shift over time.

This repurposing of Cold War-era relationships and serving as the primary provider of numerous global public goods may be wearing thin. The shifts in oil flows will be a significant factor contributing to a reconsideration of the U.S. global role and willingness to spend lives and treasure securing oil trade routes. During the Cold War, the United States had domestic political debates over burden-sharing with treaty allies when the United States and its allies faced a clear, common, political-military threat. A future strategy whereby the United States expends the majority of effort protecting oil flows that go to some allies (Japan and South Korea), some partners (India and Vietnam), and some potential geopolitical rivals (China) may come in for more skepticism from many parts of the U.S. political spectrum. At least some Americans are already increasingly skeptical of the United States playing a global role when it cannot be directly related to core U.S. interests.\(^{16}\) If the combination of ongoing budget austerity, a skeptical public, and a shift in who is directly benefiting from the flow of Persian Gulf oil leads to an eventual lessening of U.S. commitments in the region, are there other states poised to take over this role?

Logical candidates for new protectors of oil flows would be states who have the greatest demand, a growing military, and the political ambition to do so. Europe’s dependence on Persian Gulf oil is dropping much like the United States. Both the EU and NATO are having difficulty keeping up their counter-piracy task forces, let alone anything more significant.\(^{17}\) The Gulf Arab states have been attempting to act together through the Gulf Cooperation Council (GCC) for over thirty years, with little concrete to show for it. While Iran has offered to be the guarantor of security, no other state in the region—with the possible exception of the current government in Iraq—trusts Tehran.

The two prime contenders as up-and-coming guarantors would be India and China. India is developing its navy, is nearby, and sees itself as a global actor. However, India has geopolitical rivals, China and Pakistan, on two fronts. This makes it difficult to free up resources to protect public goods, despite

**Shifts in oil flows will be a significant factor in reconsidering the U.S. global role.**
U.S. hopes that it will do just that.\textsuperscript{18} India also has self-imposed limits on the way it currently operates in the world: like many rising powers, it prefers bilateral interactions, particularly with smaller neighbors. While India has contributed to the counter-piracy efforts off of Somalia, it has insisted on deploying independently rather than joining the U.S.-led coalition. India has stated its preference for this operation to be put under a UN “blue helmet” command—an international construct with which it is comfortable.\textsuperscript{19} However, UN Security Council-mandated activities are almost always lagging indicators of international concern. A security guarantor for oil flow in the Persian Gulf would have to be more proactive and willing to operate in a variety of political-military configurations.

China suffers some of the same limitations as India. It has unresolved security issues with neighbors, and—unlike India—it is a significant distance from the Persian Gulf. While some argue that China is developing a set of Indian Ocean military bases from which to project power (a so-called “string of pearls”), so far all of China’s port development activities in the region have been commercial in nature.\textsuperscript{20} China’s most significant military power projection to the region has been a series of small naval task forces to participate in counter-piracy operations off of Somalia.\textsuperscript{21} While it has gained significant operating experience in the region, it is currently nowhere near able to deploy forces in large numbers for significant periods of time, particularly in anything other than an internationally-sanctioned effort. More significant operations would require basing or similar access, something that so far China has denied it desires specifically as a policy matter. Like India, China has chosen the independent-deployer model, not formally participating in the combined task force. It therefore has lost out on significant learning in operating as part of a coalition maritime force. Finally, it is unlikely that a number of states—India, Japan, and the Republic of Korea among them—would be comfortable with China acting as the guarantor of oil flows out of the Persian Gulf.

Despite the shifts in oil flows, non-energy interests and the stickiness of commitments will keep the United States engaged in the region. The United States remains committed to the safety and security of the Gulf Arab states, and has an even stronger commitment to the security of Israel. Even if the United States remains fully engaged in the security of the region, there will be questions about its staying power. Changes in military technology may exacerbate concerns about U.S. commitment. Specifically, increased and improved anti-access and area-denial (A2AD) capabilities will likely cause the United States to base and

\textbf{Despite the shifts in oil flows, the U.S. will remain deeply engaged in the region.}
operate differently in the region than it has in the past, including perhaps deploying forces in over-the-horizon configurations. While logical militarily, states may view such changes in deployment and/or operating patterns as evidence of decreased commitment.

To counter this perceived drop in U.S. staying power, regional states may accelerate their own efforts to secure the area. In the case of the Gulf Arab states, they would have a number of options. One is to increase cooperation with one another, an option that historically has been pursued only at the margins. Another would be to engage in self-help strategies, something limited more by small populations than by finances. If regional states were to include the acquisition of weapons of mass destruction or ballistic missiles in this self-help rubric, it could be highly destabilizing. A last option would be to seek one or more outside additional security guarantors such as China. If Beijing were both able and willing to overcome the limitations discussed above, its involvement would generate instability on a more global scale. Other Asian states dependent on Persian Gulf flows would likely see a significant Chinese role in the Gulf as adding uncertainty, rather than diminishing it.

The good news is that, despite changes in oil flows, almost every state has an interest in seeing oil and petroleum products continuing to move, regardless of destination. It is only in certain very limited circumstances that a state is going to have both the interest and capability to significantly bottle up oil flows out of the region. Perhaps a combination of self-help by those in the region, oil sector redundancies, and a United States more over-the-horizon will be sufficient to address most threats to oil flow. Military and/or political events, however, can still give rise to oil supply disruptions in countries as diverse as Iran, Iraq, Nigeria, Colombia, or Venezuela. Moreover, strikes by oil worker strikes can shut down oil production even in politically stable countries like Norway.

The Real Ending

Even after thinking through the changes underway in U.S. oil production and foreign policy, it is tempting to fall back on the French adage, “la plus ca change, la plus c’est la meme chose”—the more things change, the more they stay the same. Since markets will remain the organizing principle of oil, too much supply or too much demand will impact prices and thus also supply and demand, eventually reversing current trends. Over the long term, then, in a high fixed-cost industry, there will be cycles, and perhaps we are just in a supercycle of North American supply that will temporarily redraw global crude oil flows. At the same time, perhaps small changes to U.S. foreign policy such as the Asian pivot and the likely continued primacy of U.S. naval forces, regardless of their
exact deployment schedules or location, means no change will occur in the security of oil flows and the fundamental U.S. role in the Persian Gulf region.

Yet, that seems an oversimplification at this juncture in the history of oil and geopolitics. One of the benefits of big cyclical moves is that at their apex, they provide a view of the opportunities and challenges just beyond the border of expectations. The increase in North American oil supply, the significant redirection of oil trade, the adjustment of U.S. military posture in the Middle East, the U.S. “pivot” to Asia, the potential for a nuclear deal with Iran, and growing internal political instability in the states of the Persian Gulf are together contributing to a new perspective on global oil and the role of the United States in the region.

The startling uncertainty associated with these fairly dramatic, albeit potentially impermanent, changes will encourage key players to rethink oil and security-related decisions. Within the region, some states may try to balance a potentially more normalized/accepted Iran, and this may decrease regional stability. Outside of the region, a new state may consider becoming the guarantor of regional stability, and this may cause greater problems than it solves. Meanwhile, a reevaluation in the energy sector is already underway. Natural gas is becoming the champion energy source of this century as a result of the gas shale boom, the potential for gas shale development around the world, the growth in global LNG trade, and the growing consensus that natural gas can be a bridge fuel to a more climate-friendly energy mix, even moving slowly into transport. Certainly new worries about oil and geopolitics will accelerate the penetration of natural gas in the energy mix of consuming countries.

Meanwhile, China will reconsider its growing dependence on Persian Gulf oil, not to mention oil from other parts of the world. By 2025, China could easily import as much as 70 percent of its oil demand, up from 59 percent today. Environmental concerns are already feeding the gradual switch from coal to natural gas and renewable energy. Oil may seem like the early winner in China’s energy mix, but eventually the country’s disproportionate oil dependence, relative to the diminishing U.S. dependence, will become a strategic liability. Chinese conservation, energy mix, supply diversification, and environmental protection policies are bound to accelerate during the next decade, eventually tempering the growth in Chinese oil demand and imports. However, even if China decides that conservation and diversification are better answers than becoming a Persian Gulf military power, the Chinese military, like any good bureaucracy, will argue for expanded capabilities and deployments as a hedge.
This continuing expansion of Chinese naval capabilities in the region will cause reactions from India and others, leading to further instability.

Other oil consuming countries will both overreact and underreact to the current wave of change. The perception that oil supply disruptions may attract less active engagement by the United States, or that disruptions may not be solvable using military force, will encourage Europe and OECD Asia to accelerate their efforts to reduce reliance on crude oil, even as soft oil prices help their economies. Other countries that hang on to fuel subsidies and grow their oil demand will end up even more vulnerable to disruptions.

This will also be a tough decade for oil producers. The countries with ample reserves, sophisticated industries, and/or deep pockets will thrive, but others will not. It is difficult to foresee who will win and who will lose. It seems Saudi Arabia will manage better than Iraq or perhaps Iran; Mexico may now be in a better position than Brazil; Russia seems well-positioned in both oil and gas. The continent with the greatest need, Africa, may struggle the most.

In sum, the tale of global oil and U.S. foreign policy has moved closer than ever before to the conclusion favored by politicians and the public. The United States needs less imported crude oil just as the U.S. military considers its fiscally-constrained options, including a return to a greater over-the-horizon military posture in the Persian Gulf. The real ending to the story, however, is likely less stability, more rivalry, and certainly continued uncertainty.

Notes

6. In the case of Massachusetts vs. the Environmental Protection Act, 549 U.S. 497 (2007), the U.S. Supreme Court found that the EPA had authority under the Clean Air Act to regulate emissions of greenhouse gases.
8. Energy Information Administration, Department of Energy, “AEO2014 Early Release Overview,” report number DOE/EIA-0383ER(2014), December 16, 2013, http://www.eia.gov/forecasts/aeo/er/index.cfm. This is adjusted with the January 2014 EIA Short-term Energy Outlook that updated 2013 demand. It is likely that when EIA releases the Final 2014 Annual Energy Outlook, the demand projection to 2025 will be higher reflecting the higher 2013 demand.

9. ESAI Energy projections.

10. ESAI Energy projections.


13. Unless otherwise noted, the oil supply and demand data and forecasts presented in this paper are based on research and forecasting conducted by ESAI Energy, an energy research and forecasting firm that has conducted this kind of analysis for 28 years. They can be found at www.esai.com.


