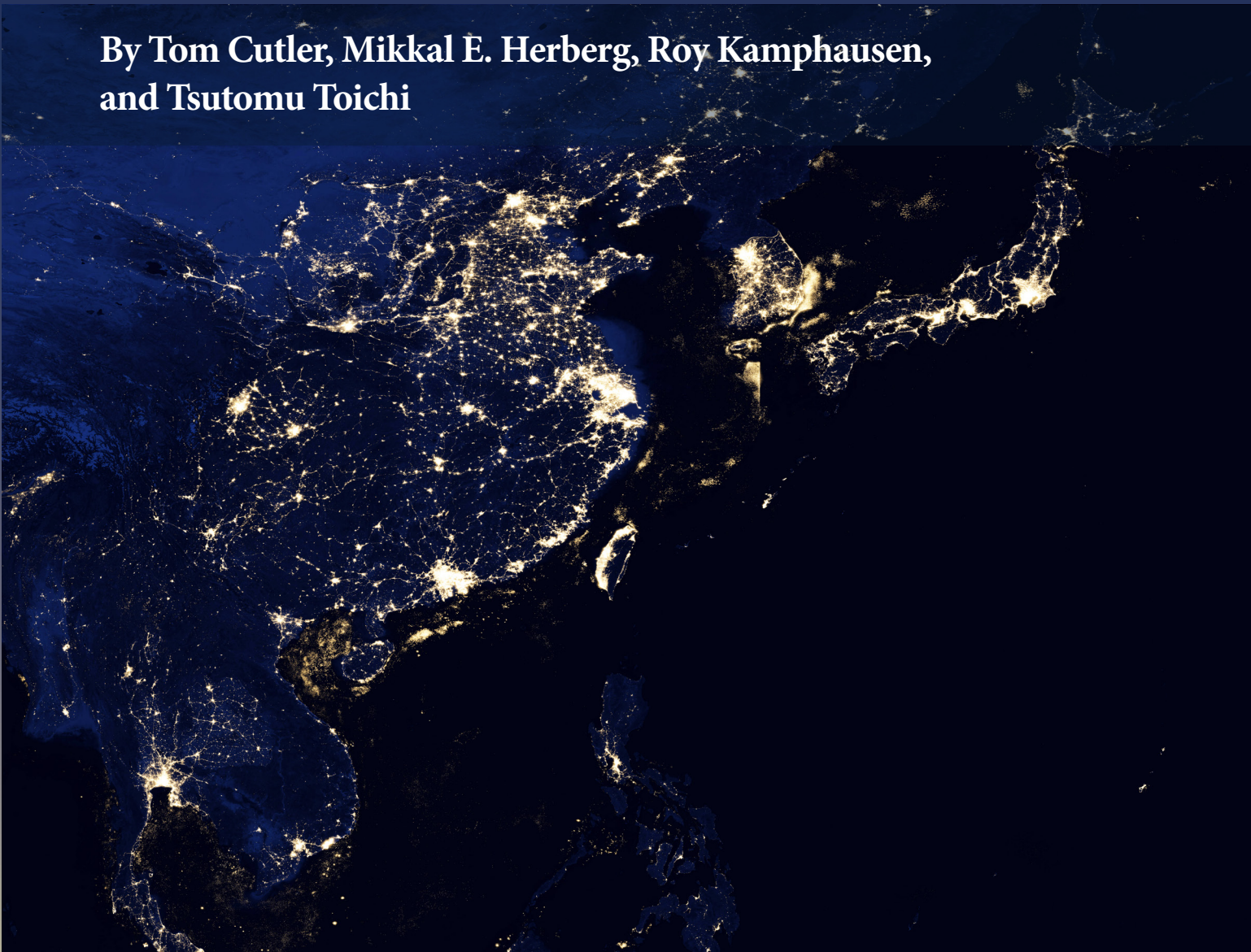


ADAPTING TO A NEW ENERGY ERA

Maximizing Potential Benefits for the Asia-Pacific

By Tom Cutler, Mikkal E. Herberg, Roy Kamphausen,
and Tsutomu Toichi



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Fifteen years ago, policymakers, industry leaders, and regional analysts were faced with a very different energy landscape in the Asia-Pacific. Until recently, North America was expected to be a major importer of natural gas for the foreseeable future—to the extent that in 2001, the International Energy Agency called out rising dependence on gas imports as a potential source of geopolitical concern for the continent. Meanwhile, Japan’s energy security strategies emphasized increasing the country’s reliance on nuclear energy to over 40% of the supply mix and looked to liquefied natural gas (LNG) as an opportunity to reduce dependence on Middle East energy imports. And while there were already signs that China would need to address the limits of self-reliance as an energy strategy, its global engagement and investment in world energy markets remained at a much lower level. However, rapid and dramatic developments in markets, technologies, and policies have altered each of these realities. Soaring Asian demand, coupled with declining North American import needs, has fundamentally altered the flow of oil and gas supplies in international markets. Although Middle Eastern supplies remain the linchpin of global energy security, today nearly all of the region’s oil and gas exports are directed to Asia.

These trends suggest that a fundamental revolution has occurred in world energy markets, with the Asia-Pacific at the center. As the dynamics of this revolution continue to evolve rapidly, there is a need for regional stakeholders to consider how to best use it as a catalyst to strengthen energy cooperation, which would yield economic, security, and environmental benefits. In order to strategically respond to these changes, policymakers and industry leaders across the region need to better understand how to adapt institutions, strategies, and market tools for regional energy security to accurately reflect the changes and embrace the opportunities of a new energy era.

With these issues in mind, the National Bureau of Asian Research (NBR) has convened the multiyear initiative “Adapting to a New Energy Era.” Through a range of activities—including field research, commissioned papers, workshops, and dialogues with key stakeholders—this initiative provides in-depth and rigorous research into how countries across the Asia-Pacific can forge stronger diplomatic, strategic, and economic tools to support common energy security interests.

Our approach includes an emphasis on four core questions:

1. What is the United States’ current energy security strategy toward oil and gas supply security, and how are conditions changing?
2. How can the United States, Japan, and other stakeholders in Asia work together to build stronger market, diplomatic, and institutional tools for a new energy and strategic environment?
3. How can Asia-Pacific countries work more closely together on a coordinated strategic policy to stabilize the Persian Gulf and secure oil and LNG transport?
4. What are the likely requirements for the United States, Japan, and other stakeholders in Asia to achieve these goals?

In this NBR Special Report, four leading Asia policy specialists examine elements of each of these questions. In the first essay, Mikkal E. Herberg offers an overview of major shifts underway in world energy markets and highlights key questions for strengthening efforts to develop new, more collaborative energy security strategies in the Asia-Pacific. Next, Roy Kamphausen assesses factors that will shape U.S. strategic engagement in the Middle East and raises questions about

potential roles for new security providers in the region, especially among the oil-importing states in East Asia. Following this analysis, Tsutomu Toichi offers a view from Japan, examining what the existential questions are for its energy policies and how the country may lead in strengthening regional energy security more broadly. In the fourth essay, Tom Cutler assesses the need for new energy architecture in the Asia-Pacific and makes recommendations for improving regional engagement. Collectively, these essays address key questions for U.S. and Asian energy security, making them essential reading for both industry and the policy community. We are grateful to the authors for their insights.

In addition to the report's authors, a number of individuals and groups deserve special thanks and acknowledgement for their support of this initiative. First, we wish to extend our thanks to the Sasakawa Peace Foundation. Through seeking to promote international exchange, cooperation, and understanding, the foundation fosters invaluable insight and leadership on a wide range of questions with implications for strengthening trans-Pacific ties. Its generous support and guidance has made this initiative possible.

Second, we are deeply appreciative of the tireless efforts of the project's principal investigator, Mikkal E. Herberg. For more than ten years, he has led NBR's Energy Security Program, developing our work on energy policy into a robust, multifaceted program. His expertise honed from more than 30 years of working on regional energy issues has enabled NBR to address questions ranging from oil and gas supply security to Russian energy geopolitics and to engage with the top experts in the world.

Finally, we deeply appreciate the scholars, industry experts, and policymakers who have contributed their time, insights, and creative thinking to informing this study. This report is intended to serve as an interim assessment in a multiyear initiative and provide a foundation for continued dialogue that results in actionable, forward-looking recommendations for strengthening public policy. Going forward, we will continue to convene dialogues across the United States and Asia and will share these findings in a final report that captures the program's findings as a whole. We look forward to continuing to work together on our common goal of strengthening regional energy security.

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Forging a New Strategy for U.S., Japanese, and Asian Energy Security

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EXECUTIVE SUMMARY

This essay argues that the U.S., Japan, and the rest of Asia need to develop a new, more collaborative energy security strategy in the wake of the U.S. unconventional energy revolution, rising Asian energy demand, and changes in the U.S. strategic posture.

MAIN ARGUMENT

World energy markets are undergoing seismic shifts as Asian energy demand and imports have risen dramatically and the U.S. unconventional energy revolution has radically reduced the need for imported energy. U.S. dependence on Middle East oil is disappearing, while Asian dependence is rising, especially for China. At the same time, the U.S. faces a war-weary American public, sharply reduced future defense spending, a need to shift strategic and diplomatic resources toward Asia, and a new and dangerously unmanageable situation in the Middle East in the wake of the Arab Spring. The combination of growing energy abundance and tightening strategic constraints raises the possibility that the U.S. could reduce some of its costly commitments to Middle East stability, increasing the risks of worsening instability and threats to the reliability of energy exports to Asia. It is, therefore, in the interest of Japan, China, and the rest of Asia to begin working together to forge a new, more collaborative energy security strategy in cooperation with the U.S. Nevertheless, this will be difficult due to the overlay of strategic rivalries and tensions in the region that make stronger regional cooperation on many issues a serious challenge.

POLICY IMPLICATIONS

- The U.S. and Japan should lead the creation of a new dialogue in Asia, including with China especially. The goal of this dialogue should be to find common ground and share the burden of security cooperation in order to ensure greater stability in the Middle East and the strategic security of energy production and energy sea lanes from the Persian Gulf to Asia.
- New efforts should also be made to forge new energy cooperation institutions in the Asia-Pacific that would strengthen regional energy security in the event of major supply disruptions from the Middle East. This should include new strategic oil stocks.
- Countries in the region also need to work together to strengthen energy markets and contracts, especially for LNG, in order to increase flexibility, transparency, and the ability to adjust more quickly to changing market conditions and potential supply shortages.

World energy markets have undergone seismic shifts in the past decade, driven by the twin forces of rising Asian energy demand and the unexpected boom in North American production of shale gas, tight oil, and oil sands. China is at the center of Asia's demand surge and has emerged as an energy superpower on the world stage. China recently surpassed the United States as the world's largest oil importer and continues investing heavily in energy resources around the world, particularly in the Persian Gulf. Beijing's diplomatic and political influence is also growing in tandem. At the same time, Japan's dependence on oil and gas imports has also grown sharply in the wake of the Fukushima disaster. While Japan is pursuing a nuclear restart and a more diverse portfolio of alternate supplies to address this dependence, both oil and gas are anticipated to play central, long-term roles in the country's energy security strategies. Ensuring reliable, affordable access to oil and gas supplies is thus a growing priority for Japanese industry and policy, and there has been increasing interest from Tokyo in strengthening markets and forging new energy partnerships across the Asia-Pacific and globally. Meanwhile, U.S. direct requirements for Persian Gulf oil supplies are declining rapidly, and in their place, Asia—and particularly China—has become the largest direct beneficiary of Persian Gulf oil exports. By implication, China and the rest of Asia also are now the key beneficiaries of continuing and costly U.S. commitments to the security and stability of the Middle East and Persian Gulf.

These changes suggest that the United States, Japan, China, and the rest of Asia will need to make major policy adjustments to adapt to these new energy security realities. It is axiomatic that the reliable flow of Persian Gulf oil exports to world markets remains vital to global economic health. Even if the United States becomes “quasi-self-sufficient” in oil or Japan decreases its dependence on the Middle East, oil prices will continue to be determined in a global market. Nevertheless, both energy changes at home in the United States and a deep desire domestically to reduce the country's future entanglements in the Middle East and Persian Gulf in the wake of the Afghanistan and Iraq wars suggest that the United States will be willing to accept more volatility in the region. At the same time, the United States will also probably be looking for a stronger partnership with Asian countries in order to find ways to support greater stability in the Middle East and to help forge more reliable energy flows from the Persian Gulf.

This essay explores how the United States, Japan, and the rest of Asia can adapt to a new energy era. The first section reviews the historical foundations of U.S. and Asian energy security and examines how both market and policy considerations are changing. Section two then explores how these major shifts are leading stakeholders in the United States, Japan, and Asia to rethink their existing energy security strategies and identifies arenas where there is a pressing need for new institutional, market, and strategic arrangements. The essay concludes by highlighting key questions for U.S., Japanese, Chinese, and other Asian stakeholders.

Asia-Pacific Energy Security in a Global Context

Since the oil price shocks of the 1970s, a central pillar of U.S. energy security strategy has been the strategic commitment to ensuring stability in the Persian Gulf and the uninterrupted flow of oil to world markets. Increasing oil demand in the United States, Europe, and Japan during the economic boom years of the 1960s led to sharply rising imports of oil from the Persian Gulf region, which became the linchpin of global oil supplies to the Western industrial economy. Although the United States was the largest oil producer in the world until the early 1970s, domestic oil

production peaked in 1970 at about 11 million barrels of oil per day (mmbd) and began a gradual decline that continued largely unabated until 2008.¹ In the face of rapidly rising oil demand, oil imports reached 50% of total U.S. oil consumption by the early 1970s and imports from the Persian Gulf have remained in the range of 15%–30% of U.S. oil imports over the past 40 years. European countries also became more dependent on Persian Gulf oil, which has consistently made up one-half of their oil imports, and Japan, which is 100% reliant on imported oil and natural gas supplies, has traditionally depended on the Persian Gulf for 75%–90% of its total oil needs.

The Oil Price Shocks of the 1970s and 1980s and the U.S. Policy Response

Political events and supply disruptions in the Persian Gulf and Middle East led to severe oil price shocks in the 1970s that wreaked economic havoc on the Western industrial countries and contributed to severe global and U.S. economic recessions in 1973–74 and 1980–82. In the United States, the new energy security narrative became one of scarcity and economic vulnerability. Politicians in both the Nixon and Ford administrations responded with politically popular but misguided and ineffective campaigns to achieve domestic “energy independence.”² Lacking domestic oil reserves to develop, Japan took an active interest in diversifying to producers beyond the Middle East, while also placing a premium on increasing energy efficiency and the shares of nuclear energy and liquefied natural gas (LNG) in its national energy mix. Nevertheless, U.S., Japanese, and Western dependence on Persian Gulf oil continued to rise throughout the 1970s. Japan, in particular, became the single-largest importer of oil from the region during this period, and expanding use of LNG in the country’s power sector deepened Japan’s overall energy ties to the Middle East.

In the wake of two oil shocks, the United States began a long buildup in its strategic presence and alliances in the Persian Gulf to seek greater stability in oil flows. Internationally, the United States led the creation of the International Energy Agency (IEA), which brought together the major Western industrial oil importers to establish strategic stocks for collective use in the case of future supply disruptions.³ During the 1970s, in an effort to bolster political stability in the Middle East and Persian Gulf, the United States balanced major alliances with Iran (then under the shah) and Saudi Arabia, which were the two largest oil exporters in the region. However, the Iranian Revolution put an end to U.S. relations with Iran and moved Washington’s attention fully to the Arab side of the Gulf, particularly the strategic alliance with Saudi Arabia.⁴ Subsequently, the Reagan administration shifted further toward developing a stronger military and diplomatic posture in the Gulf that was concerned with not only guaranteeing the flow of oil but also responding to the Soviet invasion of Afghanistan that had begun in late 1979.⁵ Thereafter, U.S. military power was increasingly deployed in the region, driven by a series of wars and threats to Persian Gulf oil supplies. During the Iran-Iraq War of 1980–88, the United States quietly aided Iraq with covert arms and intelligence against Iran’s threat to broader U.S. interests in the Arab nations. The U.S. Navy guaranteed oil flows during the so-called “tanker war” of 1987–88

¹ All statistics in this paragraph are from BP plc, “BP Statistical Review of World Energy 2013,” June 2013.

² Richard Nixon, “Address to the Nation about National Energy Policy,” November 25, 1973, <http://www.presidency.ucsb.edu/ws/?pid=4051>.

³ IEA, “History,” webpage, <http://www.iea.org/aboutus/history>.

⁴ For an excellent discussion of this period, see Anthony H. Cordesman, *The Gulf and the West: Strategic Relations and Military Realities* (Boulder: Westview Press, 1988). On the early U.S.-Saudi relationship, see Nadav Safran, *Saudi Arabia: The Ceaseless Quest for Security* (Cambridge: Harvard University Press, 1985), 295–308.

⁵ On this period, see Thomas L. McNaugher, *Arms and Oil: U.S. Military Strategy and the Persian Gulf* (Brookings Institution, 1985), 183–98.

by reflagging and providing naval escorts for Kuwaiti tankers.⁶ In response to Iraq's invasion of Kuwait in 1990 and the potential threat to Saudi oil fields, the United States intervened decisively by expelling Iraqi forces from Kuwait, thereby establishing a military presence in Kuwait and Saudi Arabia for the first time. The 2003 Iraq War, recently wound down, further deepened the U.S. presence and footprint in the region.⁷ The United States still maintains a strong presence through military installations in Qatar, Bahrain, and Kuwait.

The United States has been and remains the only country with the strategic power to maintain order in the Persian Gulf and guarantee oil flows. Japan cultivated opportunities to develop a robust energy security strategy in the region by strengthening its economic relations through investments in upstream LNG projects and (with lesser success) in upstream oil development. However, Japan's lack of strategic power-projection capabilities naturally requires Tokyo to rely on commercial ties and energy technology for influence. In a similar fashion, China, South Korea, and India have played a role in broadening access to Middle East supplies; yet these countries have not shown a willingness or the ability to take on a larger strategic role in the region.

Changing Markets for the United States

Yet while U.S. policymakers' perceptions of energy scarcity and vulnerability have remained largely unchanged, the realities of the oil market have changed dramatically. Until very recently, the United States, Europe, and Japan, as the largest importers of Persian Gulf oil, were the most direct beneficiaries of U.S. efforts to ensure oil flows from the region. However, North American dependence on the Middle East for oil is now declining rapidly, while Asia's dependence is mushrooming.

The changes have been most dramatic in North America, particularly in the United States. Since 2006, the long, structural decline in U.S. oil production has been sharply reversed due to new hydrofracturing technology used to produce tight oil supplies that were previously uneconomic. At the same time, U.S. oil demand has declined since its peak in 2005 and is likely to grow very slowly, if at all, in the future. As a result, the U.S. Energy Department forecasts now suggest that U.S. oil-import dependence is likely to decline steadily over the next ten years from a peak of 60% in 2006 to a projected 21% in 2015 and should remain close to that level for many years after.⁸ One recent private-sector report suggests that the United States could become nearly self-sufficient in oil as early as 2020 under the right circumstances.⁹ Given this trend, U.S. imports of oil from the Middle East and Persian Gulf region are rapidly becoming negligible, with most coming from Saudi Arabia. Even Saudi oil exports to the United States are beginning to come under pressure.¹⁰ Adding to the growing perception of ample future U.S. and Canadian energy supplies is the great growth in shale natural gas production, resulting in plunging North American natural gas prices,

⁶ For more on the tanker war, see Anthony H. Cordesman, *The Iran-Iraq War and Western Security 1984–87* (London: Jane's Publishing, 1988).

⁷ Although the second war in Iraq was justified via the threat of weapons of mass destruction, the larger issue of preventing Saddam Hussein from dominating the Arab oil producers in the region was ultimately an important underpinning for the long-term strategic rationale. For a good discussion of the various roots of U.S. intervention, see Pierre Noël, "The New U.S. Middle East Policy and Energy Security Challenges," *International Journal* 62, no. 1 (2006/2007).

⁸ U.S. Energy Information Administration, "Annual Energy Outlook 2014," May 2014. For the 2015 import share, see "U.S. Boosts 2015 Oil Forecast as Shale Powers Push to 10 MMBpd," Reuters, September 9, 2014.

⁹ Edward L. Morse, "Energy 2020: North America, The New Middle East?" *Commodity Research and Strategy*, Citibank, March 2012. For another variation on this theme of the Americas becoming self-sufficient in energy, see Amy Myers Jaffe, "The Americas, Not the Middle East, Will Be the World Capital of Energy," *Foreign Policy*, September/October 2011.

¹⁰ Libby George, "U.S. Shale Squeezing Out Saudi Oil Imports, Boosting Gasoline Exports: IEA," Reuters, September 11, 2014.

which will very likely transform both the United States and Canada into LNG exporters to Asia over the next decade.¹¹

Expectations for Canadian oil production also are increasing as a result of expanding oil sands development in western Canada, combined with new tight oil expansion similar to what has been occurring in the United States.¹² When combined with the production increases expected from Brazil's large new offshore pre-salt reserves and rising Mexican oil production due to recent major energy reforms, the Western Hemisphere is likely to require very little additional oil from the Middle East or elsewhere outside the hemisphere.¹³ In the case of Europe, long-term oil demand is expected to continue its decline at about the same pace that Europe's oil production declines. Consequently, its future oil import needs will be relatively flat and can be met mainly by exports from Russia and North and West Africa, as well as by new supplies from the Caspian region of Central Asia.¹⁴

Asia's Rise in Energy Markets

At the same time that North America is becoming more self-sufficient, rising oil demand in developing Asia, and particularly China, has made Asia the predominant buyer and direct beneficiary of Persian Gulf oil. Global oil flows, as a result, are shifting decisively onto a Middle East–Asia axis. Japan and South Korea have long been heavily dependent on the Persian Gulf; despite decades of efforts by both countries to diversify their oil import sources, 85%–90% of their total oil needs are still satisfied by the Middle East. More recently, developing Asia's imports of Persian Gulf oil have accelerated with rising oil demand. China's oil demand has roughly doubled in each of the past two decades, reaching 10 mmbd in 2013, nearly 60% of which is now imported. One-half of those oil imports come from the Middle East.¹⁵ Saudi Arabia now sometimes exports more oil to China on a monthly basis than to the United States, which was historically Saudi Arabia's largest market. India is 75% oil-import dependent, and roughly 80% of its oil imports come from the Persian Gulf.¹⁶

Asia as a region, including the Association of Southeast Asian Nations (ASEAN), relies on the Middle East for satisfying over 50% of its total oil needs, and this dependence will increase dramatically in the next decade and beyond.¹⁷ The IEA forecasts that Asia's demand for oil imports will rise from 12 to 27 mmbd between 2012 and 2035 and will account for virtually the entire net increase in both global oil demand and global oil trade.¹⁸ The Institute of Energy Economics Japan

¹¹ For an excellent assessment of this outlook, see Charles Ebinger, Kevin Massy, and Govinda Avasarala, "Liquid Markets: Assessing the Case for U.S. Exports of Liquefied Natural Gas," Brookings Institution, Policy Brief, May 2012.

¹² Morse, *Energy 2020*; and Dina O'Meara, "Oil Production Racing Towards New Highs: Trade Association Bumps Up Conventional, Bitumen Production Outlook," *Calgary Herald*, June 6, 2012.

¹³ The U.S. Energy Information Administration's "International Energy Outlook 2014" has revised the 2020 and 2025 forecasts from its 2013 report for Mexican oil production by one mmbd due to recent energy industry reforms that will attract new foreign investment. See the section on "Energy Reform in Mexico," 16–17.

¹⁴ IEA, *World Energy Outlook 2013* (Paris: IEA, 2013). For an excellent overview of these shifting oil trade patterns and implications, see John Mitchell, *More for Asia: Rebalancing World Oil and Gas* (London: Chatham House, 2010). On the rapidly changing global oil supply outlook, see Leonardi Maugeri, "Oil: The Next Revolution: The Unprecedented Upsurge in Oil Production Capacity and What It Means for the World," Harvard Kennedy School, Belfer Center for Science and International Affairs, Discussion Paper, June 2012.

¹⁵ BP plc, "BP Statistical Review of World Energy 2014."

¹⁶ *Ibid.*

¹⁷ For the most authoritative overview of Asia's oil and energy outlook, see Institute of Energy Economics Japan (IEEJ), "Asia/World Energy Outlook 2013: Growing Uncertainty over International Energy Trends and the Future of Asia," October 2013. All figures in this paragraph are from this report and forecast unless otherwise stated.

¹⁸ IEA, *World Energy Outlook 2013*, 561–64.

also forecasts a 15 mmbd rise in Asia's oil imports over the same period.¹⁹ As a result, while the stability and security of Middle East and Persian Gulf oil flows have been vital for Asia since the 1970s, this issue has become an even more critical and direct concern with the rise of oil-import dependence in China, India, and Southeast Asia.²⁰ As discussed above, European demand for oil imports is expected to decline significantly in the period from 2014 to 2035 and can be met largely by Russian, Caspian, and African supplies. This trend is likely to limit imports of Persian Gulf crude. Hence, the largest direct beneficiary of U.S. efforts to secure Gulf supplies is now almost entirely Asia and increasingly China.

Implications for U.S. and Asian Energy Security Strategies

Revisiting U.S. Policy?

These fundamental global energy shifts, along with changing U.S. strategic priorities and capabilities, suggest that the United States may begin to reconsider the energy security foundations of its strategic commitments to the Persian Gulf, as well as its broader approaches to global energy security. As suggested earlier, the U.S. commitment to the region's stability and the security of its sea lanes has historically been rooted in two energy security imperatives. The first is securing reliable U.S. access to Persian Gulf oil, which has traditionally satisfied a significant share of the United States' oil import needs. The second is ensuring the reliable flow of Persian Gulf oil—the linchpin of global oil supplies—to world markets to avoid supply disruptions and price shocks that would undermine global and U.S. economic growth. However, with U.S. reliance on crude oil from the region rapidly evaporating, policies built around the concept of energy scarcity are increasingly inappropriate in an era of growing abundance in North America. Moreover, the United States is on the way to becoming a natural gas exporter as soon as a series of LNG projects that have been approved begin to come online after 2015. These supplies will most likely go largely to booming Asian LNG markets. There is even discussion of the United States becoming a crude oil exporter in the future, which would require modifying the 40-year ban on crude oil exports imposed during the oil crises of the 1970s.²¹

The approaching dilemma facing U.S. policymakers is described well by John Mitchell of Chatham House, who raised these issues in late 2010 and examined the implications of the broad shift in oil flows toward Asia.²² In a report published in September 2012 by the National Bureau of Asian Research, Mitchell sharpened his characterization of the dilemma confronting U.S. policymakers:

Under what conditions will the United States be prepared to continue (partly for reasons wider than oil security) to maintain its military presence in the Middle East and its support for stability of that region's governments, when the oil supplies are in fact going to Asian markets? The answers to these questions

¹⁹ IEEJ, "Asia/World Energy Outlook 2011: Growing Uncertainty over International Energy Trends and the Future of Asia," February 2012.

²⁰ See Mitchell, *More for Asia*.

²¹ Tim Boersma and Charles K. Ebinger, "Lift the Ban on U.S. Oil Exports," Brookings Institution, Memorandum, January 23, 2014; and Blake Clayton, "The Case for Allowing U.S. Crude Oil Exports," Council on Foreign Relations, Policy Innovation Memorandum, no. 34, July 2013.

²² Mitchell, *More for Asia*.

must depend on how far the United States recognizes the indivisibility of global oil security.²³

Beyond considerations of energy security there are other strategic and budget pressures at work that seem likely to reinforce any disposition in Washington to recalibrate the United States' geopolitical footprint in the Middle East and Persian Gulf. The Obama administration has been explicit about its desire to reduce commitments to the region after a decade of war and lost lives. Such increasingly isolationist impulses are evident not only in Washington but also in the general public. According to recent polls, the American public is deeply weary of costly entanglements in the Middle East in the wake of the Iraq and Afghanistan wars.²⁴ When the Obama administration tried to rally congressional and domestic support for a military response to Bashar al-Assad's use of chemical weapons against the Syrian people, the response was overwhelmingly negative. The lead-from-behind approach taken during the Libyan insurrection revealed in Washington a deep suspicion of military solutions to increasingly complex changes in the Middle East. Additionally, severe defense budget cuts as well as sequestration required in the Budget Control Act of 2011 will likely take effect over the next decade and will require difficult decisions about maintaining a large military footprint in the Middle East and Persian Gulf. The U.S. rebalancing toward Asia announced by the Obama administration will also demand shifting military and diplomatic resources away from traditional areas toward Asia. Finally, in the wake of the Arab Spring, it is increasingly apparent that the United States' capacity to shape the region is weakening, as events in Iraq, Syria, Egypt, and Libya demonstrate. Although it is clear that the United States will not and should not pull back entirely from the region, there is a strong sense of "hegemony fatigue" among the American people and in Washington, D.C., that is affecting the willingness of the United States to lead and sustain its primacy in global affairs.²⁵

Sustained U.S. Interests in Global Energy Security and Asia's Growing Role in the Middle East and Persian Gulf

Despite these many changes, U.S. power in the Middle East and Persian Gulf nevertheless remains important for achieving key U.S. energy security and economic goals. Global oil prices and the prosperity of the international economy still depend critically on both the reliable flow of oil from the region and the security of the sea lanes to Asia and the rest of the world. Asia's continued economic growth, in particular, which is central to U.S. prosperity, is dependent on stable and affordable energy supplies from the Persian Gulf. The success of the U.S. rebalance to Asia relies heavily on Asia's continued access to oil that can only be ensured by the United States.

Hence, the United States faces a dilemma. Its own need for Persian Gulf oil is disappearing, but, at the same time, it continues to have a vital strategic and economic interest in sustaining the reliable flow of that oil to Asian and global markets. Simultaneously, broader strategic, budget, and domestic political pressures seem increasingly likely to reinforce the impulse to reduce commitments to the Middle East and Persian Gulf. While the U.S. military plans to maintain its priority focus on the region according to the 2014 Quadrennial Defense Review, the

²³ John V. Mitchell, "Asia's New Role in Global Energy Security," in "Oil and Gas for Asia: Geopolitical Implications of Asia's Rising Demand," National Bureau of Asian Research (NBR), NBR Special Report, no. 41, September 2012.

²⁴ Pew Research Center, "Public Sees U.S. Power Declining as Support for Global Engagement Slips," *America's Place in the World 2013*, December 3, 2013.

²⁵ For a thoughtful discussion of the United States' choices between "worldwide hegemony" and narrow isolationism, see Patrick Porter, *Sharing Power? Prospects for a U.S. Concert-Balance Strategy* (Carlisle: U.S. Army War College Press, 2013).

willingness and capacity of future administrations to actively shape regional events seem likely to decline.²⁶ Jon Alterman, one of the most trenchant U.S. specialists on the Middle East, argues that this “willingness to go to war to defend friends and interests in the Middle East” is changing in important ways. Citing many of the factors mentioned above, he concludes that Western governments are moving toward “a more lasting Western effort to impose distance between the West and the Middle East.... [that] will focus on a narrower set of security threats going forward, focusing on trade through key waterways and with less attention to conditions within and between countries.” For the United States, this shift suggests a “willingness to accept more volatility in the Middle East, out of a conviction that it will not add to greater volatility in the United States itself.”²⁷

These changes will have important energy security implications for Asia. While we cannot know quite how the United States will reshape its Middle East commitments, the United States, Japan, and Asia as a whole should begin planning for these new realities. It would seem to make sense to develop a hedging strategy against the potential for changing U.S. and Western commitments in the region.

This raises a number of thorny and vexing questions. What should a revised energy security architecture in the Asia-Pacific look like in the context of reduced U.S. commitments and capabilities, and how could it be achieved? Given Japan’s robust trade and investment relationships in the Persian Gulf and the strength of the U.S.-Japan alliance, Japan is a natural potential partner in U.S. efforts to promote the reliable flow of Gulf energy supplies to world markets. Yet Japan’s significant limitations on its strategic capabilities will continue to shape how the country can respond to major developments. What role might Japan play in providing for greater leadership? Additionally, what role would Australia, South Korea, and other Asia-Pacific allies play in a new architecture? What role would or could China play as not only the largest beneficiary of stable and affordable oil flows from the Persian Gulf but also as the chief strategic rival to the United States and Japan? How would Asia overcome an already zero-sum atmosphere of suspicion and rivalry over control of energy supplies and transit routes among the region’s importers?

In order to answer these questions, two broad dimensions of a future energy security architecture for Asia need to be examined. First, at the strategic level there is the challenge of forging new modes of energy security cooperation amid an increasingly contentious regional security landscape. Second, there is the challenge of developing more effective regional institutions for energy cooperation as well as developing more flexible and robust energy markets. From a straightforward security perspective, how can the United States, Japan, China, and other Asian stakeholders craft a strategic and diplomatic approach to maintaining the stability of the Persian Gulf and securing sea lanes to Asia that requires a new level of security collaboration among the Asian powers? There is already a view in Washington that Asia needs to carry a larger share of the responsibility for securing the flow of oil and LNG from the Middle East. Alterman put this succinctly recently:

The United States will need to find some solution to what is currently a “free rider” problem in Middle Eastern security. That is to say, the United States spends billions of dollars annually to preserve the security of the Gulf, while

²⁶ The 2014 Quadrennial Defense Review states that “the United States also has enduring interests in the Middle East, and we will remain fully committed to the security of our partners in the region. We will continue to maintain a strong military posture in the Gulf region.” U.S. Department of Defense, *Quadrennial Defense Review 2014* (Washington, D.C., March 2014), viii.

²⁷ Jon B. Alterman, “What Should the Middle East Expect from the United States and Its Allies?” in *2014 Global Forecast: U.S. Security Policy at a Crossroads*, ed. Craig Cohen, Kathleen Hicks, and Josiane Gabel (Washington, D.C.: Center for Strategic and International Studies, 2013), 28–30.

contributions from energy-consuming nations are sparse.... Seen from Washington, some of the parties that benefit most from the security the United States helps provide both fail to contribute and simultaneously take actions that undermine it. That cannot go on indefinitely.²⁸

A recent study on strengthening U.S. energy security called for Washington to work more closely with China to take on a stronger role in securing Middle East stability and protecting Persian Gulf oil supplies and sea lanes.²⁹ If a future supply disruption does occur, there will almost certainly be calls from Congress and elsewhere in Washington for Asia to play a stronger role than in the past. This presents very significant challenges in the context of the competitive strategic overlay for the East Asian region. The region is already struggling to adapt to the economic and strategic rise of China and the associated deepening strategic rivalries and tensions.

Second, and from a hopefully more promising institutional perspective, how can the Asia-Pacific work to craft collaborative regional energy security institutions and more flexible oil and LNG markets to strengthen the region's energy security? How might these institutions or arrangements mesh with existing institutions like the IEA or the group of 20 (G-20)? Can the IEA be reshaped sufficiently to meet the changing patterns of global oil demand and incorporate large new Asian oil importers like China and India? How can the Asia-Pacific make regional energy markets more resilient to potential supply and price shocks and improve market flexibility? ASEAN in particular needs to develop strategic oil stocks as its dependence on oil from the Persian Gulf continues to grow. For example, a recent report from Chatham House based on a two-day scenario exercise in Singapore points to a number of ways that countries in the region could work together to respond more effectively to a potential future oil supply disruption emanating from the Middle East.³⁰ Likewise, as the region's reliance on LNG rises rapidly, there is increasingly a need in Asia for new arrangements that develop a more flexible and liquid LNG marketplace, perhaps through new storage mechanisms such as official strategic storage or commercial storage expansion. The creation of regional LNG spot markets and trading hubs is already among the options being discussed that could make Asian LNG markets more resilient and robust.

In sum, efforts to anticipate and respond to the implications of rapidly changing global oil and LNG market flows need to focus on four key questions. First, will the rapid changes in North American oil and gas production and a new era of "energy abundance" significantly affect attitudes in Washington about the importance of maintaining its diplomatic and strategic engagement in the Middle East and Persian Gulf and in what ways? Second, will the broader pressures brought on by budget constraints, war weariness, and the realities of the Arab Spring reinforce a potentially less assertive or more arms-length U.S. presence in the Middle East and Persian Gulf? For example, the United States may continue to play a critical role in keeping the sea lanes open but increasingly be less inclined to intervene by putting "boots on the ground" to shape events than it has been in the past. What would this mean for Asia's energy security? Third, to the extent that there is a shift in U.S. policy, how should Asia's major oil importers and regional strategic rivals respond to a reduced U.S. presence? Can they overcome their rivalries to collaborate based on common interests in securing the region's vital energy supplies? Finally, what is the potential for the Asia-Pacific to

²⁸ Jon Alterman, Interview, CNN, *Fareed Zakaria GPS*, January 14, 2013.

²⁹ Commission on Energy and Geopolitics, "Oil Security 2025: U.S. National Security Policy in an Era of Domestic Oil Abundance," Report, January 2014. In perhaps a precursor of this possibility, see William Wan, "U.S. Urges China to Help with Islamic State in Iraq," *Washington Post*, September 9, 2014.

³⁰ John Mitchell, "Asia's Oil Supply: Risks and Pragmatic Remedies," Research Paper, Chatham House, May 2014.

forge new, more resilient regional energy security institutions and arrangements along with more flexible and resilient oil and LNG markets? The answers to these four fundamental questions will shape the new architecture of energy security for the Asia-Pacific region.

Conclusion

Responding to this shifting energy landscape and finding a more collaborative approach to ensuring Middle East stability is a critical challenge facing policymakers in the United States, Japan, and across Asia. This new reality is likely to require new economic, diplomatic, and strategic policies for achieving global energy security, including closer collaboration between the major powers in the Asia-Pacific. To that end, both the United States and Japan are leaders on the world energy stage but will need to revamp their fragmented approach to energy diplomacy. For example, both countries should renew efforts to build more resilient and flexible oil and LNG markets; boost economic and oil development in key “swing” suppliers in Central Asia, northern Iraq, West Africa, and Latin America; and build new energy institutions that reflect current oil markets. Policies on emergency oil stocks also need to be revised substantially to improve their effectiveness.

In addition, a new global strategy should establish closer coordination between the United States, Japan, China, and other large Asian oil and gas importers on their common energy security interests, especially in the stability of the maritime arena generally and the Persian Gulf region specifically. It is clear that the United States will remain the key outside strategic power in the Middle East and Persian Gulf. However, recent difficulties in shaping events in Iraq, Egypt, Syria, and Libya and strong domestic resistance to committing boots on the ground suggest that the United States will depend more heavily on diplomacy and coordination with other partners that have mutual interests in the region. As a result, the risk of instability is likely to rise, with important implications for the security of Asia’s energy supplies from the Persian Gulf. China and Russia have already begun to play a larger role in the Middle East. As their policies toward Iran, Iraq, Syria, and Libya demonstrate, China and Russia have very different strategic and energy agendas from the United States.

An important part of both of these emphases is the need for the United States to strengthen collaboration with Japan and other large importers in Asia and with traditional partners in the Persian Gulf. Australia, Singapore, India, Indonesia, and South Korea have all been active in international oil markets, and a greater understanding of their interests in and capabilities for assuming a greater role in global energy security will be essential for strengthening the likely outcomes of any global response. Together with these partners, the United States and Japan need to reshape energy market and institutional forces to support changing interests and capabilities in the Middle East and Persian Gulf that also reflect a sustained, common interest in securing global energy security.

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The United States' Military Posture toward the Middle East: Potential Drivers of Change

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EXECUTIVE SUMMARY

This essay examines U.S. security commitments to the Middle East and Persian Gulf, highlights key factors shaping U.S. engagement, and raises questions about potential roles for new security providers, especially among oil-importing states in East Asia.

MAIN ARGUMENT

The U.S. has enduring security interests in the Middle East and Persian Gulf that will remain even as U.S. oil and gas imports from the region decline. Yet as measured from the highs in posture at the peak of the Afghanistan and Iraq wars, U.S. troop levels are already much lower, leading some to conclude that the U.S. is in the midst of a strategic disengagement. Supporting this notion are historic levels of war fatigue, shifting budget constraints, and a deep concern about the long-term costs of caring for war veterans. Meanwhile, the U.S. strategic rebalance to Asia and great-power relationship with China will also have some bearing on the future U.S. posture in the Middle East and Persian Gulf, especially in light of increasing East Asian dependency on Middle Eastern gas and petroleum. However, the prospects of another state or other states providing security in this vital oil-producing region are uncertain.

POLICY IMPLICATIONS

- The U.S. faces hard choices about how many forces in region its enduring commitment to the broader Middle East and Persian Gulf actually requires. Part of this exercise includes reassessing what security is needed.
- Oil-importing states must also assess whether changing dynamics and a potentially decreased U.S. posture create an expectation that these states provide forces and contribute to Middle East and Persian Gulf security in greater ways than before.
- Several future outcomes might ensue from the current situation. In one scenario, the U.S. maintains the capacity to respond to crises but with fewer capabilities in region to shape pre-crisis events, and no other country takes over the United States' current role. Another, if unlikely, scenario is that the U.S. and China would reach an agreement to share security responsibilities. A third scenario might entail the U.S. building on existing patterns of cooperation to construct tailored multilateral approaches that can engage a range of countries in providing for regional security.

The United States has enduring security interests in the Middle East and Persian Gulf that will remain even as U.S. oil and gas imports from the region decline. These include opposing violent extremist elements, providing support for Israel, and ensuring a stable supply of oil for global markets. Yet a series of factors, including both domestic factors in the United States and regional developments, will increasingly put pressure on U.S. commitments to the Middle East and Persian Gulf, despite the policy commitments of American leaders to remain fully engaged there. The rapid military advances made by the Islamic State in Iraq and Syria (ISIS) in the spring and summer of 2014 underscore the tension between U.S. security interests and the various pressures on the United States to reduce its role in the region. The carefully reached decision by President Barack Obama to provide air support to Iraqi forces battling ISIS encapsulates the dilemma faced by the United States as it seeks to manage a security crisis that is partly of its own doing, while also responding to multiple domestic considerations, including from U.S. armed forces and the American public.

U.S. military force levels, though an admittedly imperfect proxy, can be a useful metric for measuring the United States' strategic commitment to the region for two reasons: they are rapidly changeable in response to policy guidance and any changes would be readily observable. In this regard, the number of troops on the ground may be a more reliable indicator of strategic intent than more overt policy declarations. While it is not necessarily true that higher numbers of troops reflect a greater strategic commitment—some missions simply require more forces—there nonetheless seems to be a correlation, almost a strategic logic, between troop levels in a region and that region's strategic importance, irrespective of the actual outcomes those troops produce.

This essay seeks to assess the factors, both internal and external, that will shape future U.S. strategic military engagement in the greater Middle East and Persian Gulf. It addresses the region's dynamics, assesses the durability of U.S. force structure commitments, and examines key domestic trends in the United States that could have an impact on future U.S. force posture and presence. The essay then puts the U.S. strategic rebalance to Asia and great-power relationship with China into the context of the future U.S. posture in the Middle East and Persian Gulf. The essay assesses the degree to which other states might step forward to pick up some of the burden from the United States and concludes that the prospects of another state or other states providing security for this vital oil-producing region are uncertain.

The Situation in the Middle East and Persian Gulf and the Role of Central Command

The strategic situation in the Middle East and Persian Gulf contains elements of stability and instability that will bind the United States to the region strategically in ways that are highly consistent with current patterns. Egypt is in the throes of a period of reform and retrenchment, with the path of further democratic development uncertain. Saudi Arabia largely resists systemic domestic political reform while attempting to shape political developments elsewhere in the region. Iran plays a destabilizing role in many ways but, following the late November 2013 nuclear agreement, is positioned to move forward in a constructive manner, despite the grave concerns many nations have about the long-term efficacy of the deal. Syria has plunged

into the depths of a chaotic civil war that has resulted in nearly 200,000 deaths.¹ Meanwhile, the U.S. strategic partnership with Israel remains strong, challenges between the leaders notwithstanding, and changes in the domestic political arrangements of some Arab states (the so-called Arab Spring movements) will also garner U.S. attention. In short, the region retains a set of both stabilizing and dynamic, even chaotic, forces that will create a “pull” factor for continued U.S. strategic engagement.

U.S. Central Command (CENTCOM) is the military combatant command assigned responsibility for carrying out the security dimensions of the United States’ policy toward the region. CENTCOM’s area of responsibility includes twenty countries in the Middle East, Persian Gulf, Central Asia, and South Asia subregions.² In a statement to Congress on command posture, the CENTCOM commander, General James Mattis, argued that the United States’ presence and commitment in the region will endure for reasons that include but go beyond oil:

The ongoing events of the Arab Awakening, blatant brutality by the Iranian-backed Syrian regime and the spillover effects of refugees and violence into neighboring countries, coupled with Iran’s flagrant violation of United Nations security council resolutions, bellicose rhetoric and pursuit of a nuclear weapons capability, and the persistent threat from both Shia (Iranian supported) and Sunni (Al Qaeda and its affiliates) violent extremists demand international attention.... *As we look to the future direction of American foreign policy, three enduring factors will keep U.S. attention anchored in this region: the U.S. relationship with Israel and our other partner nations; oil and energy resources that fuel the global economy; and the persistent threat from violent extremist organizations.*³

The March 2014 Quadrennial Defense Review (QDR) reinforced the importance of the Middle East to U.S. strategic and force planning considerations. The document states that “the United States also has enduring interests in the Middle East, and we will remain fully committed to the security of our partners in the region. We will continue to maintain a strong military posture in the Persian Gulf region—one that can respond swiftly to crisis, deter aggression, and assure our allies and partners.”⁴ Thus, because of relationships with key regional states as well as threats to the national security of the United States from violent extremists, the U.S. commitment to the region is expected to continue beyond a point when the provision of secure oil supplies is important to national interests. Moreover, concern for the stability of oil and energy resources that support the global economy implies that the U.S. commitment will endure as long as friends and allies of the United States rely on Gulf oil.

CENTCOM carries out its missions in the region using four principal methods:

- *Military-to-military engagement.* A type of forward engagement, military-to-military engagement is the bedrock of the United States’ most important relationships in the region

¹ Megan Price, Anita Gohdes, and Patrick Ball, “Updated Statistical Analysis of Documentation of Killings in the Syrian Arab Republic,” Office of the UN High Commissioner for Human Rights, August 2014, <http://www.ohchr.org/Documents/Countries/SY/HRDAGUpdatedReportAug2014.pdf>.

² The countries in the CENTCOM area of responsibility include Afghanistan, Bahrain, Egypt, Iran, Iraq, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Oman, Pakistan, Qatar, Saudi Arabia, Syria, Tajikistan, Turkmenistan, United Arab Emirates, Uzbekistan, and Yemen.

³ James N. Mattis, statement before the Senate Armed Services Committee, March 5, 2013, http://www.globalsecurity.org/military/library/congress/2013_hr/130305-mattis.pdf (emphasis added).

⁴ U.S. Department of Defense, *Quadrennial Defense Review 2014* (Washington, D.C., March 2014), http://www.defense.gov/pubs/2014_Quadrennial_Defense_Review.pdf.

and builds the trust necessary for militaries to work closely together, especially as U.S. forces draw down.

- *Plans and operations.* Plans and operations involve dealing with various contingencies that might arise and include partner country participation.
- *Security cooperation programs.* Security cooperation programs include responding to partner country needs through training and exercises, defense sales, and participation in professional military education, among other tools intended to build partner capacity.
- *Posture and presence.* Posture and presence refer to both the assigned and rotational U.S. armed forces in the region, which demonstrate American commitment. The U.S. military posture and presence in the region going forward are expected to be largely maritime in nature. Residual ground forces would be characterized by “a tailored, lighter footprint supported by access to infrastructure that enables rapid reinforcement.”⁵

In short, U.S. armed forces are focused on shaping the current and future security environments in the Middle East and Persian Gulf region using a traditional set of military tools. The forces available in-theater to accomplish these goals include the more than 35,000 soldiers, sailors, airmen, and marines in the CENTCOM area of operation, apart from those in Afghanistan.⁶ Of these, the majority are U.S. Navy sailors, both afloat and on shore duty, befitting the maritime presence mission that CENTCOM deems most essential going forward.⁷ Four operational task forces make up the Fifth Fleet combat forces’ presence in the region.⁸ Other task forces command logistics units, surface forces (U.S. Coast Guard patrols), expeditionary combat forces (explosive ordnance disposal, coastal warfare, and construction battalion Seabees), maritime patrols (reconnaissance and surveillance), and on-call task forces for disaster relief and contingencies.⁹

The U.S. Army has the largest number of other troops on the ground in the region (excluding Afghanistan). These units are significantly involved in the engagement and capacity-building dimensions of CENTCOM’s efforts to shape favorable pre-conflict outcomes. Under the concept of regionally aligned forces, U.S. Army combat brigades conduct year-long deployments to the region, along the way holding more than 1,800 training events and symposia on an annual basis with regional partners.¹⁰

U.S. Military Presence in the Region

A major reduction in the United States’ commitment to the Middle East and Persian Gulf region, as measured by the U.S. military posture and presence, has already begun and will continue

⁵ Mattis, statement before the Senate Armed Services Committee.

⁶ The number of 35,000 military personnel in and around the Persian Gulf is drawn from the *Quadrennial Defense Review 2014* (p. 35), but troop levels can change rapidly as units are quickly reassigned among combatant commands in response to real-world contingencies.

⁷ U.S. Naval Forces Central Command, “Commander, U.S. Naval Forces Central Command, U.S. Fifth Fleet Command Overview,” <http://www.cusnc.navy.mil/command/command.html>.

⁸ Combined Task Force 50 (CTF-50) commands strike forces and includes at least a Nimitz-class aircraft carrier, a Ticonderoga-class cruiser, an Arleigh Burke-class destroyer, and an Oliver Hazard Perry-class frigate. CTF-51 plans and conducts contingency-response missions and includes at least a Wasp-class landing helicopter dock, a Tarawa-class landing helicopter assault (LHA) ship, a Harpers Ferry-class dock landing ship (LSD), a Whidbey Island-class LSD, a squadron of AV-8B Harrier II aircraft, and a squadron of CH-53D Sea Stallion helicopters. CTF-52 conducts mine warfare. CTF-54 commands U.S. submarine forces, both attack and guided-missile submarines.

⁹ U.S. Naval Forces Central Command, “U.S. 5th Fleet, U.S. Naval Forces Central Command Task Forces,” <http://www.cusnc.navy.mil/taskforces.html>.

¹⁰ Gary Sheftick, “ARCENT Says Future Hinges on Regional Alignments,” U.S. Army, October 28, 2013, <http://www.army.mil/article/114027>.

until all U.S. combat forces are withdrawn from Afghanistan by the end of 2014.¹¹ Beginning with the commencement of combat operations in Operation Enduring Freedom in Afghanistan in October 2001 and continuing with the invasion of Iraq in March 2003, the United States has deployed hundreds of thousands of soldiers to and through the region. In December 2008, at the peak of the commitment of U.S. combat forces to the two theaters, more than 294,000 troops were present, a more than tenfold increase from prewar levels in June 2001.¹² When U.S. government and contractor personnel are added in, the number of American personnel in the region likely approached 400,000 at the peak.

Moreover, this force structure was not a passive occupying military. Quite the contrary, it was an extremely capable armed force with a mission to achieve strategic effects, namely the toppling of the Saddam Hussein and Taliban regimes. Thereafter, the force was ordered to contribute to national reconstruction in the states of Iraq and Afghanistan while continuing to engage in combat with the violent extremists leading active insurgencies in each country.

History ultimately will judge the success of the efforts and whether the commitments of resources in blood and treasure were worth the outcomes in Iraq and Afghanistan. However, contemporary policymakers must take into account the continuing structural effects in the region that those initiatives brought to pass, even as history ponders the larger dimensions related to the worthiness of the ventures. In attempting to gauge whether and how the U.S. strategic commitment to the Middle East and Persian Gulf region might be affected as a result of other extraregional trends, one point is essential to note early on: a large-scale strategic disengagement is already underway, at least in terms of U.S. combat forces.

Despite this trend, current force levels outside combat zones are significantly higher than their pre-2001 levels.¹³ This fact suggests that a second phenomenon operates in parallel with strategic disengagement, namely that the United States remains fully committed to the region strategically and is demonstrating that commitment with higher troop levels than have previously been maintained. In many respects, the CENTCOM posture statement and higher troop levels reflect a new status quo for U.S. force levels and activities in the region, now that most U.S. troops have rotated home. Divergent views about what force levels actually mean notwithstanding, there do not appear to be any imperatives that would otherwise push the United States from the region. Rather, extraregional trends are likely to drive change to a greater degree. These include changes both in U.S. domestic policy and in global great-power relationships.

Changing U.S. Domestic Considerations

After more than a decade of war, there is an emerging consensus among the general American population that solutions to global security issues need not include the commitment of U.S. military forces to combat.¹⁴ For instance, in poll results from the first week of September 2013,

¹¹ Negotiations continue as to the size and capabilities of the U.S. and NATO forces that will remain, ostensibly to continue training the Afghan National Army but also potentially to conduct limited counterterrorism operations.

¹² Amy Belasco, "Troop Levels in the Afghan and Iraq Wars, FY2001–FY2012: Cost and Other Potential Issues," Congressional Research Service, CRS Report for Congress, R40682, July 2, 2009, 4, <http://www.fas.org/sgp/crs/natsec/R40682.pdf>.

¹³ Ibid.

¹⁴ To be sure, there is a sharp difference between deployment of forces to an overseas region and committing troops to combat. However, the difference is narrower in this case, given the proximity of the Syrian conflict to earlier wars and the perception that deployment is a first step toward combat.

48% of Americans surveyed opposed the conduct of airstrikes against Syria in response to the Assad government's reported use of chemical weapons, while only 29% supported the strikes. Moreover, three-quarters of respondents felt that conducting strikes would have negative implications for the United States.¹⁵ A week later, the level of opposition had grown to 63%.¹⁶ After yet another week, two-thirds of Americans polled supported the Obama administration's decision to pursue a diplomatic solution, despite a very strong sense (shared by 57% of respondents) that Syria was untrustworthy and that diplomatic efforts would likely be ineffective.¹⁷ While support for going to war is a function of many factors, a strong majority of Americans favored a course of action that they deemed unlikely to succeed because they felt this course was preferable to undertaking combat operations. That finding is remarkable. U.S. leaders dutifully noted the level of domestic opposition, and given this and other factors, such as the introduction of a Russian-led diplomatic effort providing an alternative approach, chose not to pursue combat air strikes in Syria.

What will help determine whether sentiments opposing overseas combat deployments are transient or, conversely, will lead to enduring new realities? Two factors figure prominently in an analysis of this situation. The first is the emergence of a war weariness among the American people that is doubtless related to the length of the simultaneous wars in Iraq and Afghanistan and that appears to point toward a more general desire to avoid new international commitments. Second, the effects of this war weariness are compounded by a foreboding sense that the long-term social costs required to fully treat war injuries and assimilate wounded veterans into society have not been clearly understood or measured, which lends support to war-avoidance policies going forward.

War Weariness

As a presidential candidate in 2008, Barack Obama recognized the debilitating effects of long-term conflict and campaigned on a pledge to end the wars in Iraq and Afghanistan. But as he noted in his speech to the UN General Assembly in September 2013, it took three more long years to redeploy U.S. troops from the war in Iraq, and combat troops will not finally depart Afghanistan until the end of 2014.¹⁸ In its history, the United States has not fought extended campaigns very often or very well. As retired U.S. Army colonel and historian Andrew Bacevich has eloquently argued, "long wars are antithetical to democracy." Channeling General George C. Marshall, an architect of the Allied victory in World War II and later both secretary of defense and secretary of state, Bacevich asserted that "a democracy cannot fight a Seven Years War," referring to the great European conflict of the mid-eighteenth century.¹⁹ That the longest overseas war in U.S. history (Afghanistan, over twelve years) took place simultaneously with the third-longest war (Iraq, nearly

¹⁵ Pew Research Center for the People and the Press, "Public Opinion Runs Against Syrian Airstrikes," September 2, 2013, <http://www.people-press.org/2013/09/03/public-opinion-runs-against-syrian-airstrikes>.

¹⁶ Pew Research Center for the People and the Press, "Opposition to Syrian Airstrikes Surges," September 9, 2013, <http://www.people-press.org/2013/09/09/opposition-to-syrian-airstrikes-surges>.

¹⁷ Pew Research Center for the People and the Press, "Public Backs Diplomatic Approach in Syria, but Distrusts Syria and Russia," September 16, 2013, <http://www.people-press.org/2013/09/16/public-backs-diplomatic-approach-in-syria-but-distrusts-syria-and-russia>.

¹⁸ Barack Obama (remarks by President Obama in Address to the United Nations General Assembly, New York, September 24, 2013), <http://www.whitehouse.gov/the-press-office/2013/09/24/remarks-president-obama-address-united-nations-general-assembly>.

¹⁹ Andrew J. Bacevich, "Endless War, a Recipe for Four-Star Arrogance," *Washington Post*, June 27, 2010, <http://www.washingtonpost.com/wp-dyn/content/article/2010/06/25/AR2010062502160.html>.

nine years) multiplies the deleterious effects of war for the American public.²⁰ At this point, as President Obama noted in a September 2013 interview, any new war, especially in the Middle East or Persian Gulf region, is highly unlikely: “I’m not sure that we’re ever going to get a majority of the American people, after over a decade of war, after what happened in Iraq, to say that any military action, particularly in the Middle East, makes sense in the absence of some direct threat or attack against us.”²¹

While war weariness is clearly influencing American leaders’ considerations about new commitments of U.S. forces to combat, it also appears to have had a spillover effect on the public’s support for overseas deployments more generally. There exists a general and growing sentiment that the United States ought to be less involved internationally, at least with respect to international security affairs. The Pew Research Center reports that a large majority of Americans polled agree with the statement that the United States “plays a less important and powerful role as a world leader than it did a decade ago.” A majority of Americans surveyed also believe the United States is too engaged overseas and “should mind its own business,” in the latter case by the largest majority in the nearly 50-year history of Pew asking that question.²² Similar isolationist patterns can be seen in early polling on the crisis in Ukraine, which has found that “by a roughly two-to-one margin (56% vs. 29%), the public says it is more important for the U.S. to not get involved in the situation with Russia and Ukraine than to take a firm stand against Russian actions.”²³

This neo-isolationist thinking on the part of the American people has undeniable, if indeterminate, effects on the judgments of political leaders. As Matthew Baum and Philip Potter note, there is surely an impact on political leaders’ decisions when public opinion turns against a particular activity in foreign affairs. But this is a function of many factors, including the stage of the crisis, public perceptions of vital national interests, casualties from armed conflict, and domestic political factors, among others, making precise predictions about the impact of public opinion extremely difficult.²⁴ To be sure, presidents often make difficult decisions not supported by a majority of the American people. However, in situations where questions arise about the necessity of U.S. involvement, one expects that there will increasingly be calls, including from Capitol Hill, for security burdens to be shared. In the Middle East and Persian Gulf region, for example, one would expect other oil-importing states to be asked to help provide security. The dual impact of negative public opinion and strong congressional arguments for a change of course are likely to affect presidential judgments.

Beyond the institutional and public strain that long wars may engender, a second contributing factor to war weariness may be a sense that much of the total human cost of the wars is unknown

²⁰ Long wars are also bad for the U.S. military institution itself and for civil-military relations more generally, and this has doubtless contributed to the public’s weariness with combat. Writing just after General Stanley McChrystal was compelled to resign as commander of forces in Afghanistan in the wake of an ill-advised *Rolling Stone* interview, Bacevich noted that “protracted conflict introduces toxins that inexorably corrode the values of popular government. Not least among those values is a code of military conduct that honors the principle of civilian control while keeping the officer corps free from the taint of politics.” See Bacevich, “Endless War, a Recipe for Four-Star Arrogance.” It is not surprising, therefore, that the chairman of the Joint Chiefs of Staff Martin Dempsey strongly argued against combat operations versus the Assad regime in Syria during summer 2013, even if they were only to be air strikes.

²¹ Barack Obama, interview by Gwen Ifill, *Newshour*, PBS, September 9, 2013, http://www.pbs.org/newshour/bb/white_house/july-dec13/obama_09-09.html.

²² Pew Research Center for the People and the Press, “Public Sees U.S. Power Declining as Support for Global Engagement Slips,” *America’s Place in the World 2013*, December 3, 2013, <http://www.people-press.org/2013/12/03/public-sees-u-s-power-declining-as-support-for-global-engagement-slips>.

²³ Pew Research Center for the People and the Press, “Most Say U.S. Should ‘Not Get Too Involved’ in Ukraine,” March 11, 2014.

²⁴ Matthew A. Baum and Philip B.K. Potter, “The Relationships between Mass Media, Public Opinion, and Foreign Policy: Toward a Theoretical Synthesis,” *Annual Review of Political Science* 11 (2008): 39–65.

and remains to be paid. In their speeches at Fort Bragg in December 2011 on the end of the war in Iraq, President and Mrs. Obama discussed its human costs, including the loss of life (nearly 4,500 troops in Iraq) and suffering from casualties (more than 30,000). But each also spent a great deal of time speaking about the nation's responsibility to aid veterans, particularly wounded warriors, in recovering fully, reintegrating into society, receiving job training, and so forth.²⁵ Their comments reflect the reality that the unconventional nature of the war in Iraq resulted in unusual traumas and catastrophic injuries for the wounded. Due to advances in battlefield medicine, injured soldiers thankfully have higher survival rates than in previous conflicts, especially if treated at a field medical facility shortly after being wounded.²⁶ However, higher survival rates have also contributed to large numbers of severely wounded veterans, and disability claims for returned soldiers are historically high. Fully 45% of the 1.6 million veterans of the two wars have applied for benefits related to their disabilities through the Department of Veterans Affairs, more than double the rate of veterans of the first Gulf War, and with an average number of ailments that is far greater than those claimed by veterans of all previous wars.²⁷ Estimates vary about the long-term costs of these disability claims, and it is unlikely that totals will be known until the middle of the century or later.

Budget Constraints

That there are real and continuing financial costs associated with completed wars leads to a second factor that will constrain new and current overseas commitments, including to the Middle East and Persian Gulf region. Under the Budget Control Act of 2011, the U.S. Department of Defense is expected to shed nearly one trillion dollars, or nearly 20% of the defense budget, by 2021. Although the Bipartisan Budget Act of 2013 provided three years of relief from the effects of sequestration, unless Congress acts again, annual sequestration cuts will resume in fiscal year 2016.²⁸

That future national security decisions are constrained by fiscal realities created by past wars is of grave concern. In many respects, the nearly unbridled defense spending of the first decade of the 21st century reflected an unspoken "pursuit of absolute security" strategy after September 11. In the aftermath of the catastrophically deadly attacks in New York and Washington, D.C., national defense leaders and military planners sought to do whatever was necessary—legally, financially, diplomatically, and militarily—to prevent a recurrence.²⁹ They were willing to pay any price, and nearly did. The cost of the wars in Afghanistan and Iraq alone approached \$2 trillion, and according to one estimate, post-conflict costs are anticipated

²⁵ "Remarks by the President and First Lady on the End of the War in Iraq," White House, December 14, 2011, <http://www.whitehouse.gov/the-press-office/2011/12/14/remarks-president-and-first-lady-end-war-iraq>.

²⁶ U.S. Central Command Pre-Hospital Trauma Care Assessment Team, "Saving Lives on the Battlefield: A Joint Trauma System Review of Pre-Hospital Trauma Care in Combined Joint Operating Area–Afghanistan (CJOA-A)," Final Report, January 30, 2013.

²⁷ Marilynn Marchione, "Iraq, Afghanistan Veterans Filing for Disability Benefits at Historic Rate," Huffington Post, May 27, 2012, http://www.huffingtonpost.com/2012/05/27/iraq-afghanistan-veterans-disability-benefits_n_1549436.html.

²⁸ U.S. Department of Defense, *Quadrennial Defense Review 2014*, iv. Adjusted for inflation, however, the United States defense budget as a percentage of GDP will still be above pre-September 11 levels after the reductions. The Pentagon will continue to spend as much as the next eleven largest national defense budgets combined. See Stockholm International Peace Research Institute, (SIPRI), "The 15 Countries with the Highest Military Expenditure in 2012," in *SIPRI Yearbook 2013* (Oxford: Oxford University Press, 2013), table 3.3, <http://www.sipri.org/research/armaments/milex/Top%2015%20table%202012.pdf>.

²⁹ President George W. Bush's speech to a joint session of Congress on September 20, 2001, set the tone for this "never again" mindset, even if it was unspoken. Government patterns of spending over the next decade reinforced the degree to which this mindset was a central organizing force for senior policymakers.

to range between \$4 and \$6 trillion dollars.³⁰ Because no other pressing national security priorities were competing for budgetary resources, U.S. fiscal commitments to the war on terrorism were almost without bounds. Whether the marginal gains for national security were worth their exorbitant cost seems a little considered point.

But in a post-Budget Control Act environment, constraints on spending demonstrate that the U.S. national security strategy must return to a more historically normal posture in which consideration of available resources is a necessary component of overall strategy formulation. Put differently, the United States must now once again make national security decisions in part on the basis of how much various options will cost. Trade-offs will occur, and tough choices must be made. As a result, some regions or activities will necessarily be funded at lower levels going forward.

The 2014 QDR takes stock of the dilemma policymakers face in implementing the nation's defense priorities. While not explicitly stating that trade-offs will need to be made, the QDR notes that if sequestration returns in fiscal year 2016, the Department of Defense would continue prioritizing efforts to resource the rebalance to Asia. Resources for the Middle East would be fewer, however, resulting in a "leaner, yet still responsive posture."³¹ This suggests that the Asia-Pacific might receive higher priority than the Middle East and Persian Gulf region. Perhaps a new National Security Strategy would address how the Obama administration proposes to achieve its national security goals within a context of constrained budgets. An early glimpse of the Obama strategy might be found in the president's remarks during his April 2014 visit to alliance partners in Asia. Noting the cost in blood and treasure to the United States of the wars in Afghanistan and Iraq, President Obama argued that not all foreign policy problems require the use of force to be resolved.³²

Yet the rebalance to Asia may be at risk. In an interview in early March 2014, Katrina McFarland, assistant secretary of defense for acquisition, said that the Pentagon is now reconsidering the rebalance to Asia strategy in light of budgetary pressures: "Right now, the pivot is being looked at again, because candidly it can't happen."³³ Whether McFarland was fundamentally misinformed about the administration's policy priorities or her comments were simply the result of an ill-advised moment of frankness, an important effect of this statement was to undercut administration assertions about the staying power of the rebalance. Reinforcing perceptions that budget constraints are having an outsized impact, the U.S. Marine Corps assistant commandant, General John M. Paxton Jr., questioned whether the Corps' stock of equipment and resources was sufficient to meet the challenges of the rebalance.³⁴ Taken together, these statements raise doubts about the Department of Defense's ability to provide adequate resources for priority efforts.

The twin factors of war weariness and fiscal constraint have together reduced the impetus for a commitment of military force overseas and limited the U.S. government's ability to fund such activity. In this context, a reduction of U.S. forces stationed in the broader Middle East and

³⁰ Linda J. Bilmes, "The Financial Legacy of Iraq and Afghanistan: How Wartime Spending Decisions Will Constrain Future National Security Budgets," Harvard Kennedy School, HKS Faculty Research Working Paper Series, RWPI3-006, March 2013. Bilmes estimates that future war-related medical costs, as well as recapitalization of the force, will be important dimensions.

³¹ U.S. Department of Defense, *Quadrennial Defense Review 2014*, 54.

³² Mark Landler, "Ending Asia Trip, Obama Defends His Foreign Policy," *New York Times*, April 28, 2014.

³³ Zachary Fryer-Biggs, "DoD Official: Asia Pivot 'Can't Happen' Due to Budget Pressures," March 4, 2014, *Defense News*, <http://www.defensenews.com/article/20140304/DEFREG02/303040022/DoD-Official-Asia-Pivot-Can-t-Happen-Due-Budget-Pressures>.

³⁴ Stew Magnuson, "Marines Question Availability of Ships, Personnel for Asia-Pacific Shift," *National Defense*, April 8, 2014, <http://www.nationaldefensemagazine.org/blog/Lists/Posts/Post.aspx?ID=1464>.

Persian Gulf region might well occur, and if it does, the United States' capacity to shape events and respond to crises there may be reduced. Thus, a strategic pull-back from the Middle East might occur not as a function of declining commitment to the region, nor because secular trends are driving the United States out or reducing the need for a strong U.S. presence, but rather because of policy changes elsewhere that require a larger share of dwindling defense resources. The U.S. rebalance to Asia represents one prominent example.

Changing Great-Power Dynamics and the U.S. Rebalance to Asia

China's rise as a regional great power reprises patterns that remind states in the Asia-Pacific of the Middle Kingdom's hegemonic past. Even as it resumes its regional roles, China also aspires to a position of global power and influence. The country has the resources and interests to demand roles for itself of global significance, even if it carries out those roles only episodically. Nonetheless, this status as a global player in the 21st century is a new reality for China, the region, and the world.

For its part, the United States senses that a critical element of its enduring grand strategy—the preservation of strategic freedom to maneuver through a network of regional bases, a web of alliances, and a high-quality military presence—is potentially challenged by China's emergence. In particular, China's efforts to create strategic space off its eastern coast by implementing a cost-imposing strategy that puts at risk any forces that might operate there in ways counter to Chinese interests in a crisis contingency—what U.S. analysts call China's anti-access/area-denial capabilities—have garnered attention.

Thus, the United States has attempted to rebalance to Asia. In an August 2012 speech, Deputy Secretary of Defense Ash Carter argued that the principal motivating factor for the rebalance was a recognition that the United States had arrived at a “strategic inflection point” brought about by the end of the war in Iraq and the expected conclusion of U.S. combat commitments in Afghanistan by the end of 2014. “Of necessity,” the United States would need to realign its interests and capabilities in the Asia-Pacific.³⁵ Carter also said that the rebalance would comprise decisions related to force structure (i.e., what is kept on active service and what is retired), new technologies and weapon systems, revised operational plans and tactics, posture and presence (i.e., where units and equipment are based in the region), and alliances and partnerships.³⁶

Significant changes to be made in force posture include basing more than 60% of the U.S. Navy in Asia by 2020; the forward basing of littoral combat ships in Singapore; a new rotational Marine training facility in Darwin, Australia; enhanced air force bomber, naval surface, and submarine capabilities; and forward-deployed marines in Guam. Most recently, during President Obama's visit to Manila, the Enhanced Defense Cooperation Agreement between the United States and the Philippines was announced, which will provide for exercises, training, and basing support for

³⁵ Ashton B. Carter, “The U.S. Strategic Rebalance to Asia: A Defense Perspective” (speech, New York, August 1, 2012), <http://www.defense.gov/speeches/speech.aspx?speechid=1715>.

³⁶ Carter was not the only one—or even the first—to address the rebalance. Other administration leaders, including then secretary of state Hillary Clinton—who first spoke of an American “pivot” to the Asia-Pacific—as well as Secretaries of Defense Leon Panetta and Chuck Hagel also addressed dimensions of the rebalance. President Obama's trip to the Asia-Pacific in April 2014 also sought to reaffirm American commitment to the rebalance in important ways. But Carter made the explicit linkage between a reduced commitment in the Middle East and a growing commitment in the Asia-Pacific.

transiting U.S. forces.³⁷ The QDR says that the resulting U.S. force posture in the Asia-Pacific will be “geographically distributed, operationally resilient, and politically sustainable.”³⁸

Despite Washington’s assurance that the rebalance is not about China, Beijing remains concerned that a new-style containment strategy is in effect. Chinese leaders have undertaken a variety of responses, some of which include demonstrating the global reach that China now possesses. For instance, Wang Jisi, an influential international relations scholar, argues that as the United States rebalances to Asia on the basis of its national interests, China might place greater strategic weight on its own shift toward Southwest Asia. In particular, Wang suggests that China may well increase its posture in the Middle East, noting that such a move would give greater balance to the U.S.-China relationship.³⁹ One is hard-pressed to miss the potential significance for the Middle East and Persian Gulf region of a more active China, especially if the United States conducts a drawdown in its military presence there. The bilateral dynamics of a greater Chinese commitment to the region could create incentives for rentier states in the region to leverage the two great powers against each other.⁴⁰

Beyond the political benefits of complicating U.S. calculations through its own pivot, is there a persuasive logic of national security interests indicating that China should take a more active role in Middle East security? As has been pointed out elsewhere, China will inevitably require significantly more petroleum from the region in coming years. Concern about the secure supply of that oil is certainly a driver behind China’s efforts to field a globally capable blue water navy. Thus, contributing to security in the Middle East and Persian Gulf region could be one of the ways that the Chinese navy helps secure the country’s interests abroad.⁴¹ Yet, at the same time, Beijing hardly wants to see a fundamental U.S. disengagement from the Middle East, not least because it remains wary of the sort of open-ended commitments to regional security that have bogged down the United States.

Moreover, Beijing may not see the direct causal links between a certain level of regional security and the achievement of its own goals for stable oil flow. Or put differently, Chinese leaders may feel that a greater level of commitment may not increase the security of oil shipments any more than doing very little (or doing nothing, for that matter). Beijing may also not be terribly responsive to a message from Washington that suggests China be more of a contributor to regional security, especially if those calls for greater participation come from Capitol Hill. Free-riding states rarely are persuaded by the logic of their need to do more.

Despite the many reasons Beijing might want the present level of U.S.-provided security to continue, the reality is that the United States is entering a new period when it likely has a diminished national interest in maintaining high levels of security support in the Middle East and Persian Gulf, policymakers’ assurances notwithstanding. A relatively reduced U.S. commitment to the region, at least in comparison with wartime force levels; sharply diminished support from the American public for overseas engagement; a strategic commitment to rebalance to the Asia-Pacific,

³⁷ Juliet Eilperin, “U.S., Philippines to Sign 10-Year Defense Agreement Amid Rising Tensions,” *Washington Post*, April 27, 2014, http://www.washingtonpost.com/world/us-philippines-to-sign-10-year-defense-agreement-amid-rising-tensions/2014/04/27/a04436c0-cddf-11e3-a75e-463587891b57_story.html.

³⁸ U.S. Department of Defense, *Quadrennial Defense Review 2014*, 34.

³⁹ Wang Jisi, “‘Marching Westwards’: The Rebalancing of China’s Geostrategy,” Peking University, Center for International and Strategic Studies, Report, no. 73, October 7, 2012.

⁴⁰ Dina Badie, “Upping the Ante: Chinese Encroachment, U.S. Entrenchment, and Gulf Security,” *Strategic Studies Quarterly* 7, no. 2 (2013): 41–68.

⁴¹ See China’s 2013 defense white paper: Information Office of the State Council of the People’s Republic of China, *The Diversified Employment of China’s Armed Forces* (Beijing, April 2013).

even as resources for all overseas commitments are contracting; and a demand by U.S. leaders for burden sharing on the part of oil-importing states could collectively result in a future in which the United States is less engaged in the Middle East. In such a future, how would Asia's oil-importing states respond?

Potential Paths Forward

If the United States were to reduce its military footprint in the Middle East and Persian Gulf region, what capabilities are most likely to be cut? While it is difficult to predict what missions would be reduced, it has often been the case in past drawdowns that defense planners and commanders have reduced longer-term capacity-building missions (such as engagement and security cooperation with foreign militaries) to focus on posture/presence and crisis-response missions. Were that to occur once more in the Middle East and Persian Gulf region, one could expect a reduced set of bilateral and multilateral exercises and fewer deployments of regionally aligned forces, both of which have been effective approaches to shaping the regional security environment before a crisis emerges.

If a military or coalition of militaries other than the United States were to assume a greater role in preserving regional security, the desired outcomes, and thus the approach taken, might be more limited. For instance, a coalition of oil-importing states might assess that the broad purpose of shaping the regional security environment is enormously costly and a fool's errand given the vicissitudes of regional politics. To such a coalition, providing regional security might mean little more than securing the geographic area that has military significance for the transit of oil: the Strait of Hormuz.⁴² In this scenario, a naval task force of participating countries could join together in useful ways to achieve the goal of securing passage from oil terminals in the Persian Gulf to the Arabian Sea. To be sure, focusing on securing the region's strategic geography for the safe transit of oil tankers risks the possibility that surprises or shocks could affect safe supply in ways that such a limited approach might not be able to mitigate. Yet, for such a coalition, the open-ended costs of supporting a broader level of regional security might be simply untenable and thus not an option.

A second limited approach might entail that the navies of the same collection of oil-dependent states—either in combination with or separate from the Strait of Hormuz operation—employ a series of patrols for the purpose of demonstrating military presence. This approach might have broader goals than the first one in terms of contributing to regional security but would not be matched by boots on the ground in the Gulf states. Such “presence without a military purpose” missions are inherently political, being intended to shape regional impressions of the state asserting its presence much more than they are intended to shape regional decisions. The former goal is much more easily achieved than the latter.

In neither approach would large formations of foreign militaries be resident in individual countries, and countries in the region would necessarily take on much larger burdens in terms of policing and regulation. The obvious question then is what would happen in the event of a major crisis that fundamentally threatened the secure flow of oil? The limited approaches discussed

⁴² The author is indebted for this insight to the discussants, particularly Admiral Dennis Blair, at the NBR workshops on “A New Energy Era” in Washington, D.C., in December 2013 and Tokyo in February 2014.

above ill prepare a coalition to respond to such a crisis. One is thus hard-pressed to imagine a solution that does not involve the great powers (and, in particular, the United States).

However, would the United States be prepared to help such a coalition of foreign militaries in the event of a crisis? In the face of diminished budgetary resources, a reduced commitment on the part of the American people to intervene in international security affairs (especially in the Middle East and Persian Gulf region), and a growing policy imperative to shift attention to the Asia-Pacific, is it possible to imagine even a modestly reduced U.S. security commitment to the region?

On the one hand, despite war weariness and budget constraints, the U.S. policy commitment to the region's security seems strong, especially in view of affirmations in the QDR and other official documents. Moreover, the U.S. armed forces are the only institution that can provide the full dimensional capabilities needed to ensure the tactical security of the region's strategic geography, as well as provide longer-term capacity building for regional armed forces. On the other hand, it seems foolhardy to rule out potential futures solely based on the logic that "it could never happen." History is rife with examples to the contrary. Thus, examining how a security crisis might play out that demanded U.S. forces in the context of a reduced desire by Washington to supply them seems a worthy exercise. At least three possibilities present themselves.

One possibility is that some aspects of the U.S. military commitment are drawn down without another power picking up the slack, resulting in uncertain security outcomes for the Middle East and Persian Gulf region. In particular, the types of engagement and shaping activities conducted by the U.S. Army's regionally aligned forces might be curtailed, placing a greater burden on diminishing U.S. Navy assets to conduct presence missions. The expectation would remain that the United States would rapidly expand capabilities in the event of a crisis. The chief challenge with this approach is that it not only places a premium on crisis and contingency response, or responding "in extremis," but does so without many of the tools for crisis management that a prior period of military-to-military engagement would provide. In this scenario, no other state (including China, which would continue to free ride) would pick up the slack in terms of engagement and capacity building.

A second possibility is that the United States and China reach some grand bargain regarding their respective roles in the Middle East and Persian Gulf region. As U.S. dependence on Middle East oil continues to decline and Chinese demand continues to grow, a natural synergy of interests suggests that the two powers might develop new paths for cooperation on some aspects of regional security, especially in light of the complementarities of the two armed forces. As desirable as such an approach might be, levels of strategic distrust between the two militaries diminish the likelihood of collaboration. Moreover, China's strategically risk-averse military might be reluctant to enter the chaotic fray of regional politics and security in a significant way. For its part, any U.S. initiative to harmonize security operations with the People's Liberation Army would seem to require a strategic "forcing event" to get the process moving. Or put differently, the imperatives to yield the United States' strategic pride of place in the region would require an even greater push than seems apparent in the current context.

A third possibility is that the United States helps form and lead an international coalition of armed forces that perform the security functions now largely executed by the U.S. military. The Combined Maritime Forces (CMF), an entity led by U.S. Naval Forces Central Command, represents a nascent structure along these lines. The navies of 30 nations participate in one or more of the CMF's three combined task forces. The CMF's antipiracy task force,

Combined Task Force 151 (CTF-151), is perhaps the best-known effort, notable for its success in reducing piracy and reflecting a truly multilateral effort through a rotating command approach. But CTF-150 and CTF-152 use the same rotating command approach and have missions closer to the full dimensional requirements that a true multilateral security structure in the region might require, including counterterrorism activities and general maritime security. CTF-150's area of operation covers the Red Sea, Gulf of Aden, Indian Ocean, and Gulf of Oman. CTF-152 covers the Arabian Gulf. The chief drawback of the combined task forces is that all missions are purely voluntary.⁴³ Nonetheless, a combined naval task force might form to address limited missions, such as providing security for the passage of ships through the Strait of Hormuz, and then expand the scope of collaboration in the future. Of course, oil-importing states would likely be expected to play leading roles, which would create additional challenges regarding how China, Japan, and South Korea might cooperate in useful ways. But there need not be an integrated command-and-control structure for the three nations' navies; instead, lower-level coordination might be a starting point.

Conclusions

Several secular trends will have an impact on the U.S. commitment to the Middle East and Persian Gulf in the decade after the conclusion of two wars in the CENTCOM area of responsibility. First, the American people are weary of war and overseas military commitments more generally, and this reality will serve as a check on political leaders as they consider future deployments or military commitments to the region. In this regard, public opposition to air strikes in Syria may be indicative of a more general reluctance to address security and foreign policy challenges with the military instrument of national power, especially in the Middle East and Persian Gulf region. Second, budget limitations will compel Pentagon strategists and policymakers to take fiscal constraints into consideration as they formulate national strategy, including toward the broader Middle East. Third, the U.S. rebalance to Asia is a national-level priority that will shrink the amount of resources available to carry out all other regional activities, including in the Middle East and Persian Gulf. These factors may well contribute to changes in the composition of the United States' military posture and an even further downsizing of the level of U.S. troops in the region. In the short term, U.S. Army combat brigade deployments of regionally aligned forces, as well as some U.S. Navy presence missions, may be trimmed as a consequence. These missions traditionally have served to help shape regional security environments before crises emerge; their reduction will thus have an impact on crisis prevention and response activities in uncertain ways.

A further drawdown in U.S. force levels in the region, even after the postwar drawdown of troops from Afghanistan at the end of 2014 is complete, may well contribute to the perception that the United States is in the midst of a strategic withdrawal. However, overall force levels are still expected to be higher than prewar levels, lending support for the position—espoused by U.S. policy leaders—that the United States' commitment to the region is an enduring one. These diverging perceptions of the U.S. commitment will have uncertain impacts on regional security.

One consequence of the new reality of somewhat lower U.S. force levels could be that a void is created in which no other country or entity picks up the slack to provide regional security. While

⁴³ For more information, see the Combined Maritime Forces website, <http://combinedmaritimeforces.com>.

such an outcome runs counter to U.S. assertions about the enduring strategic importance of the Middle East and Persian Gulf region, the key issue here is not the pull-back of the United States but rather the failure to orchestrate the emergence of an alternative security provider.

A second scenario is the management of the new reality by means of a grand bargain between the two great powers with interests in the region—the United States and China—to cooperate in providing security. On the one hand, the United States as the established power, albeit one with declining interests and diminished resources, maintains strategic concerns in the region and a series of bilateral partners. On the other hand, China as the new rising power possesses compelling interests in the region and a few partners but largely lacks the trust necessary for security cooperation. Collaboration between the two powers on regional security makes for an interesting notion. The complementary capabilities of their armed forces make meeting the practical challenges to such an approach easier than overcoming the strategic distrust that currently exists. It remains difficult, however, to imagine a scenario in which China and the United States could make such an arrangement work.

A third result would be the adoption of the lessons learned from multilateral responses to regional security challenges elsewhere in order to create a coalition of partners to provide security in the Middle East and Persian Gulf. The Gulf of Aden antipiracy mission is one model of like-minded states coming together to respond to an extant threat. One would expect that states dependent on oil imports, including China, Japan, and South Korea, might figure out meaningful ways to cooperate. To be sure, China's navy did not join the antipiracy coalition's command-and-control structure, although the Chinese task force did communicate and coordinate with it. The chief question to be answered is whether the cooperation formed in response to a nonstate security threat such as piracy could be replicated in a broader way to address a full set of regional security challenges. Reaching a shared understanding of what security was being provided, against what threats, and to achieve what outcomes is a necessary first step.

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Japan's Response to Its New Energy Security Challenges

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EXECUTIVE SUMMARY

This essay examines Japan's new energy security challenges and assesses its responses amid the country's ongoing energy policy overhaul and the dramatic changes taking place in global energy markets.

MAIN ARGUMENT

Japan is in the midst of a major shift in its energy mix. As a result of the Fukushima Daiichi nuclear accident of March 2011, the role of nuclear energy in power generation will unavoidably decline in coming years while gas-fired power generation will increase its share. Consequently, it is a pressing issue for Japan to ensure a stable supply of LNG while minimizing the procurement costs. Doing so will require Japan to address not only economic and market questions but key questions for its energy security strategies, such as the implications of growing dependence on Middle East resources and concerns about the freedom of navigation in critical energy sea lanes. With this in mind, Japan could strengthen energy security for itself—and the region—by promoting greater energy cooperation among Asia-Pacific countries, in particular with China, South Korea, and Russia. Additionally, as it is difficult for Tokyo to protect critical energy sea lanes by itself, Japan-U.S. cooperation will be increasingly important for ensuring freedom of navigation. Because energy security is closely linked with national security, diplomacy, economic competitiveness, and climate change, the government should develop a long-term and comprehensive energy strategy to accomplish Japan's national interests.

POLICY IMPLICATIONS

- If Japan becomes excessively dependent on gas-fired power generation, a new risk factor may arise in the country's energy security due to the high cost of power generation and the very small LNG stockpile in Japan.
- Depending on U.S. policy and actions toward Syria and Iran, heightened political and social instabilities in the Middle East may call for Japan to enhance its economic assistance as well as its human resource development activities in the Persian Gulf countries.
- Additional gas export projects out of Russia provide a good opportunity to build a win-win relationship between the two countries, given that Russia is seeking to expand into the Asian market and Japan aims to reduce procurement costs and diversify its supply sources.

As a consequence of the Great East Japan Earthquake and the Fukushima Daiichi nuclear accident of March 2011, Japan's energy policy has come under pressure, including calls for a fundamental re-examination and revamp. Although nuclear power has played a central role in Japan's energy security since the oil crises of the 1970s, public opinion about its future use is now divided due to heightened safety concerns following the Fukushima accident. While the suspension of all nuclear power plants continues as of summer 2014, thermal power generation has been charged with making up for the lost capacity, with power generation fueled by liquefied natural gas (LNG) assuming the largest role. However, soaring oil prices, at times exceeding \$100 per barrel, have increased the fuel cost for power generation. Consequently, while most power utilities are operating LNG- and oil-fired power generation at full capacity in an effort to avoid power failure at any cost, they have also been obliged to raise electricity rates significantly to survive. Such supply uncertainties and the escalated cost for power have become a major cause for concern for the current administration as it implements its growth strategy, popularly known as Abenomics.

This current situation has near-term as well as longer-term implications. Regarding the restart of inactive nuclear power stations, at the end of July 2014, nineteen units were either undergoing or awaiting an audit in accordance with the new regulatory requirements developed by the Nuclear Regulation Authority. By autumn 2014, two nuclear power stations that have met the new requirements and obtained local community approvals are expected to begin the restart procedures. However, because it takes from six months to one year or more to audit a nuclear power plant, the power supply situation is expected to remain tight for the time being. In the medium to long term, the share of nuclear power in Japan's total power supply will inevitably become lower than it was before the earthquake and tsunami. Nuclear power stations not only will be decommissioned if they fail to meet safety standards, but even if put back online, they in principle will only have a maximum operation period of 40 years. Combined with the social and political difficulties in constructing new nuclear power stations, it is expected that Japan will increasingly rely on LNG-fired thermal plants as an alternative source of power.

On top of these issues, the global energy situation is undergoing drastic changes that will have a significant impact on Japan. The shale revolution that began in the United States has brought about a paradigm shift in global oil and natural gas markets and is beginning to affect not just the energy and climate-change policies of the United States but also its diplomatic and security policies. In particular, with U.S. oil imports in sharp decline due to increased domestic production of tight oil, the United States is in the process of reviewing the policy for its involvement in the Middle East. At the same time, surging energy demand in Asian countries such as China, India, and some members of the Association of Southeast Asian Nations (ASEAN) is leading to the growing deficiency in domestic availability of oil and gas resources and increased imports of oil and natural gas from the Middle East and Africa. For the foreseeable future, these countries, including Japan, will presumably become highly dependent on energy imports from outside the region. Complicating matters further, political turmoil in Libya and Egypt, violent civil war in Syria, and a deteriorating security situation in Iraq continue to destabilize the Middle East and North Africa. Addressing these geopolitical challenges will have significant implications not only for Japan's energy security outlook but for the Asia-Pacific and world energy markets more broadly.

With these issues in mind, this essay examines key considerations for Japan in its assessment of the seismic shifts in the energy situation both in Japan and around the world and discusses

appropriate policies and strategies for Japan to enhance its energy security. The essay first examines Japan's current and future energy mix. This section is followed by a discussion of the impact of the shale revolution on U.S. involvement in the Middle East and the implications for Japan-U.S. cooperation. The essay concludes by arguing that energy security in the Asia-Pacific region should not be a single-country exercise but is more effectively pursued through energy cooperation, in particular between Japan, China, and South Korea.

Japan's Energy Security: Achieving the Best Energy Mix

In September 2012, the administration under the Democratic Party of Japan (DPJ) decided to phase out all nuclear power stations by sometime in the 2030s and drafted the "Innovative Strategy for Energy and the Environment." However, the Abe administration, which came to power at the end of 2012, declared that it would re-examine this policy from scratch. The new Basic Energy Plan decided by the Cabinet in April 2014 set out a policy of continued utilization of nuclear power, which the plan recognized as an important base-load source of electricity in view of its ability to provide a stable supply of electricity while reducing costs. The plan also promoted the benefits of nuclear power for mitigating global warming, while emphasizing the need to prioritize ensuring the safety of operation.

At the same time, the plan proposes to reduce nuclear dependence as much as possible. This policy will make it increasingly important to improve the efficiency of thermal power generation and develop renewable sources of energy. In addition, Japan will need to promote technological innovation in the field of energy conservation, including improving the efficiency of the cogeneration system, which is a clean-energy utilization technology, and developing clean-coal technologies, fuel cells, and smart grids. In this environment, the maximum operating period of a nuclear power plant by law is 40 years, although this term is extendable by 20 years if the plant meets the new regulatory standards. Construction of new reactors—excluding the two units already under construction—looks unlikely, at least for the time being. According to the author's estimate, the share of nuclear power in Japan's total electricity production will most likely decline from about 30% before the earthquake to around 15%–20% by 2030.

Meanwhile, even with the help of feed-in tariffs, it is realistic to project that growth in the proportion of power generation from renewable energy will rise from about 10% in 2012 (of which hydropower accounts for about 8%) to about 25% in 2030, using a very optimistic estimate. In order to achieve such a target, the former government committee estimated that it is necessary to increase the installed capacity to six to fifteen times that of 2010, by bringing solar power capacity up to 53.4 gigawatts (GW), wind power to 15 GW, and geothermal power to 3.6 GW by 2030.¹ However, major challenges such as the need to address how to reduce production costs for renewable energy and how to strengthen the power-transmission grid overall will continue to affect these targets.

Consequently, thermal power generation is required to make up for the reduction in nuclear power in the medium to long term, resulting in its share of power generation in 2030 still accounting for around 55%–60%. It should be noted that this outlook is not likely to differ much from the share of 61% in 2010 just before the earthquake. Among the types of thermal power generation available,

¹ Ministry of Economy, Trade and Industry (Japan), "Enerugimiikkusu niokeru saiseikanouenerugi oyobi karyokuhatsuden nikakawaru kadai" [Energy Mix and Challenges for Renewable Energy and Thermal Power Generation], April 2012.

both oil- and coal-fired thermal face difficult challenges in view of aging facilities, high fuel costs, and the lack of a bright prospect for commercializing carbon capture and storage technology. By contrast, LNG-fired thermal power is expected to play a larger role in Japan's energy mix. This power source offers the potential of reducing CO₂ emissions and fuel costs through improved generation efficiency as a result of the introduction of advanced technologies such as an integrated gas combined cycle. According to the Federation of Electric Power Companies of Japan, LNG thermal power accounted for 43.2% of Japan's total power generated in 2013.²

However, it should be noted that LNG thermal power could pose new risks if it is excessively relied on. Whereas there are private and national oil stockpiles with a combined storage equivalent of approximately 180 days of consumption, LNG stockpiles are at an extremely low level of approximately 13 days of power generation use, which accounts for only about two-thirds of the total demand. Because the stockpiling cost for LNG is much higher than that for oil, emphasis so far has been placed on other security measures, such as diversification of the fuel mix or LNG import sources. Yet even with these measures in place, there is a risk of Japan falling into a power crisis in the event of a serious disruption in supply from Qatar, the United Arab Emirates, or elsewhere. Particularly, for Chubu Electric Power Company, the gas-fired power using LNG from Qatar supplied approximately 40% of total power in 2012 and 2013. In addition, projected shale gas supply to Japan from the United States could be curtailed if a shortage in natural gas supplies leads to a spike in gas prices in the domestic U.S. market. It has thus now become essential for Japan to ensure a stable supply of LNG by diversifying supply sources, including shale gas imports from the United States and Canada, and to realize a reduction in procurement costs. Due to the shutdown of all nuclear power plants, most of the electric power companies have been forced to raise power tariffs by approximately 20% for household and 30% for business users, respectively.³

Japan has been importing LNG at much higher prices than its European counterparts due to the "Asian premium," which is a major cause of hikes in gas and electricity costs. In addition, in the aftermath of the earthquake and tsunami, Japanese buyers scrambled for LNG procurement from all over the world through short-term contracts as well as spot transactions, putting the highest priority on assured supply of electricity rather than costs. However, the largest factor in higher pricing is that LNG prices in Asia, including in Japan, are set in accordance with formulas linked to crude oil prices. Although Japanese buyers in the past have requested that sellers revise the pricing formula and the destination clause that restricts buyer ability to resell purchased LNG, this has not yet been achieved.

However, the environment now seems ripe for Japan to possibly diversify its sources and forms of natural gas supply—for example, by adding shale gas imports from North America or new LNG supplies out of East Africa or Russia. In addition, LNG markets in Asia now present a window of opportunity for converting a seller's market to a buyer's market. The important thing in this regard is for the buyer to have as many negotiating cards as possible in order to win favorable terms. In Japan's case, one card with the most immediate effect on bargaining is the restart of nuclear power stations. The Institute of Energy Economics, Japan, estimates that, if Japan were to operate six or seven 1 GW nuclear reactors, it could reduce demand for LNG by 4–5 million tons per year.

² Federation of Electric Power Companies of Japan, "Denjiren kaichou teireikaiken youshi" [President of the Federation of Electric Power Companies of Japan's Regular Meeting Summary], May 23, 2014.

³ Ministry of Economy, Trade and Industry (Japan), "Sougoushigenenerugi chosakai Genshiryoku syouininkai Daigokaikagou Sankoushiryou 3" [5th Meeting of Advisory Committee for Natural Resources and Energy, Nuclear Energy Subcommittee Reference Material 3], August 2014.

It is also important for LNG-importing countries to cooperate with each other to collectively strengthen their bargaining power against sellers. The Japanese government has been hosting LNG producer-consumer conferences and taking market actions in coordination with major natural gas importers such as South Korea, India, and the European Union in order to exert greater influence on gas-exporting countries such as Russia and Qatar. Although prices for importing LNG into Asia are likely to remain linked to crude oil prices, buyers should endeavor to reduce this Asian premium by adopting a variety of formulas, such as linking LNG to Western hub prices or by allowing for other market-based pricing formulas, including spot electricity prices in the power exchange

The United States' Changing Posture toward the Middle East and Its Implications for Japan

The United States' import dependence on oil has declined rapidly with the expansion of the shale revolution in recent years. This decline has created greater space for the United States to prioritize attention to other domestic political and economic issues, making it more difficult for the country to keep up the role of "world's policeman" that it has played in the Persian Gulf at great human and economic cost. Nevertheless, the United States is not expected to significantly reduce its involvement in the Middle East for several reasons.

First, even if the United States no longer needs oil from the Middle East, oil is still an important commodity traded in world markets. If the Middle East were destabilized, crude oil prices would soar across the globe and the world economy would fall into a confusion that would seriously affect the United States. Second, the Middle East is an economically important export market for the United States. In particular, amid concerns over Iranian nuclear weapons development, the oil-producing countries in the Persian Gulf such as the United Arab Emirates, Saudi Arabia, and Oman are rapidly increasing imports of U.S.-made weapons. Under such circumstances, it presents significant economic benefits for the U.S. military industry to export arms to the Gulf Cooperation Council countries. Last, Israel is the only nation in the Middle East governed by a democratic system, and ensuring the security of the Israeli state is a fundamental policy for the United States. It is also believed that the presence of Jewish-Americans with strong domestic political influence will help push the United States to continue its involvement in efforts to stabilize the Middle East, such as through attempts to settle the Israel-Palestine conflict.

Yet although the Persian Gulf oil-producing countries, including Saudi Arabia, appear relatively stable politically, such stability depends largely on their ability to suppress discontent among their people by using abundant oil revenues as leverage. The risk of political instability could increase in the future, however, if the influence of the Organization of Petroleum Exporting Countries (OPEC) in the international oil market—particularly that of Saudi Arabia as its leader—were to weaken and oil prices were to decline significantly, especially as the impacts of the shale revolution in North America continue to spread across the globe. Furthermore, the Saudi government is growing increasingly distrustful of recent movements by the Obama administration to address both the Iranian nuclear issue and the question of chemical weapons in Syria through diplomatic negotiations. The stabilization of the Middle East should not be expected as long as the turmoil in Syria continues and the risk of a nuclear-armed Iran remains.

Although the United States has so far maintained the balance between Middle Eastern countries, U.S. policy toward the region has shifted under the Obama administration. The administration

withdrew U.S. troops from Iraq at the end of 2011 and is preparing to withdraw troops completely from Afghanistan by the end of 2016. In parallel with these developments, in November 2011 the Obama administration announced a rebalancing policy placing greater geostrategic emphasis on the Asia-Pacific region, which suggests that to some degree relatively less attention will be given to addressing violent extremism and other major destabilization risks in the Middle East.

The context of this policy shift is China's economic, political, and military rise, which is of historic proportions, together with the remarkable economic development in the wider Asia-Pacific. Of particular note is the fact that China, with its worsening gap between energy supply and demand, is intensely engaged in efforts to acquire oil and natural gas resources from all over the world. In recent years, China has significantly increased imports from the Middle East and Africa. Its three state-owned oil companies vigorously engage in exploration and development activities in areas where Western oil companies have traditionally been reluctant to invest for reasons such as human rights issues (Angola or Sudan in Africa, for example).

Crude oil and natural gas imports from the Middle East and Africa are transported to China through the Strait of Malacca. However, China is increasingly wary of the risk of relying only on imports via Malacca because strategic chokepoints in the Philippines and Singapore could be seized by U.S. military forces in the event of a crisis. In order to minimize this risk, China is working to diversify its transport routes by constructing gas pipelines from Central Asia, crude oil pipelines from Russia, and oil and gas pipelines via Myanmar. Given the situation described above, the security of sea lanes to transport LNG and crude oil from the Middle East and Africa could be deemed to be a lifeline not only for China but for Japan as well. In recent years, China appears to be increasingly behaving in ways that could threaten the principle of free navigation of the ocean, seemingly attempting to make the segment of the Pacific Ocean stretching from the East China Sea to the South China Sea into the territorial waters of China.

Because it is difficult for Japan to protect these sea lanes by itself, the security issue has become an increasingly important subject for the Japan-U.S. alliance. Already some observers in the United States, such as Mikkal Herberg, have argued that allies like Japan and South Korea, as the beneficiaries, should bear some form of burden-sharing in efforts to ensure freedom of navigation. In July 2014 the Abe administration decided to re-examine the interpretation of the constitutional clause concerning the exercise of collective self-defense rights and is making an all-out effort to resolve the Futenma base issue in Okinawa, which could be considered steps in the direction of strengthening the energy security of Japan. Taking account of aggressive naval expansion by China in these years, sincere efforts by the Abe administration could contribute to protecting the sea lane from the Middle East.

Energy Security and Regional Cooperation in Northeast Asia

At present, the Middle East is in the midst of a historic sea change. It will take a number of years for the political situation to stabilize, and there also is a strong possibility for unexpected social turmoil to occur in the process. In preparation for such a contingency, Japan needs to promote measures for energy security not only for itself but for the Asia-Pacific region as a whole, where cooperation in the energy sectors of Japan, China, and South Korea is particularly important. Although intergovernmental cooperation between Japan and Korea or Japan and China has not made much progress due to political frictions, there are some positive movements in the private sector.

In the area of Japan-Korea cooperation, stakeholders from both countries have been pursuing joint efforts that can address concerns about stable access to LNG supplies and the need to reduce costs. For instance, Korea Gas Corporation and Chubu Electric Power have launched a project to jointly purchase approximately 1.7 million tons of LNG over a period of five years. In addition, in November 2012, under the auspices of the Embassy of Japan in the Republic of Korea, a seminar was held with the participation of representatives from private enterprises and the governments of Japan and South Korea, discussing the construction of a subsea power-transmission line connecting the cities of Kitakyushu and Busan. Such a facility could help enhance energy security by providing each country with relief supplies in the event of a future power shortage. Although several issues remain to be resolved before implementation, such as cost sharing and confidence building between the two countries, it is expected that the joint study of the project could itself lead to improved relations and mutual understanding.

Meanwhile, a series of Japan-China environmental and energy forums has been held over the past several years. Cooperation has improved between corporations and research institutions in both countries in the fields of iron and steel, chemicals, cement, and coal-fired power generation, as well as in the development of environmental and energy-saving technologies. To advance cooperation on a wider range of issues, however, a concrete framework for intellectual property rights protection is needed. In terms of nuclear power, Japan can contribute to enhancing energy security in Northeast Asia if it takes the initiative to develop a system of information exchange and support in hardware as well as software for safety operation, drawing on the experience of the Fukushima disaster, so that nuclear power stations in China, Korea, and Taiwan will be more safely operated.

In working to enhance energy security and slow global warming in the Asia-Pacific, Japan has advocated a variety of measures. These include transferring know-how on human resources development and institutional design, to be utilized in reinforcing oil stockpiles; promoting the development and use of natural gas and renewable energy; and spreading clean-coal technology and energy conservation practices. Such cooperative efforts need to be implemented not only on a bilateral basis but also in multilateral frameworks such as the Asia-Pacific Economic Cooperation (APEC), ASEAN +3 (ASEAN with China, Japan, and South Korea), the East Asia Summit, and other forums. Since the Asia-Pacific embraces a multitude of nations with divergent political systems and in varying stages of economic development, energy cooperation can be more realistically carried out with a bottom-up approach that builds on existing collaboration rather than through a top-down system, such as the one employed by the European Union.

Whenever energy security in Northeast Asia is discussed, the role of Russia cannot be disregarded. At the Sakhalin-1 and Sakhalin-2 development projects, where Japanese companies are participating, production of oil and natural gas has already begun, and these hydrocarbons are being exported to Japan. Russia is also working on several projects to export natural gas from East Siberia or Sakhalin to Asian countries, including Japan, in the form of LNG. This enthusiasm comes from a growing sense of crisis in Russia caused by the shale gas revolution in North America and the slowdown in gas demand in Europe. Accordingly, top officials from Rosneft and Gazprom, charged with the mission of promoting LNG export projects from Sakhalin and the Russian Far East, have made frequent visits to Japan, China, and South Korea to redouble their sales effort. Elsewhere, a Japanese consortium has proposed a project to import natural gas produced at Sakhalin-1 through a pipeline rather than in the form of LNG, as transit costs for gas via pipeline

are expected to be lower than those via LNG shipping. The concept is to construct a gas pipeline system starting on the Russian side of La Perouse Strait and extending approximately 1,500 km through Hokkaido and along the Pacific coast of Japan to Kashima, Ibaraki Prefecture.

Feasibility studies for such a pipeline were conducted about ten years ago. Although plans did not progress further because Japan was more focused on the expansion of nuclear power at the time, the situation has changed completely following the Fukushima disaster. If pursued, the above project would connect mainland Japan to an overseas gas field through a pipeline for the first time in history and help diversify the country's supply channels. In that sense, such projects provide a good opportunity for a win-win relationship between Russia, which aspires to expand gas exports to Asia, and Japan, which desires a stable and economical supply of natural gas. In addition, greater energy cooperation between Japan and Russia could offer additional benefits in the diplomatic negotiations over the territorial dispute involving the Northern Territories/Kuril Islands. Recent developments in the Ukraine crisis, however, have created a more difficult situation politically for Japan to promote energy cooperation with Russia.

Conclusion

To respond to an increasingly uncertain international energy environment, Japan should put its “best energy mix” into reality through diversifying its supply options. In order to strengthen the country's bargaining power in negotiations with resource exporters, every available means should be fully mobilized, including the restart of idle nuclear power stations, construction of new high-efficiency coal-fired power plants, and the accelerated introduction of renewable energy and energy-saving measures.

Meanwhile, in order to ensure a stable and economical supply of oil and natural gas, diversification of procurement methods and channels is required. To that end, the government should strengthen its resource diplomacy as well as its support measures for relevant investments by the private sector. In particular, it is important to promote shale gas imports from North America, the expansion of gas imports from Russia, and the development of oil and natural gas resources in Australia, as well as in ASEAN and East African countries.

At the same time, in order to enhance political stability in the Middle East—which is crucial for ensuring Japanese energy security—Japan will need to utilize official development assistance funds to improve technological and economic cooperation and develop human resources. In addition, Japan should provide assistance for the development of domestic industry in Middle Eastern countries, as well as the industrial and social infrastructure to expand job opportunities for young people, by the use of international finance and trade insurance institutions. Since energy security is closely linked with national security, diplomacy, economic competitiveness, and climate change, the Japanese government should develop a long-term and comprehensive energy strategy to accomplish Japan's national interests.

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The Architecture of Asian Energy Security

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EXECUTIVE SUMMARY

This essay traces the history of regional cooperation in Asia on energy security, compares various multilateral forums' emergency planning arrangements for an oil disruption, and suggests that new and politically bold steps will be needed to strengthen Asia's architecture for energy security.

MAIN ARGUMENT

The energy picture of Asia as a region is being reshaped, exposing it to new vulnerabilities but also opening up new opportunities. The unrelenting growth in Asian energy demand, which was initially led by Japan and South Korea and subsequently by China and India, is now also being driven by the ten member countries of the Association of Southeast Asian Nations (ASEAN). Southeast Asia's increasing vulnerability to oil import disruptions and North America's growing energy self-sufficiency have altered some of the premises of Asian energy security and raise questions about the adequacy of the existing network of overlapping institutional structures. Existing regional forums such as the Asia-Pacific Economic Cooperation (APEC) process, ASEAN, and the East Asia Summit (EAS), in conjunction with the International Energy Agency (IEA), have become progressively active in their technical collaboration in regard to emergency planning and oil stocks. As a result, Asian leaders now need only make a collective political commitment to a concrete plan of action if the region is to be adequately prepared for when, not if, there is an energy market disruption that causes major economic damage.

POLICY IMPLICATIONS

- Building a regional oil stockpile seems to be the most feasible next step Asian governments can take to enhance their energy security.
- The EAS is a potential vehicle for an ASEAN-centric, pan-Asian umbrella arrangement, although the first steps might need to be taken by a smaller group of nations. The summit's Energy Cooperation Task Force should establish a new work initiative on oil stocks and contingency planning. Its work should build upon the efforts of the ASEAN +3 oil stockpiling process and be conducted in collaboration with the IEA.
- The U.S. should be fully engaged in this process, both because it will still play a role in protecting key sea lanes for energy transport and because the country's emergence as a potentially key energy exporter will help Asia diversify its supplies and mitigate risk.

Policymakers have a fundamental responsibility to ensure that their nations are prepared in the event of a severe energy disruption where governments have no choice but to intervene in the marketplace or face economic catastrophe. As a matter of national security and energy policy, diversifying supply sources and fuel types, promoting energy efficiency, improving investment climates, and other actions are all important long-term strategies to ensure energy security. However, such long-term programs do not obviate the need to have contingency plans already in place for when the spigot is suddenly turned off. It is simply not enough for countries to rely solely on market forces or go-it-alone policies. Because oil supply disruptions affect consumers without regard to national borders, a coordinated, region-wide response is the most effective approach to mitigate the economic damage and political havoc such disruptions can cause. In the case of Asia, however, there is no single overarching collective energy-security arrangement that covers the entire region.

The world's most comprehensive international energy-security arrangement has been the emergency-response mechanisms of the International Energy Agency (IEA), which was established in the aftermath of the October 1973 oil embargo. These mechanisms include a requirement that member countries possess oil stocks equal to 90 days of net oil imports and an oil-sharing scheme.¹ While the IEA serves as a model for jointly coordinated emergency responses, it falls short in the context of Asian energy security because it does not include China, India, or the member countries of the Association of Southeast Asian Nations (ASEAN). Given the interconnection of markets and the growing demand for energy by these non-IEA countries, this represents a critical gap in national, regional, and even global energy security. If oil-supply vulnerability is indeed Asia's Achilles heel, then it is timely to consider whether policymakers should revisit the issues of collective oil stocks and oil-sharing arrangements as topics for regional discussion.

This essay examines the rhetoric and the reality in efforts to develop Asia's regional oil-security arrangements through the Asia-Pacific Economic Cooperation (APEC) forum, ASEAN, the ASEAN +3 grouping (the ASEAN countries plus China, Japan, and South Korea), the East Asia Summit (EAS), and the five-country talks (China, India, Japan, South Korea, and the United States). The essay details the history of these arrangements, including their accomplishments and future plans, and considers options for strengthening Asia's institutional arrangements for oil-market emergencies. Given the potential for a supply disruption and spike in the price of oil to inflict serious damage on the regional economy, the essay suggests that the development of a pan-Asian joint strategic oil-stockpiling program might be an appropriate next step in advancing actionable energy security goals. Finally, it identifies the EAS as the forum best positioned to further ongoing efforts to safeguard pan-Asian energy security.

The Changing Calculus of Asia's Regional Energy Security

Given Asia's growing demand for oil as its primary fuel, flattening production, and rising dependence on the Middle East, Asian energy security is usually defined in terms of oil-supply security. Japan and South Korea are virtually 100% dependent on oil imports, while China is over 50% dependent on imports, and India depends on imports to satisfy about 75% of its energy needs. Meanwhile, growing demand in ASEAN will increasingly impact global energy markets. In a recent

¹ See "IEA Response System for Oil Supply Emergencies 2012," International Energy Agency (IEA), 2012.

report on Southeast Asia, the IEA predicts that ASEAN will become the world's fourth-largest oil importer by 2035 as its net import-dependence almost doubles to 75% and net imports rise from 1.9 million barrels per day (mbd) to just over 5 mbd. The IEA states that "Southeast Asia has emerged as a key player in the global energy system" with growing dependence on imported energy in China, India, and ASEAN "shifting the centre of gravity of the global energy system to Asia," which will "leave it more vulnerable to potential disruptions."²

Meanwhile, the trend of increasing reliance on seaborne trade in natural gas and coal is adding new dimensions to Asia's energy supply vulnerability. The region's reliance on imports from the Middle East presumes the safety of sea lanes traversing the Indian Ocean, the Southeast Asian archipelago, and the South China Sea. Thus, Northeast and Southeast Asia cannot ignore the impact of India, not only as a significant emerging importer of oil, liquefied natural gas (LNG), and coal, but also because of its geographic location astride the sea lanes in the Indian Ocean through which 70% of the world's oil trade, 60% of LNG trade, and 70% of coal trade pass.³ India has also become a supplier of petroleum products to Southeast Asia and Northeast Asia. At the same time, India's growing demand for coal and LNG from Indonesia, Australia, and elsewhere, and crude oil imports from ASEAN, is increasingly becoming a factor in New Delhi's calculations of Indian energy security.⁴

These new patterns in energy trade serve to reinforce the intertwining energy security interests of Northeast Asia, Southeast Asia, and South Asia and create new incentives for intraregional collaboration. All three subregions have a common interest in forging closer links by adopting joint initiatives to mitigate the risks associated with their shared dependence on Middle East oil.⁵ For example, even as traditional exporters in Southeast Asia have less and less surplus oil, LNG, and eventually coal to export to Northeast Asian consumers, the more industrialized countries to the north, notably Japan, offer their developing and emerging neighbors technical assistance and financial support in the name of unifying regional efforts for energy security along the Pacific Rim.

Moving forward, Asia's vulnerability will only increase, as the region will account for 85% of the growth in oil demand over the next twenty years, in addition to already accounting for 70% of global LNG trade and a large portion of international commerce in coal.⁶ IEA executive director Maria van der Hoeven warns that the "outlook for energy production and demand has implications that will be felt well beyond the region...the region faces global challenges, underscoring the need to enhance cooperation intra-regionally and with international partners."⁷

The Asian Development Bank (ADB) offers a similar view, forecasting that the Asia-Pacific's dependence on imported oil will grow to two-thirds by 2035. Its dependence on LNG and, after 2015, imported coal is likewise expected to increase. ADB has also expressed special concern about the region's vulnerability to oil-supply disruptions, stating that "oil...poses the greatest

² "Southeast Asia Energy Outlook," IEA and the Economic Research Institute for ASEAN and East Asia, October 2013, 11, 12.

³ Robert Kaplan, *Monsoon: The Indian Ocean and the Future of American Power* (New York: Random House, 2010), 5–11. Kaplan characterizes the Indian Ocean as a strategic hub from the Middle East and the east coast of Africa to the Southeast Asian archipelago nations where the threat of a disruption is of concern, and where the United States, India, and China will inevitably compete for blue water dominance.

⁴ Tom Cutler, "The Changing Calculus of Indian Energy Security," Strategic Studies Institute, U.S. Army War College, January 2014, <http://www.strategicstudiesinstitute.army.mil/pdffiles/PUB1194.pdf>.

⁵ See François Nicolas, *ASEAN Energy Cooperation; An Increasingly Daunting Challenge* (Paris: IFRI, 2009), 29, <http://www.ifri.org/downloads/fnicolas.pdf>.

⁶ See IEA, *World Energy Outlook 2011* (Paris: OECD/IEA, 2011), <http://www.worldenergyoutlook.org/publications/weo-2011>.

⁷ Maria van der Hoeven, "Southeast Asia Energy Outlook" (presentation in Bangkok, Thailand, October 2, 2013).

threat... [and] is most problematic” for Asia’s energy security. Imports will triple between now and 2035 and the trend of increasing reliance on Middle Eastern oil from one-third of the region’s dependence in 1990 to half in 2010 will accelerate, reaching over 31 mbd by 2035. Moreover, “Asia’s refineries are configured to process mostly light Middle Eastern crudes and, unlike refineries in other regions, cannot immediately handle very heavy crudes.” ADB concludes that because of Asia’s overdependence on a single region, it must build a higher level of regional cooperation comparable to that seen in Europe to strengthen its energy security. What will be required to achieve this is the “political will to cooperate and the mutual confidence that makes cooperation possible.”⁸

These reports from two respected institutions—the IEA and ADB—suggest that a new look at the architecture of Asia’s regional energy security is warranted. Moreover, amid these calls for enhanced regional cooperation in Asia, there is a constructive role for the United States to play in providing external support to achieve regional consensus.⁹ In that regard, Asia’s energy security considerations affect U.S. interests not only in terms of the United States’ global political and economic impact but also because of North America’s expanding role as an energy supplier to Asia.

Regional Efforts to Enhance Asia’s Energy Security

Constructing collective energy-security arrangements is more complicated in Asia than in Europe, where after World War II the United States played an influential role in building Western European unity. Asia is less homogenous, having a mix of energy exporters and importers with varying resource endowments, economic disparities, and different national political systems. Nations along the Pacific Rim are frequently separated by water and are less contiguous by land than in Europe. Another key difference is that the European oil market has evolved from a set of protected national markets dominated by state-owned companies into an integrated, competitive internal market operating in the context of a globally interconnected and interdependent energy system. By contrast, national laws and practices in Asia are more fragmented and less harmonized.¹⁰

Efforts to address the need for stronger regional arrangements in Asia are further complicated by three factors that will continue to shape interests in regional energy cooperation. First, the challenge of promoting regional approaches to energy security in Asia is exacerbated by the politicization of energy, especially the process of securing oil supplies. Whereas the establishment of the European Coal and Steel Community after World War II used energy as a unifying concept that led to the formation of the European Union,¹¹ Mikkal Herberg has observed that in Asia, “rather than seeking ways to cooperate to find common regional solutions to these problems, the region’s powers have increasingly embarked on a national competitive approach that

⁸ See Asian Development Bank (ADB), *Asian Development Outlook 2013: Asia’s Energy Challenge* (Manila: ADB, 2013), 56–57, xiii, 100, <http://www.adb.org/sites/default/files/pub/2013/ado2013.pdf>; and ADB, *Energy Outlook for Asia and the Pacific* (Manila: ADB, October 2013).

⁹ See Mikkal E. Herberg et al., “Oil and Gas for Asia: Geopolitical Implications for Asia’s Rising Demand,” National Bureau of Asian Research (NBR), NBR Special Report, no. 41, September 2012.

¹⁰ See “Towards a Modern and Effective System of Oil Stocks in Europe,” European Commission, Consultation Document, April 2008, 5, http://ec.europa.eu/energy/oil/consultation/doc/stocks/2008_04_oil_stocks_en_consultation_doc_en.pdf.

¹¹ Akiko Fukushima, “Political and Security Cooperation in East Asia: Promoting Functional Cooperation,” in *An East Asian Community and the United States*, eds. Ralph A. Cossa and Akihiko Tanaka (Washington: Center for Strategic and International Studies, 2007), 120–21.

intensifies distrust, worsens maritime tensions, and aggravates key strategic rivalries.”¹² Robert Manning writes that two different perspectives—the geoeconomic and geostrategic—drive Asian government policies: “If [the] geostrategic mindset persists, Asia’s thirst for oil could increase the likelihood of conflict... How an Asian government defines energy security will...help determine which approach it follows.”¹³

Second, despite oil’s strategic importance, Asia’s sense of urgency to develop stronger international arrangements has been undercut by what Manning describes as “energy complacency.” He notes that as “energy imports snowballed from the 1980s to the mid-1990s, energy ceased to be a frontline strategic concern due to low oil prices.” Manning further argues that “an economic and strategic watershed was reached in 1993” when China became a net oil importer; however, with the possible exception of Japan, “energy was rarely central to national debates over economics or security,” and “the Asian economic crisis further delayed decision-making about energy security in the region” as oil demand and prices dropped.¹⁴

Finally, another reason Asia has not been as successful as Europe in reaching agreement on a regionally focused oil-storage or oil-sharing plan ties back to the broader point that there is no single overarching pan-Asian organization or institutional platform actively engaged in energy security planning where all the key players can negotiate such cooperation. **Table 1** illustrates this point by comparing the membership ranks of the IEA, APEC, and the EAS and depicting how ASEAN fits in as a membership bloc. It shows that the EAS, which does not currently engage in planning for energy emergencies, includes all the key countries, whereas APEC does not include India. Thus, the EAS offers the best political potential to provide a diplomatic platform for the development of regional oil stockpiles and other forms of emergency planning in Asia. Another

TABLE 1 Membership in key international forums sponsoring energy cooperation

Country/organization	Energy trade role	IEA	APEC	EAS
ASEAN	Importer/exporter	–	✓	✓
Australia	Importer/exporter	✓	✓	✓
China	Importer	–	✓	✓
India	Importer	–	–	✓
Japan	Importer	✓	✓	✓
Korea	Importer	✓	✓	✓
Russia	Exporter	–	✓	✓
United States	Emerging exporter	✓	✓	✓

NOTE: Nations are designated as energy importers and/or exporters of oil, gas, and coal. Cambodia, Laos, and Myanmar are members of ASEAN but not APEC. Papua New Guinea belongs to APEC but not ASEAN.

¹² Herberg et al., “Oil and Gas for Asia,” 3.

¹³ Robert A. Manning, “The Asian Energy Predicament,” *Survival* 42, no.3 (2000): 73. See also Kent Calder’s statement that “the problem for Asian stability, growing with each barrel of Chinese oil imports, is now clear. It is the danger that China’s attempts to safeguard its oil supply lanes and defend its historical sovereignty in adjacent seas poses for other nations... [A]s Chinese imports steadily rise, defending the fragile sea-lanes to the far off Persian Gulf becomes a new security imperative.” Kent Calder, “Asia’s Empty Tank,” *Foreign Affairs* 75, no.2 (1996); and Kent Calder, *Pacific Defense: Arms, Energy, and America’s Future in Asia* (New York: William A. Morrow, 1996).

¹⁴ Manning, “The Asian Energy Predicament,” 74–75.

option is of course to broaden the scope of other forums, such as the IEA, ASEAN, and APEC, which are already actively engaged in emergency planning.

Table 2 provides a side-by-side comparison of emergency-response profiles for APEC, ASEAN, the EAS, the IEA, the South Asian Association for Regional Cooperation (SAARC), and the EU. It depicts how the current architecture of energy security planning in Asia is marked by overlapping frameworks and differentiated functionality. APEC and ASEAN, especially the ASEAN +3 grouping, are active in their own ways, including by collecting data and participating in emergency-preparedness training exercises, but neither grouping has implemented a defined oil-stock system. SAARC focuses its cooperation on regional energy integration rather than contingency planning, and the EAS is modestly engaged on issues related to clean energy and market integration with no activities underway at all in contingency planning. The EU meanwhile has a regional system of mandated strategic stocks but no formal oil-sharing scheme. In this context, therefore, it is useful to review the policy pronouncements of APEC, ASEAN, the EAS, and the five-country talks and assess what they have aspired to do to help inform the new steps Asia might take to establish regional oil stockpiles or emergency oil-sharing arrangements. The following sections detail the individual histories of these programs and describe potential challenges and opportunities for further cooperation.

APEC

APEC's formation in 1989 as a gathering of regional economies brought together nations from both sides of the Pacific Ocean with the overall goal of supporting "sustainable economic growth and prosperity in the Asia-Pacific region." The Energy Working Group (EWG) was formed the following year, and the Tokyo-based Asia Pacific Energy Research Centre (APERC) was established in July 1996 to collect data and publish energy reports.

The cornerstone of APEC's contingency planning efforts is the Energy Security Initiative (ESI), which was endorsed by APEC leaders in Shanghai in October 2001. Conceived in response to concerns about oil price volatility, the ESI comprises "short term measures to respond to temporary energy supply disruptions...[such as] improving the transparency of the global oil market, monitoring efforts to strengthen sea-lane security, implementing a real-time emergency sharing system and encouraging member economies to have emergency mechanisms and contingency plans in place," which 5 of APEC's 21 members already possess by virtue of their membership in the IEA.¹⁵

At their meeting in Mexico City in July 2002, APEC energy ministers expanded the ESI to include stronger language on oil stocks and directed the EWG to "undertake work on improving monthly oil data, where available; real time emergency information sharing; the option of oil stocks among interested members; considering a feasibility study on possible joint stocks among interested members; and organizing dialogues on sea lane security issues."¹⁶ In 2002, APERC released a study on oil stocks that concluded that "for the smaller Asian oil importing countries, a stockpile of around 30 days coverage of net imports is...optimal in terms of costs versus benefits."¹⁷

¹⁵ See APEC Energy Working Group, "Energy Security Initiative," http://www.ewg.apec.org/energy_security.html.

¹⁶ See APEC, "Fostering Regional Energy Cooperation—Setting A Long Term Vision and Implementing Short Term Actions," Ministerial Statement from 2002 APEC Energy Ministerial Meeting, July 23, 2002, par. 8.

¹⁷ Asia Pacific Energy Research Centre (APERC), *Energy Security Initiative: Emergency Oil Stocks as an Option to Respond to Oil Supply Disruptions* (Tokyo: APERC, 2002), 2. See also Inja Paik et al., "Strategic Oil Stocks in the APEC Region" (presentation at the Annual International Conference of International Association of Energy Economists, Rome, June 1999).

TABLE 2 Oil security functions of selected international forums

	APEC	ASEAN	EAS	IEA	SAARC	EU
Regularized data collection	Monthly reporting to METI's Energy Data and Modeling Center in Japan in conjunction with the Joint Oil Data Initiative	ASEAN Centre for Energy (ACE) maintains an energy database	None, although the Economic Research Institute for ASEAN and East Asia (ERIA) issues research reports	Monthly reporting of stocks that are published by the IEA secretariat	None; the SAARC Energy Centre based in Islamabad focuses its efforts on "establishing an energy ring in South Asia" and is not focused on emergency response	Monthly reporting of stocks, published by the European Commission (EC)
Market monitoring	Asia Pacific Energy Research Centre (APEREC) provides analytical support	ACE maintains an oil price database	None, but ERIA has begun collaborating with the IEA, including on joint studies	Secretariat's Statistics Division and Directorate of Energy Markets and Security; SOM and SEQ committees*	SAARC has a working group on energy but does not have a market monitoring function	EC Directorate for Energy
Dedicated energy emergency communication	Real-time emergency information sharing system run by APERC includes an Internet-based chat room and data sharing	ASEAN +3 Energy Security System, including chat room and bulletin board system	None	Yes; has also established emergency hotlines with China and India	None	Yes; has established an early-warning system with Russia in the event of energy emergencies
Oil stock requirements	None, although members are encouraged to hold strategic stocks, including joint stocks, and to have emergency mechanisms and contingency plans in place	None, although holding stocks is encouraged	None	Crude only; 90 days of net imports	None, although the ADB recommended in 2011 that a SAARC strategic petroleum reserve be created	First mandated in 1968 and since increased (to crude/product 90 days of net imports or 61 days of consumption, whichever is higher); one-third of stocks must be held as product conforming to demand patterns; may be held by another EU member state

Table 2 cont.

	APEC	ASEAN	EAS	IEA	SAARC	EU
Collective action	None	Consultation on measures per the ASEAN Petroleum Security Agreement implemented through the ASEAN Council on Petroleum-led coordinated emergency response mechanism	None	Governing Board in accordance with International Energy Program agreement; emergency systems have been used and are tested every two years	None	Coordination Group chaired by the EC would coordinate stock drawdown and other emergency actions
Oil sharing	No	Yes, a 10% trigger; never used since establishment in 1977, although there have been bilateral exchanges	No	Yes, a 7% trigger; has been used three times since being established in 1974	No	No; inherently coordinated with IEA due to member overlap; EC attends IEA exercises
Legal basis	Based primarily on APEC Energy Security Initiative; no legally binding basis	Treaty-based sharing scheme also applies in periods of oversupply to ensure markets for oil exporter members of ASEAN	Has not yet addressed issues of emergency and joint contingency planning	Legal basis is International Energy Program Treaty	No legal authorities for South Asian cooperation on energy security	Legal basis includes European Community treaty; conforming domestic legislation

NOTE: Market monitoring for the IEA is done in part through its Standing Group on the Oil Market (SOM) and Standing Group on Emergency Questions (SEQ).

Meanwhile, to give ESI an operational capability, Japan helped APEC establish the Real Time Emergency Information System (RTEIS) in 2004. The RTEIS is an Internet-based service that provides real-time communication in the form of a chat room and data-sharing in the form of a bulletin board. An operational manual funded by Australia was released the following year, and in 2006 the system underwent testing at APERC.

APEC interaction with the IEA emerged in May 2007 when the IEA's executive director Nobuo Tanaka gave the keynote address at the energy ministerial meeting in Darwin, Australia. However, it was not until three years later at the APEC energy ministerial meeting in Fukui, Japan, that the ministers issued the exhortation that "APEC economies should continually strengthen their ability to *respond to oil supply disruptions*" and "instruct[ed] the EWG to develop joint programs with the International Energy Agency (IEA) to improve response to oil and gas emergency situations in the APEC region."¹⁸

This helped pave the way for an APEC-IEA-ASEAN joint emergency exercise in May 2011. Formal APEC collaboration with ASEAN was not politically endorsed, however, until June 2012 at the ministerial meeting in St. Petersburg, where the energy ministers "encourage[d] the EWG and APERC to *work in collaboration with the International Energy Agency (IEA) and the Association of Southeast Asian Nations (ASEAN) on activities to improve the response to oil and gas emergency situations* in the APEC region, including emergency response workshops and exercises."¹⁹

APEC is presently in the midst of conducting its own joint oil and gas security exercises. Yet despite all these efforts, it still does not have either an oil stock program or an oil-sharing scheme in place as envisioned by the ESI. Nevertheless, APEC has the potential institutional capacity to house an energy-emergency scheme such that, if India were to join its ranks, the organization could serve as a platform for pan-Asian energy security. However, APEC as a whole has yet to demonstrate the political will to actually take on this energy security task.

ASEAN

Energy cooperation within ASEAN is viewed as part of its broad goal for regional economic integration, including a trans-ASEAN gas pipeline and trans-ASEAN power grid. Intra-ASEAN energy cooperation is led by annual meetings of ministers supported by the Senior Officials Meeting on Energy process, the ASEAN Secretariat, and the ASEAN Centre for Energy. Although the "ASEAN Plan of Action for Energy Cooperation 2010–2015" emphasizes longer-term efforts to promote energy security and clean energy, the document does not mention emergency preparedness or oil stocks. This may be due to the fact that ASEAN energy collaboration previously had a strong focus on oil supply security in the 1970s and 1980s.

The ASEAN Council on Petroleum (ASCOPE) was established in 1975 as a coordinating mechanism with industry, and in 1977 ASCOPE established a petroleum-sharing scheme to be implemented by member countries' state-owned oil companies. Since ASEAN included both importers and exporters, the sharing plan was devised to manage periods of both shortages and oversupply in exports of 20%. However, there were shortcomings in that the 1977 arrangement was not legally binding and key members such as Brunei (an oil-exporter) and Singapore (an

¹⁸ APEC, "Fukui Declaration—Low Carbon Paths to Energy Security: Cooperative Energy Solutions for a Sustainable APEC," Ministerial Statement from 2010 APEC Energy Ministerial Meeting, June 19, 2010, par. 4.

¹⁹ APEC, "St. Petersburg Declaration—Energy Security: Challenges and Strategic Choices," Ministerial Statement from 2012 APEC Energy Ministerial Meeting, June 24–25, 2012.

oil-refining and storage center) could not participate because they did not have government-controlled, parastatal oil companies as required by the scheme.

At the first meeting of ASEAN energy ministers in September 1980, Thailand suggested that the 20% trigger level be reduced to 10%, but a consensus did not emerge around this proposal. However, the extreme swings in oil supplies and prices caused by the oil shock of 1979 and the Iran-Iraq tanker war in the 1980s motivated ASEAN to introduce the ASEAN Emergency Petroleum Sharing Scheme Supplementary to ASCOPE's in 1983. Then, at their June 1986 meeting in Manila, ASEAN leaders signed a regional treaty known as the 1986 ASEAN Petroleum Security Agreement (APSA). Under APSA the sharing scheme's 20% trigger for shortages or oversupply remained intact, as did other provisions. For example, the scheme was still limited in that it only included government-controlled oil and excluded exports by private international oil companies to consumers outside ASEAN—that is, “the amount contractually committed to traditional buyers.... [by] oil contractors/operators or refiners serving mainly international markets, to which the government has no entitlement.”²⁰

During the Persian Gulf crisis in the early 1990s, a Philippine request for APSA's activation was not approved and doubts circulated about whether the sharing scheme could be implemented successfully.²¹ Consequently, in 1999, ASEAN energy ministers decided to modify APSA. Six years later, in 2005, ASEAN as a group became a net importer of oil, thereby limiting its ability to have surplus oil to share during a shortage in the absence of mandated emergency oil reserves. In March 2009, ASEAN foreign ministers approved a revised APSA with a 10% trigger and established a coordinated emergency-response mechanism to implement the scheme on a “voluntary and commercial basis.” The revised agreement also stated that “oil stockpiling, whether individually or jointly by ASEAN Member states, shall be on a voluntary and commercial basis. The joint stockpiling may be commenced by ASEAN member states who are ready and willing to make the commitments and cooperation.”²²

ASEAN faces many challenges in developing an oil-stock arrangement and supporting its oil-sharing scheme, and much of the progress it has achieved in recent years on oil stocks has come through working with its neighbors in Northeast Asia under the ASEAN +3 process. Thus, the next section will consider its efforts to address these challenges through the framework of the ASEAN +3 grouping.

ASEAN +3

Established in 1996, the ASEAN +3 arrangement with China, Japan, and South Korea proved to be a useful forum during the Asian financial crisis and has since become a positive factor in strengthening ASEAN's capabilities for managing energy emergencies. The grouping's contributions include joint meetings and studies on oil stocks as well as the establishment in 2007 of an energy security system.²³

²⁰ ASEAN, “ASEAN Petroleum Security Agreement,” June 24, 1986, <http://www.asean.org/communities/asean-economic-community/item/asean-petroleum-security-agreement-manila-24-june-1986>.

²¹ *Oil Supply Security: Emergency Response of IEA Countries 2007* (Paris: IEA, 2007), 318–24, https://www.iea.org/publications/freepublications/publication/oil_security.pdf. Also see Nicholas, op cit, 26. Francois Nicolas, “ASEAN Energy Cooperation: An Increasingly Daunting Challenge” (Paris: IFRI, 2009).

²² See ASEAN, “ASEAN Petroleum Security Arrangements,” art. 3, section 3-3-1-f.

²³ The ASEAN +3 energy security system comprises a communication system and a database. The communication system consists of a real-time, web-based chat room with displays limited to one hundred characters and a bulletin board with a two thousand kilobyte file size. See Beni Suryadi, “ASEAN +3 Oil Stockpiling Roadmap and ASEAN +3 Energy Security System” (presentation by the ASEAN Centre for Energy at the IEA-APEC/ASEAN Emergency Response Exercise, Bangkok, May 2–3, 2011).

This cooperation had its origins in 2003 when Asian concerns over energy supply security heightened in anticipation of the Iraq War. These concerns led to the first ASEAN +3 energy ministerial meeting, which was held in Manila in June 2004. The importance of oil stockpiles was recognized in the ministerial statement, and during the meeting the Philippines suggested creating a regional stockpile at the former U.S. naval base at Subic Bay. In August 2008 at their fifth meeting in Bangkok, the ASEAN +3 energy ministers announced the development of the ASEAN +3 “oil stockpiling roadmap,” which would be based on four principles: voluntary and nonbinding agreements; mutual benefits; mutual respect, including respect for bilateral and regional cooperation; and a step-by-step approach with long-term perspectives. A working group was formed to develop the roadmap,²⁴ and two years later at a June 2010 IEA workshop in Jakarta on emergency planning, a representative from the ASEAN Centre for Energy made a presentation on the initiative. The presentation concluded that due to differences in the economic situations of various ASEAN +3 countries it was not presently possible to develop a detailed roadmap with concrete targets for all members, as had been the objective.²⁵

Despite this setback, the ninth ASEAN +3 energy ministerial meeting in Cambodia in September 2012 authorized continued work on the roadmap, including proposed workshops on planning and construction of oil stockpiles, and encouraged stakeholder cooperation and continued cooperation with the IEA. These same themes were repeated in September 2013 at the grouping’s tenth meeting in Indonesia, which also announced a joint study with ASCOPE on the impact of the ASEAN oil stockpiling roadmap on the ASEAN Petroleum Security Agreement. More recently, the ASEAN +3 group Oil Stockpiling Roadmap Workshop held in February 2014 in Siem Riep, Cambodia, included presentations on the economic benefits of investing in a joint stockpile. And so now ASEAN energy security is at a crossroads. Without the benefit of strategic stocks, the organization’s oil-sharing scheme might no longer be adequate to offset an oil-market disruption. Thus, unless they can accomplish a collective political commitment on their own, the ASEAN +3 nations should reach outward to inject new momentum into their efforts and broaden their supply base.

East Asia Summit

ASEAN and ASEAN +3 previously reached outward in the spirit of pan-Asian unity and regional cooperation when they established the EAS. Malaysia’s former prime minister Mahathir bin Mohamad is credited with first promoting the concept of a pan-Asian grouping with his proposal in 1991 to create an East Asia economic caucus. Although his ideas met with resistance, just over a decade later, in 2004–5, ASEAN and the ASEAN +3 foreign ministers endorsed a proposal for the EAS, an ASEAN-centric grouping consisting of 16 members (the ASEAN +3 nations plus Australia, India, and New Zealand).²⁶

As a leader-led forum that focuses on broad political, economic, and strategic issues, the first EAS meeting was held in Malaysia in December 2005, at which time EAS leaders agreed to enhance their cooperation by promoting energy security. At the second summit in the Philippines in January 2007, the leaders held a special session on energy, which resulted in the “Cebu Declaration

²⁴ Suryadi, “ASEAN +3 Oil Stockpiling Roadmap”; and Beni Suryadi, “Development of Oil Stockpiling Roadmap for ASEAN+3” (presentation at a joint IEA and Indonesian Ministry of Energy and Mineral Resources workshop, Jakarta, June 16–17, 2010).

²⁵ Suryadi, “Development of Oil Stockpiling Roadmap for ASEAN+3.”

²⁶ Cossa and Tanaka, eds., *An East Asian Community and the United States*, chaps. 1 and 2, especially pp. 6, 30–36.

on East Asian Energy Security.” The Cebu Declaration reaffirmed the “collective commitment to ensuring energy security for our region” and addressed a wide range of energy issues including the goal to “explore possible modes of strategic fuel stockpiling such as individual programmes, multi-country and/or regional voluntary and commercial arrangements.” It recognized that less developed members would need assistance in their national capacity-building to achieve these energy security goals and added that “the necessary follow-up actions to ensure implementation... will be undertaken through existing ASEAN mechanisms in close consultations among EAS participants.”²⁷ The leaders also agreed to establish the EAS Energy Cooperation Task Force based on ASEAN mechanisms in order to carry out the summit’s energy work. In addition, they endorsed Japan’s proposal for the establishment of the Economic Research Institute for ASEAN and East Asia (ERIA) to serve as the de facto secretariat on energy issues. Also at Cebu, Singapore proposed that the EAS energy ministers meet, and the first EAS energy ministerial meeting was held a few months later in Singapore in August 2007. Since then, it has become standard practice for EAS energy meetings to be held in conjunction with ASEAN and ASEAN +3 meetings, which produces important political synergies.

The Cebu Declaration notwithstanding, oil stocks and energy-contingency planning have not yet been a focus for EAS energy ministers. The first EAS energy ministerial statement was silent on the issue when it established three work streams for energy cooperation under the EAS umbrella: energy efficiency and conservation, energy market integration, and biofuels. Then in November 2007, EAS leaders issued the “Singapore Declaration on Climate Change, Energy and the Environment,” which reflected their focus on long-term measures to enhance energy security and emphasized actions to promote clean energy and efficiency in order to help combat climate change.

The second EAS energy ministerial in Bangkok in 2008 expressed concern over high oil prices and ministers “affirmed to vigorously take their actions in such areas as enhancing emergency preparedness.”²⁸ The third EAS energy ministerial in Myanmar in 2009 subsequently addressed the essential issue of data transparency by highlighting the importance of the Joint Oil Data Initiative. The EAS grew to eighteen nations in November 2011 when the United States and Russia joined, and at the sixth meeting in Cambodia in 2012 it was agreed that the ERIA would work jointly with the IEA on energy outlook studies. Finally, at the seventh meeting in Indonesia in September 2013, the ministers added a new work stream on renewables.

Given that the issues related to emergency preparedness that are outlined in the Cebu Declaration are not addressed by the Energy Cooperation Task Force’s four existing work streams, a logical next step might be for the task force to establish a fifth work stream on oil stocks and contingency planning. The IEA should be involved in this work, to which end a helpful development was the joint IEA-ERIA workshop on ASEAN’s energy outlook that was held in Bangkok in May 2013. Its work should be based on the accomplishments of the ASEAN +3 oil stockpiling roadmap process. In order to make this happen, agreement on any major new undertaking in the areas of pan-Asian oil sharing or strategic oil stockholding will require the active support of key energy players in

²⁷ “Cebu Declaration on East Asian Energy Security,” January 15, 2007, available at the ASEAN website, <http://www.asean.org/news/item/cebu-declaration-on-east-asian-energy-security-cebu-philippines-15-january-2007-2>.

²⁸ “Joint Ministerial Statement of the Second East Asian Summit Energy Ministers Meeting,” August 7, 2008, available at the ASEAN website, <http://www.asean.org/news/item/joint-ministerial-statement-of-the-second-east-asian-summit-energy-ministers-meeting-bangkok-7-august-2008>.

the region, which raises the issue of the “big power” approach to regional energy security that is exemplified by the five-country talks championed by China.

Five-Country Talks

The five-country talks was a Chinese initiative to bring together the five major oil consumers (China, India, Japan, South Korea, and the United States). The first meeting was held in Beijing in December 2006. The group’s joint statement highlighted the importance of strengthening cooperation on oil stocks, the beneficial role of the IEA, and the need for better available market data, including the submission of data to the Joint Oil Data Initiative. Energy ministers from the five countries met again two years later in Aomori, Japan, on the margins of the group of eight (G-8) energy ministerial meeting in June 2008. The executive director of the IEA, Nobuo Tanaka, also attended the meeting, and the joint statement encouraged stronger cooperation between the IEA and nonmember countries. In the end, even though the talks provided an unprecedented opportunity for the five major oil consumers to discuss important energy issues at the same table, a third meeting was never held.

Possible Next Steps for Asia’s Energy Security

Although Asia has yet to establish its own system of strategic oil stocks or an emergency allocation system, there has been a lot of cooperation at the technical level among regional energy forums. **Table 3** provides a compendium of technical cooperation among APEC, ASEAN, and the IEA. Among other things, this review of more than 30 selected instances of technical cooperation among key international forums documents the IEA’s outreach to nonmembers in promoting the establishment of strategic oil stockpiles in Asia as well as its efforts to establish a basis for harmonizing emergency-response activities. The number of workshops, emergency planning reviews, and joint exercises among the IEA, APEC, and ASEAN indicates that a solid foundation of technical collaboration has been established, especially in regard to oil stocks.²⁹ However, what is lacking is an agreed-upon institutional architecture for Asian energy security that could house a regional oil stockpile or support an emergency-sharing scheme.

To address this gap, **Table 4** assesses the merits of various institutional options to elevate Asian cooperation to actually establishing a joint stockpile or regional-sharing scheme, including options available through APEC, ASEAN, and the EAS. While the IEA has the demonstrated capacity to maintain and conduct emergency oil sharing and coordinated oil-stock drawdowns, it appears unlikely that all the key Asian countries will ever be members. Thus, the IEA can only play a complementary role to any pan-Asian collective energy security program. ASEAN and its long-standing oil-sharing scheme provide a foundation for regional energy security that has been enhanced by the efforts of the ASEAN +3 grouping to develop an oil stockpiling roadmap, but more needs to be done. Meanwhile, APEC has the potential to play a leading role in Asian energy security but has not yet taken the necessary steps to establish an actual oil-sharing or stockpiling arrangement. While the five-country talks are unlikely to be revived, strengthening subregional systems in Southeast Asia (through ASEAN) and South Asia (through SAARC) and establishing

²⁹ Two helpful sources offering a Northeast Asian perspective are Eui-Soon Shin, “Joint Stockpiling and Emergency Sharing of Oil: Lessons and Prospects for Northeast Asia” (Asian Energy Workshop, Beijing, May 11–14, 2004); and Eui-Soon Shin, “Joint Stockpiling and Emergency Sharing of Oil: Update on the Situation in the ROK and on Arrangements for Regional Cooperation in Northeast Asia” (Asian Energy Security Workshop, Beijing, May 13–16, 2005).

TABLE 3 Compendium of selected regional technical exchanges and cooperation in oil stocks and emergency oil sharing

Activity	Location and date
APEC workshop on “Emergency Oil Stocks and Energy Security in the APEC Region”	Tokyo, March 2000
IEA-ASEAN seminar on “Asian Oil and Energy Security”	Kuala Lumpur, May 2000
IEA-China workshop on “Emergency Oil Stocks Issues”	Paris, April 2001
IEA emergency-response simulation exercises for oil supply disruptions with observers from nonmember countries, including ASEAN, China, and India	Paris, 2002, 2004, 2008, 2010, 2011
APEC Energy Security Initiative Workshop	Taipei, April 2002
APEC Sea Lane Disruption Simulation Exercise	Tokyo, April 2002
IEA-China Oil Stocks and Emergency Response Seminar	Beijing, December 2002
Joint IEA-ASEAN workshop on “ASEAN Oil Security and Emergency Preparedness”	Paris, September 2003
APEC Oil Emergency Response Workshop	Portland, June 2003
ASEAN +3 Oil Stockpile Forum	Bangkok, November 2003
APEC Joint Oil Stockpiling Workshop	Seoul, December 2003
IEA-India workshop on “Emergency Oil Stocks Issues”	New Delhi, January 2004
2nd ASEAN +3 Oil Stockpiling Forum	Manila, February 2004
IEA-ASEAN workshop on “Oil Supply Disruption Management Issues”	Phnom Penh, April 2004
IEA launches training in statistics and emergency preparedness to nonmember countries, including China, India, ASEAN, and other APEC economies	2004 onward
3rd ASEAN +3 Oil Stockpiling Forum	Hanoi, March 2005
APEC workshop on “Best Practices for the Establishment and Management of Strategic Oil Stocks”	Honolulu, July 2005
IEA-China workshop on “Oil Security”	Beijing, October 2006
IEA-China seminar on “Emergency Preparedness and Statistics”	Paris, October 2006
6th ASEAN +3 Oil Stockpiling Forum	Kuala Lumpur, January 2008
IEA-Thailand Joint Emergency Response Exercise	Bangkok, May 2009
IEA-Indonesia workshop on “Establishing Policy, Legislation, Structures and Practices for National Emergency Preparedness”	Jakarta, June 2010
Fifth IEA Emergency Response Exercise (including several ASEAN member countries, ASCOPE, and ACE as observers)	Paris, November 2010
IEA Emergency Response Assessment of Thailand	Bangkok, May 2011
IEA-APEC/ASEAN Emergency Response Exercise	Bangkok, May 2011
6th ASEAN +3 Working Group meeting on Oil Stockpile Road Map (OSRM)	Vientiane, August 2011
IEA Joint Emergency Response Exercise with India	New Delhi, June 2012
ASEAN +3 workshop on “Pre-Project Phase and Decision Phase on the Development of Oil Stockpiling”	Seoul, March 2013
APEC Oil and Gas Security Forum	Tokyo, April 2013
IEA Team Visit for Emergency Response Assessment of India	New Delhi, June 2013
APEC Joint Oil and Gas Security Exercise	Bangkok, September 2013
Joint IEA-ERIA Study and Forum on the ASEAN Energy Outlook	Bangkok, September 2013
2nd APEC Joint Oil and Gas Security Exercise	Jakarta, October 2013
ASEAN +3 OSRM Workshop and Energy Security Forum	Siem Reap, February 2014
2nd APEC Oil and Gas Security Forum	Tokyo, March 2014

TABLE 4 Multilateral options for Asian energy-security institutional architecture

	Membership and scope of impact	Readiness and capability (emergency oil stocks)	Readiness and capability (oil sharing)	Strengths	Weaknesses
IEA	Broad impact enhanced by outreach to nonmembers such as China, India, and ASEAN	Yes, core mission; has the ability to coordinate member country stock drawdowns	Yes, core mission	Proven system with link to Europe and channels of communication to nonmembers	Oil-sharing/stock scheme does not include China, India, or ASEAN
ASEAN	Regional impact enhanced by creating ASEAN +3 emergency communication system with China, Japan, and South Korea	No meaningful levels of strategic stocks but efforts ongoing in ASEAN +3 to build emergency reserves	Oil-sharing plan in place but viability is uncertain due to growing net oil import status and lack of strategic reserves	At the core of ASEAN +3 and EAS; geographically central in the region; potential base for expanded dialogue and cooperation	ASEAN +3 does not include India or the United States
APEC	21 member economies, including 5 from the Western Hemisphere, but does not include India or other countries in South Asia	Has studied the issue but has not established its own oil stock system; some members belong to the IEA	No, but recently conducted a series of oil and gas security exercises and has a real-time emergency information sharing system	An established forum for economic cooperation; includes energy suppliers Russia, Canada, and Australia	Might be unwieldy and is not a preferred vehicle for some Asian member economies
EAS	Includes all the key players; its 18 members are projected to account for 70% of global energy demand by 2035	None as a group, but many members have stock regimes in place	None as a group, although most members belong to either the IEA or ASEAN scheme	High-level but untested political mechanism that could empower a successful joint endeavor; would be ASEAN-centric	No operational track record; would require new effort and coordination with ASEAN and the IEA

Table 4 cont.

	Membership and scope of impact	Readiness and capability (emergency oil stocks)	Readiness and capability (oil sharing)	Strengths	Weaknesses
Five-country/big-power approach (China, India, Japan, South Korea, and the United States)	Would not be inclusive, although it would have a major impact on world energy markets	All five powers hold strategic stocks in varying degrees	3 of the 5 belong to the IEA, with which China and India have special agreements	Small size might enable agreement on joint oil stockpile and timely decisions in an emergency	Does not include ASEAN
Subregional groupings for Southeast, South, and Northeast Asia	All key Asian players would be included, and the possible U.S. role might vary by subregion	Only in Northeast Asia do all players maintain meaningful levels of strategic oil stocks	Varies by subregion: Southeast Asia has the ASEAN scheme, Japan and Korea have the IEA, and China and India do not belong to any sharing scheme	Brings cohesion to the subregions but would need linkages among them to be most effective	No pan-Asia arrangement
Stand-alone joint regional strategic stockpile	Flexible; could be based on the EAS to have the broadest impact, but would need a champion to lead the process of negotiation	Could be a combination of land-based and floating storage in multiple locations; should be coordinated with oil producers and industry	Would need to be supported by stock system; might be hard to devise and implement, depending on the diversity and geographic expanse of membership	High level of political commitment by major players could enable a successful undertaking	Would be diplomatically challenging to achieve and be expensive; would likely require a legally binding treaty

a new arrangement in Northeast Asia would be beneficial. In the end, however, if the subregional approach were adopted, then efforts would have to be made to coordinate all the plans. It would therefore be simpler to have one pan-Asian system with strategic reserves based in several locations in all three subregions.

Based on this assessment, the EAS seems best-positioned politically of all the existing institutional frameworks to be a vehicle for the community-building necessary to construct a new architecture for Asian energy security. The EAS is ASEAN-centric and includes all the key energy players in Asia. Among its membership are countries with the capability to develop an oil-sharing system or a strategic oil-stockpiling program. Therefore, setting up a new EAS work stream on oil stocks and contingency planning would be a logical and relatively easy next step to bring all the key countries to the same table to at least begin a conversation on how to move forward on energy security. And it could be done in the name of implementing the Cebu Declaration of January 2007, in which EAS leaders committed to exploring possible modes of strategic fuel stockpiling. The changing calculus of Asian energy security suggests that now is the time to fulfill that vision.

In addition to creating an overarching architecture for regional energy cooperation, there are a number of specific strategic steps that Asia should consider. Chief among these is developing a regional oil stockpile. While major oil consumers such as China; India; IEA members Japan, South Korea, and Australia; and Taiwan have developed their own strategic oil stockpiles in varying degrees, ASEAN nations do not possess meaningful levels of dedicated oil stocks.³⁰ Since they have varying capacities to build their own individual stockpiles and will not likely be able to do so on their own, a broader-based regional joint stockpile might be the most viable option. Indeed, economies of scale favor large, centralized collective stockpile arrangements; moreover, the collective nature of strategic stocks could serve as a deterrent to politically motivated supply interruptions.³¹

No matter what arrangements are agreed upon, it is essential that the mechanisms and procedures for releasing oil stocks be clear, coordinated, and transparent. In that regard, the EU's experience in oil stock "tickets" and other measures might help inform Asia's approach to cross-border stock holding. Feasibility studies would need to be commissioned to evaluate potential locations, storage construction types, cost, infrastructure links to refineries, pipelines, ports, and other technical factors. Key issues to resolve include the mix of crude and refined products, given that supply disruptions sometimes occur in the refinery sector, as demonstrated by Hurricane Katrina in 2005. Strategic stockpiles are most effective in the form of publicly held reserves so determining the split between government and privately owned commercial inventories is another important decision, and therefore stakeholder consultations with industry would need to be conducted. The stockpile could be administered in conjunction with the host government, either by a new supranational authority (e.g., a joint Asian energy stockpile authority), or by some

³⁰ Malaysia and Brunei are net oil exporters. Singapore is a refining and commercial storage hub, and is building the world's largest hard-rock cavern storage at Jurong. The other countries in ASEAN, some of whom do not have any domestic refining capacity, have aspirational goals and, in a few cases, very low levels of genuine strategic reserves. Elsewhere in Asia, Japan, South Korea, and New Zealand each hold at least 90 days of net imports as required by the IEA, while Australia's holding of slightly over 60 days is not in compliance. China has completed the first stage of a three-phase program of expanding its oil reserves from just over 100 million barrels now to approximately 500 million barrels of crude by 2020, equivalent to about 60 days of projected imports. Taiwan has adequate levels of government-controlled reserves and mandatory industry stocks. India's strategic reserve is not yet operational but when filled will have a capacity equal to about three weeks of imports, and it hopes to expand its reserves to 90 days of coverage by 2020.

³¹ For two excellent analyses on the economics of strategic oil stockpiles, see Jan Stelter and Yuichiro Nishida, "Focus on Energy Security: Costs, Benefits and Financing of Holding Emergency Oil Stocks," IEA, 2013; and Nahim Bin Zahur, "Potential Economic Benefits from Oil Stockpiling in ASEAN" (presented at the ASEAN +3 Oil Stockpiling Road Map Workshop, Siem Reap, February 25, 2014).

combination of an expanded and strengthened ASEAN secretariat, the ASEAN Centre for Energy, and the ERIA in coordination with the IEA.

Conclusion

Maintaining strategic oil reserves and being able to share oil with fellow consumers are the most effective measures a nation can take in the event of a short-term supply shortfall. Although emergency oil reserves do not reduce a nation's dependence on imported oil, they can mitigate its vulnerability to debilitating oil supply shortages.³² Thus, the nations of Asia need to enhance their dialogue and coordination while they can during periods of adequate energy supplies and take concrete steps for the design, construction, filling, and development of agreed-upon operating procedures for a joint stockpile.

Political trust and economic commitment will be essential, as this type of functional cooperation is harder to accomplish than other types of energy cooperation. Building a strategic energy reserve—whether it be oil-based or also include natural gas or coal—will be very expensive to carry out, but the cost of continuing to do nothing meaningful may be even higher given the potentially severe economic impacts of a supply disruption. Asia has progressed in its cooperation on emergency planning, and now it is time for the region to show the leadership, courage, and political will to embrace a new energy paradigm and take concrete steps toward making the goal of a regional oil stockpile a reality.

³² See Tom Cutler, "NATO and Oil Supply Vulnerability," *NATO Review*, October 1984.

ADAPTING TO A NEW ENERGY ERA

A New Strategy for U.S., Japanese, and Asian Energy Security



About the Project

World energy markets have undergone a seismic shift in the past ten years, driven by the unexpected boom in U.S. and Canadian production of shale gas, tight oil, and heavy oil. These changes have accelerated an already steady decline in U.S. imports of Middle East oil and gas, while China, Japan, and the rest of Asia have emerged as major importers of oil and natural gas from the Persian Gulf. As the United States continues its rebalancing to Asia, broad changes in both energy markets and global strategic priorities suggest that there is an urgent need for the United States and Asia to revamp their energy-security strategies and approaches to stabilizing the Gulf.

Project Activities

Through a range of activities—including field research, commissioned papers, workshops, and dialogues with key stakeholders—“Adapting to a New Energy Era” aims to provide in-depth and academically rigorous research into how the United States, Japan, South Korea, China, and others can craft stronger diplomatic, strategic, and economic tools to support common energy security interests. Year two of this initiative (2014–15) will feature activities in Washington, D.C.; Japan; and China.

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Energy security is an emerging yet rapidly evolving field, with significant, long-term implications for the geopolitical, economic, and environmental health for the Asia-Pacific. With this in mind, this initiative includes an explicit effort to engage young Japanese researchers whose research will play a vital role in informing and shaping a new generation of energy policy research in the region.

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