The Energy Implications of a Nuclear Deal between the P5+1 and Iran

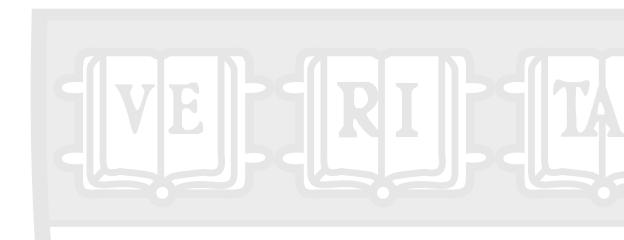
Workshop Report

Cambridge, Massachusetts June 23–24, 2015

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Cover photo: Oil byproducts being burned off at a petrochemical plant in the desert at Abadan, near Ahwaz, Iran, during a sandstorm, July 1971. (AP Photo/Horst Faas)

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On June 23 and 24, twenty five experts met at Harvard University's Kennedy School of Government under the auspices of the Geopolitics of Energy Project at the Belfer Center for Science and International Affairs. The group, which included experts from academia, the financial sector, government, and the energy industry, spent an evening and the following full day discussing and debating the possible energy implications of a nuclear deal between the P5+1 and Iran. Each individual brought a different perspective and expertise—from those focused on the state of the Iranian oil sector to those specializing in U.S. sanctions. The deliberations were held behind closed doors and on the basis of Chatham House rules. The Geopolitics of Energy Project thanks the Middle East Security Project, the Iran Project, and the Middle East Initiative for providing additional resources to hold this workshop.

Given the significant uncertainties related to Iran's strategy, the contours of a deal, and the oil market more generally, it is not surprising that there were few points of absolute consensus among the group. This workshop report, therefore, does not purport to represent a consensus among the group, but rather seeks to highlight key areas of debate or important and unusual insights shared during the course of discussions.

• The majority of the group anticipated that a deal would be concluded by the end of the summer at the latest. Most thought that both sides had too much invested in a positive outcome to let the negotiations founder. Several members, however, felt that the possibility of a "nodeal" scenario was as high as 40%. Most agreed that if the two sides did not reach an accord by September, the talks could stall out in the face of strong opposition in Washington and Tehran to further extensions of the interim agreement.

- The group discussed in detail the question of how much additional oil Iran could bring to market once a deal was signed and sanctions were subsequently lifted (assuming this would take approximately 6-8 months after an agreement was inked). One expert in the group posited that Iran had the ability to supplement its current production of 2.8mnb/d to bring an additional 800,000 barrels of crude oil *and condensate per* day to market within a year; of these additional barrels, 300-500,000 would be crude oil. Of the crude oil, 150,000 would be new oil, while the remainder would be achieved through better enhanced oil recovery techniques. Achieving these numbers would not necessarily demand foreign investment, but would require significant investment made possible by the release of Iranian frozen assets. These numbers are in contrast to the more ambitious predictions made by Iranian Oil Minister Bijan Zangeneh; in June 2015, he said that Iran could immediately increase oil exports by 500,000 after sanctions were lifted and produce a total of 4mnb/d within the three months that followed.
- Experts were in agreement that Iran's 30 million or more barrels currently held in floating storage was less of an issue than anticipated by many. As much as 50-75% of these barrels are estimated to be either condensate, or condensate blended with heavy oil, the sale of at least part of which is not prohibited by Iranian sanctions. If Iran has struggled to find a market for these barrels today, in all likelihood, the lifting of sanctions will not make them any more attractive to international buyers, who may be concerned the contents could damage refinery equipment.

Many agreed that there was little ideological opposition to foreign investment in Iran's oil sector today.

- Several experts warned that reaching such production levels would also require the Iranian government to overcome obstacles that have traditionally stymied Iranian decision making and economic policy. Many agreed that—unlike the domestic debate in Iraq after the removal of Saddam Hussein—there was little ideological opposition to foreign investment in Iran's oil sector today. But there continues to be multiple factions and competing interests, a recipe which in the past has slowed Iran's ability to execute complex turnarounds quickly.
- According to the experts present, Iran could well reach production levels of over 5mmb/d by 2020, but this depends more on Iran's ability to attract foreign investment into the oil sector. (Iran's production before the 1979 revolution was approximately 6mmb/d.) Here, there was significant debate about how successful Iran would be in attracting foreign investment. There was consensus that many U.S. restrictions on some types of investments would remain and that compliance concerns would inhibit European investment as well as American. IRCG involvement in many Iranian entities could add to international wariness. Those closer to the oil industry,

however, stressed that many international oil companies would be prepared to navigate difficult environments, in Iran and elsewhere, for access to reserves such as those of Iran. Continued uncertainty surrounding sanctions may ward off most forms of investment and financial interactions, but many investments related to oil will proceed, particularly if Iran makes good on its efforts to reform its model contract to be more attractive to international oil companies.

- Many experts expressed concern that a failure by Iran to capture early economic gains (in the energy sector or elsewhere) will create challenges to the durability of the agreement over the medium and longer terms. Should Western governments want companies to invest in Iran as a means of shoring up the agreement, they may need to provide incentives and at least encouragement to companies to do so.
- The impact of Iran's return to international energy markets will in part revolve around President Rouhani's ability and willingness to tackle burgeoning domestic energy consumption in Iran. (Iran's primary energy consumption 98% of which is met by oil and gas has risen by 50% in the last decade.) The gains of Iran's earlier efforts to bring domestic energy prices more in line with international ones have largely been eroded. Raising the price Iranians pay for their electricity is critical if Iran is to have sufficient excess energy for export.



- Some experts underscored how Iran will seek to use its energy wealth, once unconstrained, to develop its economy in ways which make it less vulnerable to sanctions in the future. The Iranian government will not focus simply on increasing the export of crude oil and natural gas, but will instead focus on the development of more value-added activities. One might expect Iran over the coming years to develop the ability to export more petroleum products than crude oil, to develop industries reliant on natural gas (steel, cement, petrochemicals), and to focus on the cross-border export of electricity, depending on whether Iran's relations with the countries in the region improve. Iran may focus more on domestic and regional markets, more than international ones, and on products more than raw materials.
- The role of Russia and its interests in an Iranian deal drew considerable discussion. The positive role that Russia has played in the P5+1 negotiations was generally perceived as evidence that Moscow had deep interests in Iran not acquiring a nuclear weapon and avoiding additional military conflict in the region. But Russia is also a country that stands to benefit from the sale of new weapons, civilian nuclear technologies, and energy investments. Russia's decision not to play a spoiler role may also be the result of Moscow and Russian energy entities having a better understanding of Iran's energy strategy than most of the other actors; in particular, they may not perceive Iran's natural gas to be a major threat to Russian markets.

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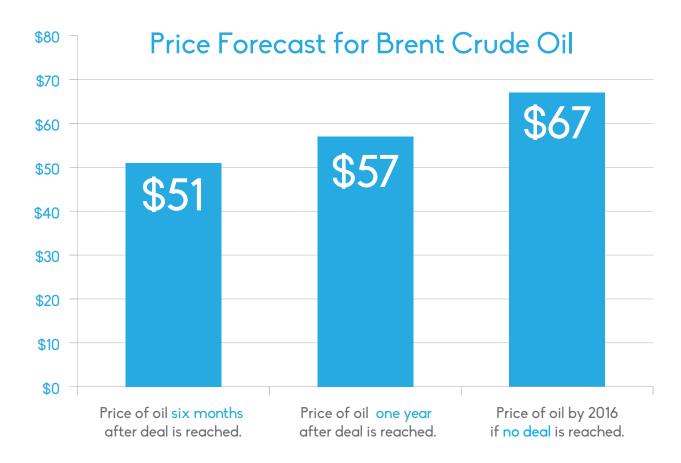
- The volumes of additional crude oil Iran brings to market within the calendar year are unlikely to be sufficient in themselves to prompt a change in the current strategy of Saudi Arabia or other members of OPEC. They are unlikely to induce a return to a more cooperative approach to the oil market by OPEC or to the restoration of the quota system as Iran has proposed. However, the combination of growing Iranian and Iraqi crude and weak global demand over the next several years, could lead Saudi Arabia, Iraq, Iran, and other large producers inside or outside of OPEC to return to some collective decision making to prevent a complete collapse in prices.
- Looking ahead, Iran's return to the international oil markets could hasten an already-nascent and highly significant shift in the thinking of large oil producers in the Gulf. Thanks to growing production and weak demand, they could come to see their oil as having limited value over time; selling oil today makes more economic sense than keeping it in the ground for a future time, as no one can be sure that prices will return to previous highs. No one will be interested in holding spare capacity.

- Such a shift in thinking could lead to new forms of geopolitical competition. Not only will Iran, Iraq, and the countries of the GCC be vying for the same markets, but they if they see oil as having more value today than it will tomorrow will likely expedite their efforts to develop cross-border fields. This could lead to further tension and even conflict. Many of these countries, including Iran, are seeking to develop their ability to export petroleum and other products; competition in product markets could become intense.
- There was some debate over whether this is an auspicious or atrocious time for Iran to reenter energy markets from its own perspective. Some thought Iran's low cost production is well-poised to attract upstream investment in a world of lower oil prices. A larger segment of the group, however, felt it was Iran's misfortune to try to re-develop its industry at a time when prices are low and global opportunities are abundant.
- Experts were reluctant to predict the impact that a return of Iranian oil to international markets would have on price—given the critical role that global demand and other trends in supply will have. However, in parting, two-thirds of the experts made predictions about what the oil price will be six months after a deal, one year after a deal, and if no deal is clinched. The average of these predictions was as follows:
 - ► The price of oil (Brent) six months after a deal is signed: \$51
 - ► The price of oil (Brent) one year after a deal is signed: \$57
 - ▶ The price of oil (Brent) at the end of 2015 if no deal is signed: \$67



• These average price predictions are largely consistent with the discussion in two particular ways. First, experts anticipated that Iran would initially seek to "surge" oil onto the market after the signing of an agreement to demonstrate its geopolitical weight and ability to influence global markets. With very few exceptions, experts anticipated that the price would be lower six months after the deal than it would be a year after. Second, experts expected that, in the absence of a deal, there would be increased efforts to restrict Iranian oil sales and higher geopolitical risk in the region. (One expert, however, predicted less volatility.) Virtually all experts predicted that the "no deal" price would be higher than in either of the previous two scenarios.

Figure 1.Courtesy of Nader Habibi



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List of Attendees

Name	Title		
Bhushan Bahree	Senior Director, OPEC Middle East Research, IHS		
Jason Bordoff	Director of Center on Global Energy Policy, Columbia University		
Patrick Clawson	Director for Research, The Washington Institute for Near East Policy		
Michael Cohen	Head of Energy Commodities Research, Barclays		
Helima Croft	Managing Director and Chief Commodities Strategist, RBC Capital Markets, LLC		
David Gordon	Senior Adviser, Eurasia Group		
Nader Habibi	Henry J. Leir Professor of the Economics of the Middle East, Brandeis University		
Amy Jaffe	Executive Director of Energy and Sustainability, UC Davis		
Bijan Khajehpour	Managing and Founding Partner, Atieh International		
Robert Kleinberg	Schlumberger Fellow, Schlumberger-Doll Research		
Cliff Kupchan	Chairman and Practice Head, Eurasia Group		
Henry Lee	Jassim M. Jaidah Family Director Environment and Natural Resources Program, Harvard Kennedy School		
Suzanne Maloney	Senior Fellow, Foreign Policy, Center for Middle East Policy, Brookings Institution		
Leonardo Maugeri	Senior Associate, Environment and Natural Resources Program/Geopolitics of Energy Project, HKS		
Scott Modell	Senior Adviser, Rapidan Group		
Payam Mohseni	Iran Project Director and Fellow for Iran Studies, Harvard Kennedy School		
Ed Morse	Global Head of Commodities Research, Citigroup		
Meghan O'Sullivan	Jeane Kirkpatrick Professor of the Practice of International Affairs, Director of the Geopolitics of Energy Project, Harvard Kennedy School		
Liz Rosenberg	Senior Fellow and Director of the Energy, Economics and Security Program, Center for a New American Security		
Djavad Salehi-Isfahani	Professor of Economics, Virginia Tech		
Gary Samore	Executive Director, the Belfer Center, Harvard Kennedy School		
Greg Saunders	Senior Director International Affairs, BP		
Sara Vakhshouri	President, SVB Energy International		
Jamie Webster	Senior Director, IHS Energy Insight		



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