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Shouldering the Sanctions: A Future for EU-Iran Energy Cooperation

GLOBAL SECURITY REPORT

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Shouldering the Sanctions: A Future for EU-Iran Energy Cooperation

Executive Summary

The decision by the United States to withdraw from the Joint Comprehensive Plan of Action (JCPOA) has radically altered the risk calculus for players in the global energy market interested in engaging with Iran's petroleum sector. In anticipation of US secondary sanctions targeting Iranian oil exports, numerous multinational companies have announced they are scaling back or withdrawing their investments altogether. This presents a severe challenge to the sustenance of the nuclear deal, in which economic relief from the easing of sanctions is a central quid pro quo.

A detailed analysis of the Iranian petroleum sector suggests that there is significant overlap between Iran's plans for this sector and European strategic priorities. While most reporting on investment in Iran has understandably focused on the decisions of major players such as the French oil giant Total, this report draws attention to the role of small and medium-sized enterprises (SMEs). The report suggests that those enterprises, if supported by adequate financial and legal structures, have the potential to play a significant role in maintaining energy trade between Europe and Iran.

Specifically, the report highlights:

- In light of re-imposed US sanctions, a realistic outlook for energy cooperation between Europe and Iran must be built on managed expectations; this means downgrading assessments of what commercial cooperation can look like. Tehran still expects that the EU would continue buying Iranian crude, gas liquids and petrochemicals and facilitate the transfer of technology to Iran. Yet, as the withdrawal of key European companies from Iran bears witness to, substantial purchases of Iranian oil and gas are unlikely to materialize in the near to medium future.

- Other key Iranian goals can however be facilitated by Europe-Iran cooperation and engagement. The most promising channel for future cooperation between Iranian and European companies is the advancement of relations between European SMEs and Iranian private sector companies. Promoting joint ventures between these two groups, with the objective of transferring technology and knowledge to Iran, should be the key component of EU helping Iran achieve its stated goals.

- A facilitating environment for energy-related European SMEs to operate in Iran needs to be established. This requires action by the Europeans and Iranians. The proposed European-developed special purpose vehicle (SPV) can act as a platform to facilitate triangular barter trade that will pave the way for transactions to be processed with minimum interaction with Iranian banks.

- This new model of cooperation shifts the focus from large multinational companies to SMEs without a nexus to the US or significant exposure to US markets. If enough of these enterprises can be incentivised to sustain business with Iran such model, centred on a series of smaller projects, can represent a way forward in the current climate.

Introduction

The US withdrawal from the JCPOA and planned re-imposition of secondary sanctions on international companies active in Iran's petroleum sector will dramatically change the risk profile of Iran for many players in the global energy market. These include oil and gas majors, contractors and subcontractors, technology providers, merchants, banks, financiers, investors, shipping companies and insurance underwriters. As a result, a large number of international companies, especially those of European origin with exposure to the United States, are likely to withdraw from the Iranian market.

From the Iranian perspective, this development will no doubt lead to serious gaps in implementing the country's strategy to boost production, exports, and value added from its petroleum sector. From the European perspective, it calls into question the future of the JCPOA, which key EU governments have vowed to protect. A core question therefore is how the EU and relevant governments can create conditions in which European companies can continue to engage the Iranian energy market in light of US sanctions.

> ***"Saving the JCPOA is the most urgent priority for European governments."***

Saving the JCPOA is the most urgent priority for European governments and remains the key objective guiding the EU's policy planning. However, a continuation of energy relations with Iran holds other dimensions as well. As noted by the European Commission's *European Energy Security Strategy*, "the European Union's prosperity and security hinges on a stable and abundant supply of energy."[1] The EU's own strategic goals of maintaining Iran as a solid source of energy, especially natural gas, will enable reducing its dependencies on any singular supplier. As a result, a reduction in Iran's position as an energy source places further risks on the security profile of Europe's energy dependence.

This requires a resolute but realistic strategy to sustain the relationship in the energy field. On 24th September, foreign ministers of the remaining parties to the JCPOA endorsed plans "to establish a Special Purpose Vehicle, to facilitate payments related to Iran's exports (including oil) and imports."[2] Details on this payment structure are still sketchy, and it remains unlikely to alleviate the concerns of multinational corporations with significant exposure to US markets and, by extension, to US sanctions. However, it may encourage European SMEs with no US nexus and an interest in the Iranian market to maintain operations there.

This report suggests that those enterprises, if supported by adequate financial and legal structures, have the potential to play a significant role in maintaining energy trade between Europe and Iran. The report first takes a closer look at the Iranian petroleum sector and its current capabilities, and discusses how Iran's plans for the sector relate to European strategic priorities. It then identifies challenges generated through the US withdrawal from the JCPOA, and presents recommendations on how future EU-Iran energy sector cooperation can be structured and promoted.

Centrality of Petroleum Exports in Sustaining the Iran Nuclear Deal

The looming US sanctions targeting Iranian oil exports present a grave challenge to Iran's ailing economy, as well as to the future sustenance of the JCPOA. Oil is a vital source of national income and according to recent statements from Masoud Karbasian, Iran's former Minister of Economic Affairs and Finance, accounts for over a third of the government's general revenue.[3] In 2017, revenues from oil exports reached 50 billion USD, with "oil and oil products" making up 70 percent of all Iranian exports for the fiscal year,[4] and crude oil exports representing the primary source of hard currency earnings.

"Oil and gas are centrepiece to the European effort to sustain economic exchange with Iran."

The centrality of oil in Iran's economy has directly translated into the government's assertion that preserving the ability to export petroleum is necessary for remaining in the JCPOA. As the Iranian Deputy Foreign Minister Abbas Araghchi stated, "As long as we can sell our oil, it will be in our interest to stay in the JCPOA."[5] Iranian officials, who have long been frustrated with their European counterparts' lacklustre attempts to cushion the impact of US sanctions, are growing visibly impatient as the November deadline for full re-imposition of US sanctions moves closer.[6] In this sense, oil and gas are centrepiece to the European effort to sustain economic exchange with Iran.

Status Quo in the Iranian Petroleum Sector

Iran holds 157 billion barrels of the world's proved oil reserves[7] (about 9.3 percent) and 33.2 trillion cubic meter (tcm) of the worlds' proven gas reserves (around 17 percent). These combined resources are the highest conventional reserves of the world. The country's oil and gas industry is more than a century old and operates under the full supervision of the Ministry of Petroleum (MoP), which covers a myriad of activities such as exploration, production, engineering and construction, refining, transportation, distribution, export and import, as well as services and research.

The MoP has four main subsidiary companies: the National Iranian Oil Company (NIOC); National Iranian Gas Company (NIGC); National Iranian Oil Refining and Distribution Company (NIORDC); and the National Iranian Petrochemical Company (NPC). Of these, NIOC is the key company managing reserves, as well as producing and exporting oil and gas.

Table: Key Data on the Iranian Petroleum Sector[8]

Oil and Gas Liquids	
Reserves (crude oil only)	157 billion barrels
Production (crude and gas liquids)	4.98 million bpd (mbpd)
Refining Throughput	1.98 mbpd
Crude Oil Exports	2.60 mbpd
Gas	
Reserves	33.2 trillion cubic meter (tcm)
Production	223.9 billion cubic meter / year (bcm/y)
Domestic Consumption	214.4 bcm/y
Natural Gas Export Capacity	9.5 bcm/y

The country's petroleum sector has been one of the main beneficiaries of the JCPOA, which led to the lifting of sanctions in January 2016. During increased sanctions period between 2011 and 2013, Iran's oil production dropped to three mbpd and exports to a low of around one mbpd in 2014. Since then, the NIOC has managed to rehabilitate production and exports, hitting a record high of 2.7 mbpd in oil and liquids exports in June 2018.[9]

One of the advantages assisting Iran at the current juncture is the growing production capacity of its gas liquids. According to OPEC data on crude oil production, Iran's output stood at 3.9 mbpd at the end of 2017, meaning that the country's main production growth stems from gas condensate, while it produces more than one mbpd of gas liquids.[10] In other words, whilst Iran has not yet fully recovered to pre-sanctions crude oil production capacity (4.2 mbpd), it has surpassed its export capacity through the availability of condensates (which can either replace crude in some domestic refineries, be exported directly, or blended with crude oil to produce lighter crude quality for international customers). The ability to blend crude oil and condensate is a unique capability that allows the NIOC to offer the sought after grades of oil in the market; hence having a better value proposition to many refineries.

It is important to note that Iran's rapid post-JCPOA recovery has been reliant on the availability of equipment and technologies accessible to the NIOC after the lifting of sanctions. Moreover, previous rounds of sanctions, alongside a lack of investment in the sector, have left a negative footprint in the industry and this has motivated the government to modernise the sector at a fast pace.

> ***"Iran's petroleum sector has been one of the main beneficiaries of the JCPOA."***

It was to Western companies such as Total, Shell, ENI, Statoil and Edison that the first wave of post-revolutionary upstream contracts had gone to from the late 1990s onwards. During the harshest years of nuclear-related sanctions (2008 to 2014), NIOC had no choice but to rely on Asian, especially Chinese technology providers, but few Iranian technocrats were happy with the industry's progress without western technology providers. Following the implementation of the JCPOA, petroleum sector strategists and decision-makers turned once again to Western companies.

Preparing for the post sanctions period, at a November 2015 conference in Tehran, the NIOC introduced 16 upstream projects (including 12 shared and 4 independent fields) for international investments. However, many Western companies remained hesitant to enter the Iranian market in anticipation of snap-back US sanctions.

The most visible sign of a return of Western oil majors was the signing of an agreement with a consortium led by France's Total – now jeopardised by the US withdrawal from the JCPOA.[11] This has necessarily meant Tehran turning to Russian and Chinese investment to fill the gap. On 14 March 2018, NIOC and the Russian state-owned company Zarubezhneft signed a cooperation agreement to develop the Aban and Paydar fields on the Iran-Iraq border, and there are currently indications that Lukoil will be awarded the Abe Teymour and Mansouri fields in central-western Iran, consolidating the presence of Russian companies in the country. Furthermore, Total's share of the signed South Pars 11 contract has officially been transferred to the project's junior foreign partner, China National Petroleum Corporation (CNPC).[12]

However, the above-mentioned developments do not imply that Tehran will stop engaging Western companies in its major projects. Following the contract signing on 14 March, Zanganeh underlined that NIOC would like to secure technology and investors from all regions, including European and American companies. In fact, technical experts in the MoP and NIOC would still prefer Western technology to all other sources, even if this has been slow to emerge and has proved risky due to the prospect of new sanctions.

Evidently, NIOC's ambitious plans to attract Western technology now look very unlikely. Yet Iran's petroleum sector will need to address several key challenges in the coming years, including:

- need for new investments in strategic oil and gas production;
- efficiency improvements;

- the development of shared fields.

Despite the quick rehabilitation of production figures, Iran faces an annual depletion rate of 5 percent, or about 200,000 bpd. This means that without new investments or efficiency improvements, the country's strategic production levels will drop.

Low efficiency is an overarching theme in Iran's petroleum and energy sectors. Improving recovery rates in the upstream sector alone could generate additional profits. According to Gholamreza Manuchehri, Deputy Director of NIOC, "the average rate of recovery from Iran's oilfields is around 25% but it should reach 40%. In-place oil reserves are estimated at 800 billion barrels....raising the recovery rate by merely 1% is equivalent to adding 8 billion barrels" to reserves.[13] At current prices, this would mean more than $500 billion generated for the country for every 1% improvement in recovery rates.

There is also a political urgency to developing shared fields, especially the country's largest gas field, South Pars, shared with Qatar. Incidentally, 12 of the 16 upstream projects that NIOC has introduced for international investment are shared fields similar to that of South Pars.

Another important trend in the country's petroleum sector is the gradual empowerment of its domestic contractors. In the absence of international prime contractors, Iranian companies have been beneficiaries of major oil and gas projects, building capacities through occasional collaboration with Western engineering firms as well as trial and error approaches. Significant domestic prime contractors include governmental companies such as PetroPars and OIEC, as well as private sector companies such as Dana Energy. However, these companies have limited financial capabilities, and projects awarded to them still require major financing by the MoP or investors.

One of the urgent needs in the petroleum sector will be finding financing solutions. A growing number of projects presented by the petroleum industry in Iran are referred to as Engineering, Procurement, Construction and Financing projects (EPCF). While Iranian prime contractors are capable in the construction segment, the MoP and the NIOC family of companies continue to look for engineering, procurement and financing solutions from international investors to develop the industry.

Future Plans and the Role of International Companies

The NIOC is planning to increase oil production to 4.5 mbpd and gas production to 1.3 bcm/d by 2022, with officials stating they will require a total of $200 billion in new investments.[14] In order to achieve these targets, Iran will need to attract major foreign investment and technology into its domestic sector.

European companies will have to play a significant role in this process, especially as technology providers. The expectation among Iranian decision-makers is that European Small and Medium Sized Enterprises (SMEs) will partner with Iranian, Russian and Asian prime contractors to fill gaps in the engineering segment.

Going forward, developing the country's gas resources will be the backbone of the industrial developments in the country; in absolute terms, the gas sector already dominates over the petroleum sector production in the country. Based on 2017 figures, Iran's crude production was 183.4 million tons per annum, while gas production equalled to 192.5 million tons of oil equivalent and condensate production was 50.8 million tons of oil equivalent.[15]

The expansion of the gas sector and the need to best utilise these resources will naturally lead to the country's key industries i.e. petrochemicals, power generation, steel, aluminium becoming gas-based. Furthermore, gas and electricity exports will be the mainstay of Iran's regional interaction with its immediate neighbours in need of gas and/or electricity. Developing this sector will be a key priority for Tehran as it will not only facilitate economic growth, but also help to reduce tensions with countries such as Pakistan and Saudi Arabia – similar to the way it eased tensions between Iran and Turkey.[16]

"Efficiency in energy consumption is a key issue for Iran and efficiency improvements could go a long way."

On energy efficiency, the MoP subsidiary Iran Fuel Efficiency Company (IFCO) is in charge of identifying and financing energy efficiency projects up to a total volume of $100 billion. Here, European SMEs can also play a significant role, not just as technology providers, but also as operators of small-scale projects in the Iranian energy sector. In fact, efficiency in energy consumption is a key issue for Iran and efficiency improvements could go a long way. Per capita primary energy consumption in Iran in kg of oil equivalent stood at 3,411 per annum in 2017.[17] For comparison, the same indicator was 1,941 in Turkey. Evidently, if European SMEs support Iran in the technological process of improving energy consumption efficiency, it could lead to opportunities in the petroleum sector. For example, a 20% reduction of consumption would translate into freeing up of energy resources equal to about 400,000 bpd of oil. In other words, Iran does not have to increase production to enhance its export potential, it can reach the same goal through reducing domestic consumption. Such technological solutions are certainly available through European SMEs.

EU-Iran Energy Ties and the Challenge of Re-imposition of U.S. Sanctions

The European Union and Iran have a history of close energy ties. Prior to the stringent sanctions regime period, Europe was Iran's second largest export market for crude after China.[18] However, European imports plummeted in the wake of the bloc's 2012 embargo on Iranian oil. The implementation of the JCPOA and lifting of EU sanctions enabled greater exchange. Imports have risen sharply since the JCPOA Implementation Day. As of early 2018, Iranian crude exports to Europe had roughly trebled over the two years since the deal's implementation.[19]

The American withdrawal from the JCPOA and the anticipation of reinstated US sanctions targeting Iran's oil exports is once again reversing these dynamics, and key European operators are announcing their withdrawal from the Iranian energy market or scaling back of their activities. According to some calculations, oil exports from Iran to Europe have dropped by fifty percent in recent months, a decrease arguably steeper than anticipated.[20]

As noted in a June 2018 ELN report, for many companies, "the decision to leave Iran is driven by operational considerations which stem from an inability to secure important third-party services, especially banking services."[21] This illustrates the risks in oil trade, where importers and exporters rely on an interconnected web of banking, shipping, and insurance. In one illustrative case, the Greek refinery Hellenic Petroleum, one of the key European purchasers of Iranian crude, has been reportedly cutting imports, as it was unable to find a bank capable of processing payments to Iran.[22] It remains to be seen whether the proposed SPV structure by the EU will pave the way for those European companies that are less concerned about US sanctions to remain engaged in the Iranian market.

Evidently, these developments present a severe challenge to Iran's petroleum sector, which needs investment and technology from European companies. A pattern is emerging by which large European companies withdraw from the Iranian market leaving significant vacuums that are filled by large Russian, Chinese, and Indian firms - or some NOCs such as Petronas. Consortia of smaller companies such as Pergas, which recently signed a Heads of Agreement to develop the Karanj oil field in Khuzestan province, will remain in Iran and can become the main source of Western technology.

> ***"Oil exports from Iran to Europe have dropped by fifty percent in recent months, a decrease arguably steeper than anticipated."***

This means however that the country's petroleum sector will develop at a much slower pace than previously envisioned. From the long list of international companies that have signed Memoranda of Understandings (MoUs) or have carried out studies on Iranian oil and gas fields, only the Chinese and Russian ones will remain committed and the NIOC will have to start looking for new interested parties to develop those fields. At the same time, the period since the signing of the JCPOA and the lifting of sanctions has allowed Iranian companies to import technologies and equipment, which may help Iran develop techniques to develop its resources. This phenomenon was experienced in the gas sector when Iranian companies managed to develop their own capacities and enhance gas production during the sanctions years between 2008 and 2015. The MoP and the NIOC family of companies will increasingly look for opportunities to sign agreements with consortia consisting of foreign and Iranian companies, hoping that the European partners would provide the needed technologies.

European companies will be the key group of entities hit by re-instated US sanctions. While it remains to be seen how the EU and respective European governments' attempts to offer protections will unfold, three groups of EU companies can be identified at the current juncture:

- Companies with a large exposure to the US market, who, like Total S.A., will forego their Iranian business and withdraw all-together;
- Entities that have US exposure, but conclude that their interests would be protected by the EU (either through political arrangements or through the threat of counter-sanctions); and
- Businesses that have no or limited exposure to the US market and wish to continue their business in and with Iran.

Therefore, depending on the type of protection and guarantees the EU will offer, a number of European energy-related companies may remain engaged in the Iranian market. Those entities that decide to remain will need to watch the following strategic parameters to determine their approach:

- The US administration's attitude to Iran and the possibility of further sanctions;
- Iran's eastward orientation in trade and investment decisions;
- The impact of EU guarantees (such as financing agreements) on the potential of risk-free trade with Iran;
- Tehran's attempts to improve the business climate to entice European businesses to remain interested;
- Increased regional tensions that could create hiccups for international companies that have simultaneous investments in Iran and elsewhere in the region.

Potential Framework for Iran-EU Energy Sector Cooperation: recommendations

Against this difficult backdrop, Tehran's stated goals in the energy sector and potential ways for the EU and European companies to help Iran in this process can be summarized as below:

"A realistic outlook for energy cooperation between Europe and Iran must be built on managed expectations."

Iran's Stated Goals	How EU companies can help
To remain the third largest gas producer in the world with gas production of 360 bcm/y by 2025	The expansion of the upstream gas production will require investment and technology
To inject gas into the oil fields in order to maintain and increase oil production	Offer efficient solutions to increase the recovery rates of Iranian oil fields and help Iran produce more efficiently
To supply gas to power plants, gas-based industries and petrochemicals and to export the resulting products at economically viable prices	EU companies would be major sources of technology and investment, but could also join forces with Iranian companies to develop regional opportunities, such as using Iranian gas in a third country to produce gas-based commodities
To replace domestic demand for petroleum products with gas and maintain the share of gas in Iran's energy basket above 70 percent	Transfer of technical knowledge and best practices: EU countries have a strong track record in optimising their energy mix and utilising diverse sources
To export gas to the regional countries, Indian subcontinent and Europe	Import from Iran gas, and gas-based commodities (petrochemicals, steel, aluminium etc.)
To increase energy efficiency in industrial, residential and commercial consumption	Offer the needed technologies to improve energy efficiency with clear economic and environmental benefits

Managing expectations

Considering the new legal and operational realities introduced by the re-imposition of US sanctions, a realistic outlook for energy cooperation between Europe and Iran must be built on managed expectations. This means downgrading assessments of what commercial cooperation can look like.

Tehran still expects that the EU would continue buying Iranian crude, gas liquids and petrochemicals, and facilitate the transfer of technology to Iran. Yet as the withdrawal of key European companies from Iran bears witness to, substantial purchases of Iranian oil and gas will not materialise in the near to medium future. As an executive at the MoP told the authors of this report, large European entities have already reduced their imports from Iran, even though petroleum related sanctions would not kick in until 4 November. In this area of managing expectations, the EU will have to rely on the support of other JCPOA signatories, i.e. Russia and China.

Promoting viable cooperation and engagement with European SMEs

At the same time, other key Iranian goals identified in the table above can be facilitated by Europe-Iran cooperation and engagement. The most promising channel for future cooperation between Iranian and European companies is the advancement of relations between European SMEs and Iranian private sector companies. Promoting joint ventures between these two groups with the objective of transferring technology and knowledge to Iran should be the key component of EU helping Iran achieve its stated goals. In line with this proposition, in late August, the EU allocated €18 million to promoting cooperation between the two sides, a first part of a larger €50 million allocation in development aid to Iran. Of this first instalment, €8 million has been dedicated to "supporting the private sector" and capacity building of "high-potential" SMEs are specified as an area of engagement.[23]

Related to Tehran's emphasis on European technology in its energy sector is the desire to increase efficiency on all levels, especially the recovery rates in upstream production. In this process, one should not underestimate Iran's own capacities in the sector. Despite external sanctions, in the past decade Iran has gone from being a consumer of foreign technology and a pure exporter of oil to being an exporter of oil, gas and petroleum products, a manufacturer of petroleum sector equipment as well as a hub for energy connectivity in the region. Iranian technocrats nevertheless perceive European technology as the key driver in efficiency improvements. As a result, when it comes to technological collaboration, the EU should look for ways to promote the presence of European SMEs in Iran.

European companies could approach the Iranian petroleum sector as:

- **Junior partners in existing projects:** Many Iranian and foreign companies have already signed contracts and are looking for technology or operational partners. European SMEs would potentially be fitting partners for such contracts;
- **A subcontractor to existing contractors:** A subcontracting arrangement in an existing contract may be not as lucrative as being one of the leading partners, but it is a feasible way of benefiting from the opportunities and consolidating bilateral relations;
- **Exporter of equipment to Iran:** European SMEs could also look at the possibility of selling equipment to Iranian contractors and subcontractors. Such an approach would require a certain degree of presence in the market, given that Iranian authorities would insist on local value addition in the process: having an Iranian partner and a plan to transfer some of the technology to Iran would be an important component in this strategy. This would mean that European SMEs would enter Joint Ventures (JV) with Iranian companies to either assemble, or manufacture, their equipment. Such JVs would also allow the foreign company to offer its products or services within the provisions of "local content".

Establishing general financial transactions channels to use for energy-related cooperation

As outlined, in addition to technology, Iran's petroleum sector will require financing capacities that European SMEs do not possess. As such, creating general non-energy focused financing channels will be an important component, as these channels can also be used for energy cooperation.

Evidently, there are opportunities for Iranian-European collaboration in the energy sector. However, they require legal and financial frameworks provided for by both sides. Here, there are important steps that European governments and the EU can undertake. In the legal realm, this includes building on the provisions of the EU blocking statute to establish a more resilient legal framework to support European commercial engagement with Iran. In August this year, the European

Commission revived Council Regulation No. 2271, better known as the "blocking regulation" to protect European business in Iran against US secondary sanctions. A January 2018 survey of 60 executives of European companies active in Iran showed that more than 50% thought that, "assuming Iran remains committed to the nuclear deal," the revival of the blocking regulation would positively affect the decision to invest in Iran.[24]

> ***"As long as Iran's compliance with FATF standards remains uncertain, foreign investors will remain wary."***

In the current context, the regulation has been seen primarily as a political tool aimed at signalling a European commitment to economic exchange with Iran. It nonetheless contains important legal provisions and can backed by a greater enforcement power and tied to established European legal frameworks. As noted in an earlier ELN report, this process may be aided by the establishment of a European regulatory body tasked with overseeing EU sanctions policy and trade facilitation.[25] In the area of enforcement, this body could add teeth to the objective of deterring noncompliance with EU law. Instead of being limited to its current ambiguous provisions that threaten penalties against European entities that comply with US secondary sanctions, "a more effective approach would be to penalize European companies that deny services to European individuals or entities that maintain links with Iran even though they comply with U.S. secondary sanctions."[26] Legal framework regulations could be connected to the structure that underpins the Single Euro Payments Area, which requires banks to demonstrate legitimate regulatory concerns as grounds for rejecting transfers of Iranian-origin funds from another European financial institution to prevent that they are quarantined once they have reached Europe.[27]

To facilitate the creation of a functioning payment channel between the two sides, Iran will also have to implement legal provisions to address the requirements of the Financial Action Task Force (FATF). The Iranian authorities have made progress in passing the needed legislation[28], but more work will be needed to sooth concerns over money laundering and terrorist financing prior to the 18 October deadline for normalizing Iran's status within the FATF framework. As long as Iran's compliance with FATF standards remains uncertain, foreign investors will remain wary of these risks as well as of potential FATF countermeasures. This will inevitably discourage many businesses.

Establishing financial channels will not fully resolve the financing needs of Iranian projects. In addition to technology, the Iranian petroleum sector requires investments. These investments can partly be sourced through domestic bonds, but the realisation of Iran's plans requires international investments. China and Russia promise to be major investors in the future, but Iran will rightly expect European initiatives in this field. Here, one solution would be for Europe's support in the establishment and protection of Iranian Eurobonds in Europe. Such Eurobonds can be securitized through Iranian oil exports and allow Iran to raise funds for its petroleum sector projects. Furthermore, Europeans can also direct some of its financing channels through Russia and China, seemingly in a better position to immunise their businesses and banks against US sanctions.

Finally, EU institutions and governments should help European SMEs develop successful joint ventures (JVs) with Iranian companies. Iran is a challenging business environment and average SMEs may be disinclined to engage in the domestic market. To employ just one metric, the World Bank puts Iran on place 124 out of 190 countries listed in its "ease of doing business ranking."[29] While the EU should engage Iran to improve its business climate, additional support services for SMEs, such as an expansion of those outlined in the European Commission's development aid package, would further facilitate a deepening of business ties between the two sides.

Conclusion

It remains to be seen whether the EU will find ways to secure the nuclear deal and promote energy sector cooperation with Iran. The Rouhani Administration remains highly interested in deepening relations with the EU, and also keen to show to the Iranian population that the nuclear deal will translate into economic and technological upsides for the country. A commitment to deepening energy relations between Iran and the EU would certainly contribute to these objectives.

There is no doubt that the Iranian government appreciates the political resolve of the EU in sustaining the JCPOA, but the measures planned so far may fall short of the Iranian expectations in the field of economic benefits. Nonetheless, the initiatives proposed in this report, if executed well, can create the framework for continued transfer of technology and trade between the two sides, including in the energy sector.

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