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THE GULF CRISIS AND GLOBAL ENERGY MARKETS

Report

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I. INTRODUCTION

1. The Gulf, like other parts of the Middle East, is both a source of friction and cooperation between Europe and the United States. This is a reflection of convergent and divergent interests in the region, but it is also emblematic of more enduring changes underway in the international system as a whole. The United States, for example, has a critical role to play in maintaining a balance of power in the Pacific and this challenging obligation possibly imposes limits on its engagement in the Gulf. Europe is trying to bolster its economic ties to the Gulf and is potentially more directly affected than is the United States when instability in the region flares up. Mounting US-Iranian tensions have revealed a degree of European vulnerability to conflict in the region. Acts of sabotage in and around the Strait of Hormuz through which passes 20% of the oil and one quarter of the liquified natural gas (LNG) consumed globally, or missile attacks on critical energy infrastructure have immediate implications for European energy security, but Europe has only limited military leverage there, and continues to need its American and Gulf partners to ensure that structures are in place to reduce risk and to build security. This cooperation is only possible as long as shared interests outweigh conflicting ones, and if a comprehensive transatlantic dialogue on the Gulf is continued. This is not always easy, although all sides continue to recognise the need for continued engagement.

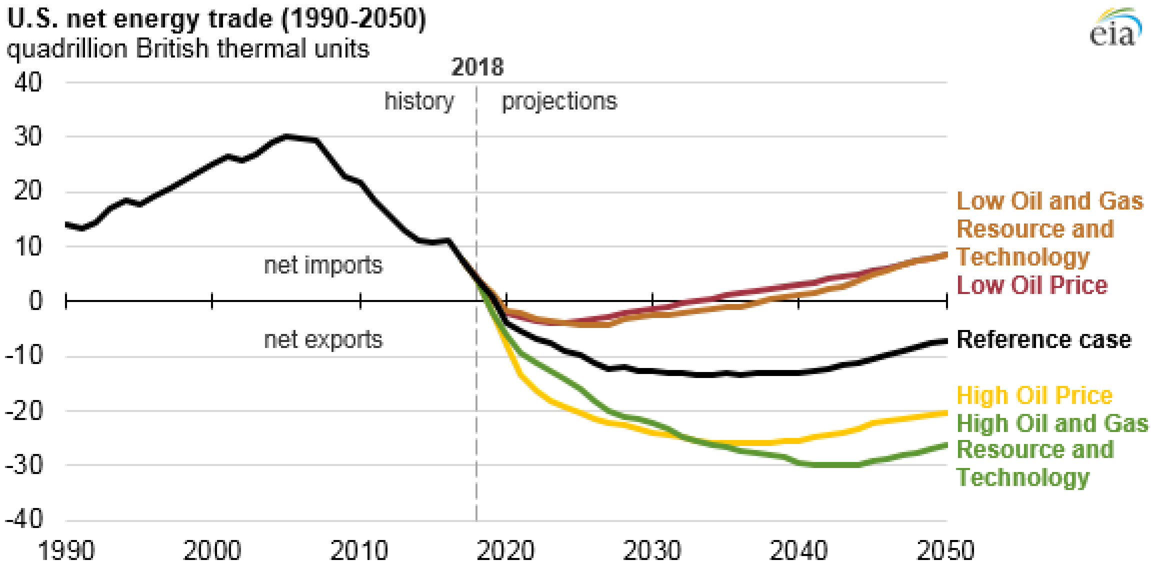
2. At the end of the day, US and European interests in the Gulf overlap and the arguments in support of continued partnership there is compelling. This report will focus primarily on the energy dimension of those shared interests, but it will also consider the broader strategic context in which Gulf energy must be understood.

II. GLOBAL ENERGY MARKET TRENDS AND THE GULF

3. The Gulf Arab states have long served as the lynchpin of the global energy system and, not coincidentally, are among the richest countries in the world, at least in per capita terms. According to a 2016 BP study, the six countries of the Cooperation Council for the Arab States of the Gulf (CCASG) collectively hold 29% of the world’s oil reserves and 22% of its gas reserves. They also account for 23% of global crude production and 11% of that of natural gas. In 2018 the region’s primary producers – including Iran – were ranked as following in terms of output: Saudi Arabia – 12.3 million barrels per day (mbpd); Iran – 4.7 mbpd; Iraq – 4.6 mbpd; United Arab Emirates (UAE) – 3.9 mbpd; Kuwait – 3.0 mbpd; and Qatar – 1.9 mbpd (Rapier, 2020). Saudi Arabia, the UAE, and Kuwait are also ranked among the top ten oil producers in the world.

4. Energy markets have become highly fluid. The most important development over the past decade has been the introduction of shale fracking technologies in North America and the fundamental change this has wrought in oil and gas production. In 2018, the United States registered the greatest one-year increase in oil and gas production ever recorded. The shale sector accounted for most of this increase. That year, the U.S. produced a very high share of the world’s 2.2 mbpd expansion of oil production. Canadian production jumped by 410,000 bpd and Saudi Arabia underwent the third most significant output increase. Meanwhile, Venezuelan and Iranian production fell by 580,000 bpd and 310,000 bpd respectively. The largest increases in gas production were registered in the U.S. (a stunning increase of 78 bcm or 5.3%), China (43 bcm), Russia (23 bcm), and Iran (16 bcm) (BP, 2019). It should be borne in mind that shale fracturing is more costly than production in the Gulf and economically viable only above a certain price per barrel. The current collapse in prices following the COVID-19 pandemic, on the one hand, and the Saudi decision to increase its production on the other, has dealt a major blow to shale fracturing production, and this could, in turn, increase the strategic importance of the Gulf over the short and medium term.

5. In 2019, the U.S. Energy Information Administration projected that for the first time since the 1950s the United States in 2020 would export more energy than it imported as the growth of oil, natural gas, and natural gas plant liquids production would outpace growth in US energy consumption.



Source: U.S. Energy Information Administration, Annual Energy Outlook 2019, https://www.eia.gov/todayinenergy/detail.php?id=38152

6. Traditionally, the United States has defined energy security as the degree to which it is or is not dependent on imports of oil and gas, particularly from less stable regions of the world. Of course, this is a definition that needs further elaboration as US strategic interests are also bound up with the vitality of the global economy which, in turn, depends on globally traded energy. Moreover, because of the fracking revolution, the United States now has the potential to be a major player in those markets. Although the United States is increasingly energy independent, it cannot insulate itself from a global energy supply or price shock. A sudden increase in global oil prices would invariably have a very adverse impact on U.S. allies, and would even drive up energy prices in the United States. If it achieved anything, the global financial crisis of 2008 revealed the degree to which US prosperity relies on the vibrant demand of its trading partners. The same is true for Europe, and the transatlantic community thus shares a stake in the unhindered flow of reasonably priced and secure energy needed to power the global economy (Cordesman, 2017). Here too, the impact of the pandemic could change the outlook, while making the need for transatlantic cooperation even more vital. The pandemic, of course, has precipitated a very consequential fall in energy prices.

7. It is also important to recognise that oil is globally arbitraged and is thus a very "fungible" commodity; price movements tend to be global in nature as the oil market is integrated, not segmented. A significant increase in production in Saudi Arabia, for example, will tend to drive global prices downward, other factors being equal. Oil markets are highly efficient and price disparities tend to be rapidly bid away in a world where oil can be shipped almost anywhere in response to price movements. So even if US oil production is shipped to Asia and not to Europe, an increase of US oil on the global market will drive prices down in Europe. In this sense, rising US production linked to hydraulic fracturing in recent years has helped regulate world prices. When prices rose in a sustained way due to supply shocks, US shale production kicked in and kept them lower than they otherwise would have been. This was obviously a powerful check on the kind of market leverage that OPEC had long asserted, although OPEC production remains an essential part of the formula. Finally, until the onset of the current pandemic global energy demand had been dynamic, rising by 2.9% in 2018, with two-thirds of the increase driven by increased demand in China, the United States, and India (BP, 2019). The situation today, however, is very different due to the collapse of demand and prices.

Indeed, oil prices have been highly volatile in recent years, reflecting not only shifting supply and demand conditions but also changes in political and security risk assessments. On 13 January 2016 for example, oil prices stood at a five-year low of USD 30.31 p/b. They then rose to USD 84.98 p/b on 1 October 2018 in response to supply constraints linked to sanctions on Iran and a collapse of capacity in Venezuela was largely self-induced. Prices then fell to USD 53.8 p/b on 31 December 2018 due in part to the easing of US sanctions on some countries purchasing oil from Iran. They then rose to USD 68.27 on 7 January 2019 after US forces killed the head of the Iranian Quds force (Nasdaq, 2020). As the COVID-19 pandemic spread during the spring of 2020 and following a Saudi-Russian oil price war, global oil prices collapsed, standing at USD 24.8 p/b at 20 March with Texas Crude prices actually falling below zero. This extraordinary price volatility has reflected shifting supply and demand conditions, changing risk premia, and rapidly evolving market expectations. Volatility itself is costly as it undermines long-term investment while inspiring a quest for more secure energy solutions less subject to such wild price swings. This is one reason that investment in renewable energies has soared in recent years; technology change driven by rising investment is making solar and wind power more price competitive.

III. RENEWABLE ENERGIES AND THE GULF

8. In fact, the dangers of relying on unstable or hostile countries for energy as well as ever-rising concerns about climate change are driving interest in non-carbon renewable energy. In 2018, global carbon emissions increased by 2%, the highest rate in seven years, while the past decade has been the warmest on record – a development with very costly consequences as evidenced by the surge of wildfires in Europe and North America, the global retreat of glaciers and the increasing frequency of extreme weather events (McGrath, 2020). Between 2001 and 2017, renewable energy capacity increased every year, although growth flattened in 2018 to the point where the increase was only 60% of net additions needed each year to meet long-term climate goals. According to the IEA, renewable capacity will need to expand by over 300 GW on average each year between 2018 and 2030 to reach the goals of the Paris Agreement. Changing renewable prices are beginning to make this transition look feasible. Technological advances have driven down the price of solar and wind-generated renewable energy and could begin to erode the dominant roles that carbon fuels play in the energy market (IEA, 2019). That day has certainly not yet arrived, but the prospect adds a degree of uncertainty for countries like those on the Gulf that have relied heavily on carbon fuel exports.

9. It is almost ironic that the countries of the Gulf would be disposed to pursue sustainable energy futures given their huge endowments of carbon-based energy. But there is a compelling case for their doing so, and they certainly have the resources to underwrite this conversion. Energy consumption in the Cooperation Council for the Arab States of the Gulf (CCASG) has increased 6% annually since 2000, a rate that exceeds both the region's GDP and population growth rates. Per capita consumption of energy in the CCASG is among the highest in the world. Saudi Arabian domestic oil consumption, for example, has risen from 17% of production in 2000 to 32% in 2015 (Perniceni, 2019). Demand has been driven by the emergence of energy-intensive industries and households. Because oil and gas prices in the region are so low, there has been little incentive to curtail domestic oil and gas consumption and, of course, this has cut into export earnings as domestic demand reduces the energy available for foreign sales. Electricity demand in the CCASG has also grown enormously in recent years and will continue to rise. This too has implications for the oil and gas sectors. The Saudis have met rising electricity demand by using crude oil to boost electricity production, while the UAE imports gas to generate electricity. Mounting domestic demand in the Gulf is thus threatening to undermine the primary source of regional export earnings and government revenues. This, as well as the desire to move these societies towards a post-carbon future, has increased interest throughout the region in developing more sustainable sources of domestic energy while bolstering energy efficiency.

10. The potential for solar and wind power in the region is substantial. Abundant sunlight and rapid technological change have substantially driven down the price of solar-generated electricity in the region. The UAE has produced solar electricity below USD 0.03 per kWh, which is a highly competitive price. This achievement has inspired others in the region to embrace the renewable revolution and to embark on programmes to dramatically increase the use of renewable energy in their home markets. With electricity prices falling so dramatically, there is now a prospect for developing hydrogen energy sources in the region and it is not surprising that there is substantial research underway in this promising field in countries like the UAE. Finally, as the region decarbonises, it is likely to see nuclear power as offering a cleaner means of generating electricity. The UAE has just opened the first nuclear plant in a Gulf country. The large South Korean built nuclear power plant is slated to generate one quarter of the country's electricity needs but there are some concerns about the vulnerability of these plants in a volatile region. There are also concerns about the longterm implications for nuclear weapons proliferation as developing nuclear energy capability is the first step in developing the capacity to weaponise that technology. There are additional concerns that nuclear plants could become targets if conflict were to break out in the region. Qatar, for example, has warned that the UAEs Barakah plant constitutes "a serious threat to the stability of the region and its environment." (Yee, 2020)

IV. POLITICAL DIVISIONS AND SECURITY THREATS IN THE GULF

11. For all its wealth and energy market clout, the Gulf is also a region in crisis, plagued by internal divisions and ruled by families that must confront myriad social and political challenges in the rapidly changing and modernising societies they oversee. In addition to the challenge that rapid economic change and modernisation pose for highly traditional societies, the countries of the Gulf must also adapt to shifting geopolitical tectonic plates stemming from Iranian hostility, Russia and China's growing interest and engagement in the region, and shifting US geostrategic concerns. All of this has triggered a degree of uncertainty among many stakeholders in the Gulf, and to some extent, has prompted a quest for new friends and supporters as a hedge against this unsettling uncertainty. The UAE and Bahrain's recent reconciliation with Israel, apparently with the tacit endorsement of Saudi Arabia should be understood in this light (see below). There has also been a new-found impulse among the Gulf countries to develop their own defence capacities in order to operate with greater agency in what, from their perspective, seems to be an ever more threatening world.

12. The social upheavals during the so-called Arab Spring; the civil wars in Iraq, Yemen, and Syria; tensions over Iran's nuclear weapons programme; that country's aggressive interventions in Syria, Iraq, Lebanon, and Yemen; the Saudi-Emirate-led intervention in Yemen's civil war; and the contentious rivalry between Qatar on one side and Saudi Arabia, the UAE, and Bahrain on the other present an image of a region in crisis. Although the CCASG countries have always had certain differences of opinion, tensions with Qatar have gravely undermined regional cohesion. The age-old Sunni-Shia divide continues to foment discord in the region within countries like Bahrain and Saudi Arabia and is also a factor in the Gulf Monarchies' rivalry with Iran and the war in Yemen among other things. That said, some analysts argue that this sectarian divide is secondary to other security calculations. In any case, these sources of division worry Western partners who feel that greater unity is essential to addressing difficult immediate and long-term challenges.

13. Regional tensions have implications for global energy security. The renewal of US sanctions on Iran and international firms doing business with it, for example, has had an impact on energy market dynamics in the Gulf. Iran's capacity to export oil has declined precipitously, with oil production in that country falling 40% from 2018 to December 2019, largely as a result of renewed US sanctions (Rapier, 2020). Those sanctions have not been welcomed in Europe and have generated a degree of transatlantic tension. Iran's decision to violate elements of the Joint Comprehensive Plan of Action (JCPOA), however, might eventually lay the grounds for a newfound European and American consensus on this delicate matter.

14. The accession of a new generation of leaders introduces another element of uncertainty to the region. This is most evident in the case of the Saudi Crown Prince Mohammed bin Salman (MBS), who has sought to revisit some of the strict rules governing life in his country while cracking down on those who would claim political or social rights outside those handed down by the ruling family. This has not gone unnoticed in the West. The murder of the US-based Saudi journalist Jamal Ahmad Khashoggi in a Saudi consulate in Istanbul, for example, has complicated that country's relations with a number of western countries. At the same time, MBS has endeavoured to consolidate a central role in the region for his country and to ensure that a multiplicity of actors from outside of the region are inclined to align with his vision. Indeed, the Gulf countries are clearly intent upon forging stronger links with critical regional and global players and have grown somewhat weary of relying on only one security guarantor.

15. The vulnerabilities to attack of the Gulf energy sector were made apparent in September 2019 when Houthi rebels and Iran attacked Saudi Arabia's large Abqaiq oil processing facilities and the Khurais oil field with advanced missiles and drones. Abqaiq is a vital facility in Saudi Arabia's energy system, and over half of the oil it produces is stabilised for transport there. Although Houthi rebels claimed responsibility for the attacks, most analysts believe the Iranians must have participated in or supported the operation.

16. Those attacks followed a 12 June 2019 attack on two commercial tankers in the Strait of Hormuz and the downing of a US drone by Iranian forces. In July the US Navy shot down an Iranian drone that had moved aggressively against a US vessel. On 19 July 2019, Iranian forces seized a British oil tanker in response to the decision by the United Kingdom to impound an Iranian tanker in Gibraltar for violating international sanctions. Iranian aggression led to the blockade of 5.7 mbpd of oil output, which is almost half the capacity of the Wahhabi kingdom. The incident also precipitated the largest one-day oil price hike (10%) ever recorded (Wemer et al., 2019). The threat to market stability arising out of these attacks inspired a US decision to tap into strategic reserves to counteract the price hike and to reassure markets. The impact of the attacks was also mitigated by the fact that world prices were not particularly high at that moment while Saudi Arabia's significant storage capacity was spared from attack.

17. Soon after the attacks, Saudi Energy Minister Prince Abdulaziz bin Salman announced government plans to restore production capacity to 11 mbpd by the end of the month and to achieve full capacity of 12 mbpd two months later – the highest production level the Saudis have ever achieved was 11 mbpd in November 2018 (Watkins, 2019). The Saudis asked customers of its Arab Light and Extra Light grades, which were most affected by the strikes, to accept Arab Medium and Arab Heavy as substitutes. Some industry analysts also suggested that Saudi traders were even working to purchase Iraqi oil, which in some cases may have been Iranian oil exported illegally to Iraq (Watkins, 2019). If that were the case, the supreme irony would be that such operations would move cash to the very country that was likely behind the attacks on Saudi oil fields.

18. The Iran-Houthi strike on Saudi facilities revealed worrying vulnerabilities to Gulf production, raised risk premia, and illustrated again the degree to which the region has become less stable. Market operators and strategic analysts alike worried that relatively inexpensive missiles or drones were able to have such a powerful and immediate market impact with global ramifications. Despite a significant financial effort in terms of military training and equipment, the Kingdom was not able to counter this surprise attack against its critical energy infrastructure.

19. Those attacks revealed yet again how vulnerable the global economy is to asymmetric attacks, whether these come in the form of cheap drones, sea-borne mines or computer viruses. The Saudis have recently encountered mine attacks near the Strait of Hormuz, drone strikes on pipelines, missile attacks, and a cyber-attack on Saudi Aramco in August 2012. These incidents have demonstrated that the region's energy production and shipping systems are now targets and need to be better

protected (Dipaola and Ratcliffe, 2019). One analyst, for example, has suggested that U.S. Patriot air defence assets should not have been deployed near Saudi military bases prior to the attacks but should instead have protected vulnerable energy infrastructure (Cooper, 2019).

20. The crisis also disclosed the degree to which regional actors continue to rely on the United States and key allies like France and the United Kingdom to reinforce regional stability. Again, it was a US decision to tap into its strategic reserves that helped calm markets after these attacks. The United States also announced plans to deploy more forces in the region at the request of Saudi Arabia and the UAE. As of January 2020, the United States had approximately 13,000 troops in Kuwait; 7,000 in Bahrain; 3,000 in Saudi Arabia; 13,000 in Qatar; 5,000 in the UAE; and 606 in Oman (Berger, 2020). Following the storming of the US Embassy in Baghdad and the US killing of Qasem Soleimani, the Pentagon announced that another 3,500 troops would be deployed to the region. These deployments confirm that the Americans remain committed to the stability of this difficult region even as it is drawn to deal with challenges of even greater long-term strategic concern in East Asia and Europe.

V. STRATEGIC AND ECONOMIC IMPLICATIONS OF ISRAEL'S RECONCILIATION WITH THE UAE AND BAHRAIN

21. It is in context of mounting strategic insecurity in the Gulf in which the recent agreements between the UAE, Bahrain, and Israel were negotiated. Following a sustained diplomatic engagement of senior US officials with their counterparts in the UAE and Israel, a normalisation of relations between Israel and the UAE was announced in August 2020. The deal promised to result in the recognition of Israel by the UAE, and the establishment of formal commercial, diplomatic, and security ties between the two countries. In exchange, Israel would agree to halt its plans to annex parts of the West Bank (Cook, August 2020).

22. The UAE-Israel announcement was formalised in a treaty signed in Washington on 15 September 2020. It included a declaration in which Israel and Bahrain agreed to normalise relations along the same lines. Both agreements are officially referred to as the “Abraham Accords”, referencing the “spirit of their common ancestor, Abraham” (State Department, 2020, 2020 (a)(b)). The UAE and Israel have agreed an international treaty, formally titled “Treaty of Peace, Diplomatic Relations and Full Normalization between the United Arab Emirates and the State of Israel.” In it, both sides commit to “lasting peace, stability, security and prosperity (…) and to enhance their dynamic and innovative economies.” The UAE and Israel recognise the need to establish friendly relations with a view to the “well-being of their respective peoples and of the region.” Committing to cultural and interfaith dialogue, both states also vowed to counter extremism and terrorism and to establish a “High Level Joint Forum for Peace and Co-Existence. They are to launch a "Strategic Agenda for the Middle East" together with the United States in order to “expand regional diplomatic, trade, stability and other cooperation.”

23. On the economic front, the two states have struck a range of bilateral agreements on investment and finance, healthcare, tourism, science, technology and the peaceful use of outer space, energy, environment, and maritime arrangements. The treaty already refers to a UAE-Israel protocol signed on 1 September which commits both sides to deepen and broaden bilateral investment relations, protect investors, consumers, market integrity and financial stability and to promote collaboration on strategic regional infrastructure. (State Department, 2020 (a)).

24. The agreement with Bahrain is referred to as a “Declaration of Peace, Cooperation, and Constructive Diplomatic and Friendly Relations.” In it, both sides commit to “establish full diplomatic relations, to promote lasting security, to eschew threats and the use of force, as well as advance coexistence and a culture of peace.” The Declaration anticipates a range of sectoral economic

cooperation agreements in the same fashion as the UAE-Israel agreement (State Department, 2020 (b)). Both seem slated to have significant strategic and economic implications for the region.

25. The Palestinian leadership, however, has staunchly rejected the agreements and characterised them as a "betrayal" (Crowley and Halbfinger, 2020). Palestinians see this reconciliation process as directly undermining their efforts to end Israeli occupation and achieve independent statehood. As a measure of its disappointment, the Palestinian Authority has renounced chairing this year's Arab League meeting in protest of that body's failure to condemn the deal (Deutsche Welle, 2020).

26. Cooperation between several of the Gulf monarchies and Israel is not a new phenomenon although it has been largely unacknowledged given the political and diplomatic sensitivities. That cooperation was premised on hard security calculations, primarily shared concern about Iran's rising influence in the region and its nuclear and ballistic missile programs (Al-Jazeera, 15/9/20). Not surprisingly, Iran's leadership has strongly condemned the reconciliation effort. The Chief of Staff of Iran's Armed Forces recently said that "[i]f something happens in the Persian Gulf and the Islamic Republic of Iran's national security suffers a breach, albeit minor, we will hold the UAE responsible and won't tolerate it." Supreme Leader Khamenei has called the deal a betrayal of Palestine and Arab nations. Iran obviously would prefer to see its enemies divided and now confronts a situation of "strategic encirclement" (Behravesh and Azizi, 2020). Although it is generally thought that Saudi Arabia was party to these agreements, a number of analysts believe that it likely welcomes them. The Saudis could eventually sign their own accord with Israel in the future, although the government publicly states that formal rapprochement between the two states would only be possible if a peace deal is agreed between the Israeli government and the Palestinians (*Agence France-Presse*, and Crowley and Halbfinger, 2020).

27. The deal will have important economic implications. Gulf investors were quietly investing in the dynamic Israeli tech start-up scene prior to the signing of this agreement. Trade between Israel and the Gulf States was estimated at USD 1 billion in 2019 (Srivastava et al., 2020). But these deals now give a green light to a significantly higher level of activity. In July, for example, Israel and the UAE agreed to cooperate in the development of artificial intelligence, sensors, and lasers. The two countries will also collaborate on projects to combat the coronavirus. The Israeli defence companies, Rafael and Israel Aerospace, are now working with the UAE technology company Group-42 (Brussels Times, 2020). The Israeli Ministry of Defence estimates that this deal alone could yield as much as USD 500 million in trade and investment (Grathwohl, 2020).

28. There are also implications for energy security. Moving Gulf oil through Israel, for example, would allow producers to avoid costs and security risks associated with passage through the Strait of Hormuz and the Suez Canal (Al-Kassim, 2020). New pipelines could eventually be lain to make this possible. The accords importantly include a section on the right to innocent passage across the parties' waters (State Department, 2020 (a)). This along with Israel's discovery of natural gas off the Mediterranean coast could make it a significantly more consequential energy player. The Dubai-based maritime logistics company DP World has signed a memorandum of understanding with Israeli DoverTower to mount a joint bid to operate Haifa Port (Al-Kassim, 2020). This could have unwelcome implications for other actors in the region, for example, by reducing traffic in Egypt's Suez Canal and by lowering the use of the Suez-Mediterranean pipeline (Herzinger, 2020). It might move business away from the port of Beirut in Lebanon and would likely be seen as a threat to Russia's energy pipeline ambitions (Al-Kassim, 2020).

29. Finally, the Abraham accords – notably the agreement between the UAE and Israel – have important consequences for the UAE's ability to access advanced weaponry from the U.S. (Wainer, 2020). The UAE has shown an interest in purchasing F-35 Joint Strike Fighters from the United States. For its part, Israel has long been concerned about this potential sale given the US legal commitment to maintaining Israel's "qualitative military edge", which should guarantee that US

weapons supplied to Israel should be “superior in capability” to those sold to its neighbours. Reuters has reported that the United States and UAE are now aiming to achieve a deal by December (Al Jazeera, 22/9/20). However, US Secretary of Defense Esper has reaffirmed the commitment to the qualitative military edge requirement in September, suggesting that this could emerge as a matter of some tension (Mehta, 2020).

VI. THE UNITED STATES AND THE GULF: STRATEGIC PARTNERSHIP AND ENERGY MARKET TENSIONS

30. The explosion of US shale and oil production over the last decade has had profound reverberations in the Gulf region and has undoubtedly recast the way the United States thinks about the region. Strategic analysts in the Gulf suggest that it is not a coincidence that the United States, beginning with the Obama Administration, had begun to convey an aspiration to begin to reduce its military footprint in the region, although many analysts now believe that this is unlikely to transpire anytime soon (Watkins, 2019). Booming shale oil production in the United States had made it the largest producer of oil in the world and reduced US dependence on imported oil. But falling prices linked to the COVID-19 driven recession triggered significant production and drilling cuts in the United States this past spring. Crude oil production in the United States, however, rose again in the summer of 2020 after declining from 12.7 million bpd in the first quarter of 2020 to a recent low of 10 million bpd in May. The EIA expects US crude oil production to fall from an average of 12.2 million bpd in 2019 to 11.4 million bpd in 2020 and 11.1 million bpd in 2021. (U.S. Energy Information Agency). US shale producers break-even price hovers around USD 50/b. The recovery of US fracking operations in the US today has been facilitated by very high inventory of drilled but uncompleted wells. New drilling, however, has slowed considerably due to unfavourable demand and price conditions (Rystad Energy).

31. Prior to the current global crisis, the US fracking industry was having a significant impact on the global market with important implications for the Gulf. In 2001, the United States imported 2.8 mbpd from Gulf countries, which then accounted for 23% of all US crude imports. These numbers evolved substantially as the United States increased its own production and became more energy efficient, even as domestic demand continued to rise. In 2008, US crude imports had risen to 12.9 mbpd, although by then it was only importing 2.4 mbpd from the Gulf or 18.6% of total imports. The onset of the shale revolution marked a dramatic change and by 2018 total crude oil imports to the United States stood at only 9.9 million bpd, of which only 1.6 million bpd or 15.9% of the total came from the Gulf – 57% of which came from Saudi Arabia and 33% from Iraq. By then, Canada had emerged as the largest exporter to the United States. In September and October 2019, the United States became a net oil exporter for the first time in 70 years (Rapier, 2020).

32. As US imports from the Gulf fell over the last decade, Gulf production rose by roughly 5 million bpd, and its exports to the rest of the world increased. It is now importers like China that have become more immediately vulnerable to shocks in Gulf production, while the United States partly insulated itself of such shocks by virtue of sharply rejuvenated domestic production. The irony of the current security order in the region is that the United States remains the most powerful external security player there, while Europe and Asia, which are more directly reliant on Gulf energy, play a far less important security role. There is thus an element of transatlantic burden sharing at play here.

33. The Gulf countries hardly welcomed the rise of US production. In 2014, for example, OPEC, led by the Saudis, began flooding global oil markets in order to drive prices down and to push higher cost shale producers out of the market. Although the strategy enjoyed a degree of success, US producers are agile. While some ceased operating in this period due to price pressures, US production rose again when global prices subsequently rose. Needless to say, price falls linked to the COVID-19 pandemic and the ensuing global financial and economic crisis increased pressure on US producers, who have responded by cutting back dramatically on new well drilling.

34. US relations with the Gulf Monarchies have long been the lynchpin of the regional security structure. The United States has had to balance the reassurance it provides CCASG members against the need to help the region's key players assume greater responsibility for their own security and for the security of energy flowing out of the region – this can be a difficult balance to strike: as soon as the U.S. calls for efforts to reinforce local capabilities and regional cooperation, such efforts are construed as an attempt to disengage from the region. The governments of the region have been highly sensitive to this issue and have worked to ensure that the United States remains engaged while nonetheless keeping their options open should the U.S. lower its commitment.

35. The sensitivities are myriad. Some in the region saw President Obama's support for the JCPOA as reflecting a desire to disengage from the region, and there were also concerns that growing US energy autonomy might hasten an American retreat. The signals from the Trump Administration on this front have been mixed and the region's dialogues with Russia, China, and Israel might be interpreted, in part, as an effort to hedge against geostrategic upheavals that might draw the United States away from the Gulf. Again, this seems unlikely but clearly the web of international linkages to and through the Gulf are growing denser and more complex. The UAE and Bahrain's movement toward reconciliation with Israel after decades of hostility only reinforces this view.

VII. EUROPE AND THE GULF

36. Europe's primary interests in the Middle East are: a) maintaining stability in the EU's immediate neighbourhood, especially in strategically significant areas, such as the Gulf; b) boosting trade and investment; c) securing energy imports and defending multiple energy supply lines, in part, to avoid over-dependence on Russian hydrocarbons and; d) working to prevent the expansion of Russian and Chinese political and security influence in the region (Koch, 2019).

37. In both 2018 and 2019, Russia was the EU's largest and lowest cost supplier of natural gas and single largest supplier of petroleum (Eurostat, 2019). Although the economic benefits of this trade are self-evident, there are potential strategic consequences that leave the continent vulnerable to Russian suasion. The goal of checking Russia's derived leverage obviously explains Europe's continued interests in unhindered access to Gulf oil and gas.

38. The CCASG countries collectively constitute one-fifth of the EU's imports, generating roughly EUR 100 billion of foreign exchange earnings in 2017. The EU, in turn, is the most important trading partner for the CCASG with total trade between the EU and CCASG accounting for EUR 144 billion in 2017 or 15% of the CCASG's global trade. This trade rose by 53% between 2006 and 2016. The EU runs a net trade surplus with the Gulf countries. Fossil fuel imports constituted 65% of EU imports from the Gulf in 2017 – or EUR 29 billion (Tenti, 2019). The Gulf region is also a critical financial partner for Europe, and its sovereign wealth funds have been important strategic investors across the continent.

39. The EU itself has worked with the CCASG on projects designed to foster greater regional integration, an arena in which the EU obviously has a great deal of experience. The Commission focuses on energy matters including energy market integration, the introduction of renewable energy resources, the improvement of energy efficiency, and more sustainable use of natural gas among many others. It also recognises that these countries should diversify their economies so that they are less reliant on oil and gas exports. While the Gulf's endowments of carbon energy may be ample, they are nonetheless finite, especially when domestic demand is increasing very rapidly. There is a clear sense in the region itself that future growth and development cannot rely on income generated for this one sector. Here too, the EU sees itself as one of several protagonists that can contribute to

the region's economic diversification and the adoption of more sustainable economic and energy models.

40. Like its American partner, the EU confronts several delicate diplomatic and political quandaries in the region. The onset of tensions between Qatar and its CCASG partners – particularly Saudi Arabia and the UAE – has upset regional integration, which constitutes a central theme for Europe's diplomatic engagement in the region. The EU and several of its leading members also played a key role in the nuclear negotiations with Iran. Most European governments lamented the US decision to pull out of that arrangement. Saudi Arabia and the UAE, however, were hostile to this effort, which they saw as part of a plan to extend the Islamic Republic greater legitimacy than they felt it deserved. That the signing of the deal coincided with renewed regional activism by Iran and its proxies only further alienated these countries from what the EU hoped to achieve with its engagement policy.

41. At the same time, European interests would not be served if their American ally were to wind down its presence in the region. From their perspective, US military presence remains essential to stability, and they would have strong reasons to worry if, for example, Russian and Chinese influence were to increase unchecked in the region. Europe also shares US objections to Iran's aggressive meddling in the Gulf and the Levant. Although European leaders generally objected to the US withdrawal from the JCPOA, they are equally disappointed that Iran has responded to US pressure by threatening to resume its nuclear weapons programme. Iran's violations of the JCPOA have compelled Europe to adopt a harder line, although most European governments have not abandoned hopes of reviving the JCPOA in some form.

42. The war in Yemen has also become a particularly tricky problem for Europe. The Saudis have led an air and ground intervention with US support to help restore the Yemeni President Abdu Rabbo Mansour Hadi after Houthi rebels and followers of former president Saleh overthrew him. So far, this strategic goal has not been achieved. The intervention, which began as an air campaign, quickly escalated with the UAE and Saudis deploying ground forces, including armoured battle groups. The war in Yemen has triggered a horrific humanitarian disaster and has done little to advance regional security.

43. Questions about Europe's military role in the region have become more salient in recent months. Following the US withdrawal from the JCPOA and after Iranian attacks on ships in the Strait of Hormuz and the seizure of a British flagged commercial vessel, the British government called for a European naval coalition to provide more security for commercial ships in the Gulf. The British idea was not to lend support to the Trump Administration's policy of maximum pressure on Iran. It was rather more focused on defending its own and Europe's commercial interests in the region as well as the principles of free navigation (Seligman and Johnson, 2019). The United Kingdom also wanted to demonstrate that even after Brexit, it would remain an active partner of continental Europe on shared security challenges, even when these are beyond the remit of NATO.

44. The United Kingdom, however, subsequently joined the US-led maritime coalition in *Operation Sentinel* to provide protection to ships operating in the Gulf. European countries opted for a European-led maritime mission to monitor the Gulf stationed at the French naval base in Abu Dhabi. The European Maritime Surveillance Mission in the Strait of Hormuz (EMASOH) shares many of the goals of the US-led mission but have chosen to operate separately from it. France, nonetheless, is coordinating efforts with the US Navy. Germany, Belgium, Denmark, Greece, Italy, the Netherlands, Portugal, and France have supported the deployment in a political declaration (Brzozowski, 2020). In addition to defending vital shipping lanes and preventing further incidents in these waters, the deployment implicitly has a transatlantic burden sharing dimension (The Defense Post, 2019). It is worth noting that another international mission, the so-called Combined Task Force 150 is monitoring the movement of oil through the waterways from the Red Sea to the Gulf of Oman

including the Strait of Hormuz, Bab el-Mandeb, and the Suez Canal. Thirty-three countries participate in that effort, including the United States, Canada, and several European countries. Another multilateral endeavour, Combined Task Force 152 engages naval assets from the U.S. and Gulf countries and conducts patrols in the waters of the Gulf.

45. There are those who question whether Europe as a whole can sustain a naval operation in and around the Gulf to confront a high intensity threat like that posed by Iran. Geoffrey Till, chairman of the Corbett Centre for Maritime Policy Studies at King's College London, recently noted that "All European navies have a great deal of experience dealing with moderate-level threats. The problem is, this might not be a moderate-level threat, and some countries might not have that risk appetite" (Seligman and Johnson, 2019). That said, France, like the United Kingdom, maintains a significant force presence in the region and is an important part of the regional security equation. Like the United States, France sells arms to regional partners, including Saudi Arabia, the UAE, and Qatar, and was the third most important arms exporter to the region behind the United States and Russia. Four of France's top five arms clients are in the region. In 2018, France doubled its arms sales to the Middle East as a whole. In 2009, it opened the *Camp de la Paix* consisting of a naval, air, and land force base in Abu Dhabi, and is working closely with the region's defence ministries and conducting joint exercises. The base, which houses roughly 250 military personnel, operates under ALINDIEN, the Admiral commanding French forces in the Indian Ocean.

VIII. RUSSIA, CHINA AND THE GULF

46. Russia's primary foreign policy goal remains countering the United States and NATO – politically, diplomatically, economically, militarily, and culturally – in every strategically significant part of the world including the Gulf (Borshchevskaya, 2019). Russia has sought to re-establish itself as a major player in the region, and its decisive intervention in the Syrian civil war should be understood in this light (Trenin, 2016). After shoring up the Assad regime, the Kremlin has sought to convey that it can be a reliable partner and a pragmatic and impartial player that remains on good terms with all the actors in the region (Standish and Mackinnon, 2020). Russia's regional ambitions cannot be separated from its energy interests. It is one of the world's top three hydrocarbon producers, and its economy is largely dependent on energy exports[1] (Mitrova and Yermakov, 2019). What transpires in the Gulf can have a direct impact on the Russian economy (Rumer, 2019).

47. Russia's priorities in the broader Middle East are: 1) working with regional energy exporters to stabilise and boost international oil prices; 2) undermining Europe's efforts to diversify its natural gas suppliers; 3) delivering more oil and gas to Asia; 4) attracting investment into its sanctions-hit economy; and 5) increasing its own energy exports to the region's energy importers (Mammadov, 2018). Russia's energy diplomacy in the region is conducted bilaterally and through participation in relevant international organisations, such as OPEC and the Gas Exporting Countries Forum (GECF, 2019). Russia furthers its regional strategic and economic ambitions by: 1) forging bilateral foreign policy and energy agreements; 2) working with OPEC and the GECF on energy price-boosting or price-stabilisation measures and mechanisms; 3) partnering in energy exploration and development projects; and 4) participating in critical energy infrastructure projects, such as oil shipping terminals (Mammadov, 2018).

48. Russia has traditionally viewed Gulf producers as rivals in the energy field, and it competes directly against Saudi Arabia for market share in Europe and Asia and against Qatar in the European gas market, which it regards as a core economic and strategic asset (Mammadov, 2018). This competitive relationship was on full display during a spring 2020 price war between Saudi Arabia and Russia. Changing geopolitical realities, however, have led Russia and the Gulf producers to

[1] In 2017 and 2018, hydrocarbon revenues provided 40 and 46%, respectively, of the federal budget revenues (Mitrova and Yermakov, December 2019).

deepen cooperation. For their part, the Gulf countries have deemed it in their interest to maintain good working relations with Russia, particularly on energy matters, despite outstanding differences, for example, over Russia's Syria policy. Geopolitical calculations are at play here. The Gulf monarchies recognise that Russian influence in the region has increased as a result of its intervention in Syria, its cooperative if complex relationship with Iran, and uncertainties about long-term American policies. Russia offers the Gulf monarchies a kind of hedge against uncertainty and is a potential albeit very difficult partner in shaping the global energy market (Rumer, 2019). The recent Russian-Saudi price war, however, clearly exposed the limits to this cooperation.

49. Russian leverage is particularly apparent in gas markets, which are less globally integrated and fungible than oil markets. In 2018, Qatar was the world's third-largest gas exporter after Russia and Algeria, but it was the largest liquefied natural gas (LNG) exporter, meaning that it was best placed to exploit price differentials between otherwise segmented markets (GECF, 2019). Qatar's capacity to move LNG to Europe has enabled the continent to reduce its dependence on Russian gas supplies at least at the margins (Katz, 2015). Russia has accordingly sought to tighten cooperation with Qatar – and it has done so despite the 2017 Saudi-led blockade of that country (Mammadov, 2018).

50. While Russia and Iran share the goal of reducing US influence in the region, important differences remain. This is particularly true in the energy sector, where Iran and Russia are competitors. Iran, for example, remains wary of allowing too much Russian investment in its energy sector and worries that Russia would be tempted to leverage these investments to limit future Iranian gas distribution to European markets (Geranmayeh and Liik, 2016). For its part, Russia has no interest in Europe diversifying its energy suppliers, as this would reduce its dependence on Russian energy and, by extension, undercut the Kremlin's geopolitical leverage. In this, Iran is a potential direct competitor. At the same time, Russia also discerns possible advantages in playing its European energy clients against its Asian ones (Mitrova, 2019).

51. Over the past decade, China has also increased its economic and political footprint in the broader Middle East. It is now the most consequential trade partner and foreign investor for many countries in the region and has established strategic partnerships with several of these countries while upholding the notion of "mutual non-interference in each other's internal affairs" – a notion that is particularly attractive to unaccountable authoritarian governments (Oosterveld, 2017). China has also scrupulously sought to advance its interests without involving itself in domestic and regional security matters (Scita, 2019). At the same time, however, its longterm ambitions may be to challenge the US position in the broader region and in the Gulf more specifically. Its growing need for imported energy lies at the heart of its diplomatic démarche, while its new "Silk Road Initiative" provides a kind of superstructure for advancing its interests.

52. In 2015, China emerged as the world's largest importer of crude oil and it will become increasingly reliant on energy imports (Lons et al., 2019). Currently, more than 40% of China's oil imports originate in the Middle East, which is also a key supplier of that country's LNG (Lons et al., 2019). Maintaining good relations with the region's hydrocarbon producers and ensuring access for tankers in and out of the Gulf will thus remain crucial to China's long-term energy security. China also has a clear stake in diversifying its energy supplier base and has accordingly developed ties to other energy suppliers, including Iran and Russia (Teer, 2019).

53. Beijing has sought to foster a degree of economic interdependence with the Gulf monarchies so that both sides have a stake in maintaining the energy link. China also aspires to minimise the capacity of the United States to impede the flow of energy to its dynamic coastal economy. This concern has been a catalyst for the build-up of China's naval force and its effort to gradually expand its own naval presence around the Straits of Hormuz and Bab-el-Mandeb. Not coincidentally, China established its first overseas base in Djibouti in 2017 and is also developing the Pakistani port of

Gwadar[2]. China's long-term ambition is to enhance its capacity to project force in the region. China has joined in multi-lateral anti-piracy and maritime security missions in the Arabian Sea and the Gulf of Aden, and in December 2019, participated in the first Russia-Iran-China exercise carried out in the Indian Ocean and the Sea of Oman (Lons et al., 2019).

IX. NATO: ENERGY SECURITY AND DIALOGUE WITH THE GULF

54. Since the Bucharest Summit in 2008, energy security considerations have been integrated into NATO policies and activities. A Centre of Excellence for energy security was created in Vilnius in 2013. Subsequent summits clarified NATO's role in raising strategic awareness in the energy sector, protecting energy infrastructure, and supporting operational energy development. The organisation's procedures for fuel support include a common nomenclature for NATO members, which facilitates interoperability among nations. In addition, NATO has developed two concepts: the single fuel policy (Smart Fuel principle) and a pooling of oil support resources embedded in the broader Smart Defence effort. These two concepts have been applied for years, for example, by the French armed forces.

55. Because other key regional powers like Egypt, Iraq, and Syria are far too consumed with domestic issues to play the kind of leadership roles that they once did, the Gulf countries, almost by default, have been thrust into more prominent regional security roles. While the countries of the region have deepened dialogue with other critical security actors, including the United States, the United Kingdom, France, and NATO as a whole, their record in acting in concert is mixed. The difficulties encountered by Saudi Arabia and the UAE in Yemen are a case in point. But the lack of unity within the CCASG provides only a partial explanation. There are also gaps in training, doctrine, personnel management, expeditionary capabilities, and force interoperability. Of course, some of these problems can be found in any international coalition. Although there are real reasons why the region should be acting in a more coherent fashion on the security front, there are also myriad diplomatic, political, cultural, and structural impediments to doing so (Saaman, 2017).

56. The threats to the Gulf monarchies cannot be separated from their prominent role in global energy markets. They face a threat of terrorism and risks to internal cohesion – problems which may be partly of their own making, but which external actors like Iran have readily exacerbated. They also confront a fall-out from conflicts in Syria, Iraq, and Yemen. They need to face up to threats to vital infrastructure posed by missiles and drones, and they must tackle current and potential naval threats on the vital waters through which their oil and gas exports are shipped. In addition, the entire region would be threatened were Iran to relaunch its nuclear weapons programme.

57. The Maritime challenge has enormous implications for energy security. Rising threat levels in the Gulf, for example, can raise security premia and energy price movements. This is not an abstract problem. Seaborne oil and gas from the Gulf pass through two vulnerable chokepoints at the Bab el Mandeb Strait between Somalia and Yemen, and the Strait of Hormuz between Oman and Iran. The Strait of Hormuz has been particularly problematic, and Iran has a demonstrated capacity to attack shipping in those waters. Were a full-fledged maritime conflict to unfold, it would undoubtedly drive insurance premia through the roof, which would effectively close the straits and bottle up the flow of energy from the region. Since 2008, there have been several incidents in which Iranian naval assets have moved aggressively toward American warships operating in these waters. In 2015, Iran launched a rocket near a US aircraft carrier and later imprisoned 10 US sailors whose ship had approached Farsi Island. In both May and June 2019, the United States alleged that Iran attacked oil tankers in the Gulf of Oman and in the Strait of Hormuz respectively (Reuters, 2019).

[2] This project antedates the Belt and Road Initiative. It is henceforth considered to be a key link between the sea and land routes of the Chinese connectivity initiative.

Iran also has an interest in keeping the Strait open as it moves its own oil exports to countries like China through these waters.

58. If Iran were to somehow close the Strait of Hormuz, it would block the movement of roughly 25% of the world's oil supplies. Iran uses this scenario to undergird its deterrence policy. The Revolutionary Guards have created a maritime unit capable of conducting asymmetric attacks in these waters. These include 6,000 mines, 65 combat warships armed with missiles, Kilo-class submarines and mini-submarines (Saaman, 2017). Iran also possesses an impressive ballistic missile arsenal that includes the Shahab-2 and the solid-fuelled Sejil with a range of 2,200 km. It is also developing intercontinental ballistic missiles with the likely assistance of North Korea. Most analysts judge that it would be an act of desperation for Iran to engage in an all-out attack in the Strait, but merely the prospect of such a scenario prompted the UAE to build a pipeline from Habshan to Fujairah to have the capability to move energy in a more secure fashion around, rather than through the Strait.

59. Although there has been some discussion in recent years about the need to create a NATO-like Alliance for Gulf countries to cope with these threats, this has not proved possible, not the least because of existing rivalries and mutual suspicion among the CCASG states. Current tensions between Qatar on the one hand, and Saudi Arabia, the UAE, and Bahrain on the other, are only the most recent manifestation of enduring rivalry among the CCASG countries. In the past, Qatar and Bahrain experienced sharp tensions over the Hawar Islands, there have been border frictions between Qatar and Saudi Arabia, and Oman has had border disagreements with the UAE and Saudi Arabia. These disputes tend to undermine deeper security cooperation.

60. The Trump Administration, however, floated the idea of a NATO-like security integration in the Gulf, arguing that this would help the region stand up to Iran (Exartier, 2019). A more cohesive allied CCASG would allow the US military to play more of a support role in the region, but it would also, of course, give it less influence. The difficulties of the Saudi-UAE led intervention in Yemen point to the risks of disengagement and even the negative consequences of allowing regional players to play the leading role in major military operations (Saaman, 2017). Although there are indeed compelling reasons why deeper security and diplomatic cooperation is needed in this highly stressed and strategically vulnerable region, it is not likely that the Gulf countries or a broader community of Arab nations would be prepared to go as far as building a permanent alliance along the lines of NATO, if for no reason other than the lack of strategic consensus among these countries. For this reason, the United States, France, the United Kingdom and other allies and partners will continue to play an important stabilising role in the region.

61. NATO itself is also more deeply engaged in the Gulf region. The 9/11 terrorist attacks marked a turning point for the Alliance's Gulf policy. Not only did it prompt the first and only invocation of the North Atlantic Treaty's Article 5, it also marked the moment when the Alliance began to develop more formal relations with the Gulf countries and to work with these monarchies in conflict zones. Bahrain, for example, deployed special forces to work with NATO forces in Afghanistan. Kuwait provided basing for NATO aircraft and over-flight permissions for all forces engaged in the operation. Qatar opened its Al Udeid airbase to allies, and the UAE deployed specialised troops and allowed its Al Minhad airbase to act as a support hub for the NATO mission in Afghanistan. All of this pointed to an important evolution in NATO's relations with the Gulf countries, which took on a clearly strategic dimension. This was formalised in June 2004, when Allied leaders invited Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the UAE to participate in the Istanbul Cooperation Initiative, essentially to formalise the partnerships that were emerging between NATO and the region. The idea would be to encourage greater political cooperation, engage in training activities and carry out more extensive and formal exchanges. Kuwait, Bahrain, Qatar, and the UAE joined the Istanbul Cooperation Initiative, while Saudi Arabia and Oman chose to keep the prospect of joining alive while cooperating with NATO on a case by case basis. Qatari and UAE forces subsequently participated in NATO's Operation United Protector in Libya in 2011, and starting in 2014, air forces from Bahrain, the UAE,

and Saudi Arabia conducted airstrikes in Syria and Iraq as part of the coalition to counter the Islamic State. In 2012, Allied leaders endorsed an offer by Kuwait to host a NATO ICI Regional Centre for sharing knowledge on energy security, cyber defence maritime security, chemical, biological, radiological, and nuclear defence and crisis management. It was formally opened in 2017 (Webb, 2019).

62. ICI member countries are now able to tap into NATO's training and education programmes and can develop individual partnership and cooperation programmes. They are also able to adopt NATO standards for equipment, training, planning, and operations, and this could help them cooperate more intensively in a NATO framework, including in combat situations. The level and intensity of this cooperation have increased in recent years, and this reflects their own interest in keeping the Alliance and its member states engaged in the security of the region. It is thought by some that these efforts could foster stronger regional security cooperation if the political and diplomatic conditions in the region were to allow for this to happen. Again, this does not seem likely in the current diplomatic environment.

X. THE COVID-19 PANDEMIC

63. The COVID-19 pandemic has exposed new vulnerabilities in the Gulf region although the region's monarchies are generally far better prepared to handle the medical dimensions of the crisis than are most of the countries of the broader MENA region. But COVID-19 represents a multifarious challenge. The first challenge relates to the economy. The IMF has now forecast that oil exporters from the Middle East region as a whole will contract by 7.3%. Despite an OPEC decision made with non-OPEC countries, including Russia, to slash global production by ten million barrels per day, oil prices have remained low, hovering near USD 40/b in early October. According to the IMF, the precipitous fall in oil prices and the collapse of demand triggered by COVID-19 will result in USD 270 billion lost revenues for GCC countries (Augustine, 2020) In late September 2020, S&P Global Ratings estimated that GCC central government deficits will reach about USD 490 billion cumulatively between 2020 and 2023 while government debt will surge by a record-high USD 100 billion this year. To put this into context, the IMF notes that Saudi Arabia would need oil prices at USD 76.10 to achieve fiscal breakeven in in 2020. But with oil prices at USD 40/b Ryad faces a budget deficit approaching 11.4% of GDP. Oil accounts for roughly 87% of Saudi budget revenues, 90% of export earnings, and 42% of GDP (Kimani, 2020).

64. While GCC energy production continued in the early months of 2020, demand for oil and gas swiftly collapsed as the pandemic spread. Indeed, the global demand for oil underwent its single greatest fall ever in April as governments over the world implemented lockdowns to contain the pandemic. Moreover, these lockdowns coincided with a Russian-Saudi price war that began when Russia rejected a Saudi-led effort to slash global production (Wemer, 2020). With production failing to adjust the collapse of demand, a massive oil glut emerged that triggered an oil storage crisis in North America. Some oil brokers cut prices below zero for West Texas Intermediate crude; they were effectively paying storage facilities to accept otherwise unwanted oil stocks.

65. Because Gulf oil is largely moved on supertankers, the GCC countries did not face the same storage problems but were nonetheless struck hard by the price collapse. Finally, in early April, oil producing countries, including a reluctant Russia undertook a significant production cut which put a floor on oil prices. Producers decided to cut production by a tenth of global supply for May and June (Cook, April 2020). Saudi officials are now pushing to keep production down for the rest of the year, although some expect Russia to resist given the difficulties these prices pose both Russia's budget (Parask, 2020).

66. The oil price fall has also had a devastating impact on higher cost North American shale oil producers, that cannot compete at current low prices. In late May, US imports of Saudi oil surged.

Gulf oil is now expected to take a greater share of the US market, reversing a recent and strategically consequential trend of falling US oil imports. Saudi exports to the United States surged by nearly one million barrels per day (mbpd) to 1.6 mbpd during the week ending May 22. US oil imports from all countries increased to 7.2 mbpd, almost 40 per cent more than the week before (Brower and Raval, 2020). Although there is now a floor on oil prices due to the agreed production limits, it is significantly lower than the breakeven point of roughly USD 50/b for US producers which are now obviously under siege. This effectively reverses a much-touted trend in which the United States had emerged as perhaps the world's most consequential swing producer and was exercising a degree of market discipline over global oil markets to the chagrin of both Russia and Saudi Arabia. US producers cannot play that role at current prices and are now compelled to cap wells, slash investment, cancel new drilling and lay off workers.

67. The CCASG governments rely on energy revenues not simply to underwrite national budgets and the non-energy sector, but also to build a degree of social consensus and regime legitimacy. The latter has been achieved through relatively generous social spending programs. With foreign exchange earnings tumbling, that kind of spending is now at risk. This, in turn, could have longer-term political implications for the region. When oil prices fell in 2014, Saudi Arabia, Kuwait, Qatar, Bahrain, Oman, and the UAE slashed subsidies and introduced a set of new taxes to cover the losses (Al-Tamimi, 2019).

68. The IIF suggests that Gulf countries will now have to cope with lower fiscal breakeven oil prices. A fiscal breakeven oil price is the minimum price per barrel that a country requires to meet its expected spending needs while balancing its budget. In 2020, the fiscal breakeven Brent oil price for Saudi Arabia stood at USD 75/b, Bahrain (USD 77/b), Oman (USD 80/b), and Qatar (USD 54/b). As Brent prices are now well below these levels, either the region will be running substantial fiscal deficits or governments will need to reduce public spending. Spending cuts are forecast, but fiscal deficits will still widen in 2020 to 10.3% in 2020 from 2.5% in 2019 if the average price of Brent oil is USD 40/b – the current medium-term price forecast (Saadi, 2020). The margins for state support for an array of ambitious projects and social support are thus narrowing. To take one example of the difficult choices the region's governments now confront, Saudi Arabia appears likely to scale back its much trumpeted programme for economic diversification and has recently announced plans to triple the value added tax to make up for anticipated shortfalls in oil revenue.

69. Measures to contain the virus have also had a very adverse impact on the region's economies. Gulf governments moved with alacrity to impose lockdowns. Many commercial enterprises were shuttered as a result, while travel to and within the region was dramatically curtailed. This slowed economic activity dramatically, and only in May did an easing of these strictures begin (Harb, 2020). But many restrictions remain in place, and uncertainty is everywhere apparent.

70. As this report has noted, the GCC's leaders have generally recognised the long-term economic and political risk associated with overreliance on the export of oil and gas, commodities that are finite, obvious catalysts for climate change, and subject to wild price swings that can disrupt ambitions for more balanced economic development in producer countries. With the price of far cleaner renewables falling dramatically in recent years, the region's governments have seen the writing on the wall and worked to reduce their reliance on energy exports and to diversify national economies. They have used their substantial accumulated wealth to invest in programmes designed to achieve these ambitions including high technology sectors, tourism, travel, banking and finance, and logistics among others (Kozhanov, 2020). The global crisis and the collapse in oil and gas prices, however, is now putting all of this at risk. A reduction in state support for a range of key projects aiming to modernise these societies now seems inevitable (Bordoff, 2020).

71. Labour markets will also be buffeted by the pandemic and its economic fallout. Foreigners make up roughly 90% of the population in the UAE, 66% in Kuwait, 50% in Oman and Bahrain, and 33% in Saudi Arabia. This huge community of migrant workers confronts a unique set of challenges,

and there are concerns about forced expatriation and migrant firings – something that has occurred during previous economic downturns. Indeed, this phenomenon is already underway and will have spill-over impacts particularly in the key labour exporting countries of India, Pakistan, Bangladesh, and the Philippines. Whilst GCC governments do not release data on the nationalities of those infected with COVID-19, evidence suggests that the virus is spreading fastest among foreign labourers. In Saudi-Arabia, an estimated four in five Covid cases involved foreigners in late April (The Economist, 2020). These groups are economically vulnerable. Several Gulf governments, however, have excluded foreign nationals from labour market responses to the crisis. The Saudi and Bahraini governments promised to cover the shortfall in their own nationals' wages, but most foreign workers do not qualify for this support. The UAE has also altered laws to allow companies to break or restructure contracts with non-nationals and pressure migrant workers to take unpaid leave. (Deutsche Welle, 2020). Unemployed workers are often unable to afford the journey to their home countries (The Economist, 2020), leaving them vulnerable to exploitation. India and Pakistan have organised repatriation flights for stranded nationals, but the dimension of demands exceed capacities. In May alone, more than 200,000 Indian workers registered to be repatriated from the UAE, along with 60,000 Pakistani nationals.

72. The ILO has long lamented the lack of basic rights enjoyed by migrant workers in GCC countries, some of whom live in poor and crowded conditions (Sherlock, 2020). Migrant workers are often housed in very cramped living conditions with limited access to running water and sanitation. This can complicate efforts to promote social distancing and other hygienic measures are impossible. (Allinson, 2020). There are also Covid-related challenges at the higher end of the job market. Many health care workers, including doctors, are also migrants. Eighty-five per cent of doctors and nurses in the UAE, for example, are not citizens of that country. The figure for Saudi Arabia is 78%. Some of these vital workers have opted to return to their home countries in the midst of the pandemic. According to the ILO, the outflow of foreign workers will likely be greater than it was after both the 2008-2009 financial crisis and the 2014-2015 oil price fall. In Oman, for example, the number of expatriates living in the country fell by over 340,000 in 2010 following the 2008-2009 crisis. The rate of the exodus is likely to be higher in the current crisis. The World Bank has reported the sharpest decline in household remittance payments in recent history (Deutsche Welle, 2020).

73. The Gulf region is also highly dependent on food imports, and in recent years has had to deal with supply problems due to international bottlenecks. This was the case in 2007 when commodity prices soared, and a number of food exporting countries began to restrict exports. Officials in the Gulf are now concerned about possible food supply problems arising out of the COVID-19 crisis. Breaks in global food supply chains linked to the pandemic would have an outsized impact on the region, and governments have mobilised to pre-empt the problem (MEO, 2020). The UAE has responded by easing food import requirements, including previous requirements for Arabic labelling. After the last regional food supply crisis, it invested in Eastern European and African farmland to help ensure adequate food supplies in a time of crisis. For its part, Qatar has invested in domestic agricultural production to enhance its own food security. This has eased its sense of vulnerability, at least for certain food commodities (Westall and Odeh, 2020). There are concerns that migrant workers would be particularly vulnerable to food shortages because many have been laid off and would thus be adversely impacted by rising prices.

74. Travel restrictions pose another set of challenges. The Hajj and Umrah, which typically generate USD 12 billion in earnings for the Kingdom, the equivalent of roughly 7% of total GDP, was dramatically scaled back in 2020 and these earnings have thus been foregone. As of 1 October 2020, Saudi Arabia had reported 334,605 COVID-19 cases and 4,768 deaths, the most in the GCC (Worldometer, Saudi Arabia, 2020).

75. The UAE has the region's most diversified economy, but it has also been buffeted by the current crisis. The Emirate of Dubai faces a particularly compelling economic challenge, not only due to low oil prices but also because of the collapse in tourism and travel and a housing bubble that will

be made worse by an exodus of foreign workers. The UAE is an important transportation hub, and the crisis in the travel and tourist sectors has had an outsized negative impact on the Dubai economy (TRTWORLD, 2020). Dubai's debt level has risen to 80% of UAE's GDP and there are concerns that it will need to be bailed out. As of 1 October 2020, the UAE had reported 94,190 COVID-19 cases and 419 deaths. For its part, Qatar had recorded 125,760 COVID-19 cases and 214 deaths (Worldometer, Qatar and UAE, 2020). Qatar is a major gas producer and the price of that commodity has fallen significantly along with oil prices.

76. As of 1 October, Kuwait had registered 105,676 COVID-19 cases and 612 deaths (Worldometer, Kuwait, 2020). It has imposed some of the region's harshest lockdowns with inhabitants compelled to remain at home for as much as 16 hours per day. Kuwait is highly dependent on oil exports, and the price collapse has struck hard. But aviation, hospitality, and the real estate sectors have also all taken substantial hits due to the global recession. After several years of significant budget deficits, Kuwait's financial reserves have fallen although the country still holds USD 45 billion in reserves.

77. As of 1 October, Bahrain had registered 70,864 cases of COVID-19 and 251 deaths (Worldometer, Bahrain, 2020). Bahrain and Oman are the two smallest Gulf economies and have far less foreign asset holdings than their larger and wealthier GCC partners. They accordingly will both require external support to manage the economic fallout out from the pandemic and the drop in energy prices. Both countries are now forecasting budget deficits of between 15-25% of GDP. Bahrain has announced a 30% spending cut and Oman will reduce government spending by at least 10% (TRTWORLD, 2020). Although it only holds 5 billions barrels of oil reserves, Oman's economy depends on the hydrocarbons sector for 80% of its budget revenues (Cornell, 2020). Public debt is expected to rise in 2020 to a record 77.1% of its GDP (Owtram, 2020). With its fiscal situation already under strain, the current fall in oil prices will strike Oman's economy harder than other Gulf States. The government under Sultan Haitham (who succeeded Sultan Qaboos in January) has already implemented public spending cuts in infrastructure and future investments, with services, salaries and social programmes next in line (Cornell, 2020). The current crisis also jeopardises a gas-to-liquids project planned with Royal Dutch Shell and Total estimated at USD 19 billion (Watkins, 2020.

78. Oman's difficulties may increase its dependence on Chinese lending and investments. It is situated in an attractive position for China's Belt and Road Initiative, with the development of the port in Duqm a flagship cooperation hub. Existing debt due in 2021-2022 includes USD 3.5 billion in Chinese loans. Granting any lenience in debt relief would accord Beijing additional leverage. Forty-five per cent of Oman's exports now go to China (Owtram, 2020), and Chinese demand accounts for around 85% of Oman's output in the hydrocarbons sector. China has already pledged USD 10 billion of additional investments for the petrochemicals sector development around Duqm (Watkins, 2020). The United States has been considering a military base capable of supporting aircraft carriers in Duqm.

79. The COVID-19 crisis has had some spill-over impacts on geopolitics in the Gulf. The UAE, for example, discretely began to deescalate its war of words with the Iranian government by offering medical assistance to Iran which has had the most cases in the MENA region. Both Qatar and Kuwait, which have traditionally had somewhat better relations with Iran, also offered medical assistance. This might be seen as part of a general regional effort to reverse what in late 2019 seemed like a march to war with the Islamic Republic. UAE Crown Prince Mohamed bin Zayed also offered assistance to Syrian President Bashar Al-Assad, after years of avoiding any contact with Al-Assad. This has been understood as one piece in the UAE's overall effort to improve relations with Syria and Al-Assad. It is finally noteworthy that tensions between several GCC members and Qatar have endured throughout the pandemic. Those who have worked for reconciliation will see this failure as a missed opportunity (Fakhro, 2020).

XI. CONCLUSIONS

80. Over time, Europe will have to adopt a more active foreign and security policy for the Gulf region in line with its interests in regional security. This has both diplomatic and military implications. In the future, European governments may need to deploy more naval assets to the region to defend their own interests in these waters and to work as a full-fledged partner with the countries of the region as well as with the United States.

81. On the diplomatic front, Europe and the United States should continue to work to lower tensions in the Gulf, including fostering reconciliation within the CCASG and ensuring that rivalry between Iran and the CCASG member countries does not lead to higher levels of conflict (Scazzieri, 2019). It is important that non-EU European states like Norway, Turkey, and the United Kingdom are engaged in European efforts as the continent as a whole shares an interest in reducing tensions in the region and upholding shared economic and security goals. This demands patient diplomacy and sustained consultation.

82. NATO can help ensure that the United States and its allies and partners are on the same page with regards to the Gulf. NATO offers a model of security cooperation that remains relevant to regional players. NATO can provide training opportunities that are needed in the region and foster deeper cooperation. The goal should be to build mutual trust and reinforce regional stability while helping regional actors become more self-reliant and responsible for their own security.

83. But cooperation with these undemocratic governments cannot mean that Western countries are abandoning their values and commitment to human rights. Stability in the Gulf over the long-term will demand that these societies become more open and tolerant and that their wealth is more equally distributed. Economic reform efforts are underway in the region, and these should be supported by allied countries. Ultimately, reform is a process that must be driven by the people of the region But NATO member countries have valuable experience in matters like strengthening civil society, public participation in decision making, human rights, economic diversification, and creating more meritocratic and entrepreneurial societies. Allied countries should continue to advance these values even if there is strong resistance to them in some governing quarters and certain sectors of these conservative societies.

84. It is in the interest of the international community to support the CCASG's push for renewable energy. These countries have the resources to dedicate to this important transition and they are in a position to demonstrate that these technologies can be both economically viable and environmentally sustainable. Although this might seem to work against the immediate interests of these important carbon energy producers, even they recognise that in the long term their futures hinge on embracing a renewable energy future. This will demand regulatory, educational, and institutional reform in these countries.

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