**MEMORANDUM**

TO: COUNCIL ON FOREIGN RELATIONS

FROM: ROBERT MCNALLY

PRESIDENT, THE RAPIDAN GROUP LLC

DATE: OCTOBER 9, 2012

RE: GEOPOLITICAL CONSEQUENCES OF HIGHER OIL AND GAS PRODUCTION IN THE UNITED STATES

Sustained and substantial increases in US oil and gas production due to the wider application of hydraulic fracturing and horizontal drilling in tight oil and shale gas plays would confer substantial macroeconomic benefits to the United States with little or no downside.

A sustained domestic hydrocarbon boom would also confer some distinct and strongly desirable geopolitical benefits. However, sharply lower US oil imports or North American liquids self-sufficiency alone will not provide what Americans and their political leaders crave above all - low and stable gasoline prices specifically and invulnerability to Middle East generally. In addition, unlike the all-positive macroeconomic consequences of the boom, there are downside geopolitical implications as well as upside. The main downside is the dawning awareness of large domestic production has rekindled pernicious isolationist and protectionist impulses already visible in the current national debate.

This note sketches out some benefits and challenges associated with the US oil and gas boom and responds to some questions posed by the Council.

**BENEFITS**

**Macroeconomy**

From an employment and economic growth prospective, a sustained increase in domestic oil and gas production will provide clear benefits. Direct and indirect employment will rise substantially. Domestic manufacturers will enjoy lower feedstock and operating costs. Cash-strapped States with active and prospective plays will enjoy a revenue bonanza. Net oil and gas imports will be lower, reducing our need to borrow internationally to finance domestic investment and consumption. A March 2012 analysis by Citi found that the cumulative impact of booming US liquids production and declining petroleum product demand could increase GDP by 2-3%, create 2.7-3.6 million net new jobs, and boost the US dollar in global foreign exchange markets by 1.5-5.4%. [1]

**Reduced vulnerability to oil supply disruptions in the event of a major, protracted war or blockage**

Lower oil import dependence reduces US military and economic vulnerability in the event of a protracted, major military conflict, especially if there is a major interruption or threat to the production and transportation of oil.

[1] *Energy 2020: North America, the New Middle East?* Citi GPS: Global Perspectives and Solutions, March 20, 2012

**Improved resilience to global price shocks**

While the United States – or any country – cannot insulate itself from changes in the global oil market, reduced imports means the US economy would suffer less when oil prices rise, since the value of US production would rise in line with prices.

**Weaken European and Asian dependence on expensive, oil-linked natural gas price contracts**

The prospect of US LNG exports and the spread of shale gas production around the world could erode, if not break, the oil-natural gas price link that prevails in Europe and Asia while diversifying sources of global gas exports. Russia insists on linking the price of exported natural gas to oil prices to maximize its revenues, but is under intensifying pressure – partly due to the prospects of US LNG exports into the Atlantic Basin - to shift at least part of its natural gas exports to spot basis. Were shale gas to expand internationally in promising regions such as the Asian mainland, central and Western Europe, and South America, Russia's ability to impose expensive, oil-linked prices on its customers would erode further, to the benefit of Russia's customers and global growth.

**Export of US tight oil and shale gas technology could open vast quantities of global energy reserves**

It is possible that horizontal, multi-stage hydraulic fracturing could unlock enormous new quantities of oil and gas that, along with new prospects in frontier, unconventional, and deep offshore could loosen the global oil market, diversify supplies, and reduce revenue flows to unstable or hostile regions and regimes that currently dominate global oil production. However, it is much too early to conclude that the resources and political will unlock these resources.

**RISKS**

**Resource Nationalism**

Still embryonic but fast-growing policymaker awareness of large increases in domestic oil-and-gas reserves and future production is strengthening resource nationalism and protectionist impulses in both parties. A vocal minority majority already calls for bottling up hydrocarbon resources in the US, ostensibly to keep prices lower for US consumers and to improve energy security. Rep. Ed Markey (D-MA) made multiple attempts to ban exports of US liquefied natural gas and legislation supported by Sen. Wyden (D-OR) would ban exports of crude and refined products originating from the proposed Keystone XL pipeline (which would carry US-produced oil as well as Canadian oil sands).

The issue will continue to play out as the energy market and investment consequences of the domestic energy boom come into view. Petrochemical and manufacturing companies have expressed concern that large LNG exports would raise domestic natural gas prices and undermine the promise of a renaissance in manufacturing. Some Members of Congress, including Senator Ron Wyden (D-OR) who will likely chair the Senate Energy & Natural Resources Committee if Democrats retain control of the chamber in November, believe prohibiting crude and product exports will keep domestic product prices low and stable. Two Republican primary candidates promised higher domestic production would keep gasoline prices below $3 per gallon. Most recently, China's bid to buy Nexen, a Canadian energy company with assets in the US, triggered calls for CFIUS review.

The first victim of misguided resource nationalism may be Japan. The Fukushima crisis has already boosted Japanese demand for oil and LNG imports, which the US could help supply in coming decades both from Alaska and the Lower 48 States. There are calls in Washington,

including from leading energy voices such as Senator Wyden, for a moratorium on new LNG export facilities. Washington should not interfere in private sector decisions to invest in hydrocarbon exports in the misguided belief that protectionist walls will keep domestic energy prices low and stable. As described in recent bipartisan report on the US-Japan alliance, policymakers should make it *easier* for Japan to import our LNG.[2]

**Isolationism**

In the 160 years after its founding, the United States fiercely debated whether and how to engage in the world. During most of that period, the country generally heeded George Washington's counsel to avoid meddling in foreign affairs and stick to our own continent. Nevertheless, World War Two, the Soviet Threat, and advances in atomic weapons and delivery systems served to erode the sense of protection the Pacific and Atlantic Oceans once afforded and convinced the United States that national security henceforth required robust, sustained and *global* military, economic, and political engagement. Securing Middle East energy supplies and protecting sea-lanes between supplier countries and consuming markets has been at the center of US global strategy. Our vital national interest in preventing hostile takeover of the Persian Gulf region was enshrined in the Carter Doctrine in 1980 and backstopped by the formation of Central Command (CENTCOM) in 1983.

However, the end of the Cold War, costly and unpopular wars in Afghanistan and Iraq, and enormous fiscal imbalances are turning popular and leadership focus inward. The absence of a clear foreign threat (with the possible exception of a rising China), as well as the engulfing domestic debate about major spending and tax policies, is going to reduce public support for a strong foreign policy and rekindle isolationism. The coincidental discovery of large domestic hydrocarbon resources is about the only good thing that has happened to the US economy in recent years. However, it will prompt Americans to ask themselves: Why should we continue to expend blood and treasure defending the Middle East or sea-lanes if we can produce all the energy we need in North America?

Nearly one year ago, the Obama Administration announced it would "pivot" US strategy toward Asia. The shift stemmed from the broadly recognized view that the rise of China is the primary visible risk to global peace and prosperity and a potential threat to US national security. The "pivot" clearly signaled diminution in US engagement in Europe. Less clear was the role of the Middle East. While the US is presently beefing up naval and air power in the Persian Gulf region to address a potential contingency related to Iran's nuclear program, future public and leadership support for playing the role of guarantor of Gulf security is in doubt as the US winds down unpopular, lengthy conflicts in Iraq and Afghanistan.

As noted below, it would be a grave mistake to confuse lower domestic oil import dependence with diminished geopolitical importance of the Middle East and especially Persian Gulf region, which will continue to dominate the global oil market and therefore constitute a vital strategic interest of the United States.

**Conflating oil autarky with low or stable prices**

The temptation for policymakers to promise not only low but also stable pump prices arises from wild gyrations in oil prices in recent years. As noted earlier, some officials apparently believe that banning oil exports will keep pump prices low and stable.

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[2] *The US-Japan Alliance, Anchoring Stability in Asia*, Richard Armitage and Joseph S. Nye, Jr, August 15, 2012

Energy experts who prominently support "energy independence" appropriately caution that autarky does not mean low or stable prices for a commodity that is global, fungible, and widely traded. There is one global oil price, and price trends and shocks anywhere are felt everywhere. US gasoline and diesel prices will be determined by trends and events in the global oil market, just as petroleum product prices in energy-independent Canada and Norway track global crude oil prices. Capital, labor, and infrastructure will flow to the most promising investment opportunities defined by below ground resources and above ground policy opportunities and risks. If Washington bans energy infrastructure or exports, it will render investment in the upstream fields less attractive, thereby jeopardizing supply growth. Washington did not create the goose that is laying the golden egg, but it can kill it.

While higher US liquids production will contribute to downward price pressure, that pressure can be offset if supply growth outside North America does not rise high enough to ensure global production keeps pace with strong, sustained demand growth for oil in Asia, the Middle East, and Latin America. Rapidan Group research and analysis suggests that in order to meet consensus estimates of 4% global GDP growth, the global oil industry will have to increase net oil supply by 2-3 mb/d. (An even higher rate of investment would be needed in order for OPEC to restore a spare capacity buffer sufficient to stabilize prices.) This implies adding roughly 5-6 mb/d of gross new oil supply every year, given the need to offset mature field declines of around 3 mb/d. If the US can add 0.5 mb/d or even increase to 1.0 mb/d of new oil to the global pool every year that is helpful, but on its own, it is insufficient to slake the voracious thirst for oil in fast-growing Asia, Middle East, and Latin America.

**RESPONDING TO CFR'S QUESTIONS:**

**How might the boom affect Organization of Petroleum Exporting Countries (OPEC) market power and production decisions, producer-consumer relations, and the International Energy Agency (IEA)?**

OPEC is not investing enough to meet global demand for its oil while maintaining the 4-5 mb/d spare capacity cushion needed to prevent large price gyrations caused by short term production outages and geopolitical disruptions. Strong non-OECD demand for oil (including higher demand in many OPEC countries) and weak non-OPEC supply growth have eroded OPEC's spare capacity cushion. A US oil production boom could ameliorate the latter factor, but as noted above, US production alone will not change the global supply-demand picture dramatically. In order to meaningfully loosen the global oil market, investment in oil production – including tight oil – must expand globally, not just in the United States.

Ironically, the prospect of higher US oil production – and the spread of tight oil production elsewhere – could make OPEC producers more cautious about investing in higher production capacity. OPEC's bias is to avoid overinvestment, and OPEC producers will be nervous about investing in additional capacity if production growth elsewhere could leave that new capacity sitting idle.

But most countries in the producer-consumer dialogue should welcome expanded tight oil and shale gas production. The oil market is and will remain in the throes of powerful and destabilizing forces and trends: Sustained strong demand in fast-growing non-OECD Asia, Middle East, and Latin America is colliding with disappointingly and unexpectedly small net production growth. Spare capacity remains historically low and insufficient to stabilize prices, especially given numerous geopolitical disruptions and threats to oil supply. Neither producers nor consumers benefit from wild price gyrations caused by large demand-supply imbalances for a commodity with a low short run price elasticity of demand and supply.

Finally, the boom will likely require IEA to play a stronger role in promoting soundly regulated hydraulic fracturing around the world.

**Will the US oil and gas boom affect oil prices—and if so, to what extent could these changes affect geo-economics and politics?**

Higher US oil production will place marginal downward pressure on global oil prices. However, as noted above, the contribution of net US oil production alone is unlikely to be great enough to loosen a *global* market that has become structurally tight and prone to large oil price swings.

US import requirements of waterborne crude oil from the Middle East and Africa will decline, and those flows will be redirected toward new markets in Asia, Africa, and the Middle East. The trade shift will erode the basis of the US-Saudi security bargain whereby the US protects Saudi Arabia from external threats and Riyadh protects the US from economically destabilizing oil prices.

If the US becomes a substantial natural gas exporter, Russia's geopolitical and economic position will worsen. Greater Atlantic Basin LNG supplies priced off of spot market benchmarks will erode Moscow's ability to impose oil-linked natural gas prices on its customers.

**How ought U.S. foreign policy adjust to take advantage of (or cope with) any of the future realities you foresee?**

US foreign policy should not be based on an overly optimistic expectation of the oil price and energy security benefits lower oil imports will confer. Leaders should not encourage popular expectations that higher oil production will yield low or stable gasoline or distillate prices.

Leaders should guard against neo-isolationism and resource nationalism. The US should remain open to foreign investment in its energy assets and allow private investment decisions to determine the level and direction of refined product and eventually LNG and crude oil exports.

US foreign policy should encourage the spread of US-developed hydraulic fracturing globally, especially in promising regions in Asia, Europe, and South America. Only by fostering a global energy boom can we hope to meet soaring oil demand from newly industrializing and urbanizing countries.

A strategic pivot toward Asia is understandable given the clear challenge posed by the rise of China, but the anchor of US foreign policy must remain firmly planted in the Middle East, home to 48% of the world's proved oil reserves. No scalable alternatives to oil are in view. Oil will remain a vital, fungible and widely traded commodity, transmitting everywhere price shocks emanating from anywhere. China is on course to import over 80 percent of its oil from outside sources and will build and defend global alliances and supply lines accordingly. The lion's share of future exports to Asia will likely come from Persian Gulf exporters who will earn and deploy tremendous financial windfalls. Therefore, US leaders should therefore assume that the Middle East will be no less vital a strategic interest in the next forty years as they were in the past.