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Progress, challenges, uncertainty: ambivalent times for Iran's energy sector

Developments in Iran's energy sector are overshadowed by the global standoff over the future of the nuclear deal. After US President Donald Trump had announced his willingness to cancel the Joint Comprehensive Plan of Action (JCPOA), as the deal is officially known, one industry leader raised his voice: Patrick Pouyanne, CEO of French major Total, reportedly told Trump to keep the JCPOA over dinner at the 2018 World Economic Forum in Davos. But Pouyanne also noted a US withdrawal from the deal would force Total to "re-evaluate" its engagement in Iran. It would, Pouyanne said, bring the country "back to the past", when Western energy companies could not operate there due to sanctions.¹

The encounter in Davos reflects the broader situation in the Iranian energy sector. The country holds massive oil and natural gas reserves and has favourable geological conditions. The conclusion of the JCPOA in July 2015, which features substantive energy- and finance-related sanctions relief, raised expectations that this potential could finally be tapped.² But in spite of the deal, the international politics around Iran remain complicated, leaving Iranian energy executives and international business leaders uncertain.

Yet, while Iranian energy is overshadowed by global politics, the past Iranian year – which ended on March 20 – saw several interesting developments, both domestically and internationally. Most notably, natural gas exports to Iraq were launched and contracts signed with France's Total, China's CNPC, and Russia's Zarubezhneft. Nevertheless, the international situation remains unsettled and uncertainty over the future of sanctions relief and the nuclear deal persists. Domestically, meanwhile, a debate over the involvement of the revolutionary guards in the Iranian economy has emerged. Against this backdrop, the most recent developments in Iranian energy are reviewed and discussed.

A better-than-average year for Iranian energy

Looking back, Iran's energy industry has seen a somewhat better-than-average year, at least compared to the previous years.

Two noteworthy achievements were realised on the international stage. First, Iran commenced natural gas exports to Iraq. Second, Tehran concluded its first two international energy contracts since the implementation of the nuclear deal, including with a Western company. For Iranian energy, both events were special. They have been preceded by more than a decade during which Iran had neither launched new natural gas exports (or otherwise increased the country's export of natural gas) nor concluded a single contract with a Western energy company.

¹ Financial Times: Total chief told Trump to stick with Iran nuclear deal, 11 February 2018.

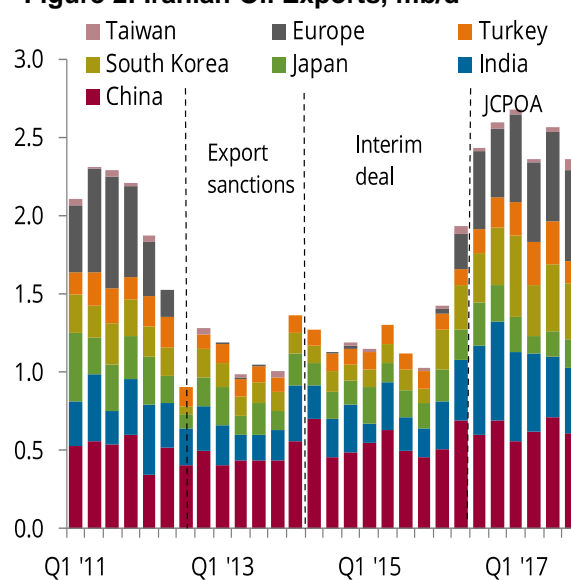
² See Jalilvand, David Ramin: Iranian energy: a comeback with hurdles, Oxford Institute for Energy Studies, Oxford, 2017.

These developments, however, do not amount to a breakthrough and generally the trends of the recent past continue. Iran's oil production and export levels remain more or less steady. In line with its OPEC quota, the country's crude oil production currently stands at around 3.8 mb/d (Figure 1). According to oil minister Bijan Zanganeh, his country has the potential to increase production by some 100,000 b/d in a matter of days.³ This suggests a modest spare capacity, amounting to 2.6% of current output. On average, in the past Iranian year (running from 21 March 2017 to 20 March 2018), Iran's oil exports amounted to 2.55 mb/d, comprising 2.12 mb/d of crude oil and 0.43 mb/d of natural gas condensate.⁴ The majority of Iran's oil exports went to Asia and the rest to Europe (Figure 2). Iran's oil ministry further announced the ambition to increase production capacity to 4.7 mb/d within four years and, with the support of international companies, possibly even to 5.0 mb/d.⁵ But for the time being, Iranian oil production capacity is stuck at just less than 4 mb/d.

Figure 1: Iranian Oil Production, mb/d



Figure 2: Iranian Oil Exports, mb/d



Source: Energy Aspects

In addition to deals with three international companies, which are discussed below, a further upstream oil contract was concluded with local company Pasargard Energy Development Company (PEDC). Shortly before the end of the last Iranian year, on 18 March, PEDC was awarded a \$2.4 billion contract to develop the Jofeir and Sepeher oil fields over the duration of 20 years. The production target at these fields is set at 110,000 b/d. PEDC is a subsidiary of Pasargard Bank, a private Iranian bank listed on the Tehran Stock Exchange.⁶

While oil output has struggled to grow, Iran has continued expanding output of natural gas. President Hassan Rohani recently announced that output at Iran's largest field, South Pars, has doubled in the past Iranian year. As a result, the country no longer needs any imports (which largely came from Turkmenistan, before).⁷ For most of the past decade, basically all production increases have been absorbed by the domestic market – apart from exports of less than 10 bcm/y to Turkey and marginal volumes to Armenia and Azerbaijan. By last year, though, production had risen enough to start exports to neighbouring Iraq (see Table 1). In January, the National Iranian Gas Company (NIGC) announced a new consumption peak.⁸ It remains to be seen if

³ Bloomberg: Iran Can Boost Output Fast If OPEC Ends Cuts, Oil Minister Says, 4 February 2018.

⁴ Shana: Iran exported in the year 96 [referring to the Iranian year 1396/2017-18] some 2.6 million barrels of oil, 19 March 2018.

⁵ Reuters: Iran plans to increase oil production capacity by 700,000 BPD within 4 years, 8 February 2018.

⁶ Shana: NIOC signs \$2.4b Oil Deal with Local Firm, 18 March 2018.

⁷ Reuters: Iran has nearly doubled gas production at South Pars: Rouhani, 18 March 2018.

⁸ Shana: Registration of new record in the country's gas consumption [in Farsi], 30 January 2018.

Iran succeeded in expanding natural gas output at a faster rate than domestic consumption, which would be a precondition for larger exports.

Table 1: Natural Gas exports in the Iranian year 1396 (March 2017-March 2018)

Turkey	5.4 bcm
Iraq	Commencing at 7 mcm/d in June, now at 14 mcm/d (equal to 5.1 bcm over a full year)
Armenia	< 1 bcm
Azerbaijan	< 1 bcm

Source: Shana⁹

At any rate, natural gas export projects remain problematic as domestic natural gas consumption in Iran is highly seasonal. Demand spikes in the winter months when temperatures are low and natural gas is used for heating. This regularly leads to domestic demand outstripping supply. In response, industrial consumers have repeatedly been cut off from supplies to ensure households are provided with enough natural gas. The winter supply disruptions have happened year in and year out, and continued in 2018.

To overcome this situation, Iran has begun to develop natural gas storage capacities. During the summer months, when domestic demand is lower, parts of the country's natural gas output will be stored for release in the winter. Since 2014, Iran has operated two storage facilities. Having increased gradually, their total capacity currently stands at 9 bcm/y. More storage facilities are to be established, according to Iranian officials, but details are still to be worked out.¹⁰

Even if Iran manages to cope better with seasonal demand volatility, domestic natural gas consumption is likely to continue increasing. This is the plan, anyway. Iran wants to use more natural gas domestically in order to extend the downstream value chain and increase domestic value creation. Ambitious petrochemical and energy-intensive industrial projects are already underway. For example, Iran is seeking to transform its Pars Special Economic Energy Zone at Asaluyeh, next to the South Pars natural gas field, into a regional hub for petrochemicals.¹¹ Similarly, already the Middle East's largest producer, Tehran plans to substantially increase steel output further.¹²

The international stage: important steps forward but problems remain

For more than a decade, Iran had neither succeeded in launching new natural gas exports nor concluded new contracts involving a Western company – until the summer of 2017. At that time, Tehran announced the start of natural gas deliveries to Iraq and shortly thereafter a contract was signed with French major Total and China's CNPC. More recently, Iran signed a second international energy contract; this time with Russian Zarubezhneft. These events constitute important achievements for the Iranian energy industry. At the same time, they are less a symbol of a deadlock being overcome but more a function of quite unique circumstances.

Political ties with Baghdad allow for first successful natural gas export project in years

In June 2017, Tehran started natural gas exports to Iraq. Based on a contract from 2013, Iran has begun supplying natural gas to its neighbour for subsequent electrification in the Baghdad area. Initial volumes of

⁹ Shana: Record of the oil industry in the year 96 [in Farsi], 19 March 2018.

¹⁰ Shana: Iran plans to Increase Gas Storage Capacity, 27 January 2018.

¹¹ Following Saudi Arabia, Iran is home to the Middle East's second largest petrochemical industry. From 52 mt/y in 2016, Tehran plans to increase petrochemical output to 117 mt/y in 2020 and 180 mt/y in 2025. Even if these targets are not met, as it appears, output is growing substantially. See Mills, Robin: Iran's best foot forward, *Petroleum Economist*, 3 January 2018.

¹² Platts: Iran's coated steel strip output jumps 42% on year: ISPA, 23 February 2018.

7 mcm/d have been increased to 14 mcm/d and should eventually reach 35 mcm/d. This also includes a second line to Basra in the southeast of Iraq, which is currently under construction.¹³

The commencement of natural gas exports to Iraq opened a new chapter in the history of Iranian natural gas. Apart from marginal swap-deals with Armenia and Azerbaijan in the 2000s, this marked Iran's first successful realisation of a natural gas export project since launching deliveries to Turkey in 2001. Remarkably, in stark contrast to actual progress on the ground, Iranian officials announced more than a dozen export plans in the meantime with volumes totalling more than 150 bcm/y.¹⁴

The relatively smooth implementation of the Iraq natural gas export project was, essentially, a function of Iran's good relations and influence with the central government of Iraq. Tehran and Baghdad enjoy close relations and several Iraqi politicians are close to Tehran. For Iraq, where blackouts are common in the capital city Baghdad, importing Iranian natural gas for electrification enhances energy security and frees oil for export (generating desperately needed revenue for the Iraqi state). Iran, in turn, benefits from further deepening its relations with its neighbour and making Iraq partly dependent on Iranian supplies. Further, it should be mentioned that Iranian companies were awarded contracts for the construction of the pipeline. In light of these factors, both Baghdad and Tehran were motivated to quickly proceed with the project and, while doing so, did not face any major foreign opposition.

From the very beginning, this distinguished the Iraq project from other Iranian natural gas export plans, where domestic and international politics tend to be more complicated. For instance, in both the cases of Pakistan (ongoing) or the United Arab Emirates (in the early 2000s), some progress was made. Eventually, however, the projects fell short – at least thus far, in the case of Pakistan – due to domestic political disputes in Iran and its partner countries as well as complex international politics. A further natural gas export project, to Oman, has not yet moved beyond early planning consultations.

In light of the above, it does appear reasonable to assume that Iran might succeed in bringing on stream a second natural gas pipeline to Iraq in the near future. Even though predictions on timing are difficult, the very same factors that account for the success of the Bagdad pipeline do also apply to the Basra project, which is currently underway. At the same time, the launch of natural gas exports to Iraq is unlikely to have any effects on the politics hampering the Pakistan project. Similarly, it remains to be seen when consultations with Muscat will translate into progress on the ground, i.e. actual construction work on the subsea pipeline across the Gulf of Oman. Apart from these more political considerations as well as outstanding commercial questions, it is also an open question whether or not Iran will succeed in generating sufficient production above domestic demand that would allow for increasing natural gas exports in practical terms.

Total's return: a special case in many respects

Very shortly after the launch of natural gas exports to Iraq, Iran notched another very important success on its international energy agenda. In July 2017, Iran signed a \$4.8 billion contract with Total and CNPC. Under the deal, Total (50.1%), CNPC (30%), and National Iranian Oil Company's (NIOC) subsidiary Petropars (19.9%) formed a consortium to develop the eleventh phase of the giant South Pars natural gas field.

This marked Iran's first international energy contract after years of discussions surrounding the introduction of a new oil contract scheme, the Iran Petroleum Contract (IPC), as well as the implementation of the Iran nuclear deal, the JCPOA, in January 2016. It also marked the first contract involving a Western company in over a decade. Before, literally dozens of memoranda of understandings had been signed but did not move forward to implementation.

The Total/CNPC contract was greeted enthusiastically by Tehran. It was hoped the deal would open the door for other – especially Western – companies to follow. Speaking to the Iranian parliament following the

¹³ Shana: Iran starts Gas Export to Iraq, 24 June 2017.

¹⁴ Jalilvand, David Ramin: Iran's gas exports: can past failure become future success?, Oxford Institute for Energy Studies, Oxford, 2013.

conclusion of the contract in July 2017, Petroleum Minister Bijan Zanganeh noted: “The deal with Total increases Iran’s energy security and is likely to encourage other foreign companies to invest in Iran.”¹⁵

However, no further contracts with Western IOCs have yet been signed and the Total/CNPC deal seems to be somewhat of a special case.

As a start, Total has a rich and long history with both Iran and the complicated international politics accompanying Iranian energy. Before EU sanctions forced the company out of Iran in 2010 alongside all other European energy companies, Total had developed the second and third phases of the South Pars field (and Total was the last European company to leave Iran). Prior to the conclusion of the JCPOA, Total had openly voiced its criticism of the sanctions. In 2010, upon introduction of EU energy and finance sanctions against Iran, then-CEO Christophe de Margerie called the sanctions policy an “error”, saying civil matters and politics shouldn’t be mixed,¹⁶ Total further underlined its commitment to Iran by always keeping its office in Tehran open, unlike other IOCs.

Even before this, more than two decades ago, Total played a central role in opposing US sanctions against Iran. In 1996, the adoption of the Iran and Libya Sanctions Act (ILSA) by the US foresaw sanctions on any company making investments in Iran’s energy sector of more than \$20 million. This threatened Total’s planned engagement at the very same field the company seeks to develop (further) today, South Pars. In response to ILSA (as well as US sanctions against Cuba), the European Union introduced what became known as “EU Blocking Regulations”.¹⁷ Also in the same year, the EU initiated a dispute against the US at the World Trade Organization. While the dispute was filed over sanctions on Cuba, the EU’s charges occurred in the broader context of US extra-territorial sanctions affecting European trade with Cuba, Iran, and Libya together. The adoption of EU Blocking Regulations and the WTO dispute resulted in the Clinton administration waiving the application of US sanctions. At the time, this allowed Total to proceed with its engagement in Iran.¹⁸

Apart from its rich experience with the international politics related to Iranian energy, Total also distinguishes itself from other IOCs by being able to bring its own finance to Iran. A major – if not the greatest – obstacle to post-JCPOA investments in the Iranian economy is the lack of access to international finance. Technically, most legal restraints have been removed with the implementation of the JCPOA. De facto, however, all major international banks have thus far refrained from re-connecting with the Iranian economy as they continue fearing punitive measures from the US.

Being among the world’s largest IOCs, Total can afford the initial investment of \$1 billion from the company’s own cash reserves. Further, the involvement of CNPC ensures that the consortium can – if needed – turn to Chinese financial institutions to facilitate the transfer of funds to Iran. Thus, since Total is not relying on third-party finance, the reluctance of international banks to finance Iran-related investments does not hamper the company’s engagement at South Pars.

Last but not least, it is also very important to note that Total is investing in Iranian natural gas, not oil. The two hydrocarbon resources differ markedly when it comes to the political economy of Iranian energy. In the case of oil, large portions of Iranian production are exported. This generates billions in hard currency revenue for the Iranian state. Natural gas, in contrast, is almost exclusively consumed domestically (exports amount to less than 5% of production). In the past years, almost all increases in Iranian natural gas production have been absorbed by the home markets. The increased use of natural gas has certainly freed oil for exports.

¹⁵ Reuters: New Iran commission to oversee Total gas deal, 12 July 2017.

¹⁶ L’Orient Le Jour: Le président de Total estime que l’embargo sur les produits pétroliers visant l’Iran est une “erreur”, 2 July 2010.

¹⁷ Adopted in 1996 in response to a series of US sanctions against Cuba, Iran, and Libya, the EU Blocking Regulations ask European entities not to comply with the extra-territorial legislation of third countries.

For the current debate on Iran and EU Blocking Regulations, see Batmanghelidj, Esfandyar: Can Blocking Regulations Help Europe Protect Its Iran Business From Trump?, Bourse & Bazaar, 2018.

¹⁸ Oil & Gas Journal: U.S. waives sanctions on South Pars field, 25 May 1998.

But compared to oil, the connection between production and export revenue remains much weaker in the case of natural gas.

In light of the complex international politics surrounding Iranian energy, a case can be made that natural gas projects in Iran might be more acceptable to the US than oil. From the point of view of Washington, an advancement of natural gas projects does not immediately lead to greater hard currency reserves at the disposal of the Iranian government. Investments in Iranian natural gas therefore do not result directly in bolstering Iran's capabilities to finance, amongst other, activities in the Middle East, which the US seek to push back.

Obviously, the politics behind Total's engagement in Iran are conducted discretely. What is publicly known is, however, that Total's CEO acknowledged the central role of the US before concluding the South Pars contract. In February 2017, Pouyanne publicly stated his company would "not be able to work in Iran", should the Trump administration not renew sanctions waivers and withdraw from the JCPOA.¹⁹ After the conclusion of the South Pars contract, in November 2017, Total even went further and opened a government relations office in Washington with explicit reference to its engagement in Iran.²⁰ This move underlines the importance of taking into account US concerns with regards to the company's engagement in Iran.

All three factors – the rich history with Iranian energy, the independence from third-party finance, and the investment in natural gas rather than oil – make Total's return to Iran somewhat unique. Similarly, albeit differing in specifics, Iran's second international energy contract in the post-JCPOA era was also a special case.

Two firsts in one contract: Russia's Zarubezhneft and private Iranian Dana

On 14 March, NIOC, private Iranian company Dana, and Russia's state-owned Zarubezhneft signed a contract to jointly develop the Aban and West Payedar oil fields. Both fields are shared with Iraq. Under the deal, which was signed for a period of ten years, Zarubezhneft has a stake of 80%.²¹ With enhanced oil recovery (EOR) technologies provided by the Russian company, the project seeks to add 48,000 b/d to Iran's production from the two fields. Reportedly, Zarubezhneft also agreed to transfer technology and knowledge on EOR to its Iranian partners. In contrast to the Total/CNPC contract, the financial volume of the Zarubezhneft deal is substantially smaller. At around \$0.7 billion, the investment sum is less than 15% the size of the Total/CNPC commitment (which albeit has a duration of twenty years, not ten).²²

In at least two ways, the contract with Zarubezhneft is special. Firstly, this is Iran's first ever energy contract with a company from Russia. Previously, all international energy contracts were concluded either with Asian or (West-) European companies. Secondly, the inclusion of Dana marks the first time a private Iranian company has been awarded an international energy contract. While the nature of Dana's relationship with NIOC on the Iranian side of the project remains to be revealed, this nevertheless constitutes an important development.

Politically, the Zarubezhneft deal obviously defies US pressure on Iran. The details of the project are yet to become public – in particular, questions regarding the project's finance and the banks involved. At any rate, Zarubezhneft, and the Russian government controlling the company, seem unimpressed by the increasingly harsh stance the Trump administration has taken towards Iran.

From the Iranian point of view, awarding a contract to a Russian state-owned company perfectly fits into the country's ambition to diversify its international energy portfolio. With its two thus far concluded international contracts in the post-JCPOA era, Tehran has in fact diversified its position to the maximum, both in terms of energy carriers and partners. The two contracts do not only cover the development of oil and natural gas, but also bring Asian, (West-) European, and Russian companies to Iran. As such, Tehran is effectively

¹⁹ Reuters: Oil major Total says final Iran project investment decision depends on renewal of U.S. waivers, 9 February 2017.

²⁰ Reuters: France's Total opens Washington office as Iran risks loom, 3 November 2017.

²¹ The allocation of the remaining 20% between NIOC and Dana is unclear as of now.

²² Shana: Development tasks of the oil fields Aban and West Payedar became specified [in Farsi], 11 March 2018.

hedging its bets in light of the complex international politics. For both political and commercial reasons, Iran is keen to bring European IOCs back to the country. At the same time, Iran wishes to avoid being vulnerable again – as experienced in 2010, when EU sanctions forced all European companies to leave its energy sector. As such, for political reasons, Iran is also seeking to attract Chinese and Russian IOCs with close links to their respective governments.²³

Zarubezhneft's affiliation with the Russian government distinguishes its case from the approaches of European IOCs. State-owned or otherwise state-affiliated IOCs from Russia (and also China) might benefit from finding themselves in a different position when it comes to assessing political and economic risks.

Table 2: International upstream agreements since January 2017

<i>IOC</i>	<i>Iranian Partner</i>	<i>Field(s)</i>	<i>Month</i>	<i>Type</i>
OMV	Dana	Zagros	January '17	MoU
Gazprom	NIOC	Unspecified	March '17	MoU
Tatneft	NISOC	Shadegan	March '17	MoU
PNOC	NIOC	Darkhowin, Pazanan	May '17	MoU
ENI	NIOC	Darquain, Kish	June '17	MoU
Total/CNPC	POGC	South Pars	July '17	Contract
Gazprom Neft	OIEC	Azar, Changuleh	July '17	MoU
Zarubezhneft	NISOC	Rage Sefid, Shadegan	July '17	MoU
Toyo	Petropars	Salman	July '17	MoU
Lukoil	NIOC	Unspecified Caspian Sea	October '17	MoU
Gazprom	NIOC	Unspecified	November '17	Gas Road Map
Gazprom	IDRO	Unspecified	November '17	MoU
Rosneft	NIOC	Unspecified	November '17	Road Map
Offshore Resource Group	Khazar	Sardare Jangal	November '17	MoU
Berlanga	NIOC	Dalpari	November '17	MoU
Zarubezhneft	IDRO	Susangerd	February '17	MoU
ONGC Videsh	IDRO	Susangerd	March '18	MoU
Zarubezhneft	NIOC, Dana	Aban, West Payedar	March '187	Contract

Source: Author

Economic and political uncertainty

The significance of being able to take a different approach to risk shouldn't be underestimated: both the economics and the politics surrounding Iranian energy continue presenting multiple and complex risks.

Economically, the global oil market affects the risk-benefit calculus negatively when it comes to Iran. Global supplies remain ample and (traditional) producers are seeking ways to balance markets by taking supply from the market, rather than being keen to see additional barrels come into production. The extended 2016 OPEC-Russia agreement was able to increase oil prices to levels of around \$60/b. Yet this has only led (unconventional) supplies from the US to grow faster.

²³ On Iran's approach to diversify its international engagements, see Footnote 2.

Iranian oil could still be competitive in global markets due to low production costs – but above ground risks are mounting. Domestically, contracts in Iran’s energy sector remain complicated, despite the introduction of a new fiscal framework – the IPC. Political debates in Iran over the engagement with foreigners are still very tense.

For instance, the Total/CNPC contract faced stiff opposition from members of the Iranian parliament. Three particular points were subject to criticism. First, the fact that the contract’s details are secret was considered to possibly invite corruption. Second, the fact that Total is also in business with Qatar was deemed to risk that secrets and energy intelligence might possibly be forwarded to Qatar (especially regarding the South Pars/North Dome field, shared by Iran and Qatar). Third, a general concern was expressed towards French politics, which the critics consider to be hostile towards Iran.²⁴ Especially the later point, a general uneasiness with foreign and especially Western companies²⁵ continues complicating international engagements in the Iranian energy sector, regardless of the narrower commercial aspects.

Parallel to this, the change in the US presidency from Barack Obama to Donald Trump has dramatically increased uncertainty. Before and after his election, Trump has vowed to cancel the JCPOA, which in his words is the “worst deal ever” and an “embarrassment to the US”. To keep the US in the deal, the US government will need to renew several sanctions waivers each 120 or 180 days, respectively. Since assuming office, the Trump administration has always renewed sanctions waivers only very shortly before the respective deadlines. This approach confronted international businesses and banks with tremendous risks, making mid- to long-term planning extremely difficult. Arguably, under President Trump the US has deliberately kept a shadow of uncertainty over the JCPOA and the future of sanctions relief – seeking to prevent Iran from reaping the economic benefits of the JCPOA.²⁶

In January this year, Trump went one step further and presented the EU with an ultimatum. Europe was asked to “fix” what the US government considers to be “the disastrous flaws” of the JCPOA before 12 May, when the next renewal of sanctions waivers is due. Otherwise, the US would withdraw from the nuclear deal, Trump has said.²⁷ Similarly troublesome to those eager to engage in Iranian energy, Trump replaced his Secretary of State Rex Tillerson in March. Tillerson, a moderate in the Trump administration who reportedly sought to keep the US in the JCPOA, was replaced by Mike Pompeo, until then Director of the CIA and known Iran-hawk. Commenting on his decision, Trump specifically mentioned differences over the JCPOA as part of his motivation to replace Tillerson. Furthermore, later in March, US National Security Advisor Herbert Raymond McMaster was replaced by John Bolton, whose views on Iran (and other foreign policy issues) are even more hawkish.²⁸ All three events – the looming 12 May deadline and the ousters of Tillerson and McMaster with more hawkish replacements – have massively increased risks and uncertainty for any Iran-related engagement. The prospect of the US withdrawing from the JCPOA appears real.

The Trump administration’s harsh stance towards Iran made Europe adopt several steps in response. Since January, a series of EU-US consultations occurred, seeking to find ways to address the “flaws” of the JCPOA. Moreover, Europe has begun to engage in political talks with Iran on the situation in the Middle East. To protect European businesses from the extra-territorial application of US sanctions, EU diplomats have raised the prospect of (renewed) Blocking Regulations legislations. Further, seeking to bypass the US financial system, several EU member states, including France and Italy, have opened Euro-denominated credit-lines to facilitate investments in Iran.

While constituting important steps towards strengthening both Europe’s political and economic position, these measures are unlikely to fully counteract the large political uncertainty over Iranian energy. Especially with regards to finance, practically all major international banks depend on access to the US market in one

²⁴ BBC Persian: Iran’s contract with Total: what do the opponents say? [in Farsi], 6 July 2017.

²⁵ The widespread negative sentiment towards foreign entities is at least partly caused by negative historical experiences with foreign powers and their economic interests.

²⁶ See Esfandiary, Dina: Trump Uses Uncertainty Against Iran, Lobelog, 2018.

²⁷ Reuters: Trump issues ultimatum to ‘fix’ Iran nuclear deal, 12 January 2018.

²⁸ Bolton openly advocated regime change and military action.

way or another. Moreover, most international energy companies either conduct business and/or use products (components, software, etc.) originating in the US.

At any rate, the international politics surrounding Iranian energy will remain complicated in the months ahead. Should the Trump administration actually cancel the JCPOA, this will very likely dramatically hinder European engagement in Iran's energy sector. But even if the US stays in the deal, Washington's de facto policy of fomenting uncertainty regarding sanctions waivers will probably continue. For the time being, therefore, most IOCs – especially European – will likely proceed with what can be described as wait-and-see strategies, i.e. remaining committed to advancing negotiations with Iran but falling short of concluding binding contracts.

IRGC divestment from the energy sector: economic and political challenges

While the complexities of international politics are increasing, the domestic politics surrounding Iranian energy have seen interesting developments, too. Following public protests in several Iranian cities in late December 2017/early January 2018, Iran's Supreme Leader Ali Khamenei made a remarkable announcement. On 20 January, Defence Minister Amir Hatami told a local newspaper that Khamenei had instructed the Revolutionary Guards (IRGC) and other branches of the Armed Forces to divest from those economic activities "irrelevant" to their core purpose.²⁹

If followed-up by action, this would have significant implications for Iran's energy sector. During the 2005 to 2013 presidency of Mahmoud Ahmadinejad, the IRGC entered the energy industry and established a considerable presence there. Especially after 2010, the IRGC filled the void left behind by European IOCs, which were forced to end their engagements in Iran due to EU sanctions. In 2011, then-head of the IRGC's business conglomerate, Rostam Ghassemi, even became Petroleum Minister.

The government's relations with the IRGC became complicated in 2013, when Rohani took over from Ahmadinejad as President. On the one hand, the Rohani government always acknowledged that the IRGC presence in the Iranian economy is a reality. Rohani also acknowledged that the IRGC are linked to the more conservative political camp in Iranian politics, on which the government relies in no small part in order to operate in the Islamic Republic's complex political system. As such, Rohani was always eager, and continues to be, to find a *modus vivendi* with IRGC and the conservatives. In the energy sector, for example, this affected the adoption process of the new fiscal scheme, the Iran Petroleum Contract (IPC), and also resulted in the first IPC contracts being awarded to a holding under the supervision of Khamenei in October 2016.

On the other hand, from the outset of his presidency Rohani also sought to push back against the IRGC and reduce their economic profile. In December 2014, for instance, Rohani noted in what was considered to be a reference to the IRGC that a concentration of different types of power would unavoidably invite corruption.³⁰ A few weeks prior, a senior advisor to the president was more explicit and publicly criticised the fact that the government is effectively unable to control the IRGC's business activities.³¹ Since then, Rohani has pushed for increased government control over the IRGC's economic arm (as well the economic activities of the numerous religious foundations close to the conservatives). Parallel to this, Rohani reduced the volume of government contracts awarded to the IRGC.³² In December 2017, shortly before protests erupted in Iran, Rouhani published – for the first time ever – a detailed account of the extent to which funds from the government budget are being allocated to the IRGC and other institutions affiliated with the more conservative camps of Iranian politics. This move sparked an intensive public debate and also played a role in the protests later the same month.

²⁹ ISNA: Order of the leader on the economic activity of army and IRGC [in Farsi], 20 January 2018.

³⁰ BBC Persian: Rohani: when weapons, money, and media are at the disposal of one institution, this brings corruption [in Farsi], 8 December 2014.

³¹ Deutsche Welle: Akbar Torkān: our power does not reach Khatam al-Anbia [in Farsi], 21 September 2014.

³² Habibi, Nader: Rouhani vs. the IRGC Economy, Muftah, 2017.

By and large, though, attempts to enforce taxation on the IRGC and other de facto tax-exempt entities have failed thus far.³³ Similarly, the IRGC still maintain a prominent profile in the Iranian economy.

The economic activities of the IRGC in the energy industry and other sectors of the economy confront the Rohani government with formidable challenges. Conceptually and practically, they constitute an obstacle to Rohani's ambition to implement free market-oriented economic policies. In particular, the role of the IRGC hinders Iran's (re-)integration into the global economy as numerous international sanctions continue being applied against the IRGC. This slows the return of – especially, but not only – European companies. For them, due diligence-related challenges severely complicate the advancement of projects and particularly securing financing because international banks are mindful of potential penalties from the US financial system.

Against this backdrop, Supreme Leader Khamenei's statement from January raises the question whether there is a momentum now which could actually lead to a lesser profile of the IRGC in the Iranian economy. In any case, however, the process of IRGC divestment would face numerous challenges, both politically and economically.

Politically, the central question is which economic activities will actually be considered as "irrelevant" to the IRGC's purpose. Neither the constitution of the Islamic Republic nor IRGC's founding charter foresee any economic role for the guards. At the same time, upon invitation by the government, the IRGC may assume tasks beyond their charter if this is in the public interest, according to their founding charter.

In the upcoming months, defining which of the IRGC's economic activities are considered to be of public interest will certainly be subject to intensive debates between Iran's various political factions. Specifically, answers will need to be found on whether and, if so, the extent to which the IRGC should maintain a presence in certain sectors.³⁴ All this is aside from the question of whether or not the diverse business arms of the IRGC are actually willing to give up profits and actually divest from the economy.

Economically, the central question in the context of a potential IRGC divestment from the energy sector (and the broader economy) pertains to the buyers' side. While reliable data are rare, several estimates assume the IRGC controls a quarter or more of the Iranian economy. The IRGC's complex business conglomerate spans several hundred companies.

Considering the extensive economic reach of the IRGC, it remains to be seen who might actually be able to take over, i.e. purchase, businesses from the IRGC, provided the latter would be willing to divest. While stronger than in many countries of the region, Iran's private sector is still comparably weak. It appears unlikely that the private sector has the financial means to absorb a complete IRGC divestment. Foreign ownership, meanwhile, continues to be highly politically problematic in Iran. In the energy sector, several private Iranian companies are operating, including in upstream. Yet, as in the overall economy, it is questionable whether private companies have the financial and operational resources to fully take over IRGC businesses. When it comes to IOCs, both in oil and natural gas, the Iranian strategy focuses on increasing production rather than replacing local – i.e. IRGC – companies.

These factors suggest that IRGC divestment, if it actually were to be realised, would be a slow and gradual process at best. In a sense, the process already has begun in recent years as the Rohani administration did in fact already lower the number of government contracts awarded to the IRGC. Assuming Rohani will seek to continue bringing down the number of public assignments given to IRGC-affiliated companies seems reasonable. At the same time, it remains to be seen if and when the IRGC will divest from businesses already under their control. Thus, even in a best-case scenario, it would likely take years before the IRGC would have markedly reduced their involvement in the Iranian economy and, as such, in the energy sector.

³³ See, for example, Bloomberg: Rouhani Puts Tax Squeeze on Iran's Guards in Power Struggle, 2 February 2015.

³⁴ One Iranian school of economic thought, close to the conservatives, argues Iran shall reduce international (inter-) dependencies as much as possible and promote autonomy and self-sufficiency instead. In this logic, the presence of the IRGC in certain strategic sectors (e.g. energy, infrastructure, telecommunications etc.) would contribute to this end.

Moving forward, despite challenges

By and large, the numerous domestic and international challenges discussed here will continue limiting the growth of Iran's energy industry. Nevertheless, there is a positive momentum not seen in years. After more than a decade of announcements and negotiations, the actual launch of natural gas exports to Iraq and the conclusion of oil and natural gas contracts with Chinese, French, and Russian companies mark significant positive developments. These outcomes remain below the hopes and expectations of Iranian officials and executives expressed in the context of the IPC and the JCPOA. But they do constitute first important successes on Iran's journey to re-connect its industry with international markets.

Iran is keen to build on these developments. This is reflected, for example, by the recent statement of Petroleum Minister Zanganeh, who noted that there is little appetite in Tehran to indefinitely extend or even expand OPEC production cuts. After having gradually increased oil production capabilities, Iran would now like to market spare volumes that are currently held back under the extended OPEC-Russia deal.³⁵

At any rate, the future of relations between Iran and the global energy industry will depend to a large extent on how the standoff over the JCPOA unfolds. As long as Tehran abides by the JCPOA, it does not appear the EU will bring back its energy and financial sanctions against Iran. Thus, despite predictions by some analysts to this end³⁶, it seems unlikely that a withdrawal from the JCPOA by the US would directly translate into bringing Iranian oil exports down dramatically – even though some US partners, especially in Asia, might partly cut back voluntarily some of their imports of Iranian oil.

Still, a US withdrawal from the JCPOA and the potential re-imposition of extra-territorial US sanctions would hit Iran's energy sector hard. In light of potential penalties on the US energy and financial markets, it would certainly result in European IOCs effectively not being able to invest in the country. Possibly, a collapse of the JCPOA would also force Total to end its Iran business or prevent the second phase of Total's investment to proceed.³⁷

Arguably, the way in which events on the global stage develop will also have direct implications for the domestic political debate surrounding Iranian energy. The less international companies commit to Iran's energy industry, the weaker the position of President Rohani will be in his attempt to reduce the economic profile of the IRGC.

³⁵ Wall Street Journal: OPEC Divided on the Right Price for Oil, 11 March 2018.

³⁶ Platts: US foreign policy turn could take 1.4 million b/d off global oil market: analysts, 15 March 2018.

³⁷ Total announced it would apply for a waiver from the US, should Washington withdraw from the JCPOA. Whether such a waiver would be granted, however, is unclear.