Pugwash Workshop
Oil and Gas Markets in the Aftermath of the Iranian Nuclear Talks

Rome, Italy

13-14 December 2014

MAIN POINTS

- A positive outcome to nuclear negotiations with Iran is possible, if there is cooperation on all sides.
- Finding a solution to the sanctions problem could be a win-win situation. It would also lead to better economic cooperation on a range of issues.
- ‘Snap back’ mechanisms may provide a mutually acceptable structure for sanctions relief, though outstanding questions exist regarding how to determine violations.
- A UNSC resolution supporting the deal and its timelines would be a useful way to ensure continued motivation for implementation (as it would be more difficult, for example, for the US Congress to backslide).
- More clarification is needed regarding ideas for a multilateral fuel bank.
- While access to nuclear energy has become a matter of national principle, the Middle East long-term scenarios point toward solar energy as an efficient way forward and a continued reliance on hydrocarbons as the most realistic one. A satisfactory resolution to the Iran nuclear issue can help free up space for discussions of longer-term energy scenarios.
- The current sanctions regime has stymied the ability of senior executives from companies in the various regions to communicate on issues related to longer-term economic cooperation. Continued and sustained dialogue is imperative.

REPORT

On 13-14 December 2014 Pugwash convened its first consultations with the oil and gas community about the future of business operations in Iran. The meeting was intended to discuss policy options for the energy market and beyond in light of the outcome of the Iranian nuclear talks and of the situation in Iraq and the Middle East. For many participants, due to the sanctions against Iran, this was the first opportunity in many years to meet with their peers. The exercise was organized with the intent of better understanding the priorities of Iranian political leaders and of the Western business community. The present report is a summary of the main topics discussed, prepared by the rapporteur.[1]

The outcome of the Iranian nuclear negotiations

The meeting took place about three weeks after the deadline for the conclusion of the Iranian nuclear talks. Failure to reach an agreement on November 24th, 2014 left the business community still unable to revise their policies towards the country. There was significant optimism that a compromise could be found in the coming months, especially if – as some noted – the format of discussions allows for the most relevant players to bargain without interference from other countries or issues. Although the last round of negotiations brought the parties relatively close to a deal, participants maintained that problems still remain. Particularly, while the US aims to constrain Iranian uranium enrichment capabilities, Tehran wants to have an industrial-scale capability; in addition both sides want to maintain leverage and will not give everything upfront. *Quid pro quo* arrangements should be favored, in which each side has an opportunity to show good faith in complying with the deal and getting some reward for it.

The business community displayed a strong interest in the recreation of normal economic ties with Iran. The participants pointed out that substantive gains can be foreseen in the event of a deal, but it is necessary to ensure that its terms cannot be revised with too much ease. The long suspension of diplomatic and business contacts between Iran and the West produced a situation in which US and Iran fail to understand each other. This will need concentrated efforts to produce the trust needed for enterprise. It was recommended that the emphasis of official discourse should shift from confrontation to cooperation. Moreover, many have criticized the spread of faulty information by mass media and specialized publications as well as the

---

[1] The rapporteur for this report was Roberta Mulas, GEM Erasmus Mundus Joint Doctoral Candidate at Warwick & LUISS. Please note that the views presented here represent a range of opinions expressed in the meeting, and they do not necessarily reflect the personal views of the rapporteur, nor of the Pugwash Conferences as an organization. The meeting was held according to traditional Pugwash/Chatham House rules to enable an open exchange of perspectives and exploration of creative possibilities for ways forward. Thus, the substance of the discussions can be reported out, but no item discussed can be attributed to any one individual. There was no attempt to seek consensus, and in fact the sharing of diverse views was encouraged.

sometimes misrepresented technical knowledge injected into the debate by NGOs with a political agenda.

It was said that in this negotiation everything is interconnected and that it is “impossible to decouple technical from political aspects.” There was considerable agreement that too much weight has been given to technical issues and not enough to politico-strategic ones. Most strikingly the notion of breakout is seen by many participants as unhelpful, a “fake concept” that gained much resonance in US debates but bears little scientific applicability. Firstly this notion would raise the question of who is to judge the length of an acceptable breakout time and the appropriate response; furthermore, it does not account for the challenges of developing nuclear weapons under IAEA safeguards given that Iran is its most inspected country. This view doubts that Iran would gain much from breaking out of the NPT, expelling IAEA inspectors to use the facilities and material they safeguarded to make a nuclear weapon. Finally, as other countries such as Japan, have breakout times of only a few months without constituting an international problem, this runs the risk of creating additional double standards in the NPT. The idea of ‘sneak out’ is equally unhelpful to the debate. It applies mainly to the capability to build one or maybe two rudimentary weapons – and the chances of any significant progress are severely decreased by the presence of international inspectors that would be a part of any deal. Another concept that many found contested is that of ‘practical needs’. It was noted, in fact, that deciding which and how much nuclear activities are necessary for a country is subjective and open to interpretations.

Technical solutions that could favor agreement between Iran and the E3+3, instead, should be encouraged. One participant noted that Iran might find it more feasible to subscribe to a new international standard if it is done at the regional level, especially as a component of the proposed Middle East zone free of weapons of mass destruction. Such new standard could include a ban on reprocessing activities or on enriching uranium at levels higher than 5%. Another example is the idea, espoused by some participants, of making Natanz and other nuclear fuel fabrication plants multilateral. Foreign participation would reduce the proliferation concerns while allowing Iran to ‘save face’. Moreover, it would supply nuclear fuel to the region and be consistent with the IAEA efforts to promote multilateral enrichment. This idea was brought further by one participant, who spoke of the efficiency of a regional framework for the development of nuclear energy that made use of Iranian expertise on enrichment and Iraqi know-how on waste management.

The prospects for relieving the pressure from sanctions was critically evaluated and it was stressed that, for a deal to be possible, the “economic gains should outweigh the political pain for Iran”. Participants noted that sanctions have unevenly affected international firms: Western ones have left the Iranian energy market but Chinese business has increased. Therefore, lifting sanctions is a prerequisite for the reinstatement of business ties between Iran and US and European firms, which should come in the early stages of the agreement. The lag involved in lifting trade bans means that the return of Western companies cannot directly be part of any nuclear deal with Iran. Given the overwhelming support for sanctions in the US Congress, a few participants recommended to begin with lifting the EU ones. While sanctions are highly interconnected and all restrictions – on banking, shipping, insurance, etc. – would need to be removed to stimulate enterprise, the initial focus should be on those directly affecting the energy market.

According to many, it is also crucial that sanctions are terminated rather than simply suspended, because leaving open the possibility of reinstating them easily acts as a powerful disincentive for long-term investments. Sanctions, in fact, are preventive and, as one participant put it, they tend to have an effect "psychologically" even when their legal force is limited or absent. At the same time, it was pointed out that Iran has effectively "sanctioned itself", as the country has been economically damaged more by bad management than by sanctions *per se*. That is why the long-term political and regulatory risks must be directly addressed for US and European companies to enter the Iranian energy market. This will be possible once sanctions are lifted, but participants argued that it critically depends on how Iran will attract capital convincing international businesses of the country's low risk. A possible UNSC resolution supporting any deal may prove helpful, including by making it potentially more difficult for the US Congress to create further hurdles.

Iran's energy policy options

It was nearly consensual opinion that Iran should not be discriminated in its pursuit of nuclear power, but that standards of safety and security should be ensured. Project risk, however, makes nuclear energy a bad investment even in a diversified energy portfolio, some argued. However, several pointed out that nuclear power has often to do "more with images than reality" – more explicitly, it is discussed as a nationalist matter of prestige rather than based on its cost effectiveness. One participant stressed that even this could shift, as in the case of Germany, which increasingly takes pride in moving away from nuclear energy. Overall, the share of energy generated from nuclear programs is decreasing worldwide – in the 1990s it accounted for 17% of total production, but it has dropped to 10% now. Following this trend, Europe is turning to energy sources alternative to nuclear power. While the point was made by several participants that more renewable energies – and solar power in particular – would be a wise investment in the region, most find its potential limited. As one participant put it, "it is very unlikely that hydrocarbon can be replaced as the main source for now."

One participant argued that, in order to improve Iran's energy future, several developments need to take place first: 1. it needs to resolve the nuclear dispute to ensure the removal of sanctions; 2. it must utilize energy more efficiently; 3. energy subsidies should be removed and exports should be planned better; 4. it needs the right formula for long-term price of gas to enable local industries to take shape; 5. it should allow upstream oil and gas investment by private companies. Especially for what concerns the latter, the launch of the Iranian Petroleum Contract (IPC) provides significant opportunities for the recreation of business investments in Iran. The old buyback contracts, in fact, were "not suitable for attracting capital and technology" whereas the new framework aims to encourage foreign business to invest in Iranian projects with long-term contracts. While the ownership of the reserves remains with Tehran – as constitutionally mandated – the new contract will allow getting close to a production-sharing model that benefits both sides. One participant highlighted that the IPC would allow gains for both the country and the investing company, ensuring a stable partnership that grants flexible and efficient operations as well as technology transfers. However, many made the case that the launch of the new framework should be delayed until the conclusion of the nuclear negotiations in order to ensure the presence of Western companies.

The regional and global energy market

The unexpected fall of the price of oil is producing both challenges and opportunities for the energy market of the Middle East. According to most, this depends on the OPEC countries' insistence on keeping oil prices high as well as maintaining their share of the market. Forcing low prices has the strongest impact on countries that are not on good terms with the largest OPEC producers, such as Russia, Iran, and Iraq. The latter presents a peculiar set of difficulties: although Iraq is becoming major player in coming years, more exploration still needs to be conducted. Moreover, the relation between the central government and the Kurdish region has seen tension over the allocation of profits from the sale of oil. One participant maintained that the recent agreement between Baghdad and the Kurdish Regional Government could have finally stabilized the situation. This demonstrates how "oil can be a source of cooperation or of conflict within Iraqi society."

It was also noted, however, that shale oil and gas technologies put a strain in the regional market as their share of global production has been reduced. With 15,000 wells drilled in the US in 2014 alone, "the emergence of shale oil and shale gas from the US is replacing its imports of Middle Eastern oil." The US, traditionally a net importer of petroleum products, recently became a net exporter. The views on shale oil and gas were mixed: one participant said that the benefits of this so-called North American petroleum renaissance is that it is producing a huge shift of wealth from producers to consumers and that production is now taking place in a stable and low-risk environment. Others, however, argued that its environmental impact make this technology's sustainability dubious.

If the fall of oil prices has reduced the flow of money into the Middle East, this trend is also increasing the potential involved in the gas market, as noted by some participants. In order to coordinate Iranian activities with those of other major gas exporters, an intergovernmental organization was founded, the Gas Exporting Countries Forum (GECF), which controls nearly 70% of the world's gas reserves and about 30% of all the transfers of liquefied natural gas (LNG). It was noted, however, that a more attractive environment for gas development could only be created after the removal of sanctions on Iran, allowing export to Europe and putting projects back on agenda. For instance, three major LNG projects have been frozen as a result of sanctions because the US technology provider withdrew. Moreover, investing on a pipeline to export gas to Europe through Iraq, Syria, Greece, and Italy is also hampered by sanctions, although a further obstacle lies in Daesh.[2]

The political impact of Daesh

The rise of Daesh is one of the most significant developments in the Middle East, generating, as several argued, "the most serious threat in the region." This depends on the fact that it was capable to make significant headway into Iraqi territory and, unlike other radical organized groups, managed to consolidate territorial control. One participant argued that this was made possible by the level of corruption and dissatisfaction among parts of Iraqi society – the capture of Mosul, for instance, was possible because those who should have resisted were lacking motivation. A further novelty of Daesh is in its doctrinal appeal: its ideology and brutality attracted resentful youth from abroad, including Western Europe. It is unclear, however, how much alienation this is creating within the divided Iraqi communities. A participant pointed out that national unity should be promoted as "the number of victims among Sunnis have not been less than among Christians, Yazidis, and Shias." Opportunities should be created for Sunnis and Shiites to discuss in order to overcome the religious separation that threatens to draw a wedge between societies in the region.

Participants, moreover, criticized the support that Gulf countries are indirectly giving Daesh through the arms and financial backing they provide to the opposition in Syria. Supposing that it would limit itself there, Saudi Arabia and other countries have seriously underestimated Daesh, according to some participants. One noted that its objective actually is to conquer Mecca and Medina, but it redirected to the territorial control of parts of Iraq because of practical reasons. Participants also raised the attention to Turkey's dangerous role because its underestimation is providing breathing space for Daesh.

The rise of the threat from Daesh has created serious losses for the regional oil and gas market, as pointed out previously. The fight against Daesh, however, also provides an opportunity for cooperation between Iran and the West, some participants noted. In this struggle they share high stakes in a prompt defeat of the movement, they are fighting the same enemy, and indirectly supporting each other. It was noted that the role of the US in the region has compounded many of these problems, including by providing increased access to advanced weaponry.

CONCLUSION

The sanctions regime has created obstacles among the business and policy communities to interact on longer-term planning and cooperation. Such communication is necessary not just for economic reasons, but also for future regional and international stability. Pugwash was urged by participants to organize further meetings.

---

[2] A majority of participants preferred to use the Arab acronym Daesh rather than ISIS, hence the report will reflect this throughout.

Participants List

Dr. Athem Alsabti, Iraqi / UK astrophysicist (BSc, MSc, PhD in Astrophysics from Manchester University), presently Research Fellow, University of London Observatory-University College London; Founder of Iraqi planetarium and National Observatory projects; Founder of the Iraqi Pugwash Group; International Secretary of the Iraqi National Academy of Science; Fellow of the British Royal Astronomical Society and member of the International Astronomical Union; CEO of Stellar Energy Ltd. [formerly CEO of Stellar Oil (Lugano) Ltd]

Dr. Hussain Al-Shahristani, Minister of Higher Education, Baghdad, **Iraq** [formerly: Minister of Oil (2006-2010), Acting Minister of Electricity (2010), and Acting Foreign Minister and Deputy Prime Minister (2010-2014)]

Mr. Mohammad Hassan Asef, First Secretary, Embassy of the Islamic Republic of **Iran**, Rome, Italy

Amb. Sergey Batsanov (Russia), Pugwash Council member and Director of the Geneva Office of International Pugwash; Member of the Pugwash CBW steering group [formerly: Director for Special Projects at the Organization for the Prohibition of Chemical Weapons (OPCW), The Hague; Representative of the USSR/Russian Federation to the Conference on Disarmament, Geneva (1989-93)]

Mrs. Sandra Ionno Butcher (USA/UK), Executive Director, Pugwash Conferences, and Member, Pugwash Council; Director, Pugwash History Project; Honorary Research Associate, Center for International Studies and Diplomacy (CISD)-School for Oriental and African Studies (SOAS), London [formerly: Senior Programme Coordinator, Pugwash Conferences; Joint Executive Secretary, British Pugwash Group; Executive Director, Student Pugwash USA; Interim Research Director and Senior Analyst, British American Security Information Council]

Dr. Paola Ceragioli, Energy expert, Milan [formerly: collaboration with Union of Italian Scientists for Disarmament (USPID), and the Landau Network]

Prof. Paolo Cotta-Ramusino, Secretary-General, Pugwash Conferences on Science and World Affairs; Member, Pugwash Executive Committee; Professor of Mathematical Physics, University of Milan, **Italy** [formerly: Secretary General, Union of Italian Scientists for Disarmament (USPID); Director, Program on Disarmament and International Security, Landau Network – Centro Volta, Como, Italy]

Ms. Rosemarie Forsythe, retired, former Director, International Political Strategy, Exxon Mobil. Currently Board or Advisory Board Member: Center for Non-Proliferation Studies, School for International Futures, The Roza Otunbayeva Initiative, National Museum of Women in the Arts; serving on Center for Strategic & International Studies (CSIS) Transnational Threats Senior Steering Committee and on the CSIS Eurasia Initiative Advisory Council [formerly: Director for Russian, Ukrainian, Eurasian Affairs, National Security Committee, The White House; US Diplomat (US liaison to European Parliament; Chargé, US Embassy, Armenia; other positions in the former Soviet Union and Australia]

Mr. Ali Ghezelbash, Owner and Director, AdAugusta Consulting Ltd; Co-Founder and Board Member, European Iran Research Group (EIRG) [formerly: Statoil; Norsk Hydro; Associate Director, Atieh Bahar Consulting]

Dr. Narsi Ghorban, Secretary to the Commission on Environment and Energy, Iran Committee of the International Chamber of Commerce, Tehran [formerly: Managing Director, Narkangan Gas to Liquid International Company; Director, International Institute for Caspian Studies; Chairman, Doran Energy]

Mr. Mohammad Amin Gorji, LNG, CNG, GTL Market Analyst, Gas Exploring Countries Forum (GECF), Doha, Qatar

Dr. Bernard Hourcade, Geographer, Senior Research Fellow (Emeritus) CNRS, Paris; Global Fellow, Woodrow Wilson Center, Washington, DC [formerly: Director of the French Institute of Iranian Studies in Tehran (1978-1993); Research on society, territories and politics in Iran, urban studies (Tehran), and geopolitics of the Middle East; Scientific Editor of Irancarto (www. irancarto.cnrs.fr.)

Mr. Ramin Lakani, Regional General Manager, Halliburton, London, UK

Hon. Giorgio La Malfa, Former Member of the Italian Parliament and retired Full Professor of Political Economy [formerly: Minister for European Political Affairs (2005-2006), Budget Minister (1980-82)] Member of ELN (European Leadership Network for Multilateral Nuclear Disarmament and Non-Proliferation)

Mr. Arnold Luethold, Head, Middle East and North Africa Programme, Geneva Centre for the Democratic Control of Armed Forces (DCAF), Geneva, **Switzerland**

Dr. Maurizio Martellini, Associate Professor in Theoretical Physics and Scientific Director of the Insubria Center on International Security (ICIS), University of Insubria, Como, Italy; Secretary General, Landau Network-Centro Volta, Como

Dr. Raffaello Matarazzo, PhD, Senior Analyst, Government Affairs, Political and Institutional Scenarios and Analysis, eni spa, Rome, Italy

Dr. Steve Miller, Member of the Pugwash Council; Director of the International Security Program of the Belfer Center for Science and International Affairs at Harvard University's Kennedy School of Government, Editor-in-chief of the quarterly International Security, and Co-chair of the US Pugwash Committee

Mr. Fareed Mohamedi, Corporate Advisor, Saudi Aramco, Dhahran, Saudi Arabia [formerly: Vice President, Industry Analysis, Global Strategy and Business Development, Statoil, London, UK; Partner and Head of Market Analysis and Country Risk, PFC Energy, Washington DC, USA; Vice President, Moody's Investors Service, New York, NY, USA; Economist, Institute of International Finance, Washington DC, USA; Economist, Economic Research, Ministry of Finance and National Economy, Bahrain]

Ms. Roberta Mulas, PhD candidate at the University of Warwick and at LUISS University; previously Research Assistant at the Peace Research Institute Frankfurt (PRIF), and at the Permanent Mission of Italy to the United Nations in New York

Mr. Mohammad Hassan Peyvandi, Vice President & Member of the Board, National Petrochemical Company, Tehran, Iran [formerly: Director of Planning & Development, NPC]

Mr. Lucian Pugliaresi, President, Energy Policy Research Foundation, Washington, DC [formerly: Senior Director, National Security Council, The White House (Reagan Admnistration), portfolio included Middle East and Energy Security, Economic Policy, and Nuclear Nonproliferation (1984-1988); Member, Secretary's Policy Planning Staff, U.S. Department of State for Secretary George Schultz (1980-1984); Positions in US Department of Energy, Interior, and Environmental Protection Agency]

Mr. Fawad Quraishi, Vice President, Exploration, Statoil, Asa, Norway [formerly: Senior Associate, McKinsey & Co, Toronto (1999-2002), Vice President, Arn Amro Bank, Amsterdam (1997-1999), First Secretary and Head of Chancery, Canadian Embassy, Tehran (1992-1995)

Dr. Tatsujiro Suzuki, Member, Pugwash Council; Vice Director, Professor, Research Center for Nuclear Weapons Abolition (RECNA), Nagasaki University, Nagasaki City, **Japan** [formerly: Vice Chairman of the Japan Atomic Energy Commission]

Dr. Hossein Abdoh Tabrizi, Advisor to the Minister of Transportation, Urban Development and Infrastructure, Tehran, **Iran**

Mr. Ali Vaez, Senior Iran Analyst, International Crisis Group, Istanbul, Turkey

Dr. Mostafa Zahrani, Director General, Institute for Political and International Studies (IPIS), Tehran, **Iran**