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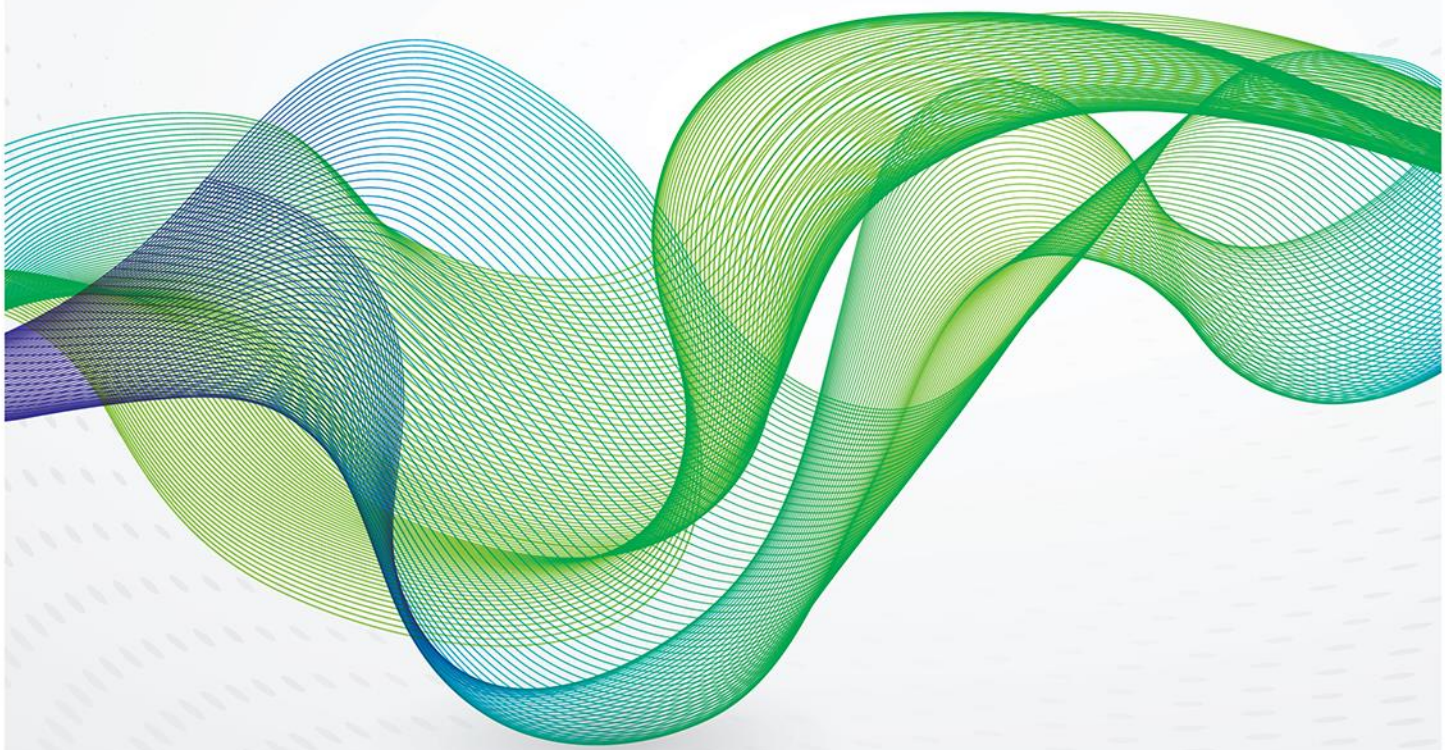
Back to Square One?
Iranian Energy after the Re-Imposition of US Sanctions



OXFORD ENERGY COMMENT

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Introduction

Once more, Iran is confronted with sanctions. Following the May 2018 announcement to exit the nuclear deal (the Joint Comprehensive Plan of Action, JCPOA), the US gradually re-imposed all unilateral nuclear sanctions against the country. By November 2018, Washington's sanctions regime was in full force again. Similar to the situation before the conclusion of the JCPOA in 2015, the energy sector is among the key targets of sanctions. Among others, US sanctions seek to prevent foreign investments, ban Iranian energy exports, and curtail the government's access to revenue from energy exports.

Sanctions have profound effects on the Iranian economy in general and the energy sector in particular. Even before sanctions entered into force, international oil companies (IOCs) abandoned the country and Tehran's oil exports began to fall sharply. From an average 2.5 mb/d in 2017, crude oil and condensate exports temporarily declined to as low as 1.0 mb/d in November, before recovering to 1.5 mb/d in February (amid the effect of sanctions waivers granted to several importers of Iranian oil, see Tables 1 and 2). The re-imposition of US sanctions marks a turning point, reversing the complicated and gradual return of Iran to global energy markets following the conclusion of the nuclear deal in 2015.

The very high degree of sensitivity to US sanctions on the part of IOCs and importers of Iranian oil is central to explaining the fallout from sanctions. Confronted with the prospect of harsh penalties by the US, all IOCs have withdrawn from Iran. Key buyers of Iranian oil have cut back their imports from Tehran, in spite of earlier government pledges to maintain trade with Iran. Against this backdrop, especially in Europe, a gap has emerged between the political ambition to continue importing Iranian oil and commercial realities on the ground, i.e. sensitivity to US sanctions. Also in Asia, key importers reduced their purchases from Iran substantially, which played an important role in bringing down Iran's oil exports. Notwithstanding the overall trend, geographical differences persist as sanctions affect Iran's energy exports much less at the regional level. Arguably, this is the case as imports from Iran are playing a bigger role in the energy security of neighbouring countries, Iraq in particular, but also Turkey.

For Iran, the consequences of sanctions are profound. Both the economy and the government budget have been hit hard. Meanwhile, political quarrels undercut the country's mitigation efforts, despite some economic resilience. The energy sector is obviously affected severely by sanctions, albeit to varying degrees. On one side, the impact is dramatic. The post-JCPOA recovery of oil exports and production has been undone. With respect to upstream capabilities, on the other side, the impact of sanctions has been rather moderate in the sense that Tehran did not succeed anyway in making IOCs engage meaningfully in Iran after the conclusion of the JCPOA. Matters will largely remain the same insofar as local companies will continue to play the central role in running the industry. In the mid- to long-run, due to sanctions, the Iranian energy industry will not only remain below its potential relative to its reserve base. Iran will also face a strategic setback as it is losing market shares while the oil market is becoming increasingly competitive. In this context, Iran is further disadvantaged as it cannot join competitors like Saudi Arabia or the UAE in investing and making acquisitions in Asian downstream markets with the objective of securing future demand.

Amid the re-imposition of US sanctions, this comment reviews recent developments in Iranian energy. An assessment of the sanctions' immediate impact is followed by an analysis of the fallout from sanctions among the main importers of Iranian energy. Thereafter, the political and economic consequences for Iran are studied, before attempting to assess what is ahead as the industry attempts to cope with sanctions.

Sanctions re-imposed: reversing Iran's return to international energy

After Washington's May 2018 announcement to withdraw from the JCPOA, the US gradually re-imposed several sets of sanctions against Iran. By 5 November 2018, the US sanctions regime was in full force again. In an attempt to impose 'maximum economic pressure'[1] on the country, Washington has been targeting the Iranian energy industry and other sectors of the economy, including finance, logistics, and trade. Sanctions also apply to energy trade and economic relations between Iran and third countries. As for the energy sector, the US seeks to prevent the international sale of Iranian oil, oil products, and natural gas (notably, unlike before the JCPOA, the US are now also sanctioning the export of condensate and natural gas). Repeatedly, US officials vowed to bring Tehran's oil exports to 'zero'. Parallel to this, Washington also seeks to block international investments into the industry.[2]

Shortly before implementation of sanctions, on 2 November 2018, Washington granted temporary sanctions waivers, so-called significant reduction exemptions (SREs), to eight importers of Iranian oil: China, Greece, India, Italy, Japan, South Korea, Taiwan, and Turkey. These countries were allowed to continue importing oil from Iran for a period of 180 days, albeit at substantially reduced levels (see Table 1). In addition, Washington also granted a waiver to Iraq to continue importing natural gas and electricity from Iran (an initial 45-day waiver granted in November was renewed for 90 days on 21 December).

By and large, whether by design or chance, or a combination of both, Washington is entertaining a policy of uncertainty with regards to sanctioning Iran. On the one hand, US policy is straightforward: 'Maximum pressure means maximum pressure', is how US Secretary of State Mike Pompeo has put it.[3] On the other hand, there has always been a high level of obscurity. Before May 2018, the US long kept a shadow of uncertainty over the fate of the JCPOA. Thereafter, until three days before energy sanctions were re-imposed in November 2018, it was not clear if Washington would grant waivers. Today, it remains to be seen whether and to what extent they will be renewed in May.

The re-imposition of US sanctions is a turning point, reversing the (complicated and gradual) return of Iran to international energy. Throughout 2018, all IOCs abandoned the country and Tehran's oil sales fell sharply. Crude oil exports dropped to 1.5 mb/d in February. Temporarily, in November 2018, they even fell to as low as 1.0 mb/d. This marks huge losses against the 2017 export average of 2.5 mb/d. Iranian oil exports fell to levels seen during the pre-JCPOA sanctions years (see Table 2). Worse for Iran, this might not be the end. In the shadow of falling exports, Iran's production of oil also declined – by some 1.1 mb/d compared with the 2017 average (see Table 3). In comparison with the decline under pre-JCPOA sanctions in 2012, Iran's oil production has fallen significantly faster this time (see Figure 1).

Table 1: Significant reduction exemptions (SREs) for importers of Iranian oil

Country	China	India	S. Korea	Japan	Turkey	Greece	Italy	Taiwan
kb/d	360	300	200	n/a	60	n/a	n/a	n/a

SREs will expire after 4 May 2019.
Source: Various media reports.

[1] The White House: Statement from the President on the Reimposition of United States Sanctions with Respect to Iran, Washington, DC: 6 August 2018. https://translations.state.gov/2018/08/06/statement-from-the-president-on-the-reimposition-of-united-states-sanctions-with-respect-to-iran/

[2] For an overview on the sanctions' regime, see Batmanghelidj, Esfandyar and Geranmayeh, Ellie: 'America's latest wave of Iran sanctions', European Council on Foreign Relations, Berlin: 6 November 2018. www.ecfr.eu/article/commentary_americas_latest_wave_of_iran_sanctions

[3] US Department of State: Briefing on Iran Sanctions, Washington, DC: 2 November 2018. www.state.gov/secretary/remarks/2018/11/287090.htm

Table 2: Iran's crude oil and condensate exports after the re-imposition of US sanctions (kb/d)

	China	India	S. Korea	Japan	Turkey	EU (total)	Others/ unknown	TOTAL
FEB-19	558	261	215	271	144	-	21	1,470
JAN-19	368	230	220	158	97	31	329	1,433
DEC-18	307	303	27	-	33	-	432	1,100
NOV-18	581	133	-	-	-	-	241	1,023
2017 av.	622	471	361	170	244	624	26	2,518

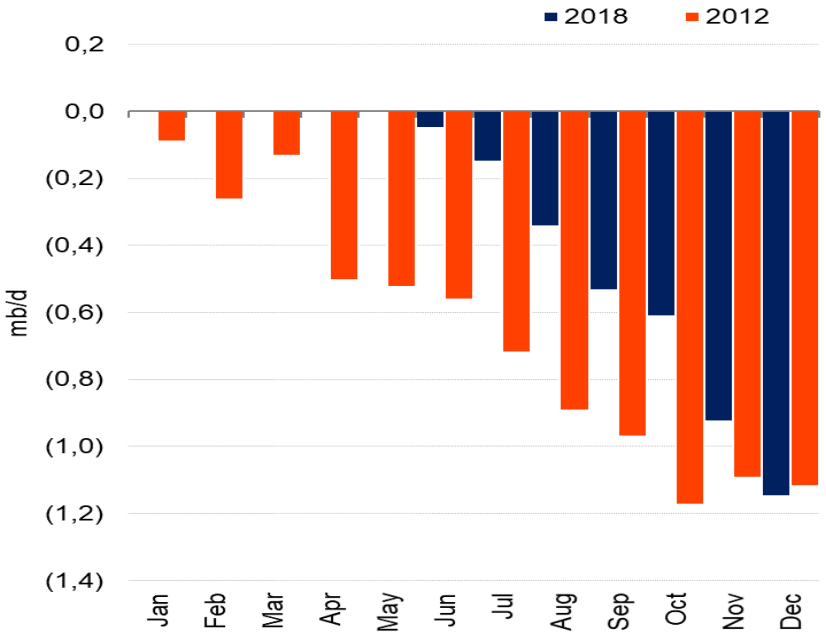
2017 is used as reference as Iran increased oil exports in early 2018 in anticipation of the US exit from the JCPOA.
Source: MEES[4] (for 2017); TankerTrackers[5]

Table 3: Iran's oil production (kb/d)

2017	2018	2Q18	3Q18	4Q18	Dec 18	Jan 19	Feb 19
3,813	3,553	3,818	3,603	2,982	2,724	2,731	2,743

Source: OPEC (based on secondary sources)[6]

Figure 1: Decline of Iran's oil production in 2012 and 2018



Source: OIES

[4] MEES: 'Iranian Oil Exports Hit Pre-Sanctions Levels As European Share Grows', 9 February 2018. www.mees.com/2018/2/9/transportation/iranian-oil-exports-hit-pre-sanctions-levels-as-european-share-grows/0fecc010-0dbc-11e8-9c19-95e019b95c5e
[5] TankerTrackers.com: various reports, 2019.
[6] OPEC: OPEC Monthly Oil Market Report, Organization of the Petroleum Exporting Countries, Vienna: 14 March 2019. www.opec.org/opec_web/en/publications/338.htm

The fallout from sanctions: globally massive, regionally moderate

IOCs and importers of Iranian oil are showing a high degree of sensitivity to US sanctions. The risk of penalties from the US, which could comprise multi-billion US-Dollar fines or exclusion from the US economy and financial system, has led to a large-scale abandoning of economic ties with Iran. This development occurred despite pledges on behalf of the governments of key importing countries to maintain oil imports. In Europe in particular, a gap emerged between the political ambition to maintain economic ties with Iran (in an attempt to save what was left of the JCPOA) and commercial reality. Meanwhile, in China, India, and other Asian countries, importers also showed a high degree of sensitivity to sanctions risks. On the ground, refiners, traders, shippers, insurers, and others attached great importance to sanctions risks and consequently divested from Iran.

As much as the overall trend reflects a substantial divestment from Iran, important geographical differences can be observed. At the regional level, Iran's energy exports are affected much less by sanctions. Playing a more important role for their energy security, neighbouring countries are continuing with the import of Iranian oil, gas and electricity. This is especially the case for Iraq and Turkey, but also for other neighbouring countries (albeit with smaller volumes). The overall fallout from sanctions remains huge. However, the continuation of energy trade at the regional level slightly cushions the impact of sanctions.

Europe's gap between political ambition and commercial reality

In Europe, there is a striking gap between the EU's stated political will and commercial realities on the ground. Politically, the EU seeks to continue trade with Iran in an attempt to safeguard the JCPOA, including oil imports. Both the EU and leading member states vowed to push back against US sanctions after Washington plainly disregarded European calls for an EU-wide sanctions waiver.[7] In August 2018, the EU introduced its so-called Blocking Statute, which asks European companies not to follow US sanctions. Economically, however, this has had no effect at all. European oil imports collapsed even before implementation of US sanctions in November 2018. Italy and Greece did not make use of their SREs. By February, no Iranian oil reached the EU anymore. Iran lost the European market, which accounted for some 25 per cent, or 624 kb/d, of its exports in 2017. Similarly, all European IOCs withdrew from Iran, including France's Total which was denied an individually requested waiver for the continuation of its engagement at South Pars.[8]

In January 2019, in an attempt to revive trade with Iran, Europe launched a so-called Special Purpose Vehicle, the 'Instrument in Support of Trade Exchanges' (INSTEX). INSTEX is designed to act as a ring trade-clearing house.[9]

It is highly unlikely, however, that INSTEX will help Europe and Iran to restart oil trade with meaningful volumes, let alone allow for engagements by European IOCs in Iran. Several important operational issues are still unclear.[10] Next to this, for a number of (partly interrelated) reasons, the impact of INSTEX in its current form will remain rather limited.

[7] BBC: Iran nuclear deal: 'US rejects EU plea for sanctions exemption', 16 July 2018. www.bbc.co.uk/news/world-us-canada-44842723

[8] *Financial Times*: 'Threat of US sanctions pushes France's Total out of Iran', 20 August 2018. www.ft.com/content/6baba178-a459-11e8-926a-7342fe5e173f

[9] Under INSTEX, EU exporters should receive renumeration not from their Iranian trade partner but from EU importers. For this system to work, Iran would need to create its own INSTEX-like institution, which would bring together Iranian exporters and importers and mirror the respective transactions. EU-Iranian trade is intended to work without financial transactions between the EU and Iran. In its initial phase, INSTEX will only be open for EU exports of humanitarian goods to Iran. The EU made the subsequent expansion to other goods and services conditional on the successful adoption and implementation of financial reforms by Iran (esp. pertaining to the Financial Action Task Force on Money Laundering, FATF). See *Financial Times*: 'Can Europe''s new financial channel save the Iran nuclear deal?', 4 February 2019. www.ft.com/content/bd5a5046-27ad-11e9-88a4-c32129756dd8

[10] On the European side, it is uncertain how long it will take for INSTEX to become operational (several months at the minimum). Similarly, the exact mechanism linking exporters and importers is yet to be developed/revealed. Also, will Iran establish an INSTEX-like institution of its own and, if so, when and how long would it take for it to become operational?

First, in the foreseeable future, INSTEX will only cover humanitarian items, i.e. a very small portion of European–Iranian trade. It is not clear if Iran will be permitted to export oil in exchange for EU humanitarian exports in the initial phase of the scheme. Agricultural and pharmaceutical products only accounted for some 15 per cent (or €1.6 billion) of the EU's total exports to Iran in 2017 (the year before the US exit from the JCPOA). As for Iran, agricultural and pharmaceutical goods represented less than 5 per cent (or €468 million) of exports to the EU.[11] Under the current design, therefore, some 85–95 per cent of European–Iranian pre-sanctions trade are not covered by INSTEX.

Second, INSTEX requires a more or less even trade balance, which seems unattainable due to sanctions. The envisaged ring trade can only function meaningfully when exports from both sides roughly match each other in terms of financial volume. In 2017, with imports at €10.1 billion and exports at €10.8 billion, EU trade with Iran was relatively balanced. Since then, however, numerous European companies have abandoned the Iranian market amid some form of US exposure and sanctions-related risks. Some of these companies might reconnect with Iran. But the vast majority will likely not do so due to US sanctions. There is a huge imbalance between declining European exports to Iran on the one hand and the politically desired higher volume of Iranian oil exports[12] to Europe on the other. Even if INSTEX will cover more than just humanitarian trade at some point in the future, EU exports to Iran will remain significantly below 2017 (i.e. pre-US sanctions) levels. As such, the imbalance will remain and INSTEX will not help Iran to recover oil exports to Europe to pre-sanctions levels.

Third, INSTEX will not help Iran to repatriate oil revenue. As INSTEX does not offer a financial channel, access to oil revenue remains problematic for Tehran. By increasing access to European products, INSTEX can contribute to improving Iran's economic situation (especially if the scheme is expanded beyond humanitarian trade). Nevertheless, INSTEX does not offer Iran a level of financial autonomy similar to having direct access to oil revenue.

Fourth, on the receiving end of Iranian oil exports, INSTEX does not eliminate sanctions-related risks. Importing Iranian oil remains a risky business. The US already threatened to sanction INSTEX and entities involved with it, should the scheme violate US sanctions.[13] INSTEX might create room for some individual traders to reconnect with Iran. But for the time being, there is no mechanism in sight that could effectively eliminate sanctions-related risks for entities with US exposure, i.e. for the vast majority of European oil importers. There is a possibility that the US will consent to allowing Iranian oil exports to Europe under INSTEX so that Iran can pay for the imports of humanitarian goods (somewhat reminiscent of the Iraqi Oil-for-Food Programme in the 1990s). However, the overall volume of oil exports would still be modest (very roughly: calculating with average 2017 data, oil exports would amount to around 109 kb/d or 17 per cent of Iran's oil exports to the EU).[14]

As a result of these factors, the gap between the EU's political ambition and commercial realities on the ground will continue to persist. Occasionally, refiners or importers might be willing to use INSTEX, provided the scheme will specifically allow for this. Overall, however, INSTEX will not eliminate sanctions-related risks for European buyers of Iranian oil, even if the scheme is eventually expanded beyond humanitarian trade. There might be opportunities for entities from third countries to participate in INSTEX, namely: Asian importers of Iranian oil. Thereby, INSTEX might contribute to allowing for

Moreover, it is not known at which exchange rate INSTEX will calculate transactions. With a multiple-tier exchange rate system in Iran, it will be challenging to define a straightforward mechanism that could transparently facilitate the type of ring trade envisaged by INSTEX. Likewise, there is uncertainty as to when non-EU countries will be allowed to join INSTEX.

[11] European Commission: 'European Union, Trade in goods with Iran', Directorate General for Trade, Brussels: 2018. www.clustercollaboration.eu/sites/default/files/international_cooperation/eu_trade_in_goods_with_iran.pdf

[12] In 2017, petroleum and petroleum products accounted for 88.7 per cent of EU imports from Iran. See above.

[13] Bloomberg: 'U.S. Threatens Retaliation If Companies Tap Iran Trade Vehicle', 8 February 2019. www.bloomberg.com/news/articles/2019-02-08/u-s-threatens-retaliation-if-companies-tap-iran-trade-vehicle

[14] In 2017, the financial value of the EU's agricultural and pharmaceutical exports to Iran was merely only 17.5% per cent of the import value of Iranian petroleum and petroleum products. In 2017, the EU's average imports of Iranian oil were 624 kb/d. See above.

Iranian oil exports to other destinations. This, however, is a long-term prospect at best. In any case, as far as Europe and Iran are concerned, INSTEX will likely not make much of a difference and Iran's oil exports to the EU are set to remain marginal under sanctions.

Asia: showing sensitivity to sanctions as well

Other trading partners of Iran are also treading carefully. When it comes to energy, the idea that Iran possesses an Eastern alternative to trade with the West (i.e. Europe) tends to be exaggerated. On the contrary, sanctions are also greatly complicating Iran's trade with the East. Over the past months, Tehran's trading partners in Asia have shown great sensitivity to US policy. They are neither coming to Iran's rescue with regard to oil trade, nor do they fill the void left behind by the departure of European companies.

At best, the engagement of Asian powers with Iran can be described as reluctant. In the case of China and India, the likely rationale is to ensure future access to Iran's vast hydrocarbon reserves, especially natural gas. Meanwhile, due to their respective ties with the US, Beijing and New Delhi are not risking too much at the moment. Commercially, Asian countries are benefitting from the situation as US sanctions leave Tehran in a weak negotiating position.

China, Iran's biggest trading partner and single largest oil importer, has followed US sanctions by and large. Beijing was granted an SRE by Washington to continue importing up to 360 kb/d until May. This volume is equal to some 58 per cent of China's average 2017 imports of Iranian crude oil and condensate, which amounted to 622 kb/d. In other words, Washington asked the People's Republic to cut imports of Iranian oil by more than 40 per cent upon implementation of the sanctions' regime on 5 November 2018. After falling to as low as 307 kb/d in December 2018, China's imports of Iranian oil recovered to 558 kb/d in February.

China is similarly reluctant to engage with the Iranian energy sector. In December 2018, CNPC suspended investment at the South Pars natural gas field (phase 11). Effectively, and contrary to the consortium contract, the Chinese company did not take over the share of Total, after the French company was forced to quit the project amid US sanctions.[15] In Iran, this brought back memories of a troubled past, when Iranian energy officials frequently complained about the poor performance of Chinese companies and even terminated contracts with them.[16] This fear was somewhat reinforced even when China approached Iran with a cooperation proposal. In January, Sinopec offered to invest $3 billion in the further development of the Yadavaran oil field, where the Chinese company is already engaged. However, the offer came with tough terms,[17] which suggests Beijing is keen to exploit Iran's weak position once more.

Beijing has reduced its economic ties with Iran beyond energy. CNPC-owned Bank of Kunlun, which assumed a central role in facilitating oil payments between China and Iran during the sanctions years before the JCPOA, announced in November 2018 that it would suspend all Iran operations. A month later, the bank suggested it would handle payments for Iranian purchases of humanitarian goods (which would be in line with US sanctions). However, the financial volume of Iran's purchase of humanitarian items from China is comparatively small, at $900 million in 2017. Overall, Chinese–

[15] Reuters: 'CNPC suspends investment in Iran's South Pars after U.S. pressure: sources', 12 December 2018. https://uk.reuters.com/article/us-china-iran-gas-sanctions/cnpc-suspends-investment-in-irans-south-pars-after-u-s-pressure-sources-idUKKBN1OB0RU

[16] Before conclusion of the JCPOA, Iranian energy officials complained about the poor performance of Chinese companies. In 2012, in light of threats by Tehran to terminate its license, CNPC de facto abandoned work at the very same South Pars phase. A year later, in 2013, then-incoming Oil Minister Bijan Zanganeh formally replaced CNPC with local company Petropars. In 2014, Tehran cancelled a CNPC contract for the Azadegan oil field.

[17] Apparently, Sinopec seeks to use Chinese-made equipment and faster-than-normal reimbursement (during the test phase, before actual production). See *Wall Street Journal*: 'China Offers Iran $3 Billion Oil-Field Deal as Europe Halts Iranian Crude Purchases', 17 January 2019. www.wsj.com/articles/china-offers-iran-3-billion-oil-field-deal-as-europe-halts-iranian-crude-purchases-11547743480

Iranian trade declined by a staggering 70 per cent between October and December 2018, from $1.2 billion to $400 million.[18]

Similar to China, the second largest buyer of Iranian oil, India, has substantially reduced oil purchases from Tehran. By February 2019, New Delhi's imports shrunk to 261 kb/d. This marks a decline of 45 per cent compared with average imports of 471 kb/d in 2017. At the same time, the volume is still notably below India's SRE of 300 kb/d. While continuing to import Iranian oil, India is also exploiting Iran's weak position. New Delhi has enforced tougher terms for Iran than during the pre-JCPOA sanctions years. As well as free shipping and a 60-day credit period, payments will be made exclusively in rupees into escrow accounts, with half of Tehran's revenue being earmarked for Iran to purchase Indian goods. Before the JCPOA, Iran and India ran a mixed payment scheme (45 per cent rupees with escrow accounts and 55 per cent in euros through international banks).[19] The economic damage to Iran is not confined to the sale of oil under less favourable terms. In February, using parts of its rupee-denominated savings, Iran had to accept a premium for the purchase of Indian sugar.[20]

Beyond oil trade, it appears unlikely that India will commit to investments in the Iranian energy sector. For several years, New Delhi and Tehran have held talks over a potential engagement of India's ONGC Videsh at the Farzad B natural gas field. Even before the US exit from the JCPOA, pricing issues prevented the project from proceeding. Negotiations over the gas field even led to a worsening of Indian–Iranian relations. After Iran suggested it might award Farzad B to Russia's Gazprom, New Delhi ordered state-owned Indian refineries to cut imports of Iranian oil. While talks between Iran and India over the field continue, an Indian engagement is unlikely under the current US sanctions regime.

Japan and South Korea have continued to import Iranian oil, albeit at reduced levels and in close coordination with the US. In the second half of January, Japanese refiners resumed imports of Iranian oil after resolving financial regulatory issues in consultation with the Japanese and US governments. The country's banks are set to proceed, although handling payments will be 'mainly' in yen.[21] The government of Japan backs insurance for oil shipments from Iran. Ahead of the re-imposition of sanctions in November 2018, the US granted Japan an SRE (of a publicly unknown volume). Japan's imports of Iranian oil in February amounted to 271 kb/d.

Similarly, South Korea also resumed oil imports from Iran in the second half of January. South Korea had suspended taking Iranian condensate in September in light of both the looming re-imposition of US sanctions and negotiations with Tehran over new contracts (Iran demanded higher prices as domestic demand increased amid to the expansion of condensate refining capacity in Iran). After several rounds of consultations with Washington, Seoul obtained an SRE to import up to 200 kb/d of Iranian condensate.[22] In February, South Korea imported 215 kb/d.

As for Russia, relations between Moscow and Tehran have warmed in recent years over shared geopolitical interests. In energy, however, both sides remain competitors and Russia moved to benefit from the current US sanctions regime at the expense of Iran. In principle, Moscow could offer Iran relevant technology (both regarding enhanced oil recovery and in natural gas). But there is little interest on the Russian side to assist a potentially serious rival in improving its capabilities.

Rather than helping Iran, Russia has increased oil production parallel to the decline in Iranian oil exports. As the grades of Russia's oil are similar to Iran's, Moscow has thereby contributed to replacing Iranian oil globally. State-owned Zarubezhneft – along with Total and CNPC, one of only

[18] Batmanghelidj, Esfandyar: 'When the Sun Sets in the East: New Dynamics in China-Iran Trade Under Sanctions', *Bourse & Bazaar*, London: 2019. https://www.bourseandbazaar.com/research-1/2018/1/11/special-report-on-china-iran-trade-under-sanctions

[19] Bloomberg: 'India Plans to Pay Five Iran Banks for Oil Purchases', 18 December 2018. http://isicrc.org/uncategorized/india-plans-to-pay-five-iran-banks-for-oil-purchases

[20] Reuters: 'Iran buys Indian sugar for first time in five years to overcome U.S. sanctions', 26 February 2019. www.reuters.com/article/us-india-iran-sugar-exlusive-idUSKCN1QF0J8

[21] S&P Global Platts: 'Japan banks set to resume Iran oil transactions after regulatory clearance: sources', 15 January 2019. www.spglobal.com/platts/en/market-insights/latest-news/oil/011519-japan-banks-set-to-resume-iran-oil-transactions-after-regulatory-clearance-source

[22] Reuters: 'SK Innovation CEO says S.Korea to restart Iran oil imports in Jan-Feb', 10 January 2019. www.reuters.com/article/skinnovation-iran-idUSL3N1ZA2KI

three international companies to have signed a contract in Iran's energy sector after JCPOA implementation – transferred its stakes in the Aban and West Paydar oil fields to Promsirieimport (another Russian state-owned enterprise). Effectively, Russia cancelled its investment in Iran as it seems highly unlikely that the project will proceed. An Iranian–Russian oil barter arrangement, which nominally foresees Iranian oil deliveries of 100 kb/d in exchange for Russian goods and services, is only used occasionally – largely due to the fact that in Iran Russia's products are not in high demand. A potential swap deal under which Russia would market Iranian oil globally faces substantial commercial challenges. Infrastructure costs for the transfer of oil from Iran's South across Iran and the Caspian Sea to Russia would be tremendous. Also, the method of reimbursing Iran is unclear. In natural gas, Russia's approach has traditionally been driven by the ambition to keep Iranian production from entering the European pipeline and global LNG markets. Risks related to US sanctions only add to this. Occasionally, Russia might consider assisting Iran in advancing regional pipeline trade (which would be in line with the general Russian approach).[23] Overall, though, the likelihood of Russian investments in Iran is extremely low.

Regional countries: against the global trend

In comparison with Asia or Europe, the situation is somewhat different when it comes to regional importers of Iranian oil, gas and electricity. Tehran's supplies matter much more to the energy security of Iran's neighbouring countries. For them, it has proven difficult to find (commercially viable) alternatives to the import of Iranian oil, natural gas, and/or electricity. In addition to this, broader political and economic entanglements come into play, which provide incentives for neighbouring countries to maintain a certain level of constructive relations with Tehran.

Of all countries, Iraq has committed most to continuing imports of Iranian energy. Supplies from Iran are vital for the energy security of Iraq and even for the stability of the country. Iraqi cities suffer from chronic blackouts. After Iran temporarily suspended gas deliveries to Iraq in the summer of 2018, electricity shortages played an important role in sparking violent public protest. Iran supplies its neighbour with growing volumes of both electricity and natural gas (for subsequent electrification). Annual imports of electricity amount to 1,000 MW/y via several transmission lines. Natural gas is imported from two pipelines (one to the Baghdad area and one to Basra) with a combined volume of around 45 mcm/d in early February (if maintained, 16.5 bcm/y). Ahead of the re-imposition of US sanctions, Baghdad received a 45-day waiver, which allowed the country to continue imports of electricity and natural gas from Iran. On 21 December 2018, the waiver was renewed for 90 days. A small-scale oil-swap deal was ended by Baghdad.[24] Moreover, due to sanctions, Iraq has been unable to settle bills for the import of energy from its neighbour. According to Iranian Oil Minister Bijan Zanganeh, the outstanding debt amounts to $2 billion.[25]

Iraqi leaders have expressed opposition to US policy towards Iran in strong terms.[26] Electricity Minister Luay Al-Khatteeb maintained that 'It's impossible […] stopping importing gas and there is no alternative'.[27] In February, some three months after the re-imposition of US sanctions, Iran and Iraq even announced their intention to deepen cooperation on electricity.[28] Parallel to this, the governors of both countries' central banks announced that a finance mechanism had been agreed to settle Iraq's

[23] Gazprom is studying the prospects of delivering Iranian gas to Pakistan and India.
[24] Nominally for 30 to 60 kb/d, but with substantially lower volumes on the ground. See S&P Global Platts: 'Iraq-Iran oil ties hampered by US sanctions', 5 February 2019. www.spglobal.com/platts/en/market-insights/latest-news/oil/020519-iraq-iran-oil-ties-hampered-by-us-sanctions
[25] *Financial Tribune*: 'Iran Oil Minister Briefs the Press on Key Oil Issues', 5 February 2019. https://financialtribune.com/articles/energy/96573/iran-oil-minister-briefs-the-press-on-key-oil-issues
[26] President Barham Salih called upon the US not to 'overburden Iraq with your own issues' and Prime Minister Adel Abdul Mahdi noted that 'Iraq will not be part of the sanctions regime against Iran'. See *Financial Times*: 'Iraq caught in crossfire as Trump upends US policy in Mid East', 14 February 2019. https://www.ft.com/content/735f9d2e-2ae7-11e9-88a4-c32129756dd8; N*ew York Times*: 'Trump Pushes Iraq to Stop Buying Energy From Iran', 11 February 2019. www.nytimes.com/2019/02/11/us/politics/iraq-buying-energy-iran.html
[27] F*inancial Times*: 'GE and Siemens energy deals with Iraq falter', 10 February 2019. https://www.ft.com/content/73da7472-2b7d-11e9-88a4-c32129756dd8
[28] *Tansim News*: 'Iran, Iraq Ink Deals to Boost Cooperation in Electricity Industry', 8 Feburary 2019. www.tasnimnews.com/en/news/2019/02/08/1942930/iran-iraq-ink-deals-to-boost-cooperation-in-electricity-industry

debt.[29] During visits of President Salih to Tehran in November 2018 and President Rohani to Baghdad in March 2019, both sides declared their ambition to enhance trade relations further.

In Turkey, officials have publicly rejected US policy but companies on the ground showed sensitivity to sanctions. On the one hand, Iran contributes to meeting Turkish energy demand, and Ankara's political ambitions do not foresee caving in to external pressure (here: US sanctions). On the other hand, Turkish businesses are as dependent on the global financial system as their counterparts in other parts of the world. In 2017, Tehran exported an average 244 kb/d of oil and some 9 bcm/y of natural gas to its north-western neighbour.[30] According to Turkish statistics, imports from Iran accounted for 45 per cent of the country's crude oil and 17 per cent of natural gas imports.[31] Especially in the case of crude oil, Ankara's import needs are expected to grow amid the expansion of local refining capacity.[32] Turkey is also receiving small volumes of electricity from Iran.[33] President Recep Tayyip Erdogan vowed to 'absolutely not abide' by US sanctions, rejecting them as 'imperialist'.[34] In mid-February, Erdogan expressed his country's readiness to join the EU's INSTEX and to create a corresponding institution in Turkey.[35] On the ground, though, Turkish companies made clear that they could not continue importing Iranian energy without a waiver and that they were in talks with the US to this end.[36] Washington granted Ankara an SRE for 60 kb/d. In February, actual imports were higher by more than twice, at 144 kb/d. It is not known whether Ankara received a waiver for natural gas imports from Iran. Imports appear to have continued.

At any rate, there is strong political and economic interest in Turkey to maintain energy relations with Iran. Notably, Turkey played a central role in circumventing sanctions in the year before the JCPOA.[37] It would be wrong to jump to conclusions and there might well be greater Turkish compliance with US sanctions this time. However, Turkey could also test the limits of US sanctions enforcement once more. In principle, as Iran and Turkey share a land boarder, payments could also be arranged physically without the need to resort to the international banking system (as has been practised occasionally in the past).

Apart from Iraq and Turkey, it is unclear how US sanctions will affect Iran's energy trade with other neighbouring countries. Tehran runs a series of relatively small-scale exchanges with Afghanistan (electricity exports), Armenia (gas–electricity swap), Azerbaijan (gas swap to the Azerbaijani enclave Nakhichevan), Pakistan (electricity exports), and Turkmenistan (electricity exports, gas imports, gas swap to Azerbaijan). Measured against Iranian electricity and power generation, as well as global energy trade, the respective volumes are comparatively small. Locally, however, they make important contributions to satisfying demand. Notably, during a visit to Iran in late February, Armenian Prime Minister Nikol Pashinyan entertained the idea of increasing gas imports from Iran and also suggested that trade could be expanded to Georgia (although both the commercial merits and the geopolitical

[29] Details have not been revealed. See *Mehr News*: 'Iran, Iraq agree on mechanism to remove payment obstacles', 6 February 2019. https://en.mehrnews.com/news/142264/Iran-Iraq-agree-on-mechanism-to-remove-payment-obstacles

[30] See above and BP: 'BP Statistical Review of World Energy', June 2018, London. www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html

[31] Energy Market Regulatory Authority (Turkey): 'Turkish Natural Gas Market Report 2017', Ankara, 2018, https://erranet.org/wp-content/uploads/2016/11/Natural-Gas-Market-Report-2017.pdf; Energy Market Regulatory Authority (Turkey): 'Turkish Petroleum Market Report 2017', Ankara, 2018. https://erranet.org/download/turkish-petroleum-market-report-2017/

[32] S&P Global Platts: 'Outlook 2019: Turkish crude oil imports set for shake-up in year ahead', 4 January 2019. www.spglobal.com/platts/en/market-insights/latest-news/oil/010419-outlook-2019-turkish-crude-oil-imports-set-for-shake-up-in-year-ahead

[33] 600 MW/y in 2018, reportedly.

[34] Reuters: 'Turkey says it will not abide by renewed sanctions on Iran', 6 November 2018. https://uk.reuters.com/article/uk-usa-iran-sanctions-turkey/turkey-says-it-will-not-abide-by-renewed-sanctions-on-iran-idUKKCN1NB0S3

[35] Al Jazeera: 'Turkey "ready" to launch SPV with Iran to bypass US sanctions', 14 February 2019. www.aljazeera.com/news/2019/02/turkey-ready-launch-spv-iran-bypass-sanctions-190214140123572.html

[36] Reuters: 'Turkey's Tupras in talks with U.S. for Iran sanctions waiver: sources', 18 October 2018. https://uk.reuters.com/article/uk-iran-oil-turkey/turkeys-tupras-in-talks-with-u-s-for-iran-sanctions-waiver-sources-idUKKCN1MS0NP

[37] Under the so-called gas-for-gold scheme. See Reuters: 'Exclusive: Turkey to Iran gold trade wiped out by new U.S. sanction', 16 February 2013. www.reuters.com/article/us-iran-turkey-sanctions-idUSBRE91E0IN20130215

feasibility are questionable).[38] Both electricity and natural gas exports are now targeted by the US sanctions (unlike before the JCPOA). But it is not clear if the US will move to curtail these comparatively small trades, too.

Consequences for Iran: economic troubles, political quarrels

Against this backdrop, sanctions are inflicting severe damage on Iran. Faltering oil exports, difficulties in repatriating oil revenue, and the broader decline in foreign trade are hitting the country's economy hard. This adds to substantial domestic challenges, including dramatic inflation, a weakening of the Iranian rial against the US dollar/euro, and soaring (youth) unemployment. Meanwhile, domestic political quarrels undercut efforts to mitigate the economic fallout from sanctions.

The International Monetary Fund (IMF) expects the Iranian economy to shrink, with real GDP growth at –1.5 and –3.6 per cent in 2018 and 2019, respectively (down from 3.7 per cent growth in 2017).[39] Forecasts by the think tank of the Iranian parliament, the Majlis Research Center, are even more pessimistic. They see a possibility for real GDP growth to be as low as –5.5 per cent in the Iranian years 2018-19 and 2019-20.[40] In this context, it is important to differentiate between Iran's overall GDP and the non-oil GDP. Amid diversification efforts, which started as early as the 1960s, the link between oil export revenue and the rest of the economy has grown somewhat weaker over the past decades. In the Iranian year 2016–17, revenue from oil and natural gas exports accounted for 'only' between 12 per cent and 14 per cent of GDP (depending on the exchange rate applied).[41]

Even more than on the economy, oil sanctions have had a harsh impact on Iran's state budget. The loss in exports translates into substantially less income for the government. In principle, the decline in the physical volume of oil exports should have been softened by the temporary increase in oil prices (especially in 3Q18).[42] However, due to the sanctions, it remains unclear which portions of Iran's oil income can actually be accessed by the government. Oil payments are typically routed via intermediary banks, most of which depend on the US financial system in one way or another, i.e. are vulnerable to sanctions. Moreover, reflecting its weak position, it is assumed that Iran is offering steep discounts on its oil sales (while some figures are circulating[43], it is difficult to present a comprehensive assessment).

It is obvious that sanctions are dealing a huge blow to Tehran's government finance. Officially, Iran claims its earnings from oil exports have actually increased recently: by 55 per cent year-on-year between March and October 2018.[44] But regardless of whether or not this is accurate, the trajectory points downwards. Since October, both oil prices and Iran's oil exports declined. At the same time, due to the interplay of the many unknown factors (increase in oil prices, access to oil revenue, size of discounts etc.), it is difficult at this point to present a reliable number. When examining the consequences of the losses in oil revenue for the Iranian state budget, it is important to discuss the proper context. According to the IMF, 34 per cent of Iran's government budget is based on oil

[38] The Prime Minister of the Republic of Armenia: Press Release: Nikol Pashinyan, Hassan Rouhani made statements for mass media representatives; documents have been signed, 27 February 2019. http://www.primeminister.am/en/press-release/item/2019/02/27/Nikol-Pashinyan-Hassan-Rouhani-Joint-Statement/

[39] IMF: World Economic Outlook, October 2018, 'Challenges to Steady Growth', International Monetary Fund, Washington, DC: 2018, p. 65. www.imf.org/en/Publications/WEO/Issues/2018/09/24/world-economic-outlook-october-2018

[40] In its worst-case scenario, the MRC sees average exports of crude oil and condensate at 0.8 mb/d in the Iranian year 2019–20. However, it is unclear which oil prices are assumed for this calculation and how much of Iran's nominal oil revenue the MRC believes can be accessed by the government. Iranian years run from March to March. The current Iranian year 1397 (2018–19) ends on 20 March 2019. See Eghtesad Online: 'Iran Parliament Think Tank Forecasts Grim Outlook on Economic Growth', 26 January 2019. https://www.en.eghtesadonline.com/Section-economy-4/27929-iran-parliament-think-tank-forecasts-grim-outlook-on-economic-growth

[41] See IMF: 'Islamic Republic of Iran 2018 Article IV Consultation' (IMF Country Report No. 18/93), International Monetary Fund, Washington DC: 2018, www.imf.org/en/Publications/CR/Issues/2018/03/29/Islamic-Republic-of-Iran-2018-Article-IV-Consultation-Press-Release-Staff-Report-and-45767; and earlier Article IV consultation reports.

[42] Between 23 June 2017, and 5 October 2018, prices for Brent increased by some 86 per cent from $46/b to $84/b, before declining to around $60/b in late 2018.

[43] See e.g. Reuters: 'Iran keeps crude prices in Asia at wide discounts against Saudi oil in January', 11 December 2018. www.reuters.com/article/us-oil-iran-prices-idUSKBN1OA056

[44] IRNA: 'Iran's oil revenues grow 55% year-on-year', 17 December 2018. www.irna.ir/en/News/83137955

revenue. This level is substantial, but it is significantly below the oil revenue share in the government budgets of other populous hydrocarbon exporting countries.

In dealing with losses in oil revenue, the administration of President Hassan Rohani is resorting largely to debt (by issuing treasury bills and bonds). Considering Iran's rather grim economic outlook, this is not without risks as it remains doubtful if the state will be able to repay its liabilities.[45] Nevertheless, the government apparently concluded that this would be the least risky of all options – at least in the very short term. In principle, there are several other options, too. The administration could raise taxation (further), cut subsidies and public spending, or increase the money supply. On the ground, though, this would be extremely delicate. Each of these measures would either reduce net income or purchasing power of households amid an already tense socio-economic situation. Beyond this, Iran could – at least partly – use assets from its National Development Fund, which reportedly amount to more than $60 billion. In total, the IMF estimates Iran's official reserves at $95 billion, but it remains unclear how much of this is with local banks (i.e. accessible).[46]

Meanwhile, political quarrels undercut the country's response to sanctions and hamper Iran's efforts to mitigate the damage from sanctions. The government is facing huge domestic opposition from various corners of the Islamic Republic's political system, in light of what critics argue are devastating results of Iran's outreach and moderation policy in the context of the JCPOA. Over the past months, several ministers were either forced out of office by the parliament or resigned.[47] The most significant damage, however, emanates from Iran's inability to realize financial reforms. In trying to sabotage the government, domestic opponents of the government are seeking to stall the adoption and implementation of several reform bills under the FATF Action Plan.[48] Without financial reform, Iran's engagement with the international banking sector is severely troubled, regardless of US efforts to curtail these ties. This amplifies Iran's challenges in repatriating oil revenue and securing payment channels for the country's foreign trade.

Beyond finance, the camp arguing for deepening economic relations with the world is in retreat. It is likely that this will have lasting effects on the politics of Iranian energy and the economy in general. The buzzwords of the Iranian economic discourse at the beginning of this decade, 'resistance economy' (eghtesad-e moghavemati), has gained traction again. Generally, all political factions in Iran are introducing their economic ideas with reference to this term, which was first coined by Supreme Leader Ali Khamenei in 2010 in response to sanctions. There is no coherent policy concept behind the expression, however. In a rather abstract sense, the resistance economy seeks to reduce international vulnerabilities, strengthen domestic capabilities, and further stimulate domestic wealth creation by promoting exports. How this is best realized is subject to intensive debates. As President Rohani has little to show for his policy of engagement and moderation in light of the re-imposition of US sanctions, his conservative opponents have gained the upper hand in recent months. They are calling, for instance, to minimize imports to the maximum possible extent, which essentially resembles an import substitution approach (Rohani has advocated for increasing interdependencies). A further example is that conservatives are arguing that domestic companies should be protected by excluding/limiting the role of foreign businesses (while Rohani has sought to promote international cooperation to realize technology and knowledge transfers).

In the energy sector, all this translates to a focus on developing the industry alone. International cooperation will remain marginal in the foreseeable future. This does not mark a radical change of course though. The role of international companies in the Iranian energy industry remained extremely small throughout the 2010s. Contrary to Tehran's ambition, the conclusion of the nuclear deal in 2015 has not meaningfully improved the situation. Moreover, for political reasons, there was always a

[45] Kalhor, Navid: 'Iran's Government Falling into a Debt Trap of Its Own Making', *Bourse & Bazaar*, 10 February 2019. https://www.bourseandbazaar.com/articles/2019/2/10/irans-government-falling-into-a-debt-trap-of-its-own-making

[46] IMF: 'Regional Economic Outlook: Middle East and Central Asia November 2018', Statistical Appendix, International Monetary Fund, Washington DC: 2018. www.imf.org/en/Publications/REO/MECA/Issues/2018/10/02/mreo1018

[47] In August 2018, the Minister for Labor and Social Welfare and the Minister for Finance were sacked by the parliament. In October 2018, the Minister for Roads and Housing resigned, followed by the Minister for Health in January 2019.

[48] On the condition of advancing financial reforms under an Action Plan by the Financial Action Task Force (FATF), the watchdog has temporarily suspended countermeasures against Iran in 2016. A deadline for Tehran to adopt several bills under the Action Plan expires in June.

desire to strongly involve local companies: domestically, to keep businesses affiliated with the conservatives satisfied and internationally, to protect against over-dependence/vulnerability in light of sanctions risks.[49] Most recently, in January 2019, the National Iranian Oil Company (NIOC) signed nine contracts with seven local companies (which focus on maintenance and production increases at several mature oil fields).[50] The local companies have different backgrounds, comprising NIOC subsidiaries, private companies, and an IRGC affiliate. As such, the government is continuing its efforts to strike a balance between the various domestic political and economic stakeholders.[51] Symbolically, this approach was also demonstrated at a recent ceremony for the inauguration of several South Pars phases, at which the President and Oil Minister appeared together with the head of the IRGC's economic arm.[52]

As well as relying on local companies in upstream, Iran is also set to enhance domestic downstream capabilities further. Sanctions, which result in fewer export options, force Iran to find alternative outlets for the country's crude oil and condensate production. As for condensate, this is not only a question of (at least partly) compensating for the loss in export revenue; the expansion of natural gas production also rests on the utilization of associated condensate output. Further, Iran also seeks to reduce dependence on gasoline imports, both for commercial and sanctions-related reasons. Apart from sanctions, the domestic utilization of crude oil and condensate also occurs in the context of the broader push for the expansion of the Iranian petrochemical industry (in an attempt to extend domestic wealth creation). During the past months, Iran expanded domestic condensate refining capacities, focusing especially on the Persian Gulf Star Refinery.[53] The trend in this direction will continue.

Outlook: losing in oil, prevailing in gas?

Looking ahead, the Iranian energy sector will continue to face harsh constraints. Tehran's options to counter US policy are severely limited, as Tehran's trading partners show extreme sensitivity to US sanctions. As for oil exports, broadly similar to the sanctions years before the JCPOA, Tehran can resort to measures like offering discounts, blending Iranian oil with that of other countries, disguising oil exports, storing oil for later sale, and selling (very small volumes of) oil domestically (for subsequent exports by private traders). This might offer modest relief. Overall, though, the last months showed that Tehran cannot maintain/recover export levels in the absence of trading partners willing to take Iranian barrels. The situation is somewhat different when it comes to natural gas and electricity. Here, the bulk of production is absorbed by the domestic market and exports go to neighbouring countries, which tend to rely heavily on Iranian supplies.

The short-term outlook is essentially defined by the expiry date of the eight SREs for oil exports, i.e. 4 May 2019. Until then, the volume of Iran's exports is likely to stabilize around current levels, possibly with some very light increases as countries like Japan or South Korea have only begun to import Iranian oil again. Towards the end of April, the volume might decline again unless the US announces an extension of SREs early on.

In the mid-term, from May onwards, the big question is whether the US will extend SREs and for which countries. US officials maintain that they are 'not looking to grant waivers' and will proceed with

[49] For example, the first four IPC contracts were awarded to domestic companies affiliated with the conservatives. See Jalilvand, David: 'Progress, challenges, uncertainty: ambivalent times for Iran's energy sector', Oxford Institute for Energy Studies, Oxford: 2018. www.oxfordenergy.org/wpcms/wp-content/uploads/2018/04/Progress-challenges-uncertainty-ambivalent-times-for-Iran%E2%80%99s-energy-sector-Insight-34.pdf

[50] Shana: 9 contracts for maintenance and increase of oil production capacity signed with local companies [in Farsi], 22 January 2019.

[51] See Jalilvand, David Ramin: 'Iranian energy: a comeback with hurdles', Oxford Institute for Energy Studies, Oxford: 2017. www.oxfordenergy.org/publications/iranian-energy-comeback-hurdles/

[52] Ceremony for the inauguration of phases 13, 22, 23, and 24 took place on 17 March 2019.

[53] The Persian Gulf Star Refinery, located near the city of Bandar Abbas at the Persian Gulf coast, receives associated condensate production from the South Pars natural gas field. Currently at 350 kb/d, the refinery is designed to eventually process 500 kb/d following further expansion.

their objective to bring Iranian oil exports to 'zero'.[54] At the same time, this does not preclude the granting of further SREs.[55] As of yet, it is not known how Washington will balance its objectives of brining Iran's oil exports to zero and having moderate oil prices at the same time. It appears likely that Washington will keep a shadow of uncertainty over this question to pressurize importers of Iranian oil, and only announce any such decision shortly before current SREs expire, i.e. in late April or early May (similar to the situation in November 2018). In this context, the availability of oil grades similar to Iran's will play a crucial role (which, among others, leads to the question of how Russia and Saudi Arabia will proceed with the OPEC+ agreement). Uncertainty over the renewal of SREs on the part of the US might discourage other countries from increasing output.

On the whole, it appears reasonable to assume that Washington will extend some of the SREs, considering that there is a strong possibility of further price volatility in 2H19, with potential shortages in the supply of medium/heavy sour oil[56] (this, at least, is the case unless the US give up the goal of preventing oil price increases). In light of their reliance on Iranian oil imports, China, India, Japan, South Korea, and Turkey are the likely candidates for the renewal of SREs – though only some of these countries might eventually receive SREs. It is impossible, at this point, to make any predictions as to the volumes under the possibly renewed SREs. Greece, Italy, and Taiwan have not imported any oil from Iran since the re-imposition of US sanctions, despite possessing waivers. Their SREs are not likely to be renewed.

Against the backdrop of uncertainty over the global supply–demand balance in 2H19, as well as the extent to which SREs will be renewed, it is difficult to predict by how much Iran's oil exports will fall further in the mid-term. It appears reasonable to use a corridor of between 1.0 and 1.4 mb/d (for both crude and condensate) as a loose reference point for Iran's oil exports until the end of this year, while acknowledging the prospect of a gradual further decline.

The (comparatively small) export of natural gas is likely to continue despite the US announcement to also target Iran's natural gas exports. In the case of Iraq, exports might even increase gradually unless the Iraqi energy situation changes fundamentally (a rather unlikely prospect). It remains to be seen whether gas exports will be covered by SREs (except for Iraq, this is currently not the case).

In the long term, there will also be considerable challenges for Iranian oil on the production side. Rather than realizing the full potential of its reserve base, Iran will struggle to prevent oil production from falling further. Most of the fields from which Iran is currently producing are mature and require international technology to enhance recovery. Meanwhile, capital constraints hinder the development of green fields.[57] It is unlikely, therefore, that Tehran will manage to bring new fields into production fast enough to compensate for the loss of output at mature fields. Thus, the longer-term outlook for Iranian oil is worsening at a time when uncertainty over the long-run prospects for oil demand is growing and competition between producing countries to attract investment is intensifying.

Beyond this, strategically, sanctions lead to a substantial weakening of Iran's long-term market position. Not only will IOCs not engage meaningfully with Iran as long as (threats of) sanctions are in place. Iran is also forced to stand aside while competitors increase their international engagements. Saudi Arabia and the UAE, for example, have been investing heavily in Asian downstream markets to ensure demand for their oil in the future. In upstream, Russia and Saudi Arabia are assessing the prospects of cooperation. Similarly, Iran's competitors are also enhancing domestic downstream capabilities in their own countries with international support (while Iran is forced to move on its own).

[54] S&P Global Platts: 'US State Department's Hook tells Japan not to expect new Iran sanctions waiver', 5 February 2019. www.spglobal.com/platts/en/market-insights/latest-news/oil/020519-us-state-departments-hook-tells-japan-not-to-expect-new-iran-sanctions-waiver

[55] Consistently, US officials do not categorically rule out the extension of SREs. Rather, the wording 'not looking to' the extension of waivers is used.

[56] See Fattouh, Bassam and Economou, Andreas: 'The Light Sweet-Medium Sour Crude Imbalance and the Dynamics of Price Differentials', Oxford Institute for Energy Studies, Oxford: 2019. www.oxfordenergy.org/publications/light-sweet-medium-sour-crude-imbalance-dynamics-price-differentials/

[57] See Mills, Robin: 'Iran's upstream sector battens down for survival', Petroleum Economist, 14 December 2018. www.petroleum-economist.com/articles/politics-economics/middle-east/2018/irans-upstream-sector-battens-down-for-survival

Prospectively, therefore, as global demand for oil is expected to slow down over the next decades, sanctions are disadvantaging Iran vis-à-vis its competitors.

In natural gas, however, Iran's position is substantially better. During the pre-JCPOA sanctions years, Iran was able to continue expanding output relying on local companies, if at a slightly slower pace. Today, natural gas production is set to remain on a growth path, too. Several uncertainties persist, however. Among other things, it is unclear whether local companies can replicate Iran's 2010–15 performance (there are more politico-economic rivalries in Iran at present, which might undercut the performance of local companies). Also, it remains to be seen if Iran can find sufficient domestic or international outlets for associated condensate production.[58]

Thus, in light of profound challenges in upstream and growing competition globally, sanctions are calling into question Iran's long-term position in the global oil market. The advancement of domestic refining capacities might offer some modest relief – albeit with little impact on the overall situation. These developments are accelerating Iran's shift towards natural gas. Even under sanctions, Iran's natural gas industry saw robust growth in the past. This marks a stark contrast to the oil sector, where production and exports have largely stagnated and never reached levels seen before the 1979 revolution. Relying on local companies and targeting mainly the domestic market, natural gas is poised to remain less affected by sanctions. Already the backbone of economic activity in Iran today, natural gas is therefore set to further increase its importance – not only relative to oil but also to the economy as a whole.

[58] See Jalilvand, David: 'Iran: an inward-looking gas giant', in: Stern, Jonathan (ed.): *The Future of Gas in the Gulf: Continuity and Change*, Oxford, Oxford Institute for Energy Studies: forthcoming 2019.