



TODAY **& TOMORROW**





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WINTER IS COMING by Mario Sechi

TO COPE WITH THE WINTER OF GAS WAR, ITALY AND EUROPE TOGETHER FACE A HISTORIC CHALLENGE: THE REDESIGN OF THE POLITICAL SPACE OF THE UNION, WHICH FIRST OF ALL MEANS FINDING NEW ENERGY ROUTES

OUR TELEVISION SCREENS are now full of geopolitics and, with every new story, I wonder whether what I see and hear corresponds to the reality. Experts of war and energy appear on the screen, rattling off the rosary of little Clausewitz and the theories on the politics of 'decoupling' in a post-everything era, i.e. tomorrow. As the words flow, I wonder: where are the peoples, the civilizations, the worldviews, the differences, the illusions and disillusiones, the maps of the known world and those of the unknown that is knocking at the door? In the last few weeks, two images recur in my thoughts: the first, a painting by Viktor Vasnetsov, the figure of Ivan Tsare-

vich riding a gray wolf in the forest and carrying his princess to safety, a masterpiece of Russian romanticism; the second, a recurring figure in Chinese folk art, Zhao Daoling, the father of Taoism, riding a tiger. What do these figures tell us? We are faced with the being that dominates nature, tames the ferocious beast, harnesses its strength with intelligence and courage and a touch of magic. This is the deepest earth of man; the phosphorescent abyss of myth. Russia and China, two former empires, an immense imaginary that rides the time zones, gallops into the night on the peaks of

the Urals and ends the race at dawn on the Great Wall; it is the story that soars over the cathedrals of the Kremlin and climbs the Temple of Heaven. It is the space where time moves, yesterday, today and tomorrow. Those who talk about the competition between the great powers often forget the character of men and the flame of culture, the great river of words and images that make man and his adventure on Earth.

In the new Great Game, everyone can see numbers (starting with energy), but only a few know how to recombine them and connect them to the thought machine. If every move were a mathematical problem, there would be no errors, because the information is visible, but it is precisely in the asymmetry of culture that the information deficit is realized. What is Putin up to? What will Xi Jinping do? What will Biden say? What symbols move Erdogan? What do the European elites think? What is the political thought in the Gulf countries? What are they saying in the Near East? The differences lie in this inner dialog, the secret is in the culture, in the very vivid shadows and lights that dart through our existence, in the images that refer to the myth and move the will of man.

To learn, to understand, we must start from these elements. Let's look at Europe: the countries of the North are naturally attracted to the East, they look to Russia, they follow trade routes projected towards the Far East, they follow the path of the great plain, they cross the steppe, they reach the Sea of China.

The countries of the South cultivate another vital space, the Mediterranean Sea, their movement points towards Africa, crosses the desert, travels into the Near East, tastes of cinnamon, ginger, cardamom, star anise and turmeric. Peoples who sail in Mare Nostrum.

The island of Britain finds its dimension as an oceanic power; it is by necessity an "empire" and its first physical and imaginary border is the English Channel; it looks to the Atlantic, has an inseparable link with the mainland of the European continent, a centuries-old history of conquest, love and hate.

This space, Europe, since 1823 has become smaller and wider. On December 2 of that year, the U.S. President James Monroe, in his message, used the word "hemisphere" for the first time and, as Carl Schmitt noted in his book *The Nomos of the Earth*, "intentionally or otherwise, the term 'hemisphere' is connected with the fact that the political system of the western hemisphere, as a regime of freedom, is opposed to the different political system of the absolute European monarchies of the time. The Monroe doctrine and the western hemisphere have since appeared together, designating the sphere of the 'special interests' of the United States." The consequences of that speech by Monroe reach as far as today, because "a space is thus designated that goes far beyond the state territory, a large space in the juridical-international sense of the term." With the 1939 declaration of Panama, this space widens further; the borders of America are no longer in the mainland alone, but extend to the sea, the territorial limit in-

creases from 3 to 300 miles from the coast and this geographical-mathematical leap introduces new strategic concepts in which "the sea is a flat surface without obstacles, on which the strategy is resolved in geometry." The fascinating theory of spaces. Look at the map, listen to the words of the leaders of great nations, we are in this game, a leap between the nineteenth and twentieth centuries, in a scenario of augmented reality.

With the opening of the sky, domination becomes global and on three dimensions. In this game with the classics and the new doctrines, a fourth dimension is added, the product of the industrialization of the West: energy infrastructure, the network of connections by land and by sea that allows the extraction, production, distribution and transformation of energy raw materials. Finally, there is a fifth element, that is growing exponentially: cyberspace, the command-and-control center of advanced economies which includes the domain of "Computing machinery and intelligence" opened by Alan Turing in 1950 with his article in *Mind*, the philosophy journal of the University of Oxford. Whoever controls the fourth and fifth elements today curves the space of the other three: earth, sea and sky.

In this complex scenario, Italy is playing an accelerated and historic game with Europe: the redesign of the political space of the Union. It is not just a military issue, of strategic defense and deterrence, it is first of all about new energy routes. In the previous issue of *World Energy*, we talked about the "Africa mission", the operation pursued by the Italian government led by Mario Draghi (and by the one who, after his resignation, will replace him in the future at Palazzo Chigi) with the instrument of economic diplomacy and the know-how of the Eni group. What we have already said in *WE* applies here: "All this is only possible thanks to a quality called credibility. It cannot be bought in ready cash; it is built and consolidated in the longue durée and is not independent of the people who take it forward. It is not produced with a machine; there is no technique to replace human relationships, the basis for dialog and respect for the culture of the other." Thus, Algeria has become Italy's leading gas supplier and will give the European Union other additional resources. The agreement signed by the Italian government is a milestone on this path. According to data provided by the Ministry of Ecological Transition, in the first half of 2022, Italy imported a total of 31.7 billion cubic meters of gas. Of this, 30 percent came from Algeria, 26 percent from Russia, 13 percent from Azerbaijan, 10 percent from Norway and Northern Europe, and 3 percent from Libya. The numbers speak for themselves, but time and history define them.

These are the steps necessary to overcome that which on the most recent cover of *The Economist* is "Europe's Coming Winter Peril", a beautiful cover, with a bear pointing to Little Red Riding Hood walking among the snow and trees transformed into gas stations. Once again, the fairy tale, the ancestral presence of the myth.

They are not remote facts, think tank abstractions, they are the notes taken by a reporter crossing the street, everyday life, filling up at the gas pump, shopping at the supermarket, education for children, income, capital, labor. It is in the mine of the fairytale, in the narrative of fantasy, in "Game of Thrones", that we find the just title for this story: "Winter is coming".

It is again with the pioneering spirit that has inspired it since its foundation that Eni has opened new routes, expanded its alliances, conducted a "research campaign" to understand where the future is shaped. A work in progress: the hunt for raw materials is a long job and the public only sees the final stretch of this great exploration.

After Africa, Qatar and the Gulf are another stage of the journey, as we discuss in this issue of *WE*: a piece of the puzzle, a geopolitical and industrial vision for our country and for Europe. The gas giant, Qatar, with its ports, its infrastructures, its gas carriers, a "miracle" that challenges the "curse of resources", the example of a today and tomorrow far from the paradigm of countries rich in raw materials condemned to poverty by "extractive kleptocracies". Qatar has a different history, no one can be a clairvoyant and know the epilogue; it would be a sin of presumption to read its story through the lens of the West (source of great strategic errors—just think about how the campaign in Afghanistan ended after twenty years, in a few days it will be the anniversary of the withdrawal of American troops, the last soldier to leave Kabul) and it would be even more misleading just to read the numbers, which are excellent but do not tell the whole story of this country that projects out into the Gulf: an aircraft carrier linking East and West. It is more than a hope; it is a fact.

It is the key of culture that opens surprise doors, uncovers interpretations that go beyond cliché and déjà-vu. If the myth is the foundation of the experience, then the hunt is on. Let's take another step back in time, let's raise the anchor: we are in the early nineteenth century, Erhama Bin Jaber is a pirate. The captains of the ships that cross the waters of the Gulf towards Oman and the Indian Ocean fear two things: the storm and his sword. His fame precedes the cannons of his ship. British writer James Silk Buckingham describes him as a man covered with wounds, one eye bandaged, his hand ready to draw his sword. He died in battle in 1826, killing himself in order not to fall prisoner to Al-Khalifa, his enemy that reigned over Bahrain. Bin Jaber sacrificed himself to save his land, he is a hero.

Let's return to the present. Two hundred years later, this historical figure goes boarding in a novel called *Al Qursan* (the pirate) written by Abdulaziz Al-Mahmoud in 2011 (translated into English the following year with the title *The Corsair*). An unexpected success. The reader is immersed in a story of adventure, page by page discovering the character, his exploits, enmities and alliances. The result is the "foundation" stone of Qatar, different from the other Gulf countries: a story in which the pirate



negotiates as an equal, makes pacts with the British and tells Captain Loch, commander of the British fleet that patrols the Gulf, "you know I'm different from them." It is this "diversity" of colonial history that cements a renewed identity, stamps the name of Erhama Bin Jaber on the ports and ships of Qatar that transport gas to the West. One book forges the national character in an instant.

Once again, it is the "ancient" tale that builds the collective imagination; the rise and fall of the great powers is this novel. It rides the tiger, it races on the back of a gray wolf, it rides the waves. Let's rediscover our myth.

we

QATAR

AND THE CURSE OF THE RESOURCES

by Moisés Naím

TO COUNTER THIS PHENOMENON, QATAR HAS EXPERIMENTED WITH A SOLUTION THAT COMBINES A TRADITIONAL MONARCHY, A LARGE WORKING CLASS MADE UP OF FOREIGNERS AND A STUBBORNLY INDEPENDENT DEMOCRACY. IT REMAINS TO BE SEEN WHETHER THIS RECIPE WILL HOLD UP TO THE ENERGY TRANSITION

ALL TOO OFTEN, natural resources blight economic and social development. From Nigeria to Indonesia, from the Democratic Republic of Congo to Venezuela, countries “blessed” with substantial mineral wealth find themselves mired in cycles of corruption, political instability, lawlessness and chronic poverty. Researchers call it the “resource curse,” and it’s responsible for keeping a shocking proportion of humanity living in deplorable conditions.

Many recipes for sidestepping the resource curse have been proposed. Today, Qatar is attempting one interesting variant: a combination of traditional monarchy, a large foreign working class and stubbornly independent democracy. A world hungry



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Inside the Villaggio Mall, the Aspire Zone shopping mall, a one-square-mile sports complex located in the Al Waab district in Doha. Inspired by Italian Renaissance cities, the mall features a 500-foot canal with gondolas.

for solutions to the resource curse will learn much from the outcome of its experiment. The resource curse comes down to a problem with the incentives the government faces. In most economies, governments must tax their people to keep on the lights. That gives the rulers a stake in the people's prosperity: the richer they are, the more they can tax them. In resource economies, that link breaks down: governments pump their revenues out of the ground, not out of their citizens' pockets. That means rulers can prosper even as the people languish. Too often, that's precisely what happens. But not every resource country devolves into an extractive kleptocracy. Where populations are small

and governing systems stable, resource wealth can be a launch-pad to widespread prosperity.

A HALFWAY SUCCESS

Take Qatar: a peninsula about the size of Connecticut jutting out into the Arabian Gulf, Qatar has become a modern cultural, financial, diplomatic and energy power. Its energy resources make its citizens some of the world's wealthiest. A success story, then? Well yes, but only to some extent. Qatari citizens are enviably served, certainly, but then just 1 out of every 8 people who live in Qatar is a citizen. Around half are workers from India, Pakistan, Nepal and Bangladesh, while the



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rest come from, well, just about everywhere you can think of on earth. Qatar has built a prosperity by importing its working class whole: foreign, transient and with limited rights, workers in Qatar long faced some of the world's toughest conditions under the Kefala (labor sponsorship) system. In its traditional guise, Kefala tightly bound workers' right to remain in the country with service to a single employer. By massively tilting the bargaining power in favor of Qatari employers, the Kefala system became ripe for abuse. Years of ghastly headlines about construction workers subjected to grueling conditions in the kingdom's famously merciless summer



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heat followed. A good many foreign workers died in the period, though the number of deaths directly related to working conditions is contested. The traditional system could not be sustained. A major reform introduced in 2020 allows workers to switch employers without having to go back home in the interim. This is a big step forward, but not enough. Under the reformed system, foreign workers are still encouraged—though not required—to obtain a green light from their old employers before changing jobs. Labor organizations warn that this can easily turn into a system for blackballing workers: simply by denying such agreement, previous bosses can signal to potential new ones that they



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Qatar, Doha. The Al Sadd district is one of the oldest in Doha. Since the start of the new millennium, it has seen vast development, with the addition of thousands of residential units and a skyline dominated by Western-style skyscrapers.



Two Arab women wearing the traditional Abaya at a market in Doha.



The Doha Corniche, a waterfront promenade that offers the best views of the city's modern skyline and becomes the focal point for national celebrations such as Qatar National Day or National Sports Day.



The official emblem of the FIFA World Cup Qatar 2022 was unveiled at the Souq Waqif in Doha on Sept. 3, 2019. Soon after, it was projected onto numerous iconic buildings in Qatar and throughout the Arab world.

should steer clear of a worker. The government's refusal to disclose how many workers have managed to switch jobs without agreement from their old employer does little to inspire confidence in the reform.

And yet, Qatar has no trouble attracting foreign workers: its USD 275 a month minimum wage remains almost four times higher than Nepal's and around twice Pakistan's minimum wage. An unemployment rate officially tallied at less than 1 percent shows clearly enough that there's no shortage of takers for the jobs that build Qatar.

Most visibly, Qatar landed the FIFA World Cup 2022. It also hosts world class global universities, cutting edge research institutions, a thriving financial sector and one of the most vibrant cultural tourism sectors in the region. Its start-up scene bustles with global talent. Now a major hub for air travellers, it physically connects Europe, Asia and Africa in the most literal sense possible.

BETWEEN MODERNITY AND TRADITION

Qatari entrepreneurs are at home in the space between modernity and tradition. One company has proposed Sajdah, the world's first smart prayer rug. Designed to enrich Muslims' spiritual experience and help children memorize prayers, it projects the words to be prayed on its own, in-rug LED screen and monitors your posture during prayer, gently correcting any lapses, while its connected phone app will remind you of prayer times in English or Arabic.

That kind of innovation is only possible where investors feel

safe. Thanks to solid security commitments from the U.S., including a large Marine base there, and to its lavishly funded military, Qatar feels as secure as a country can feel in this volatile part of the world. Its army may be small, but its diplomacy is deft and determined to maintain its independence, ensuring that, on the world stage, Qatar takes nonsense from no one.

To be sure, Qatar faces plenty of challenges. Geographically sandwiched between Iran and Saudi Arabia, it lives in the roughest of the globe's proverbial rough neighborhoods. Built by a foreign working class that vastly outnumber its citizens, its identity is defined by its citizens' privileges. And juggling a high tech start-up sector in the context of a traditional Islamic monarchy is never going to be straightforward.

Big ideas are being tested in Qatar today. Whether a traditional monarchy can sustainably sidestep the resource curse and use its gas windfall to build a thriving post-gas economy remains to be seen. So far, Qatar's closed political system has maintained solid stability and ensured prosperity for its citizens while gradually improving conditions for its huge foreign working class. But the real test will come in the decades to come, as the world transitions away from oil and gas. Because the ultimate challenge for a prosperous resource economy consists in preserving prosperity once the resources are gone.

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The JGAS unicorn

by Francesco Gattei

THE NORTH DOME FIELD IN QATAR, WHICH ALONE CONTAINS 14 PERCENT OF THE WORLD'S RESERVES, COULD CURE THE PRICE FEVER, RESTORING TO THE GAS SYSTEM THE EQUILIBRIUM DISRUPTED ON THE MORNING OF FEBRUARY 24

IN THE LAST TWO DECADES, there has been a great proliferation of unicorns. This is the name given to startups in the sectors of new technologies and digital that enjoy strong growth in results and performance on the stock exchange, with an exponential trajectory that recalls the horn of the mythological creature. Amazon, Google, Facebook and many others are the unicorns of our time, certainly less elusive than the mythical white horse.

But there is also another unicorn that hasn't had the same level of visibility and recognition. This unicorn inhabits a supergiant field, the North Dome in Qatar, and uses one technology, the liquefaction of gas. Speaking of unicorns for a gas field and hydro-

carbon extraction may appear to be a contradiction in terms. But, with due proportions on the time scale, we can certainly say that North Dome and Qatar liquefied natural gas (LNG) are among the unicorns of our time.

THE TREASURE OF THE NORTH DOME

North Dome was discovered in 1971 and extraction began separately. In over a decade, 15 wells were drilled to demarcate the treasure: the largest gas field in the world with 26,000 bcm.

In fact, adding the portion that lies under Iranian waters (South Pars), nearly half of that of Qatar, it is the largest hydrocarbon field on our planet with over 360 billion barrels of oil equivalent.

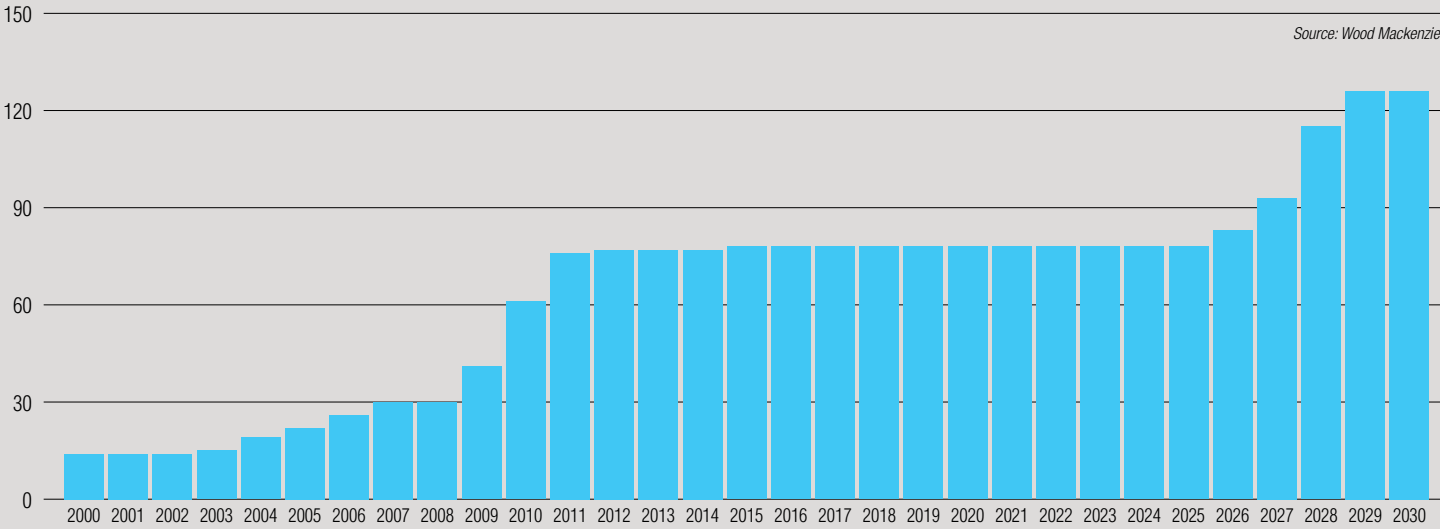
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Qatar Gas

[MILLIONS OF TONS]

In just over twenty years, the production of liquified natural gas by Qatar has grown considerably. Thanks to North Field reserves, the country has increased its LNG capacity from 14 million tons in 2000 to 78 million tons today. The prediction is that it will exceed 100 million tons in the short term, as early as 2028.



lent (surpassing neighboring Ghawar in Saudi Arabia, the largest oil field).

North Dome is made up of four different levels of rocks, which are about 400 meters thick at a depth of around 3000 meters. Together with the gas there is also a large reserve of liquids (condensates), which make the production of methane even more profitable. The Qatar section of the field alone contains 14 percent of the world's gas reserves and benefits from remarkably high productivity.

As mentioned, initially, the field was developed softly, with the start of production in 1989 for exclusively domestic consumption. However, within a decade, the growth became exponential, thanks to the massive application of liquefaction technology.

Liquefaction is the cooling process that brings the gas to -162° C and makes it liquid. This process shrinks the volume by 600 times, enabling it to be loaded onto specialized vessels.

Liquefying gas—and heating it on the consumer market to bring it back to its original form—transforms the methane market from point-to-point flow via pipeline (which is the equivalent of rail transport, rigid transport on a defined structure) into a potential global market, free from infrastructure. The only constraint is the availability of a regasification terminal at destination.

THE LNG MARKET

The commercialization of LNG began in the 1960s and dominated mainly the Asian market. Between islands and peninsulas separated by seas, the “railway” option (gas pipelines) was too expensive and so it was transported by LNG carriers, tank ships designed specifically for LNG. Indonesia and Malaysia were the major producers of liquefied gas, together with Algeria, which was a kind of swing producer of LNG on the Atlantic market. But in the 1980s, this market slowed down. High costs, low gas prices and the development of large pipelines reduced its attractiveness. A new spark was needed; a pivotal project to relaunch the LNG market and expand its dimension from regional level to a global business. And that spark was the North Dome. North Dome has a number of significant advantages, among them the potential of a gigantic gas field, with low production costs.

Few wells are required to fill out an LNG module (which, ironically, is called a train). A fraction rich in condensates enriches the gas and adds a significant revenue stream. This conventional development just a few miles from the semi-desert coast allows the construction of a sequence of liquefaction trains with a large synergistic potential. It is a central position for the European and Asian markets.

The sanctioning of the first 3.3 Mt/y of LNG led to the start up in 1996, followed by a new train a year until 1998. The initial destinations were Japan, where a group of nine local utilities were ready to use this new source, and Spain.

From that first shipment, Qatar picked up pace and, in less than a decade, with a phased and modular approach, became the largest LNG exporter in the world in 2006 with a capacity of 42 Mt/y. And the pace only got faster, with a series of increasingly large LNG units of 7.8 Mt/y each.

This was followed by the creation of the Q-Max, the biggest LNG ship in the world, more than three times the length of a football field, and the smaller Q-Flex.

In 2012, a record 77 Mt/y was produced from 14 trains and there the unicorn stopped. A moratorium is underway to assess the potential of the field and to give the field the necessary time to rest. In the same period, Qatar was overtaken by new leader Australia, which launched a series of projects all along its coast, and by the United States, the kingdom of shale gas also destined for export. These three countries combined now cover more than 50 percent of the world LNG market.

THE NORTH FIELD EAST PROJECT

The moratorium ended in 2017 when another giant project was announced. The North Field East project that will increase capacity from 77 to 110 Mt/y (and at a later stage to 127 Mt/y) by the end of the decade. The project is ambitious because it is the first time that four LNG trains are built simultaneously (two more are planned in the next phase). In a market hungry for “safe” gas, starting a project of this size is the most important solution to reduce exposure from Russian gas. In fact, in the next five years, it is probable that at least two-thirds of the new production capacity



Designed by the architect Jean Nouvel, winner of the Pritzker Prize, the National Museum of Qatar covers 430,000 square feet with rooms that reveal both the riches of the past and the wealth of today, including energy (photo). Each gallery offers a multisensory experience, featuring archival sounds, films and images.



The Q-Max, an LNG carrier built with dimensions that allow it to dock at the liquefaction terminals in Qatar. These super-tankers are intended for the Middle East-North America route; the first ships were delivered in 2008-2010.



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will come from Qatar and from that one gigantic reservoir. Moreover, it is the cheapest gas in the world, thanks to the productivity of the field, the fraction of condensates and the synergies of scale of the 8-million-ton mega-trains.

In conclusion, the Qatari unicorn is back at a gallop and is ready to redraw the map of the market. The mythological animal was famous for the healing properties of its horn, a powerful antidote to poisons. Who knows whether the North Dome field will cure

the price fever, restoring to the gas system the equilibrium disrupted on the morning of February 24.

we

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by **Lorenzo Castellani**

SAUDI ARABIA AND THE UNITED ARAB EMIRATES ARE THE PLATFORM WITH WHICH THE WEST MUST DIALOGUE ON ECONOMY, ENERGY AND POLITICS. THE POLITICAL STABILITY OF THE AREA, THE ENERGY SUSTAINABILITY OF EUROPE AND THE ECONOMY OF A LARGE PART OF THE WORLD ARE AT STAKE

IN THE NEW GLOBAL SCENARIO, energy has become the fundamental political matter. The fate of economies, armed conflicts and international order revolve more than ever around fossil deposits. Most analysts would not have bet anything on it until a few years ago, but in a world that is dematerializing through advances in technology, the role of raw materials is increasingly important. Evidence of this can be seen in the actions of world powers, such as Russia and China, which have imposed a veritable “militarization” of deposits and supply chains, triggering inflationary crises and subsequent economic slowdown elsewhere.

With the outbreak of the war in Ukraine and the consequent

diversification in the supply of gas and oil for Western Europe, the strategic importance of the Gulf area is growing, after years of fluctuating relations with the United States and with the same European countries.

A BORDER AREA

The instability of the area today is part of the broader global decoupling perspective: on the one hand the authoritarianisms, led by Russia and China, which control most raw materials and compete for technological supremacy; on the other, Western democracies, superior in economic and military terms. In this context, the Gulf becomes one of the border areas, among the

most important on a strategic level, the frontier on which opposing forces and conflicting interests converge, on top of the already numerous tensions in the area. This is evident if we consider what reality has demonstrated in the last year: the energy transition will be long and tiring; excessive accelerations lead to unmanageable economic and social hardships for democracies; the process of liberation from fossil fuels will continue for decades; the imbalances between supply and demand determined by green policies and by the restriction of production today are still redressed by returning to coal and gas. It is therefore clear that solar, wind and electricity will not be able to replace hydrocarbons and whoever controls the fields has significant negotiating power. This is why the energy question is so closely intertwined with the balance of political power.

In the last decade, the U.S.’s misunderstanding of the changes in the Arab, Persian and Turkish world has been critical in preventing the evaluation of the instability of the Muslim Brotherhood’s institutional roots. It is not enough that they constitutionalized their behavior, as occurred in Jordan and Morocco for about fifty years; all this is not enough to be able to govern a country like Egypt or Libya, overcoming the ties with Islamic roots based on the identity of Islamic law and state law. It was also forgotten that Salafism enjoyed strong support from Saudi Arabia, while Qatar supported the Muslim Brotherhood. It was therefore not enough to substitute the military for those political forces that were thought to have been constitutionalized in order to transform the system of weights and relevance in the Middle East and North Africa. Defusing military dictatorships with political reform entrusted to forces such as the radical Sunnis has had the same effect in Iraq and much earlier in Iran, effectively bringing to power the most intransigent Shiism that has destabilized Lebanon and Syria and is now in charge in Iraq. There is always a real risk of a vast “Islamic civil war” fought between Shiites and Sunnis, but also within the Sunni world itself. The clash of civilizations between Islam and the West feared by Huntington is superimposed on a molecular clash within the Islamic world that risks overwhelming nation-states, as evidenced by the disintegration of Syria. Even more complex is the problem of the area that stretches from Morocco and the Gulf to Iran and that is the new land of confrontation in the Islamic world which saw the once hegemonic role of the U.S. increasingly distanced, with consequences that proved devastating. A vacuum that, after the agreement between the United Arab Emirates and Israel, only began to be filled in 2020. The energy issue is fundamental but not sufficient to comprehend the situation. Even in 1956—on the occasion of the war unleashed by Israel, France and the United Kingdom against Nasser, who had nationalized the Suez Canal—the U.S. took the opportunity to replace the declining English hegemony with an unscrupulous struggle against Soviet influence that saved Egypt and Israel from ruin.



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THE ROLE OF SHALE

The game is even more complex now. Shale oil and gas, which are also short-lived resources in the dynamics of the energy world due to the scarcity of North American fields, have led to a growing weakening of OPEC, a development denounced by the Saudis that has created tensions and divisions in the royal family. However, the friction with OPEC has deeper historical roots. It began in the mid-1970s, when proven and unproven oil reserves began to no longer be concentrated in the hands of the majors, but instead in those of the national oil companies (NOCs), mostly non-OPEC, which today own 90 percent. This has resulted in increased competition that created an impressive technological revolution and a flock of new independent presences in the global energy oligopoly.

The shale oil and gas revolution produces both geostrategic and macro and microeconomic transformations that are significant but short-term. It is precisely this change that leads to devastation, as the last twenty years have taught us through the bloody destabilization of the Mediterranean. The most important consequence is strategic rather than market related. In fact, it has led to an illusion in the American ruling class that it is possible to do without control of the Greater Middle East, with a loss of U.S. interest in the domination of the Gulf area, North Africa and the Middle East. At the time of the proxy war in Syria, a

dangerous power vacuum was already opened and Europe is unable to fill this vacuum because of its internal divisions. These internal weaknesses include the absence of a European army, the consequences of economic austerity, which has weakened industry in its southern European outposts. Some strong areas are subject to the risk of collapse of public procurement, internal markets and governance errors due to the divisions between nations. From this point of view, even the Next Generation EU is not equipped to perform miracles: it is a technocratic-led spending plan that can give some breathing space to the state coffers, but it centralizes decisions in a European Union still far from constitutional and joint military coordination. It envisages accelerating the green transition by glossing over the risks that this entails when added to the sanctions against Russia and muddling carriers (electricity) and production. So, the market unfolds but along a thousand faults and cracks. And the forgotten theory by Seymour Martin Lipset and Steve Rokkan on the cleavages that the entire world suffered and suffers in the processes of change comes to light with a vengeance. There was the terrorism of the early 2000s that still exists, but it now takes a para-state form and is located in a fault that risks dividing the world in the crisis area with the highest intensity of disintegration. This has occurred in a place with the densest fossil hydrocarbon energy reserves on the planet. The fault splits North Africa in two and reaches the Persian Gulf where it risks breaking up the Middle East and Central Asia into an unsolvable mosaic. At one end, there is Saudi Arabia and its Sunni-Wahabi hegemony today challenged by Qatar and, at the other end, Iran and its Shiite ideology. They divide, cut into and contrast all the Gulf states, the Middle East, from Lebanon to Persia. Syria has disintegrated violently, like Libya, and these faults risk engulfing the Hashemite monarchy that reigns over Jordan. The faults also risk exacerbating the never-subsiding inter-faith conflicts in Iraq and Lebanon (in a very deep socio-economic crisis) and also threaten Israel. Jordan and Morocco are the “cornerstones,” together with Saudi Arabia, of a world that between North Africa and the Middle East rests on fragile balances of power. They were reproduced not only by the stabilizing role of Syria, but also by the decisive role of the Egyptian military.

THE U.S. STRATEGY

How long will the U.S. continue to play the role of stabilizer, which reaches as far as the Mediterranean and Israel, protecting the unique and peculiar institutional constructions of Saudi Arabia and the United Arab Emirates (UAE)? This is the most dramatic questions posed today for strategic reflection. The Biden administration takes a less disinterested attitude than that of past presidencies, to an extent inspired by what is happening in Ukraine. In the end, Joe Biden’s long-awaited trip to the Gulf was confirmed, with meetings in Israel and the UAE. Important and sensitive issues were discussed, such as the in-

clusion of Saudis and Emiratis in the U.S. anti-missile shield. Of course, the unwelcome guest was relations with Iran, both by the Americans and the allies. Both the Israelis and the Saudis and the Emiratis had so far looked with mistrust at the U.S. president as they suspect that he wants to revive the policies of detente with Tehran that had been a distinguishing feature of Barack Obama’s term. Added to this suspicion was Biden’s detachment from Prince Mohammad bin Salman, who was unwilling to modernize his country on a political and civil level according to Western canons. The decision to further tighten the alliance with Israel, and to be open to Gulf partners, suggests a turning point: Washington does not want to spoil its privileged relations with the Emirates, which have been ongoing, with ups and downs for half a century. A relaxation of relations with Iran, in Obama’s terms, no longer seems to be on the table. The Americans want to avoid both maritime strengthening by China and above all the solidification of the partnership between the Gulf countries and India. The great Asian democracy has in fact taken an ambiguous position towards Russia, is in dialog with China and has opened its own economic system to the Gulf countries. In particular, the manufacturing value chain in food production and processing. The UAE use India as an external investment field, financing the creation of dedicated infrastructures in the Indian subcontinent. There is also the integrated hydrocarbon chain through multi-billion-dollar investments in petrochemical production. For all these reasons, Western democracies must not lose their grip on key allies in the Gulf at a time when the world’s equilibrium is being redrawn. They must rebuild a realistic Westphalian system in the Middle East, where there are no more states and state civilization, such as in Libya and Iraq, they must also strengthen alliances in the Gulf that have lost strength in the last decade. In the map of the new and increasingly evident borders, Saudi Arabia and UAE are the platform with which the West must dialogue on economy, energy and politics. The political stability of the area, the energy sustainability of Europe, the economy of a large part of the world and the delicate balance of power in this crossroads of multiple zonal interests are crucial issues. Closing the ranks of the old alliances is increasingly necessary to imagine a more orderly and prosperous future. In the Gulf and in the West.

we

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THE ROLE OF GAS IN THE GULF

by Kate Dourian

CURRENTLY, MUCH OF THE GAS PRODUCED IN THE GULF COOPERATION COUNCIL STATES IS CONSUMED DOMESTICALLY: TOGETHER SAUDI ARABIA AND IRAN CONSUME MORE GAS THAN CHINA. HOWEVER, THE SHIFT IN DEMAND PATTERNS AND THE PROSPECT OF A FURTHER CONTRACTION IN RUSSIAN SUPPLIES HAVE SPURRED MIDDLE EASTERN PRODUCERS TO STEP UP THEIR EXPANSION PLANS

THE EUROPEAN PIVOT AWAY from Russian natural gas and liquified natural gas (LNG) is opening up new opportunities for producers of oil and natural gas in the Middle East and Africa. As energy security has risen to the top of the political and economic agendas of world leaders, a new energy geography is taking shape. But the scramble to replace Russian energy supplies in the immediate term is colliding with the urgent need to reduce carbon emissions and management of the energy transition will have to adapt to this new paradigm shift. The Ukraine conflict compounded existing tightness in the availability of incremental supplies following the sharp drop in upstream investments in 2015 and 2016 and the subsequent oil demand and price crash of 2020. However, LNG demand held up due to several factors, including unforeseen stoppages, high demand in Asia and low storage capacity in Europe.

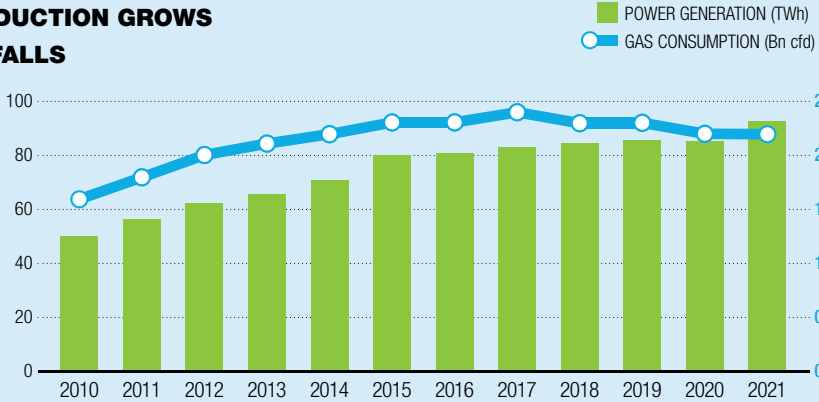
The energy industry is transforming as more and more states issue target dates for net-zero carbon emissions, raising questions about the role of oil producing states in a carbon-neutral world. The Middle East is at the epicenter of this shift and is likely to play an increasing role, at least in the medium-term. The onset of the coronavirus pandemic in 2020 and the critical need to address climate change focused the minds of policy-makers on the urgency of action to decarbonize the global economy at a faster pace. This put pressure on oil and gas producing countries to adapt and embrace new technologies to decarbonize one of the most polluting industries, one that sustained them for decades. All this comes at a price, and the shortfall in investment in oil and gas, driven partly by climate change concerns and waning investor appetite for fossil fuel projects, exacerbated the energy shortages that were evident before the Ukraine crisis.

The oil and gas business has suffered from a seven-year stretch of low prices. An estimated USD 1 trillion was drained from the energy investment cycle, and access to capital for hydrocarbon projects became constrained because of stricter environmental and governance conditions, shareholder-driven pressures on the international energy companies and the risk that oil and gas assets may become stranded as demand peaks.

ABU DHABI: ENERGY PRODUCTION GROWS BUT GAS CONSUMPTION FALLS

In 2021, the energy sector burned fewer hydrocarbons than in previous years, as the launch of the al-Barakah nuclear power plant partially replaced gas in electricity generation.

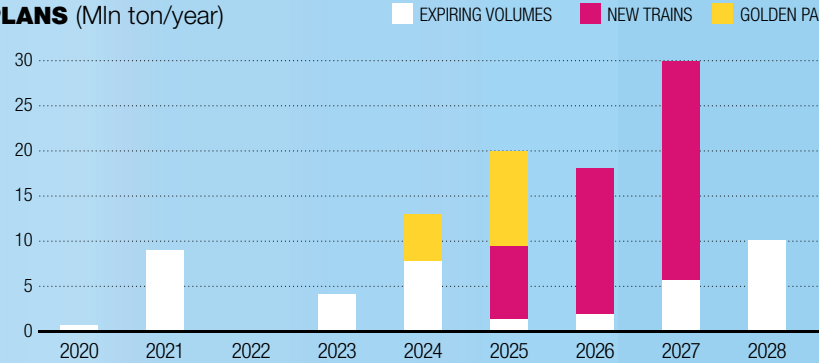
Source: EWEK, MEES



QATAR: LNG EXPANSION PLANS (Mln ton/year)

Qatar intends to increase its LNG production capacity by 40 percent over the next five years, in part thanks to the Golden Pass expansion project in Texas.

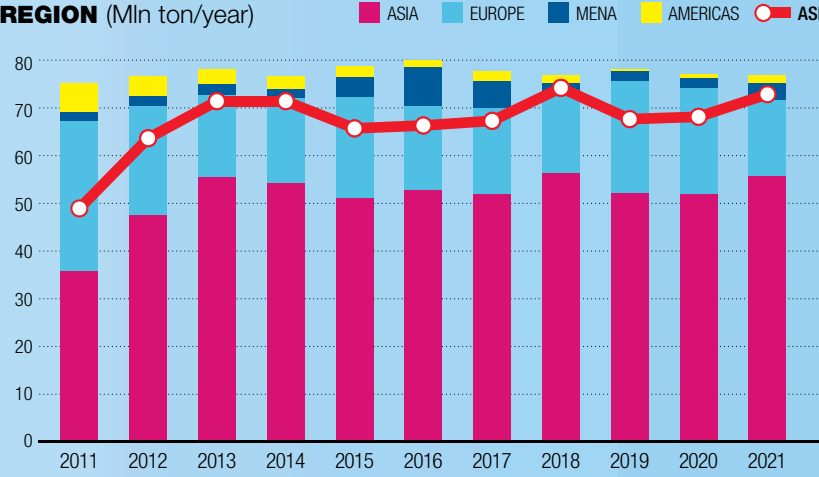
Source: QATAR PETROLEUM, GIGNIL, FERC, MEES



QATAR: LNG EXPORTS BY REGION (Mln ton/year)

Qatar is the leading LNG exporter in the world. At the moment, most of the country's LNG is tied to long-term contracts, mainly for Asian customers, which in 2021 absorbed more than 70 percent of the gas exported.

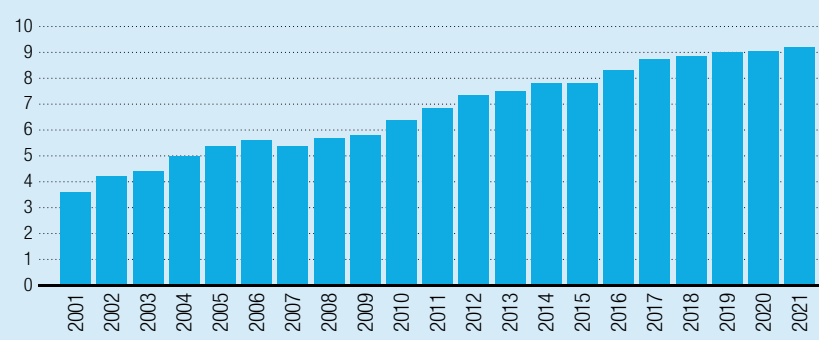
Source: GIGNIL, MEES



SAUDI ARABIA: BOOM IN PRODUCTION OF GAS FOR SALE (Bn Cfd)

In Saudi Arabia, the production of gas for sale recorded a record average of 9.2 billion cubic feet per day in 2021, with a 24-hour production peak of 10.8 billion cubic feet.

Source: Saudi Aramco, MEES



The war in Ukraine has shifted priorities and may delay the peak in fossil fuel demand that many had predicted was within sight. It will require forward-looking policies by the producers to ensure that any investments in new infrastructure today do not go to waste in the future. They will need to consider the reality that the life expectancy of any infrastructure additions needed to support gas expansion plans may be short-lived. One way to avoid being stuck with stranded assets is to ensure that any additions to fixed assets can be repurposed in the future to accommodate the anticipated growth in clean energy products like hydrogen and biofuels. Combining gas production facilities to produce blue hydrogen or ammonia is being incorporated into expansion plans in several Gulf states, including Saudi Arabia and the United Arab Emirates (UAE), as part of their efforts to both decarbonize their energy industries and supply lower carbon product to consumers. The investment cycle may again tip in favor of new upstream investment although it will take time to build a new supply base and there is little that the Middle Eastern and North African producers can do now to alleviate the current shortfall.

The international energy companies have begun their transformation and are under increasing pressure from climate activists and investors to step up their decarbonization efforts. National oil companies in the Middle East that have the lowest emissions like Saudi Aramco, the Abu Dhabi National Oil Company (ADNOC), QatarEnergy and all those taking active steps to lower the carbon content of their products are likely to prevail in the longer term. Even the most optimistic climate-neutral scenarios include oil and gas in the energy mix, though oil demand is expected to shrink while gas is expected to remain a transitional fuel in power generation for a while longer. The Middle East is one region where natural gas is the dominant fuel in power generation, which contributes to elevated levels of CO₂ emissions. Much of the natural gas produced in the Gulf oil exporting states is used domestically; Saudi Arabia and Iran combined consume more natural gas than China, and demand is set to continue, with renewables making up a tiny fraction of the energy mix in the region.

GAS WASTED FROM FLARING AND METHANE EMISSIONS

Of the world's top ten gas producers, three are in the Gulf region, but supply continues to lag demand, which has doubled since 2005. The International Energy Agency (IEA) estimates that the Middle East and North Africa producers could increase gas supply 20 bcm faster than investing in new upstream capacity if they eliminated gas flaring and tackled methane emissions. The UAE, Kuwait and Oman are among the Gulf Arab oil producers that are net importers of natural gas, some of which is supplied by Qatar. There is no regional integration and each of



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the six members of the Gulf Cooperation Council (GCC)—Saudi Arabia, the UAE, Kuwait, Bahrain, Oman and Qatar—have independent gas policies. There has been no effort to end this fragmented policy and create an integrated GCC gas grid that would allow the producers to pool resources and establish a true regional gas market that would eliminate these disparities. Although Qatar's reserves and production dwarf those of all other GCC countries combined, it has few regional customers except for the UAE and Oman, which receive a small volume of pipeline gas from Qatar via Dolphin Energy. The UAE's Oil Minister Suhail al-Mazrouei has expressed hope that the establishment of diplomatic relations between his country and Israel under the United States-mediated Abraham Accords and stronger energy ties between them offer an opportunity for more cross-border energy flows within the Middle East and beyond. This, he said, would enhance energy security and eliminate redundancies in the region's energy systems. The entry of the UAE's state-owned investment vehicle Mubadala into Israel's upstream gas through the acquisition of 22 percent in the Tamar gas field in 2021 is the latest manifestation of the changing gas geography in the East Mediterranean and the potential for tie-ins between Israel, Cyprus and Egypt that could expand cooperation further if it materializes. The European Union's (EU) plan to phase out imports of Russian natural gas and, more recently, of crude oil and refined

products, has turned the spotlight on the traditional gas producers in the Arab Gulf, chiefly Qatar, North Africa and the East Mediterranean. The Middle East has substantial natural gas reserves, estimated at around 38 percent of the global total, though much of it has not been fully exploited. The GCC countries have 1.4 tcf of gas reserves or 20 percent of the global total but actual production does not reflect these percentages. Qatar alone accounts for 4.5 percent of global gas production while the other five GCC countries together produced 6.4 percent of global trade in 2019. Outside Qatar, a significant percentage of natural gas produced in the Gulf Arab states is associated gas that fluctuates whenever oil production rises or falls. Iran, with the second largest conventional gas reserves after Russia, is hobbled by sanctions that have delayed full development of the offshore South Pars gas field.

ALL EYES ON QATAR

Qatar was an early starter in developing its massive offshore North Field reserves and is today the top LNG exporter in the world, a position it has shared alternately with the U.S. and Australia. All the other Gulf Arab oil and gas producers are net importers of natural gas and LNG, having focused on crude oil rather than gas in the early stages of developing their energy resources. But that changed as regional demand for gas for power generation has grown in much of the Middle East.

The Burj Qatar in Doha, designed by the French architect Jean Nouvel. It is the sixth tallest building in Doha.

Doha's urban skyline seen from Qatar's largest mosque, the Imam Muhammad Ibn Abdul Wahhabi Mosque. The wealth of natural gas and open economic policy are accelerating Doha's rapid growth.

The shift in demand patterns and the prospect of further shrinkage of Russian supplies to Europe has galvanized the Middle Eastern producers to step up their gas expansion projects, some of which were planned before the Ukraine crisis. Qatar is expanding its LNG production capacity by 40 percent over the next five years. The UAE and Oman are taking advantage of high LNG prices and are adding LNG export capacity. The East Mediterranean has emerged as a promising new gas hub that may provide some relief to the European market, initially via LNG exports from Egypt's underused facilities with Israeli gas serving as feedstock. Geopolitical considerations and the high cost of building pipeline links to Europe are likely to prove a hindrance to advancing the East Med gas pipeline project though the realignment of alliances within the region and a rapprochement with Turkey by Israel and Egypt might pave the way for alternative routes to deliver natural gas to Europe from the East Mediterranean and potentially even from the Gulf states. Both the UAE and Qatar have secured gas assets in the East Mediterranean alongside the international energy companies.

Gas demand growth in the last decade has come from North America, China and the Middle East rather than from Europe. The Middle East is a major market for natural gas and a bigger consumer than the EU, largely seen as the bellwether region for the natural gas market. While there are signs that in some parts of the world natural gas consumption had reached a plateau and may decline, the switch from oil to gas for power generation in the Middle East continues with no sign of a letup, except in the UAE, which has the most diversified energy mix of the Gulf oil-producing countries.

The startup of Abu Dhabi's al Barakah nuclear power station in 2020 has displaced some natural gas in electricity generation. Despite a 9 percent annual increase in power generation last year, the power sector burned less hydrocarbons than in any year since 2014. The IEA estimates that in 2021 gas consumption declined by 4 percent in the UAE where it said the ramp up of renewables, nuclear power and coal-fired generation led to a 10 percent decrease in gas use.

Abu Dhabi has traditionally been overwhelmingly reliant on gas for power-generation. Until 2018, more than 99 percent of electricity was generated by gas, supplemented by moderate amounts of liquids and solar power. With Abu Dhabi dependent on pipeline imports from Qatar to supplement domestic output, the government has embarked on plans to reduce its gas requirements and increase production of indigenous natural gas, including sour gas, hoping to achieve self-sufficiency by 2030.

THE UAE CASHING IN ON LNG DEMAND SURGE

Abu Dhabi now wants to cash in on the lucrative LNG market. The ADNOC recently approved plans to build a new LNG terminal at Fujairah, which has the benefit of being located out-



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side the Strait of Hormuz, a strategic waterway that has previously been the source of tensions between Iran and its Gulf Arab neighbors.

Indigenous gas production across Europe is declining and likely to fall further after the EU set strict new climate goals in its Green Deal that include phasing out fossil fuels by 2050. While this specific crisis is not related to the European energy transition agenda, it highlights the problem of moving too quickly away from hydrocarbons in the pursuit of net zero targets and complacency by relying too heavily on Russia as a source of both oil and gas. Europe's dependence on Russian gas is supported by data but this vulnerability has been exposed by the

Ukraine conflict. A partial EU ban on imports of Russian crude oil and a commitment to phase out Russian gas within five years will have far-reaching implications and the Middle Eastern and North African gas exporters are likely to benefit from Russia's exclusion.

High LNG prices, which have extended the rally that began in 2021, have opened arbitrage opportunities that have drawn LNG volumes into Europe from other markets though this is by no means a long-term solution to the current crisis. Europe's LNG regasification capacity stands at around 200 bcm/year (147 Mt/y), but more than a quarter of this is in Spain, which lacks sufficient pipeline connectivity with the rest of Europe to

be of much use in supplying its neighbors. But Spain is set to supply Morocco after Algeria stopped supplying its neighbor with gas following the shutdown of the Maghreb-Europe pipeline late last year.

The IEA says, "the EU could theoretically increase near-term LNG inflows by some 60 bcm, compared with the average levels in 2021," but adds that "all importers are fishing in the same pool" and so this would further bolster prices. Instead, the IEA puts forward 20 bcm as a more realistic increase, still just 13 percent of last year's imports from Russia. The U.S. has said that it would work with international partners to try to secure 15 Mmt/y of LNG for the European market.



LNG carrier ship delivering gas in the port of Malta. The realignment of alliances within the region could pave the way for new gas routes from the eastern Mediterranean and the Gulf states to Europe.



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Qatar is an obvious choice of alternative supplier in the medium term as it is already on track for a massive, two-phased expansion of its LNG production capacity from 77 Mmt/y to 127 Mmt/y by 2027. At present, most of Qatar's LNG is locked into long-term contracts, mostly to Asian customers, and can divert only a few cargoes. But around 4.2 Mt/y of Qatari LNG export contracts are due to expire in 2023, followed by a further 7.9 Mt/y in 2024, providing the potential for fresh contracts with Germany and other European nations. This means that starting in 2025, Qatar will have surplus gas to export when the first train from its 49 Mmt/y North Field East expansion will have come online.

The bulk of Qatar's LNG is sold under long-term, oil-linked contracts while only 11 percent sold on spot markets. Qatar has defended long-term contracts as guarantees of energy security in times of crisis and preferable to the spot market, which carries the risk of higher price volatility when supplies are tight. The Ukraine crisis has shifted trade flows as Europe has become a premium market for LNG. At 2.07 Mmt, volumes of Qatari LNG exports to Europe in April were the highest since March 2021. Qatar's LNG expansion is being accompanied by an effort to produce carbon neutral or green LNG cargoes to align its product with higher environmental standards in response to customer demand. QatarEnergy says that one of the flagship projects is the further deployment of carbon capture and storage

(CCS) technology to capture over 11 Mt per annum of CO₂ in Qatar by 2035. These projects will further reduce the carbon intensity of Qatar's LNG facilities by 35 percent, and of its upstream facilities by at least 25 percent (compared to previous targets of 25 percent and 15 percent, respectively) bolstering Qatar's commitment to responsibly supply cleaner LNG at scale in support of the energy transition.

The improved market outlook has bolstered producers across the globe and should facilitate a new wave of investments and gas sales contracts after a decade-long slowdown. The UAE, which wants to end its own reliance on Qatar for gas, is a small player in the global LNG market but is now pitching for a bigger slice of LNG trade. ADNOC is planning a new 9.6 Mmt/y LNG export facility in the emirate of Fujairah in response to what it says is growing global demand. ADNOC LNG operates facilities with 5.8 million Mmt/y capacity on Das Island and last year ADNOC's board endorsed plans to expand the company's capacity to 12 Mmt/y, which implies the new facilities would have around 6 Mmt/y capacity. Once the Fujairah facilities are operational, potentially as early as 2027 or 2028, they will take ADNOC LNG's capacity up to 15.4 Mmt/y.

Although the planned addition by the UAE is dwarfed by Qatar's LNG export capacity, opting to build the new facility in Fujairah will provide Abu Dhabi with a shorter route to markets by providing direct access to the Indian Ocean since Qatari tankers must take the longer route through Gulf waters and the Strait of Hormuz chokepoint. This not only reduces sailing time to end-users; it removes the low-but-ever-present risk that Iran might act on repeated threats to close the strait though this is technically difficult to accomplish. ADNOC's planned LNG export terminal at Fujairah will also offer LNG bunkering facilities.

The only current regional LNG export plant outside Hormuz is Oman LNG's 10.4 Mmt/y terminal. Debottlenecking of Oman LNG's three liquefaction trains is on track to be completed next year. Nameplate capacity is slated to rise to 11.4 Mmt/y upon completion. Oman LNG is also pursuing exporting Green LNG and like Abu Dhabi is establishing an LNG bunkering facility at the industrial hub of Sohar.

SAUDI ARABIA TURNS TO SHALE

Oil powerhouse Saudi Arabia is developing its own conventional and unconventional gas resources but does not plan to join the club of gas exporters. The kingdom has allocated USD 110 billion to develop the Jafurah Basin's shale gas reserves, which are estimated at 200 tcf. Once fully operational by 2030, Saudi Aramco says it plans for Jafurah production to reach 2 bcf/d of sales gas, along with 418 mcf/d of ethane and 630,000 b/d of natural gas liquids (NGLs) and condensate. It could potentially also supply feedstock for blue ammonia production. In addition to Jafurah, Aramco is developing unconventional

gas reserves at South Ghawar and plans first gas in 2023. A first phase is slated to deliver 200 mcf/d of sales gas and 34,000 b/d of condensate. Once fully operational by 2030, Aramco says it plans for Jafurah production to reach 2 bcf/d of sales gas, 418mcf/d of ethane and 630,000 b/d of NGLs and condensate. Saudi Aramco on 20 March announced plans to increase gas production by 50 percent by 2030. The state-owned energy company says the additional gas will displace oil in the power sector and supply feedstock for the petrochemicals sector and planned blue hydrogen facilities. Sales gas production averaged a record 9.2 bcf/d in 2021, including a single-day output record of 10.8 bcf/d.

The first conventional gas project slated to deliver higher volumes by the end of the decade is the 1.07 bcf/d expansion of the Hawiyah gas processing plant, which will take gas processing capacity up to 19.5 bcf/d. The expansion is due on-stream later this year. An additional 1.3 bcf/d of raw gas production capacity is also due online with the completion of the Hawiyah and Haradh gas compression projects. Bigger gains are due in 2025, when the 2.5 bcf/d Tanajib gas processing plant is expected to come online, bringing processing capacity to 22 bcf/d. To match gas supply with this seasonal demand pattern, Saudi Aramco is developing the Hawiyah Unayzah Reservoir Gas Storage facility. Aramco says that it will be able to inject 1.5 bcf/d into the facility later this year, and that by 2024 it will be able to draw 2.0 bcf/d for its domestic requirements, particularly during the peak summer season, when demand for cooling soars. The company has also invested heavily in its Master Gas System (MGS), which now has the capacity to supply 9.6 bcf/d in eastern, central and western regions of the kingdom. Saudi Aramco is currently working to expand this to 12.5 bcf/d, and while the project is years behind schedule, the company says it is now "expected to be completed in the second half of 2022." In neighboring Bahrain, the island state is on the verge of becoming an LNG importer as demand is likely to outstrip supply before the end of the decade unless exploration yields results. Bahrain could start importing LNG through its idle floating storage and regasification unit soon with a test cargo expected as early as 2023. Having shelved plans to develop unconventional oil reserves due to technical and cost considerations, state energy holding company will focus on maintaining gas production. The kingdom produces around 1.65 bcf/d of sales gas for domestic consumption in power generation, aluminum smelting and petrochemicals. The key potential source of additional gas output is the deep pre-Unayzah layer below the Bahrain field, where initial estimates put gas-in-place reserves at 35 tcf though further drilling will be needed to assess its true potential. Two appraisal wells are planned this year, which could provide some insight. If the results are positive, Noga-holding intends to launch a 10-15 well development program, with drilling potentially starting by the end of this year.




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The improved global market outlook has revitalized the oil and gas industry across the globe and should facilitate a new wave of investments and gas sales contracts after a decade-long slowdown. The windfall revenues that are being generated by the Gulf Arab producers from sharply higher oil and gas prices make it more likely that these projects will go ahead and deliver incremental gas in time to avert another energy shock before the end of the decade.

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 The Hawiyah Natural Gas Liquid Recovery Project, operated by Saudi Aramco, in Hawiyah, Saudi Arabia. By the end of the year, the plant is expected to expand by 1.07 billion cfd, which will bring the kingdom's gas processing capacity to 19.5 billion cfd.

 The Milad Tower at sunset, in Tehran, Iran. Together Saudi Arabia and Iran consume more natural gas than China and demand is set to persist: to date, renewable energies make up only a small part of the energy mix in the region.



THE LNG REVOLUTION

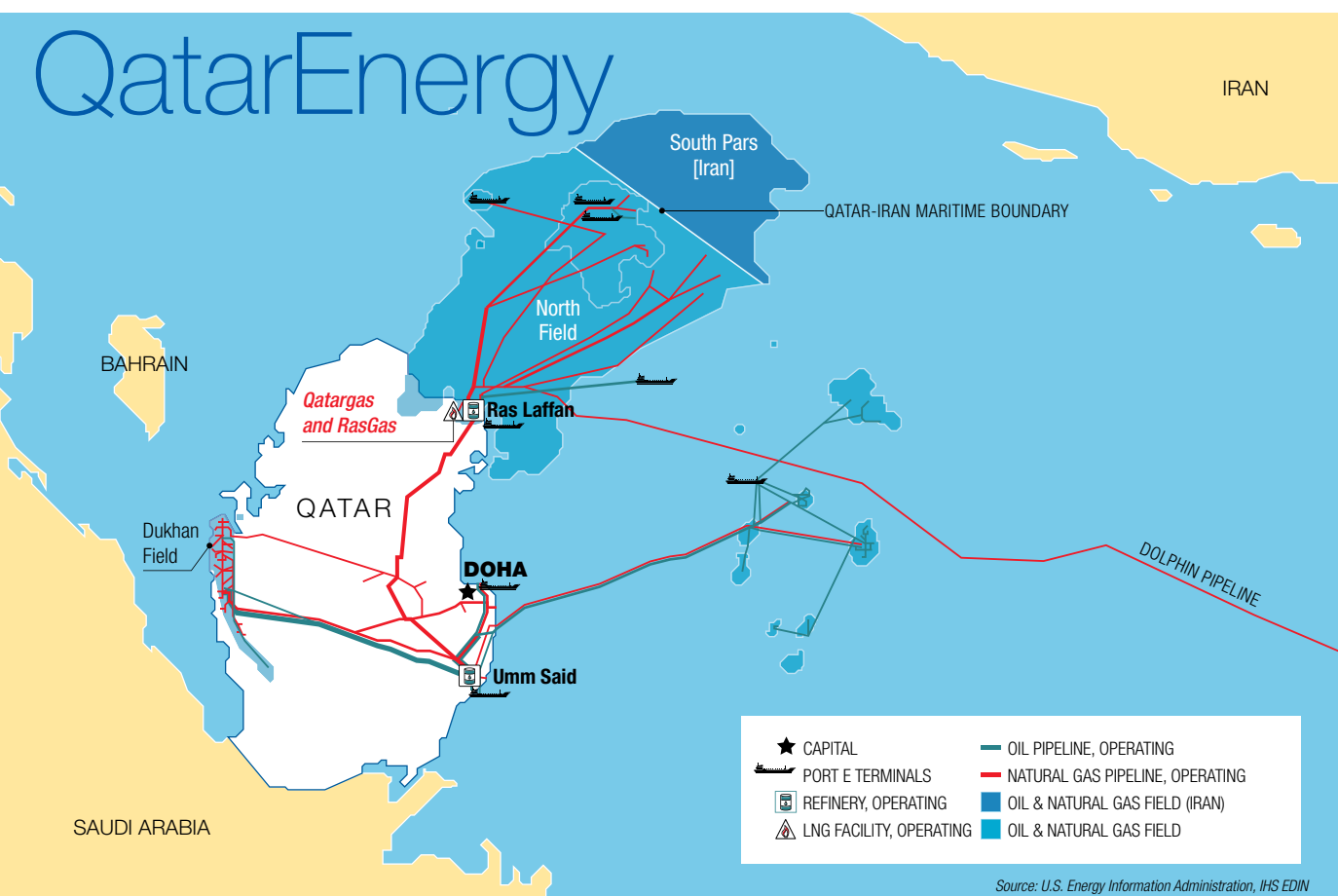
by Justin Dargin

THE COUNTRY IS SEEKING TO REGAIN ITS POSITION AS THE WORLD LEADER IN LIQUEFIED NATURAL GAS EXPORTS, WITH THE AWARENESS, HOWEVER, THAT DIVERSIFICATION OF REVENUES IS THE KEY TO OVERALL ECONOMIC SUSTAINABILITY

QATAR HAS BEEN A WORLD LEADER in the export of liquefied natural gas production (LNG) for the past decade and has skillfully positioned itself to take advantage of the rise in global LNG demand ahead of its competitors. However, Qatar arrived late in the LNG market, in part because of its small population of approximately three million (2021), only 20 percent of which are Qatari nationals. But Qatar also has one of the world's fastest population growth rates due to its robust economic performance. It had a stark 40 percent increase in residents from 2010-2015, although most of the growth was due to a massive influx of foreign workers.

Natural gas is Qatar's principal export in its energy sector, with proven natural gas reserves equal to approximately 14 percent of total world reserves. Its estimated 24.7 trillion cubic meters (tcm) plus 22.3 billion barrels (2021) of associated condensates are the third largest in the world, behind only Russia and Iran. Qatar's reserves-to-production ratio is tentatively estimated at between approximately 100-130 years at current output rates. Most of the country's gas is in the massive offshore North Field (see the map), the world's largest non-associated natural gas field. But when Qatar became the world's largest exporter of LNG in 2006 (overtaking Malaysia) it rose to prominence in the global energy sector. Even though Qatar has a dominating presence in the international LNG market, the government has recognized that it cannot be complacent and depend on a mono-export economy based on LNG for long-term sustainable development.

In recognition of that fact, Qatar is moving forward with macroeconomic diversification focused on several key sectors: expanding the downstream natural gas industries, investing in shale natural gas production and LNG plants abroad and taking a leading role in the global push for decarbonization. Because of an economic strategy based upon diversification in the natural gas value chain, Qatar is strongly represented in nearly every sector of the natural gas trade: LNG, Gas-to-Liquids (GTL), pipeline gas and Natural Gas Liquids (NGL).



THE NORTH FIELD TAKES CENTER STAGE

Upon discovering the North Field, Qatar made it the crux of its economic development program. Historically, as with most Gulf nations at that time, Qatar viewed itself through the narrow prism of an “oil producer” and did not readily discern the profitability of natural gas reserves. It took a seminal report commissioned by Qatari officials in 1962 to examine the administrative effectiveness of governmental ministries, the Arthur D. Little (ADL) study, which sounded the early warning for Qatar to diversify from oil into other economic sectors. The ADL study expressed concern over Qatar’s overwhelming economic and financial dependence on the oil sector, which it had incorrectly projected would be exhausted by 1982. Therefore the report cautioned Qatar to develop other non-oil sectors, especially its natural gas wealth. The Qatari government took these recommendations seriously and, in 1964, took initial steps to initiate broad-based implementation. However, the geopolitical turmoil associated with the 1973 Organization of Arab Exporting States (OAPEC) oil embargo and the 1979 Islamic Revolution in Iran significantly increased global oil prices and channeled enormous revenue to Qatar. Consequently, this massive revenue growth mitigated most of the negative economic impacts they would have otherwise experienced from the declining production rates due to oil field maturity. And this influx of additional revenue

lessened the sense of urgency to diversify economically. For example, from 1973 to 1974, the oil price rose by 300 percent, from USD 3 per barrel to almost USD 12 per barrel. This monumental foreign revenue inflow allowed the government to funnel the increased oil revenue into massive social and infrastructural investments, thereby creating the modern national social contract on display today. As was the case with most other oil-producing countries that experienced these windfall profits, the hard decisions accompanying economic diversification fell by the wayside. Despite the ADL’s policy suggestions, natural gas receded into the background and only dimly glimmered on the policymaking radar. However, several factors arose that precipitated oil’s decline in importance for Qatar. After oil production began declining in the 1970s, IOCs became convinced that its mature oil fields were not worth further investment. Furthermore, the IOCs perceived Qatar’s service contracts as nonviable financially, which made the prospect of additional large-scale upstream investment less appealing. By the mid-1980s, while the economy was still heavily reliant on the oil sector, falling oil prices due to a massive Saudi oil production expansion meant that between 1979 and 1983 the percentage of government revenues derived from petroleum fell from 93 percent to 80 percent. In tandem with the stark decline in oil price, Qatari oil production continued to plummet until about 1987 when a meager 300,000 b/d were produced. The final coup de grâce to oil’s formally vaunted position in Qatar’s macroeconomy occurred when the government officially departed from OPEC in 2019 by stating that it intended to focus on its domestic gas sector. This was undeniably a blow to OPEC, as it had prided itself on being an organization that spoke for the region’s interests in the global oil sector since its establishment in 1960. Structurally, though, Qatar’s exit did not disrupt the organization’s operations, and as discussed above, Qatar’s declining oil production did not significantly impact OPEC, one way or the other. But for Qatar, this volte-face realignment of its foreign policy was seen as an entirely justifiable and prudent strategic response that emphasized its sovereignty to the three-year blockade launched by Saudi Arabia, Egypt, Bahrain and the United Arab Emirates (UAE). When viewed geostrategically, the decision to withdraw from OPEC reinforced Qatar’s autonomy and lessened Saudi Arabian political influence. It is notable that despite a not insignificant animosity between Qatar and the blockade supporters, the embargo did not disrupt energy trade amongst the countries. For instance, Qatar did not halt gas exports through the Dolphin natural gas pipeline, and during the blockade Qatar was still able to export its LNG globally without interference. As an example of continuing energy collaboration, during the height of the diplomatic crises Qatar and the UAE renewed a concession agreement to develop and operate

the joint Al-Bunduq offshore oilfield. Nor were there any pronouncements that disruptions on electricity swapping through the Gulf Cooperation Council Interconnection Project would be forthcoming. The principal disruption to Qatar was that its airline, Qatar Airways, could not avail itself of the jurisdictions of the blockade countries for its flights. To a certain extent, the lack of disruption in the regional energy sector illustrated that the regional energy sector could potentially be a source of stability for future cooperative ventures in the region. But even though energy trade continued unabated, unforeseen and lasting repercussions for further Gulf collaboration could emerge at any time. But since its transition to natural gas production, Qatar ceased dependence upon oil production for foreign revenue generation; therefore, its OPEC departure merely confirmed an existing reality. Also, Qatar’s oil fields continued to mature and had been steadily declining since 2013, from 1.9 million b/d to hovering at 1.8 million b/d by 2020-2021. All the above shows that oil would be of minuscule importance to Qatar’s economic growth strategy moving forward. Qatar’s future was planted firmly in the natural gas sector, and for Qatari policymakers, LNG was the future and would fuel the economic growth boom of the Asia-Pacific region, become the bridge fuel in the drive for global decarbonization and power its foreign policy aspirations.

THE BIRTH OF QATAR'S LNG INDUSTRY

All was not smooth on Qatar’s LNG production journey as several challenges arose in Qatar’s transition to becoming a natural gas-based economy. Phase One of North Field development was interrupted several times before its planned start-up date in 1990. Not only did the Iraqi invasion of Kuwait upset most major regional development projects and cause Gulf governments to be externally focused, but Qatar faced numerous unique obstacles during this period as well. During Operations Desert Shield and Desert Storm, the evacuation of skilled personnel measurably delayed the North Field’s progress. Furthermore, progress was held back due to several infrastructural issues. For example, fourteen of the sixteen production wells in Phase One suffered from cement casing leaks during this period. A week before the revised start-up date of August 3, 1990, engineers discovered a chemical leak in an onshore pipe and the North Field, thereby shutting it down. September 3, 1991, marked the twentieth anniversary of Qatar’s independence and the North Field’s discovery. It was also the date that the North Field commenced production. Up to this time, most of Qatar’s natural gas came from several onshore and offshore oilfields, and associated gas was processed at the Umm Said complex. After this date, Qatar took advantage of two events that significantly increased natural gas demand in the international and regional markets: first, the widespread use of combined cycle gas turbines in the 1990s in power gen-



QatarGas offshore drilling rig in the Persian Gulf. The gas extracted from the platforms is subsequently treated in the Ras Laffan plant as liquefied natural gas (LNG), through three liquefaction units.



Doha, the capital of Qatar, is a cosmopolitan city home to around 60 percent of the country’s population. The largest U.S. military base in the Middle East is located west of Doha.



eration; and second, cost reductions throughout the LNG chain. These developments allowed Qatar to reconfigure its previous strategy and reorient its gas resources primarily from domestic power generation and petrochemical production to the global export market.

However, Qatar is now attempting to regain its leadership position in global LNG export that it had relinquished in the 2010s, beset by a worldwide LNG glut, weak international demand, rising LNG competitors, the slump in global oil prices from 2014-to 2017, and again in the wake of the global Covid-19 pandemic of 2020, as well as the pressure on the dominant long term contractual model by some of its major customers. However, when its new trains come online, it is expected to regain leadership.

Qatar placed a moratorium on the North Field gas exploration and production from 2005 to 2017 and it was extended year-on-year to moderate its gas production for future export potential. The moratorium was lifted in 2017, and in 2019, Qatar announced that it would expand its LNG production from 77 to 126 million tons per annum (MTPA) by 2027. QatarEnergy planned for its LNG production to increase to around 110 MTPA by 2024 and that it would construct four new LNG trains to manage the proposed increase. The planned output increase comes as drilling and appraisal work in the North Field determined that its gas reserves now exceed 50 TCM. This production increase announcement came as Qatar was locked in fierce competition with Russia, the U.S. and Australia for global LNG dominance as Qatar's rivals had significantly increased their LNG production, sending prices to multi-year lows.

Qatar plans to reduce its carbon footprint with the LNG train expansion by installing Carbon Capture and Storage Infrastructure (CCS) to reduce carbon emissions from gas liquefaction and storage by nearly 25 percent below comparable operations in other jurisdictions. Qatar is implementing its carbon reduction plans primarily due to its Paris Agreement climate pledges and to the EU's recently implemented policies, such as its Methane Strategy it announced in October 2020. The European Commission's Methane Strategy requires emissions reporting for exporters to the EU member countries. It posits the



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An LNG ship docked in the port of the Ras Laffan Industrial City. Located 80 km north of Doha, the Ras Laffan industrial hub is the main site for the production of liquefied natural gas and gas-liquid in Qatar.



Offshore platform for gas extraction. Qatar has among the lowest natural gas production costs in the world and a geographic location that allows it to export to both Asia and Europe.

default values for methane emissions if the exporters do not meet the reporting standards. This undoubtedly placed pressure on Qatar to reduce the carbon emissions from its LNG production lifecycle.

Following the promulgation of the EU Methane Strategy, the state-owned company QatarEnergy (formerly Qatar Petroleum) signed an LNG supply contract in December 2020 with the Singapore-based Pavilion Energy Trading and Supply Pte Ltd. to export 1.8 MTPA for a decade from 2023. These LNG cargoes will identify and list the emissions levels attached to each shipment. While this agreement does not obligate QatarEnergy to a specified level of emissions, the Qatari energy minister, Saad al-Kaabi, announced that it represents “Our first long-term

LNG arrangement containing specific environmental criteria and requirements ultimately designed to reduce the carbon footprint of the LNG supplies.” Overall, QatarEnergy indicated that its carbon reduction plans, a portion of its overall sustainability strategy, would act “as a clear direction towards reducing the emissions intensity of Qatar's LNG facilities by 25 percent and its upstream facilities by at least 15 percent and reducing flare intensity across upstream facilities by more than 75 percent.”

QatarEnergy's sustainability strategy also set a target to eliminate flaring by 2030 and reduce methane emissions by implementing a methane intensity target of 2 percent to apply to all facilities by 2025. The strategy also obligates QatarEnergy to expand its power capacity by more than 4GW from renewable energy, which would remove more than five mn t/yr of carbon emissions while

also planning to remove seven mn t/yr of carbon by 2030 by CCS. By taking a leading role in reducing the carbon intensity across the natural gas value chain, Qatar intends to position itself ahead of its peers as a green and responsible energy giant ready for the “post-carbon world.”

THE EUROPEAN PIVOT?

While the war between Ukraine and Russia continues to drag on at an interminable pace, the EU is scrambling to increase its LNG imports to reduce its dependence on Russian gas imports, reaching nearly 155 bcm in 2021 (140 bcm by pipeline and 15 bcm by LNG). The EU's REPowerEU Initiative sets the policy



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to rapidly replace 50 bcm of Russian gas by the end of 2022. While the EU has been reaching out to numerous gas producers, ranging from North America, North/West Africa, Australia and the Gulf region in a bid to secure alternatives to Russian pipeline gas, there is still a significant degree of uncertainty as to whether Europe would be able to viably increase its gas imports to achieve its energy diversification goals quickly enough to avoid economic repercussions.

Qatar has emerged as a critical component of Brussel's strategy. It is understandable why Qatar is central to Europe's energy security praxis; its geopolitical role as a balancing power in the region, its friendly relationship with the West and its dominating

position in the LNG market have made Qatar a focal point for Europe's energy security strategy.

Qatar still has several advantages that elude other LNG exporters despite advancing competition from its LNG production peers. Qatar has some of the lowest cost gas production globally because of the revenues from butane and propane natural gas liquids produced mostly as wet gas. Therefore, its economies of scale are robust because the North Field is a homogeneous field with extremely low production costs, and other producers find it challenging to rival those enabling factors. When considering whether in the future other jurisdictions would be able to acquire market share from Qatar, their typically higher break-even

prices must be considered as Qatar has a lower average cost of LNG production when compared to other jurisdictions. The production of natural gas liquids and condensate alongside its natural gas also increases its financial advantages. And when considered against other potential natural gas exporters to Europe, such as Libya, Algeria and Egypt, Qatar does not face the ongoing or incipient challenges as the others in domestic security, rising domestic natural gas demand, or budgetary constraints for investment in its natural gas production infrastructure. Moreover, even though new LNG production zones are being constructed globally, no other country can match Qatar's ability to renegotiate legacy contracts and create mutually advantageous contracts. Qatar's LNG sector is also highly centralized, which sets it apart from its LNG competitors; this allows it to develop a unified direction over its production and export policies. Lastly, Qatar resides at an attractive location, located much closer to Europe when compared to Australia and the U.S., the two other major LNG exporters. However, despite all these unparalleled advantages, Qatar has warned that the world would need to act collectively to assist Europe as no single supplier would be able to meet all of Europe's requirements unilaterally without having a global knock-on effect. Qatar has also signaled that in the short term, even though it is a crucial supplier to many European countries, its ability to ship additional LNG to Europe is constrained by its lack of spare capacity. Most of Qatar's LNG is supplied to Asia, comprising 70 percent of its LNG exports through various long-term contracts. And Qatar has repeatedly asserted that it seeks to preserve its status as a dependable supplier by not having to breach or renegotiate its existing long-term contracts. Furthermore, Qatar's LNG supply contracts are inflexible and have built-in third-party diversion limitations. Therefore, in the immediate sense, Qatar will not be able to fill the gap as it would depend upon whether Qatar's Asian customers would assent to divert a portion of their contracted cargoes upon Qatar's acceptance of such an arrangement. But by 2025-2027, Qatar will likely expand its LNG shipments to Europe which would align with Qatar's geostrategic and economic goals to improve its positioning in the European market.

INTERNAL CHALLENGES AND EXTERNAL OPPORTUNITIES Qatar's ambitious LNG growth posture is currently experiencing a conflict of vision with some of its foreign operators as the government seeks to produce its natural gas reserves over the most prolonged period possible to avoid rapid field depletion. Nevertheless, this view contrasts with the perceived strategy of its foreign partners, who, as a rule, seek rapid profit maximization from producing as quickly as possible to recoup exploration costs. Because of this fundamental difference in views, additional field development in Qatar may face diffi-



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culty until consensus can be found. Because most of Qatar's natural gas was previously associated with oil, periods of weak oil demand and stringent OPEC quotas obstructed many gas-reliant industries from reaching maximum efficiency. But, even now, due to its significant gas-derived wealth, Qatar faces unique obstacles that other developing countries do not have. While it does not impede capital-intensive investment, its small economy, with consequent limited absorptive capacity and a small demographic base, is potentially economically disruptive. Since it cannot depend upon domestic demand for the economic growth it desires, Qatar will be externally oriented for a long time.

The Qatari leadership considers economic diversification key to overall economic sustainability and has invested billions of dollars across various economic sectors. Even with these enormous strides, the Qatari economy is still overly dependent on gas (upstream and downstream) and the hydrocarbon sector in general since the diversification program is still expanding. However, Qatar's much-vaunted diversification efforts may not represent a substantive transition away from hydrocarbon dependence because most of its economic diversification is concentrated in the chain of downstream value-added industries, such as the petrochemical sector. Although the prices of petrochemicals and other value-added products are much more stable

and fluctuate less than crude oil and unprocessed gas, these products are still reliant on the hydrocarbon sector and may not represent proper economic diversification.

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Satellite image of Ras Laffan Industrial City. The port and the industrial complex cover almost 300 square miles and house various natural gas liquefaction plants, operated by the state-owned energy company Qatar Petroleum.



CRISIS

by Pier Paolo Raimondi



NATIONAL INTERESTS AND LONG-TERM GOALS DETERMINE THE DIFFERENT APPROACHES OF EACH NATION TO TACKLE ENERGY AND GEOPOLITICAL ISSUES IN EUROPE

S RESISTANCE

WITH THE ESCALATION of the energy and geopolitical crisis in Europe due to the Russian war in Ukraine, the prospect of potential disruptions to Russian oil and gas supplies and a further rise in prices has prompted numerous Western governments to undertake various diplomatic efforts to persuade Gulf countries to increase their production and exports.

However, since the beginning of the energy crisis, the main producing countries in the Gulf—Saudi Arabia, United Arab Emirates (UAE) and Qatar—have shown different degrees of political readiness to satisfy the wishes of Western countries. This development shows a divergence between the Gulf countries, but also reveals how these countries are increasingly pursuing their own national interests.

DIFFERENCES IN REACTIVITY

While there has been a certain reluctance on the part of Saudi Arabia and the UAE to increase oil production, despite holding most of the spare capacity (about 800,000 barrels per day each), Qatar has expressed its political readiness to help Europe diversify its gas supplies. There are many geopolitical and purely energy-related reasons for and consequences of this different response to the requests of the importing countries. In any case, the Ukrainian crisis and the consequent sanctions on Russia, which was 14 percent of world production and export at around 7 million barrels a day in 2021, will cause a reconfiguration of



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energy flows with the Gulf countries. This could expand the Gulf's importance in European markets, while Russia will seek to redirect its volumes to Asian markets.

Faced with the opportunity to gain market share and enjoy price increases, OPEC countries have preferred to preserve a plan to increase oil production, decided by OPEC+ in April 2020, which foresees a monthly increase of 400-430 Kb/d. The decision avoided increasing this production quota to the detriment of other members, with the intent of preserving its agreement with Russia, confirming OPEC's historic principle of focusing on the technocratic nature of its oil supply management in relation to political issues between member countries (as in the case of the war between Iraq and Iran or the subsequent sanctions against Iran).

The relationship between Russia, Saudi Arabia and the UAE has gradually strengthened thanks to the OPEC+ agreement ratified in 2017, which was necessary for price stabilization. Despite the war and sanctions, countries find it useful to preserve their political-energy relationship with Russia, which became crucial in mid-2020 because of a costly price war. Finally, the two OPEC countries fear that a further increase in potentially uncoordinated production could result in overproduction, excessively depressing prices and causing significant damage to the economies of the producing countries. Despite the recovery in world oil demand, after the annus horribilis of the pandemic

(2020), the OPEC countries fear further interruptions in consumption and prefer a more cautious approach to increasing production.

THE IMMEDIATE AVAILABILITY OF QATAR

In contrast, Qatar immediately expressed its political readiness to contribute to the strengthening of European energy security in various meetings with European and American representatives, using the opportunity to consolidate its relations with Washington and Brussels. Since 2019, Doha is no longer part of OPEC, a strong signal of the desire to focus on gas and free itself from the control of its larger neighbors (Saudi Arabia and the UAE) at a time of crisis among the countries of the Gulf Cooperation Council (GCC), lasting from 2017 to 2021. This decision had a modest impact in terms of energy, as Qatar accounted for just 2 percent of OPEC production at the time. Therefore, the small emirate is able to compete in the gas market as one of the world leaders in liquefied natural gas (LNG). No longer linked to OPEC and focusing on gas, Qatar has had more room to express its willingness to help European countries in their plans for diversification. Most recently, it has entered into negotiations with the United Kingdom and Germany for future supplies of LNG. Qatar saw in the European energy crisis the possibility of balancing its exports (currently 70 percent of its LNG is destined for Asian markets) and signing new con-

tracts for gas coming from the expansion of the North Field. The different positions of the three Gulf countries were also dictated by geopolitical factors. Saudi Arabia and the UAE have preferred to prioritize their national interests over those of their traditional allies (the U.S. first and foremost). The friction with the new administration and the perception of no longer having adequate security against Iran have certainly influenced the decision to not immediately satisfy the numerous requests for greater production. Qatar, on the other hand, has gained increasing diplomatic importance thanks to the energy crisis, which adds to its role in the key issue for the U.S.: negotiations with Iran and with Afghanistan. All this has enabled Qatar to earn the status of major non-NATO ally, strengthening its alliance with the U.S.

Despite the friction with the U.S. and the apparent alliance with Russia, OPEC+ (under the leadership of Saudis and Emiratis) has decided to increase production by a further 200 Kb/d (for a total of about 630 Kb/d) from July, prematurely terminating the OPEC+ agreement of two years ago. Although there are numerous doubts about the impact that this increase will have on the oil market, the decision certainly sends a soothing political signal to the U.S. after a period of strong tensions. Furthermore, Saudi Arabia and the UAE must also begin to face the potential growing competition in the Asian market from Russian oil heavily discounted due to sanctions. In the medium and long term, there is no doubt that the current crisis will allow the Gulf countries to increase their weight in the European energy market, thanks to their numerous competitive advantages; but this crisis demonstrates that this will mainly result from the pursuit of national interests.

We

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THE GULF LOOKS EAST

by Kristian Coates Ulrichsen



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OVER THE COURSE OF THE 21ST CENTURY, THE GULF COUNTRIES HAVE PROGRESSIVELY DIRECTED THEIR ECONOMIES TOWARDS ASIAN MARKETS AND FORGED EVER STRONGER RELATIONS WITH RUSSIA AND CHINA. IN THE SAME PERIOD, QATAR, THE UNITED ARAB EMIRATES AND SAUDI ARABIA HAVE ESTABLISHED THEMSELVES AS REGIONAL PLAYERS

THE CONFLICT between Russia and Ukraine has shone a spotlight onto the lack of consensus in policy responses. This is as true for the countries of the “Global South,” writ large, as it is for the six Gulf States, despite their decades-long integration into Western and U.S.-led political and security partnerships. While there are variations in positions, with Qatar tilting more toward Ukraine and Saudi Arabia and the United Arab Emirates (UAE) more toward Russia, none of the Gulf States have formally taken sides. Moreover, Saudi and Emirati leaders have rebuffed appeals from the U.S. and British governments to enact measures that would bring down oil prices and have instead signaled their support for OPEC+ output commitments. While the responses of Gulf leaders to the conflict may have come as a surprise to some analysts and commentators in Western capitals, they are consistent with a pattern of diversification in the international relationships of the Gulf States that has unfolded over the past three decades. Since the 1990s, all six Gulf States—Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE—have expanded their networks of political and economic relationships and deepened them beyond an initial focus on energy. This has occurred as the broader center of gravity in the world economy has shifted eastward and Gulf States’ trading patterns have focused increasingly on Asian rather than European or North American economies. A symbolic inflection point in this geo-economic pivoting occurred in 2009 when, for the first time, Saudi Arabia exported more oil to China than to the U.S.

20TH CENTURY, PRUDENCE AND CONSERVATISM

To be sure, the historical trajectory of the Gulf States for much of the twentieth century was oriented firmly toward a conservative status quo that marked them as highly distinct from most other countries in the region especially between the 1950s and

the 1980s. Although never formally under colonial control, four of the Gulf States came under British protection until 1961, in Kuwait; and 1971, in Bahrain, Qatar, and the Trucial States (which became the UAE that year). In Saudi Arabia, a web of political and military ties with the U.S. provided similar shelter for the royal family after 1945; while in Oman, British influence, which was informal yet pervasive, remained firm until the 1970s. All six Gulf States developed a reputation for political caution that contrasted sharply with radical movements of national liberation elsewhere in much of the developing world during the period of decolonization and after. Such conservatism impeded the growth of political and economic links with states such as China and the USSR, especially as both countries provided ideological and some material support for an uprising in the southern Omani governorate of Dhofar in the 1970s. Aside from Kuwait, which established diplomatic relations with the Soviet Union in 1963 and China in 1971, for most of the other Gulf States equivalent ties did not begin until the 1980s or, in the case of Saudi Arabia, until 1990 with both Moscow and Beijing. Once in place, however, tangible economic and political links quickly expanded, to the extent that just sixteen years later, the new Saudi King, Abdullah, made his first foreign trip as head of state to China, in 2006, and then welcomed the first visit to Saudi Arabia by a Russian President, Vladimir Putin, in 2007.

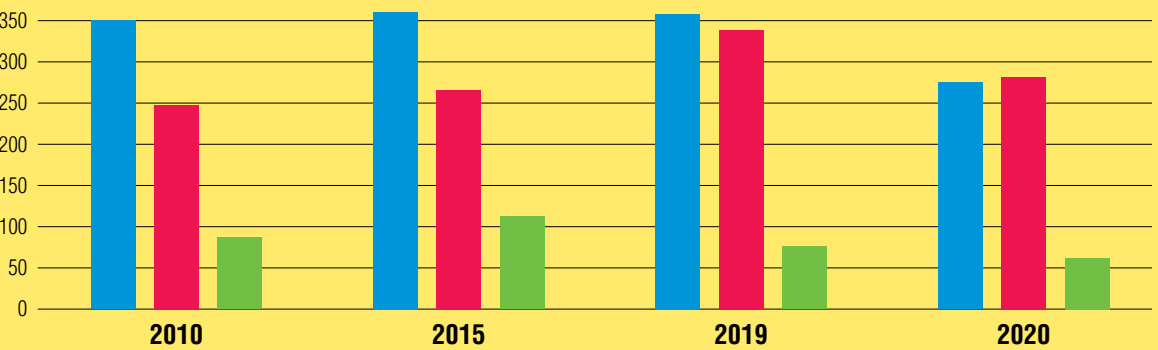
21ST CENTURY: NEW PLAYERS

Several trends converged and gradually intersected in the 1990s and 2000s. Although China only imported its first oil from the Gulf (from Oman) in 1983, the country became a net importer of oil products a decade later and a net importer of crude oil in 1996. Energy consumption rose rapidly across Asian markets even as they began to plateau in North American and European markets in the 2000s. Already by 2012, the value of the six Gulf States' exports (including oil and gas) to China, Japan, South Korea and India was three-and-a-half times greater than to the United States and the whole of the European Union combined. In 2020, Reuters market analyst John Kemp observed that West, South and East Asia had accounted for more than two-thirds of worldwide growth in oil consumption since 2009. Between 60 and 90 percent of Gulf States' energy exports (depending on the country) currently flow to Asian markets, illustrating Gulf economies' eastward shift in the twenty-first century. The growth in Asian demand was part of a rebalancing of geo-economic power from west to east, one in which the Gulf States, by virtue of their geographical location as well as their energy reserves, functioned as a pivot around which the broader change in global influence was taking place. Over the same period, the Gulf States, led by Qatar, the UAE and Saudi Arabia emerged as more visible regional actors with an increasingly global reach on issues such as financial, trade and investment flows as well

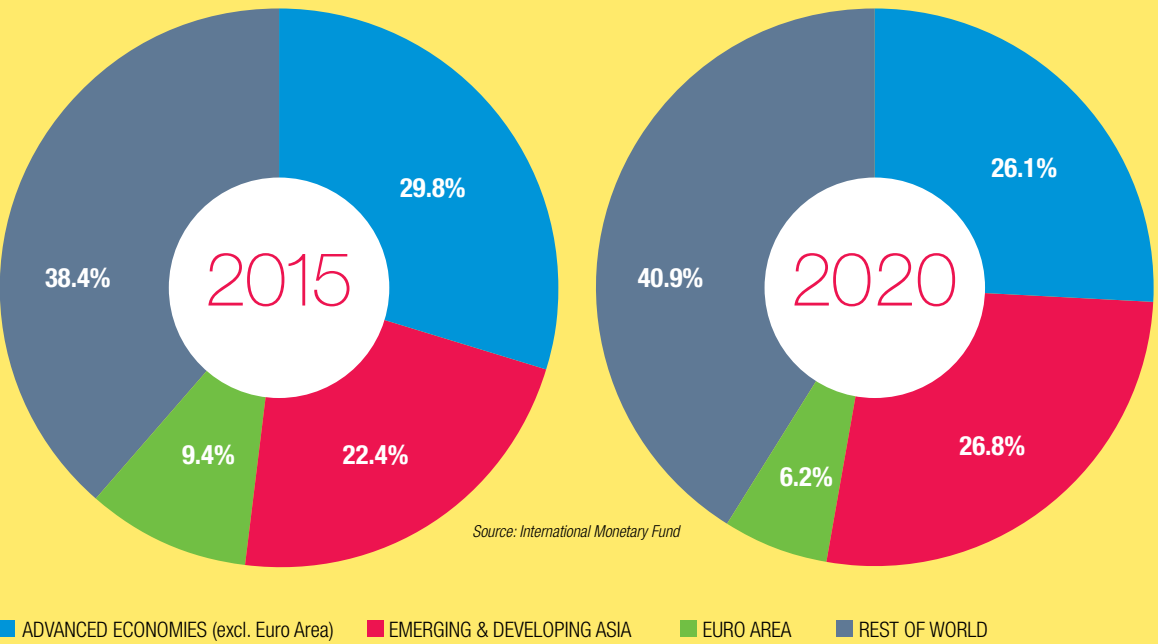
GCC, PIVOT TO ASIA

Economic and political ties between the Gulf countries and Asia have strengthened significantly over the past decade, giving impetus to bilateral trade and investment between the two regions. Growth in Asian demand for oil and gas has been central to the success of trade relations between the two areas, but economic ties are expanding significantly beyond the energy sector, particularly in construction, infrastructure and technology. China has the lion's share, with an annual growth rate of investment in GCC countries of 20 percent over the past 10 years.

TOTAL TRADE BY REGION IN BILLION USD...



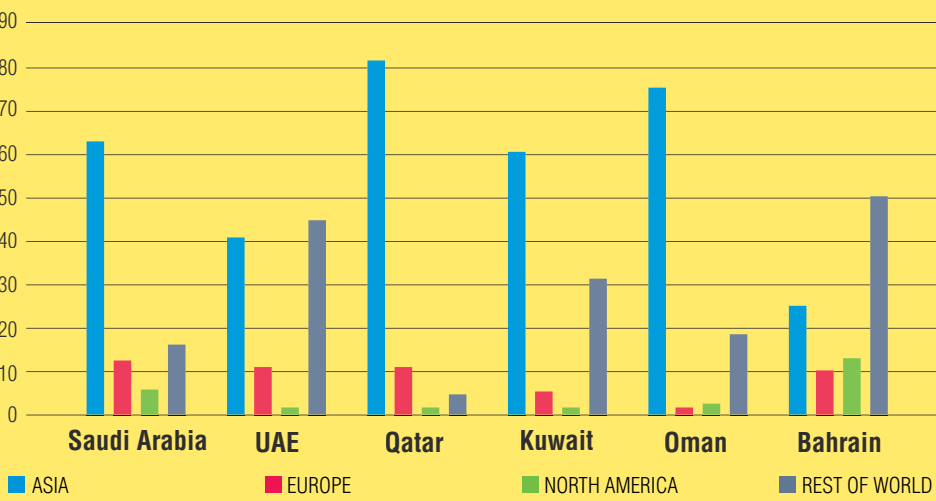
...AND IN PERCENTAGE



Trade between the Gulf states and the emerging Asian economies (including China and India) has accelerated significantly over the past decade, catching up with trade with advanced economies.

In 2020, Asia accounted for almost 27% of GCC trade exchanges (it represented just over 22% in 2015), while the euro area and other advanced economies recorded a decline in their share.

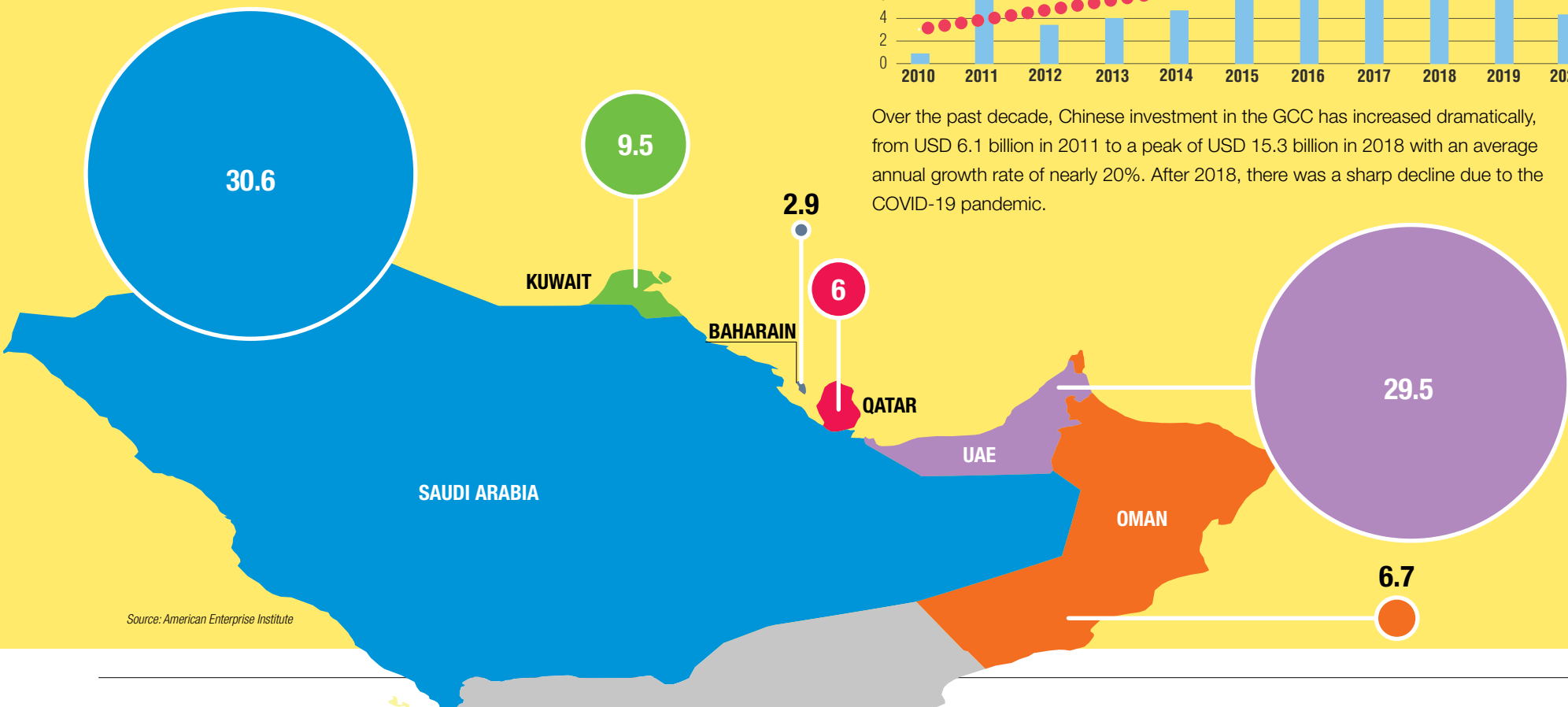
GCC, EXPORT BY REGION [%]



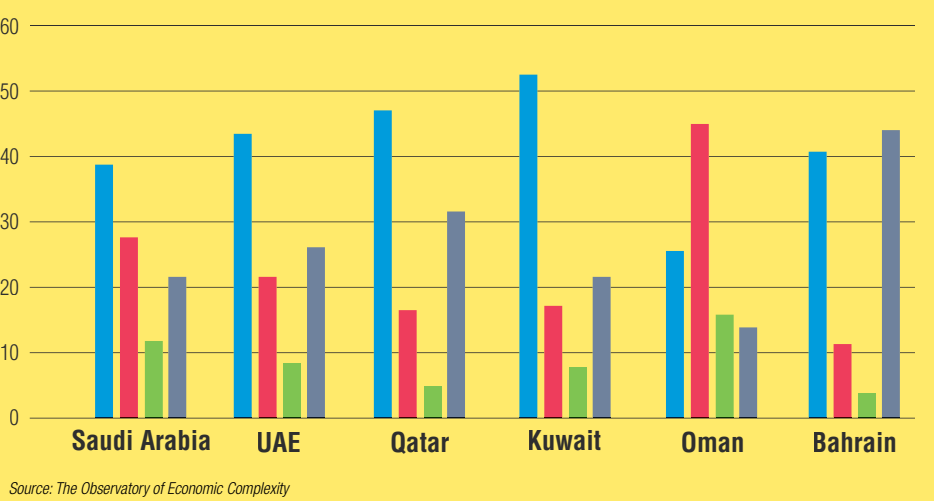
Asia represents a gigantic market for the GCC economies. Qatar is the country that most depends on exports to Asia, accounting for 82% of the emirate's total exports. Followed by Oman (76%), Saudi Arabia (64%), Kuwait (61%), United Arab Emirates (41%) and Bahrain (25%). The vast majority of exports concern the oil and gas industry.

CHINESE INVESTMENTS BY COUNTRY IN BILLION USD

Most of China's investment in the GCC went to the United Arab Emirates and Saudi Arabia (USD 29.5 billion and USD 30.6 billion respectively between 2010 and 2020). This is largely due to the size of the two countries' economies relative to other GCC countries, as well as their investment in economic diversification which has led to a large numbers of tenders.

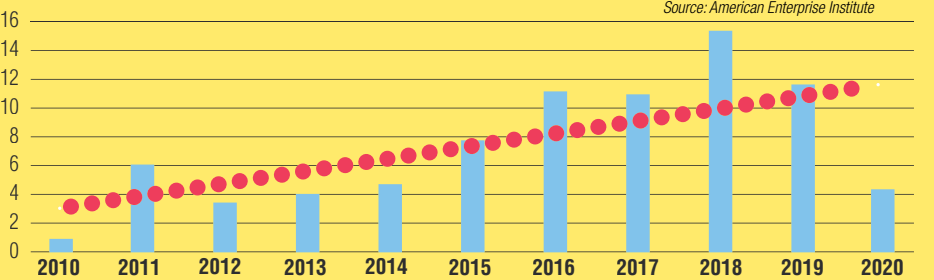


GCC, IMPORT BY REGION (%)



Imports to the Gulf region are more balanced between East and West than exports, but Asia remains the most significant import market for all GCC nations except Qatar and Oman.

CHINESE INVESTMENTS IN GCC COUNTRIES



Over the past decade, Chinese investment in the GCC has increased dramatically, from USD 6.1 billion in 2011 to a peak of USD 15.3 billion in 2018 with an average annual growth rate of nearly 20%. After 2018, there was a sharp decline due to the COVID-19 pandemic.




followed by infrastructure and trade-enabling projects and culminates in high-profile “breakthrough” cooperation on issues such as nuclear energy and space technology. China has designated Saudi Arabia and the UAE (as well as Iran) its highest status grade of “strategic partnership.” Significant Chinese investments in Khalifa Port in Abu Dhabi and in the new port and economic zone at Duqm in Oman are designed to create regional hubs for Chinese industrial and manufacturing interests. The UAE serves as a gateway for up to 60 percent of China’s exports to the Middle East North Africa (MENA) region, and Emirati and Chinese officials have identified a broad array of sectors as priorities for further cooperation, including education, healthcare, artificial intelligence, infrastructure, manufacturing, culture and tourism, in addition to energy. Across the border, China has become the largest investor in the Duqm Special Economic Zone and has also invested heavily in the Omani ports of Salalah and Sohar. Saudi Arabia has turned to China for assistance with its plans to create a civil nuclear energy program, as well as for defense and security cooperation on issues such as the development of a strategic missile defense force using Chinese technology and expertise. Both in Saudi Arabia and the UAE, Chinese inroads into the “strategic space” have caused friction with, and pushback from, U.S. officials, but to little avail.

IN SEARCH OF BALANCE

Officials in the Gulf States have made it clear that they will not be forced to choose sides in an era of more pronounced strategic rivalry and great power competition. Gulf-based sovereign wealth funds and other state-linked entities continued to engage with Russian counterparts after the imposition of (primarily Western) sanctions on Russia after 2014. Emirati and Saudi leaders have maintained regular communication with Russian President Vladimir Putin since the war in Ukraine started and have resisted U.S.-led attempts to pressure OPEC+ members into reassessing decisions on oil production levels. Ties with China have continued to expand, despite concerns from successive U.S. administrations, and leaders in all Gulf countries have demonstrated their intent to balance their international partnerships. Reaching an equilibrium might be more difficult in a more polarized world but it is indicative of the diversification of Gulf States’ international relationships in the twenty-first century and the eastward focus of those ties.

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 Dubai, United Arab Emirates. The Khor Dubai, a saltwater river that ends in the Ras Al Khor Wildlife Sanctuary. According to certain sources, in ancient times the river extended inland as far as Al Ain and the Greeks called it the Zadar River.

 Riyadh, Saudi Arabia. The Saudi Stock Exchange or Tadawul was established in 2007 as a joint stock company and is the only entity authorized to act as a stock exchange in Saudi Arabia.

as a proactive approach to reshaping aspects of international governance in coalition with other non-Western states. Their rise was facilitated by (and built upon) the substantial capital accumulation during the long oil-price boom in the 2000s but also reflected a desire to diversify and broaden economic and political interdependencies in a post-Cold War multipolar world especially after the 2007-8 global financial crisis. Policy responses to the financial crisis in and after 2008 demonstrated how Gulf leaders saw themselves as active participants in a growing array of international settings. The crisis accelerated the creation of durable new political and economic links against the backdrop of an international order in flux as the post-1945 structures of global governance struggled to remain relevant. A blunt assessment in 2009 by Emir Hamad bin Khalifa Al Thani of Qatar captured the regional mood as he stated that “China is coming, India is coming, and Russia is on its way

... I don’t know if America and Europe will still be leading.” Saudi and other Gulf leaders pledged to work with Chinese President Hu Jintao to address what they saw as a representational imbalance in the shares and voting rights in international financial institutions. Abu Dhabi campaigned hard to host the International Renewable Energy Agency, which duly became the first major intergovernmental organization to establish its global headquarters in the Middle East.

TIES WITH RUSSIA AND CHINA

Ties with India, which include strong historical connections and sizeable migrant communities, are one manifestation of the thickening of relationships with other emerging economies and “middle” powers. It is, however, Russia and China that have developed the most substantive links with the Gulf States, primarily in the economic and political spheres but also beginning to

include defense cooperation as well. Qatar has worked closely with Russia in the Gas Exporting Countries’ Forum since 2010 while Saudi Arabia and the UAE have done the same within the OPEC+ framework since 2016. Sovereign wealth funds from all three Gulf countries, as well as from Kuwait and Bahrain, have forged ahead with joint investment projects with entities such as the Russian Direct Investment Fund, while the Qatar Investment Authority has become the largest non-Russian stakeholder in Rosneft. A similar dynamic has been evident in China-Gulf relations over the past decade, too. Growing ties that focused initially on the oil and gas sector have over time been buttressed by investment partnerships and joint ventures with all six Gulf States. Since 2014, China has operated in the Arab world based on a “1+2+3” cooperation framework which follows a step-by-step process of development that begins with energy cooperation, is

A STRATEGIC PART NERSHIP

by **Brahim Maarad**

IN A PERIOD OF INSECURITY, THE EUROPEAN UNION AND THE COUNTRIES OF THE GULF COOPERATION COUNCIL AIM TO STRENGTHEN THEIR COLLABORATION IN VARIOUS AREAS: FROM TRADE TO ENERGY SECURITY, FROM INVESTMENT IN DIGITIZATION TO TRANSITION

THE ECONOMIC DATA reveal that the European Union (EU) and the countries of the Gulf Cooperation Council (GCC) together represent 20 percent of the world economy, 17.5 percent of world trade and cover more than half of global foreign direct investment. In 2020, the EU was the Gulf's main partner for imports (17.8 percent) and exports (6.9 percent). The political data reveal that as early as a month before the Russian invasion of Ukraine, the President of the European Commission, Ursula von der Leyen, was engaged in discussions with the leaders of the Gulf, Qatar in particular, to replace the Russian gas which would—sooner or later—run out. “It is important to strengthen Europe's energy security with all reliable partners,” she said. And the Gulf is an increasingly reliable partner.

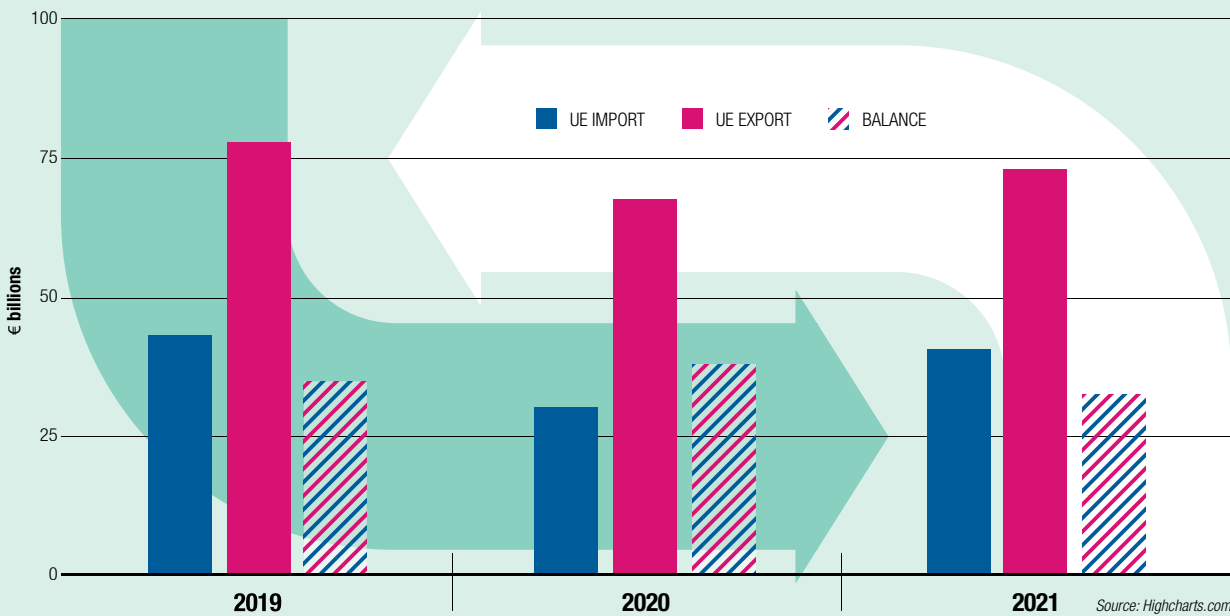
WIN-WIN COLLABORATION

On May 18 of this year, the Commission proposed a new strategic partnership with the Gulf and on June 20 it was approved by the Council. “At a time of insecurity and significant challenges to the rules-based international order, aggravated by Russia's war on Ukraine, the EU and Gulf countries stand to gain from a stronger and more strategic partnership stretching over a number of key areas. We need to work more closely together on stability in the Gulf and the Middle East, on global security threats; energy security, climate change and the green transition, digitization, trade and investment. We also need to strengthen contacts between students, researchers, businesses and citizens,” said EU High Representative for Foreign Affairs and Security Policy Josep Borrell.

Brussels is convinced that strengthening relations is a win-win. According to the EU, the Gulf region has a key role to play in the areas of green transition and energy security; and as the world's largest producer of fossil fuels, the Gulf plays a key role in stabilizing oil markets. In the medium to long-term, the Gulf can also become a major producer and exporter of renewable energy, hydrogen and more. The Gulf countries have some of the best solar and wind resources in the world and are reliable suppliers of the liquefied natural gas vital to replace Russian gas imports that arrive via pipeline. The Commission is counting precisely on this to implement its plan REPowerEU to free itself from energy dependence on Russia by 2027.

At the same time, this increase in trade and investment relations is beneficial for both sides, as Gulf countries must diversify their economies and free themselves from sole dependence on oil and gas revenues. Tourism has been developed by the United Arab Emirates and Saudi Arabia would like to follow. Brussels is drawn to the region's security and stability. And the intent is to work together on both region-led confidence-building initiatives and to address emerging crises and challenges in neighboring regions, such as the Middle East, Afghanistan and the Horn of Africa. Starting with cooperation on maritime safety, the EU has already implemented the EUNAVFOR Atalanta operation

EU-GCC: TRADE IN GOODS



The EU is the second biggest trade partner of the GCC (right after China, 15.8%), representing 12.3% of the GCC's total trade in goods with the world in 2020. 17.8% of the GCC's imports came from the EU in 2020.



The President of the European Commission, Ursula von der Leyen, during a visit to Bahrain. Even before the Russian invasion of Ukraine, Ms. von der Leyen was engaged in discussions with the leaders of the Gulf, to replace the Russian gas that would—sooner or later—run out.



Tourists take pictures of the Dubai Fountain at sunset. Sustainable tourism is one of the areas in which the EU and the Gulf can work together to develop new business and employment opportunities, especially for young people and women.

sary port infrastructures both in the EU and in the Gulf. Furthermore, green transition, climate adaptation and mitigation require large-scale global investment. The investment capabilities of the EU and the Gulf countries, when combined with the EU's skills and expertise, will unlock the capital, skills and experience needed to drive the green transition forward in other areas of the world and promote sustainable investments in the wider Middle East and Africa.

SOCIAL CHALLENGES AND HUMAN RIGHTS

As a promoter of multilateralism and social transformation, the EU says it is ready to encourage the promising social and economic changes underway in the Gulf countries, including in the field of human rights and gender equality. In addition, co-operation in research and innovation through the Horizon Europe program (the largest research program in the world) and student mobility with Erasmus + and Erasmus Mundus joint masters will create new markets and jobs and at the same time tackle social challenges such as climate and energy transitions or global health.

In all this, the issue of human rights cannot be the unwelcome guest. The EU recognizes that the human rights challenge remains, but also recognizes the significant progress made in recent years, for example the dismantling of the kafala system for migrant workers. Brussels insists on having frank relations with various human rights interlocutors, and the first EU-Saudi Arabia dialogue was held in Brussels in September 2021. Brussels encourages the ratification of the U.N. human rights treaties and the ratification and implementation of the conventions and recommendations of the International Labor Organization. There is a commitment to promoting gender equality and the empowerment of women in close cooperation with governments, civil society, the private sector and other stakeholders. “Close and effective cooperation between the EU and Gulf partners is essential to achieve key objectives of the EU, notably peaceful and prosperous Gulf and Middle East regions, a strong economic recovery, sustainable, affordable and secure energy supplies for European consumers, a strong collaboration on green transition between Europe and its partners, to contribute to net zero greenhouse gas emissions by 2050, and a strong response to global humanitarian and development needs.” This is stated in the conclusions of the EU Council on the Commission's proposal. The Foreign Ministers of the Twenty-Seven define it as a timely and “operational roadmap towards a strategic partnership with the GCC” and call for its “effective and swift implementation.” It obviously helped that the member states of the Cooperation Council supported U.N. resolutions demanding that Russia immediately stop military aggression against Ukraine and calling for civilian protection and humanitarian access in Ukraine, as well as humanitarian support for Ukrainian refugees.



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FREE TRADE NEGOTIATIONS

Returning to trade, building on the 1989 cooperation agreement, the EU and the Gulf states were engaged in negotiations on a free trade agreement, which broke down in 2008, mainly due to the different levels of ambition on key points. Since then, the EU framework for free trade agreements has further developed and currently includes ambitious provisions on sustainable development, labor rights, phasing out of export duties and other measures distorting trade and investments. Expert-level discussions continue to improve further mutual understanding of positions, with a view to negotiations for a trade agreement, which would address issues of mutual concern, including a better

environment for trade and investment, regulatory and customs cooperation and sustainable development goals. Regulatory cooperation, increased protection of intellectual property rights, including geographical indications and the fight against counterfeiting and smuggling are also on the agenda.

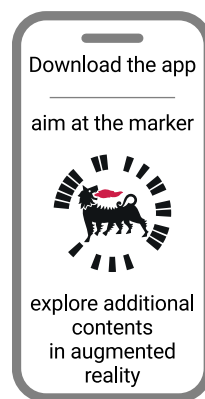
BRAHIM MAARAD
AGI reporter. Brussels correspondent.

NUMBER 1 even in FOOTBALL



by Davide Tabarelli

QATAR, WHICH WILL HOST THE 2022 WORLD CUP, TODAY HAS A CENTRAL POSITION FROM A GEOPOLITICAL POINT OF VIEW SINCE IT “SITS” ON THE MAIN SOURCE OF WEALTH FROM AN ENERGY POINT OF VIEW: GAS



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THE STRONGEST FOOTBALLER in the world, Kylian Mbappé, has confirmed he will stay at Paris Saint Germain, PSG, and not go to Real Madrid because he will receive a huge amount of money. But there is more: the owner has promised him a directing role in sporting projects at PSG, the richest team in the world, owned by Qatar's sovereign wealth fund, one of the largest with USD 450 billion. The President of PSG is Nasser Al-Khelaifi, who also serves as board member of the sovereign wealth fund and is Chairman of the European Club Association. He managed to bring the World Cup to Qatar and, for the moment, this is his greatest success; on the pitch, he has only won in France, while the Champions League is still a distant dream. Mbappé remained because, among other things, he has in mind an ambitious project to ensure that football brings greater development to Africa, the land of his parents. For the moment, there are lots of good intentions, fewer results.

A VANGUARD THAT EXTENDS INTO THE GULF

Football is in some ways a reflection of Qatar today, which in some ways a reflection of the Middle East. This is one of the most delicate regions in the world in terms of geopolitical balance, for many reasons including energy. 60 percent of the world's oil and gas reserves, the two sources that account for 55 percent of global energy demand, are still found in this region, and the costs of development here are among the lowest in the world. Qatar is just like the geography that you see on the map. It's a vanguard that detaches from the Arabian Peninsula and ends up in the Persian Gulf, stretching north, as if to reach Iran, formerly Persia, on the opposite shore. Like its geography, Qatar in recent years has detached itself from the other rich countries of the southern part of the Gulf to get closer to Iran, accepting the impossible mission of reuniting the two shores. Its political ambition, which encounters obstacles far more solid than those of the football field, is fed by the economic wealth that derives from the exploitation of its energy resources, especially gas.

In the ongoing crisis caused by the 2022 war in Ukraine, the only country in the world that had major plans to expand gas export capacity was Qatar. The greatest beneficiaries include Europe, and in particular Italy, which in 2021 imported 7 billion cubic meters of liquefied natural gas (LNG) through the Adriatic LNG terminal, located off the coast of the North Atlantic in the province of Rovigo. In the first three months of 2022, imports grew by 14 percent to 1.9 bcm, placing Qatar in third

place as Italy's largest gas supplier after Russia and Algeria. The Adriatic LNG terminal is 22 percent owned by QatarEnergy, a minority stake that hides the Qatar's real commitment to a project that seemed almost impossible back in 2009, a sort of mini-Champions League. The 71 percent majority stake is owned by ExxonMobil, while the remaining 7 percent, initially held by Edison, is now owned by the Italian SNAM, the company that manages the gas transportation system in Italy. Had it not been for the efforts of Qatar, on the strength of its enormous gas reserves, we would never have overcome the local opposition, the authorization delays and the uncertainties typical of the construction of energy infrastructures in Italy. The financial effort, moreover, was massive, with an investment in the terminal—a gigantic concrete structure resting on the seabed—of USD 3 billion, almost three times what it would have cost on land. It remains the only structure of this type in the world, and it is also the only large-scale structure built by Italy for the import of LNG, despite decades of useless attempts to build onshore regasification plants.

The other structure built in recent years, the Livorno floating terminal, has a capacity of 3.5 bcm compared to the 8 bcm of



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Adriatic LNG, which was increased to 9 bcm at the start of 2022. In the early 2000s, when various projects were discussed, the Rovigo idea was often declared useless and not compatible with the environment. For this reason it was moved offshore, at sea, far from the coast, unlike that envisaged by the first project far back in 1996. Others pointed out that the excess capacity that was glimpsed for the gas market in Europe and in Italy, then called the gas bubble, made the plant useless; claims that in 2022, with the tragedy of the war, were totally disproved. The determination,

almost obstinacy, with which Qatar sought to complete the project revealed the same ambition we see today, which drives it to seek a more important role in the region's economy, with a long-term vision detached from the short-term dynamics of the markets. The small emirate aims to consolidate a more lasting, politically solid role, aimed at establishing or re-establishing ties, cultivating culture, sometimes of strongly popular character, bordering on populism, as in the case of football.

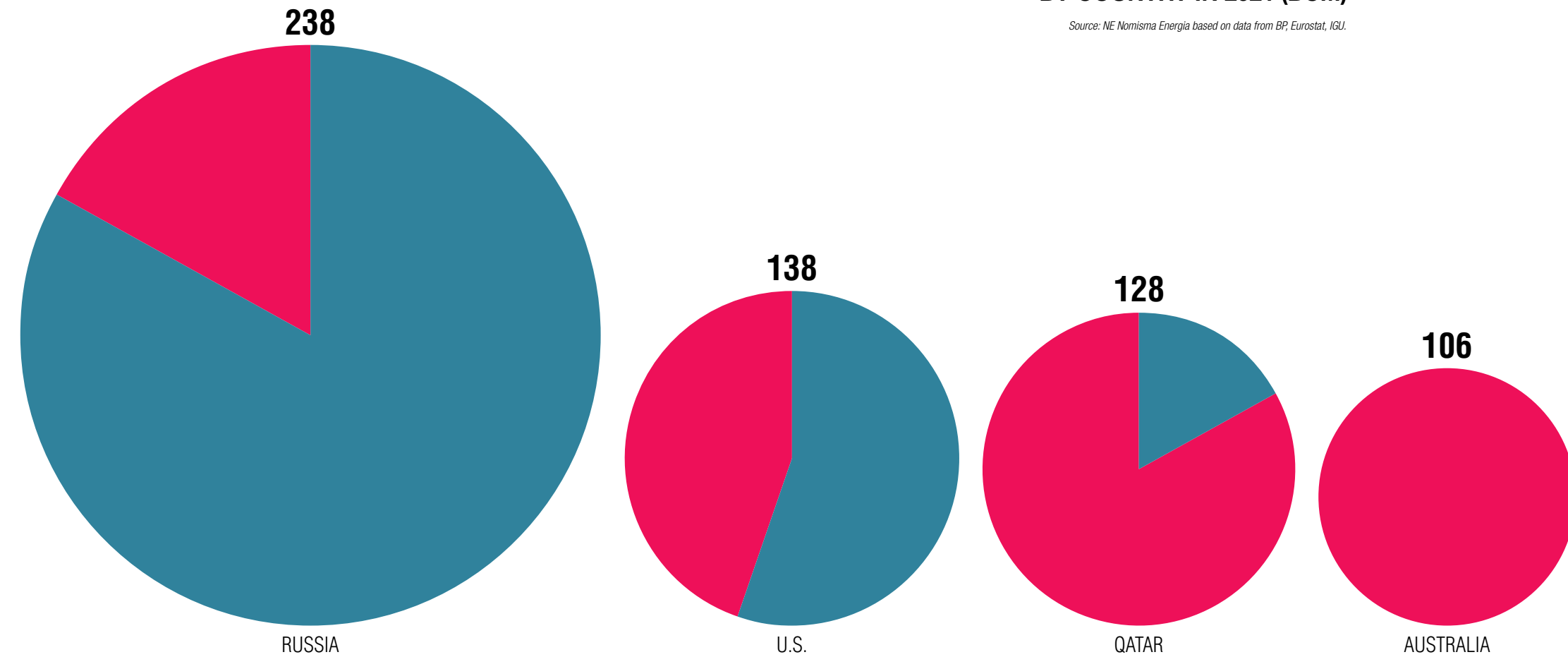
A FORWARD-LOOKING STRATEGY

Obviously, everything becomes easier when supported by great wealth, but having acknowledged this, it is also true that Qatar stands out in the region for its successful attempt to give greater meaning to the fortune granted to it by nature with its huge

NATURAL GAS EXPORTS

BY COUNTRY IN 2021 (BCM)

Source: NE Nomisma Energia based on data from BP, Eurostat, IGU.

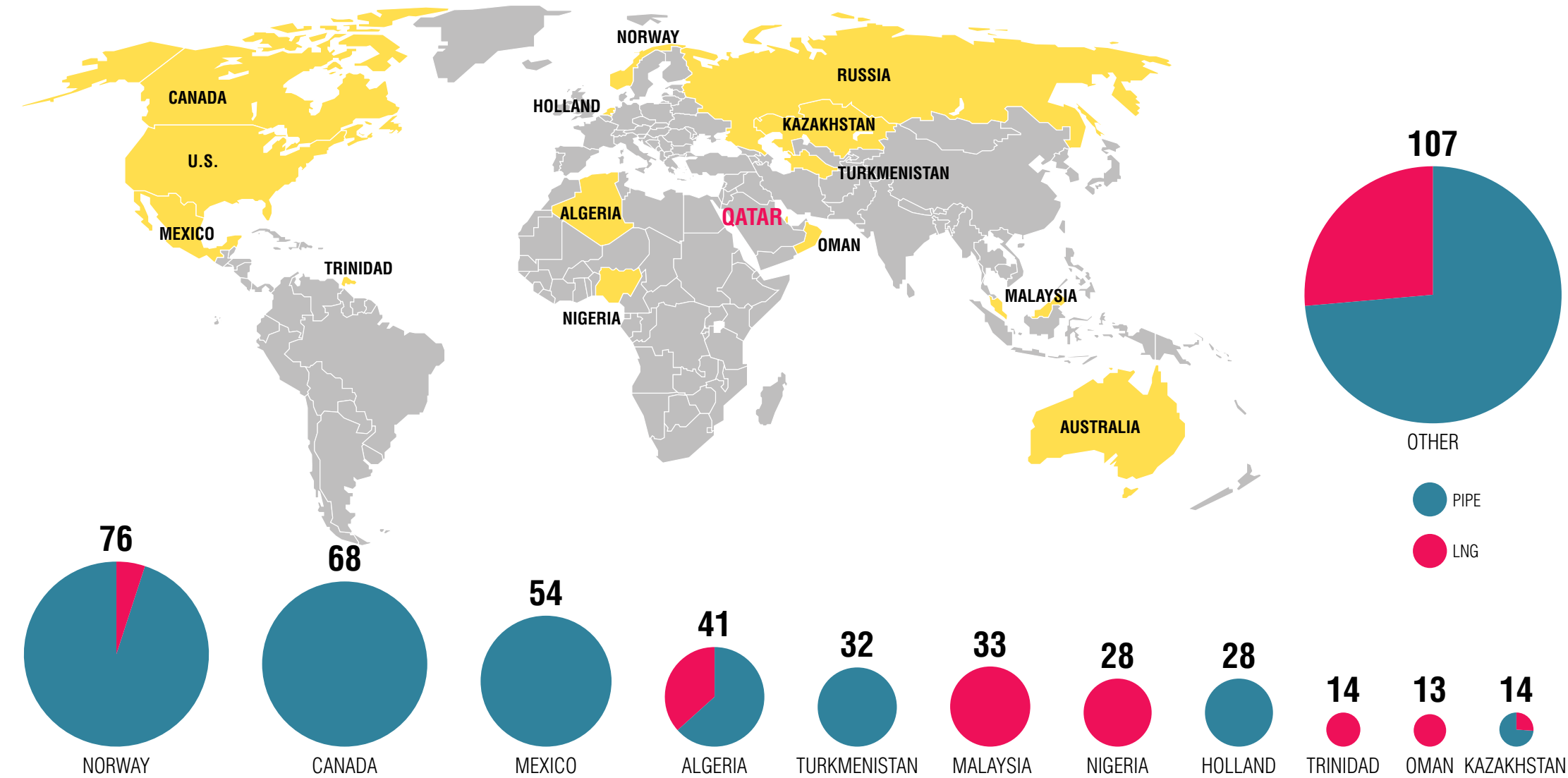


gas reserves. According to the U.N. rankings, Qatar is in second place, after Liechtenstein, for per capita income with USD 92,000 in 2019, more than double the USD 42,000 in Italy. This wealth is derived from gas exports, in particular from LNG, through the liquefaction terminals that Qatar has slowly been building for decades, since the early 1980s, 40 years ago, when gas was almost a by-product of the more precious oil. Oil has traditionally been worth much more than gas, with prices per barrel 40-50 percent higher, but with the crisis of 2022, the situation has reversed, and gas has shot up to prices almost double those of oil. This is of real satisfaction to Qatar, whose singular strategy for years was deemed too unbalanced towards LNG in an area and world oriented towards oil. Qatar's great wealth—gas—is all concentrated in the South Pars gas field, at sea and shared with Iran, which gives it its name, but which, paradoxically, does not exploit it. South Pars is the largest gas field in the world, with proven reserves of 50 tcm, probably double, with the current market prices that could justify more in-depth exploration and production using more expensive techniques. For this reason, Qatar is the third country for gas reserves in the world, after Russia and Iran. With

half of South Pars, Qatar has reserves of 25 tcm, while Iran has 32 tcm and Russia 37 tcm. Russia's reserves are on much smaller fields spread over an immense territory, many in Siberia, far from the consumer markets or from the seas over which it is easier to transport it by ship. Norway, the leading country in Europe for reserves, has 1.4 tcm; Italy, barely 100 bcm. Speaking of wealth indicators, thanks to gas exports, Norway is the first country in the world for development measured by the U.N. Development Index, the same U.N. that ranks Qatar second in terms of per capita income, but also built with other indicators, in particular life expectancy, years of schooling and attention to gender gaps. Qatar's goal is to climb the ranking of the most developed countries, from its current position in 45th place towards the number one, Norway; meanwhile, both countries share the focus on gas as their source of wealth.

THE SOUTH PARS PARADOX

It is precisely the South Pars field that highlights one of the greatest paradoxes of the world energy industry. While Qatar extracts the large volumes of gas that make it a leading global exporter, on the other side of the field, in Iran, there is no ex-



traction at all. It is true that most of the field is close to the coasts of Qatar, while the Iranian part is at least a hundred kilometers off the northern coasts, a location that does not favor the construction of liquefaction or production plants. The main reason, however, lies in the isolation suffered by Iran since the distant 1979 revolution. There was a glimmer when, in 2015, the then U.S. President Barack Obama reached a nuclear agreement with Tehran, which canceled the sanctions against Iran. This was followed by a flourishing of international initiatives for new investments in Iran, including some gigantic projects to initiate the exploitation of South Pars on the Iranian side. Then came President Trump at the end of 2016, who, consistent with the hard line of the Republicans, canceled the agreements and reintroduced sanctions, forcing the cancellation of all Iranian projects, including for gas. In the brief phase of Iran's rapprochement with the international community, in 2015 and 2016, the countries that worked hard to encourage investments in the Iranian South Pars included Qatar, an action that greatly irritated Saudi Arabia. It was one of the reasons for the decline in relations that culminated in the severance of relations in 2017 and the complete isolation of Qatar from Saudi Arabia

and other Persian Gulf countries. This, in part, led to Qatar's decision—whose oil production is less important than its gas production—to leave OPEC that year. Five years have passed, and today there is talk of a normalization of relations with Iran. In a few months the World Cup will begin, the most popular sport in the country that sits on what today has the most strategic wealth in the world in terms of energy: gas. The architect of this success is the great football fan Al-Khelaifi, whose biography reveals him to be the son of a pearl fisherman and trader in the Gulf, pearls collected over the South Pars field. With the concreteness of pearl traders, Qatar enjoys the success of hosting world championships, but knows well that it is the normalization of relations between the Gulf countries that is more important to achieve real wealth in the long term. Gas will continue to be important in this journey.

we

DAVIDE TABARELLI

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INDEPENDENCE



TACTICS

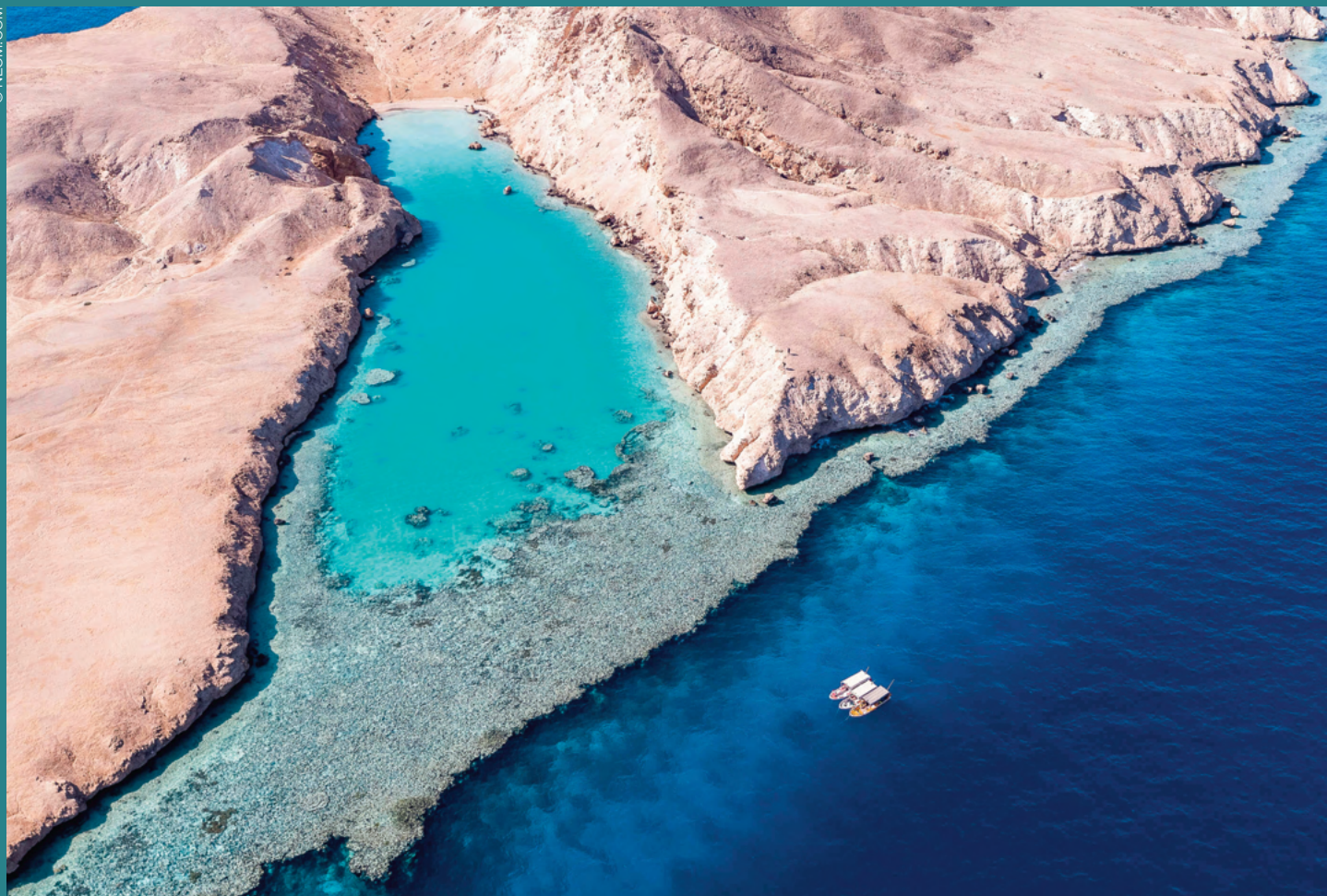
by Cinzia Bianco

THE ENERGY DIPLOMACY OF THE EUROPEAN UNION IN THE GULF, UNDERTAKEN BECAUSE OF THE NEED TO FREE ITSELF FROM RUSSIAN GAS, CAN ALSO BE PROFITABLE ON THE ENERGY TRANSITION FRONT. SUPPLIES OF GAS AND OTHER SOURCES, SUCH AS GREEN HYDROGEN, WOULD CONVERGE ENERGY SECURITY AND CLIMATE SECURITY

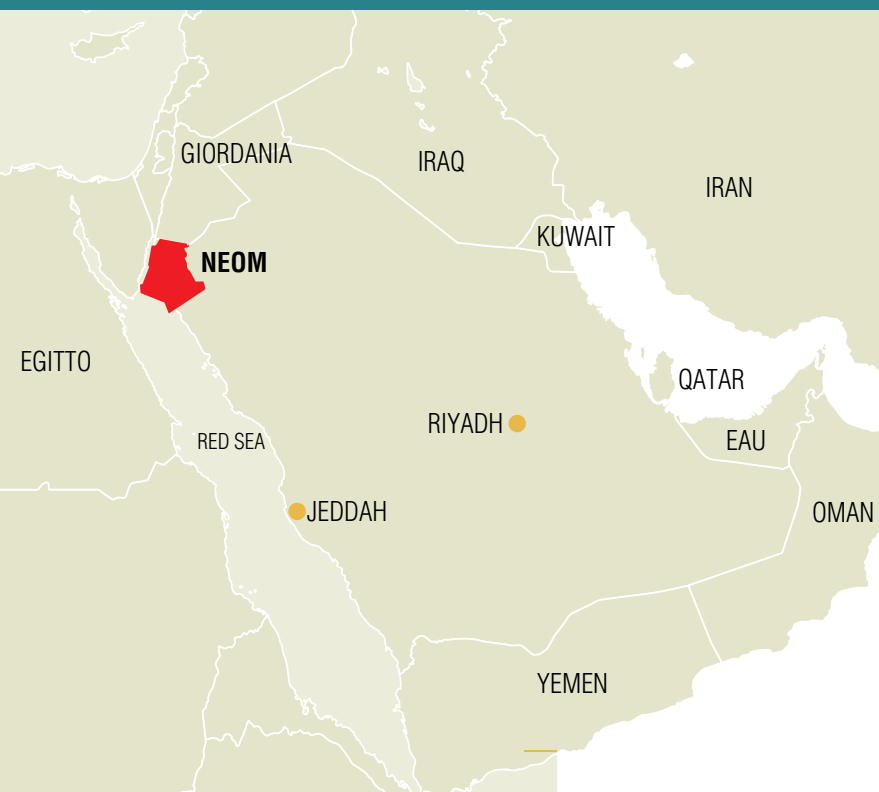
BEYOND THE BATTLEGROUND, Europeans are supporting Ukraine against Russia by leveraging their substantial weight on two domains: energy and the economy. Faced with Russia's attempts to weaponize its energy supplies, Europeans have become determined to end their dependency on Russian gas and oil. The European Union recently formalized a commitment to slash imports of Russian gas by two-thirds by 2023 and is working towards a full embargo on Russian oil within the end of 2022. These dynamics have combined with preexisting imbalances in energy markets to push oil prices to above USD 100 per barrel and growing. Europe's consumers and companies have seen their energy bills skyrocket and have been paying

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NEOM, THE FUTURE CITY OF SAUDI ARABIA



The name itself says it all: Neom means a lot of future (from the Latin, neo, combined with the first letter of mustaqbal, which in Arabic means precisely “future”). This is where Mohammed bin Salman steps in, the crown prince of Saudi Arabia, with this ambitious project: a city on the border with Jordan and Egypt that covers 10,230 square miles in an unspoiled location on the Red Sea and which will involve a new, hyper-technological and sustainable housing model. Neom, in fact, will be powered entirely by renewable sources with wind and solar plants, thanks to perennial solar resources (20 MJ/m²) and an ideal wind speed (on average 10.3 m/s). And that's not all: The project, which is worth more than USD 500 billion and will be supported by the Saudi Arabian Public Investment Fund and local and international investors, foresees that Neom will produce green hydrogen and begin exporting it in 2025, potentially to Europe.



Russia handsomely, sending amounts that overshadow the sums destined to support Ukraine. This has enabled the Russian government, which draws 40 percent of its revenues from energy exports, to survive crippling non-energy sanctions. To enable diversification, Europe turned to major energy producers, especially in the Gulf.

LOOKING TO QATAR

Europeans first reached out to Qatar, second only to the United States as the largest producer in the world of Liquefied Natural Gas (LNG), and after Qatar had already agreed with the U.S. to increase supply. Qatar initially responded that its output was locked into long-term contracts with Asian customers, with little spare capacity to be sold on the spot market. Europeans therefore started negotiating export deals for the longer term—specifically, after 2025—given that Qatar already planned to invest in doubling its output capacity. In March, both Italian Foreign Minister Luigi Di Maio and German Energy Minister Robert Habeck flew to Qatar to secure such deals, and both countries have also backed the construction of new LNG terminals. However, negotiations are not yet closed, and two major difficulties remain. Germany and Italy, as well as other EU actors in general, because they aim to become carbon-neutral by 2050, are reluctant to commit to Qatar's conditions to sign deals of at least 20 years. Moreover, Qatar also insists on terms such as a destination clause that would prevent Berlin from rerouting the gas to other areas in Europe, a condition which the EU strongly opposes.

The other significant problem that Europeans have is linked to oil. Europeans want to stop importing Russian oil by the end of 2022 and, while replacing oil is certainly easier than replacing gas, Europe needs to secure new suppliers for that. The deals that Saudi Arabia signed this year with Polish company Orlen and Danish firm Kalundborg Refinery would now put Riyadh in a strong position to access markets in Poland, the Czech Republic, Lithuania and Denmark, thus helping these countries fast-track diversification from Russia. Likewise, France's TotalEnergies has begun shipping Emirati oil to Europe



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in May, signalling that the United Arab Emirates (UAE) could also increase its presence there. The other, bigger, oil-linked problem for Europeans is to control soaring prices that are determined by growing demand and tight supply. This control over price would require the cooperation of Saudi Arabia and the UAE, two leaders of the Organization of the Petroleum Exporting Countries (OPEC). Riyadh and Abu Dhabi could have a significant impact if they encouraged all OPEC producers to increase oil supply. So far, they have rejected multiple calls from U.S. and European leaders to raise oil output to drive down prices.

A LONG-TERM PARTNERSHIP

The EU is taking these factors into account as they formulate their energy strategy vis-à-vis the Gulf monarchies in a way that is consistent with their climate objective of carbon-neutrality by 2050. Indeed, the EU is attuning its policies—such as the Green Deal, the upcoming EU-GCC (Gulf Cooperation Council) Joint Partnership Cooperation (JPC) and Re-Power EU—to the Gulf’s realities. Forging a Europe-Gulf energy partnership should not only be a short-term attempt to outfox Russia but also an element of a decades-long strategy for energy transition, encompassing both fossil fuels in the short term and green energy in the longer term. In this sense, the EU’s Green Deal can create channels for positive cooperation with the GCC countries through incentivizing economic diversification, building on the Saudi and Emirati net-zero pledges and the political momentum linked to the UAE hosting the U.N. Conference on Climate Change (COP28) in 2023. The upcoming JPC will further technical cooperation programs focusing on solar power, waste recycling, carbon capture and storage, the preservation of biodiversity, combating desertification, water security and energy efficiency. It would also boost cooperation on electricity beyond technical dialogue among producers, transmission system operators, distributors and their associations, with plans to link the GCC Interconnection Authority electricity grid to the EU electricity grid via Egypt, as a follow-up to the Saudi-Egypt deal signed in October 2021. Finally, while diversifying away from Russian energy, the EU will also accelerate attention to renewables. For Europeans green energy, in particular, green hydrogen, could be crucial to the efforts to become carbon-neutral by 2050 without disrupting energy security. Saudi Arabia, the UAE and Oman are at the forefront of producing green hydrogen in the Middle East and North Africa (MENA) region and beyond. For instance, Saudi Arabia’s 2GW project in NEOM—a planned megacity near the borders of Egypt and Jordan—aims to produce green hydrogen at between USD 1.5 kg and 1.95 kg, whereas the EU estimates that domestically produced hydrogen will cost between USD 3 kg and 6 kg. NEOM aims to start exporting in 2025, potentially to Europe. In 2021 Germany signed a memorandum of



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understanding with Saudi Arabia to “promote bilateral cooperation for the production, processing, application, and transport of clean hydrogen.” Frans Timmermans, the European Commission’s executive vice-president for the European Green Deal, initiated an exploratory dialogue with Saudi Energy Minister Abdulaziz bin Salman at the 2021 International Energy Forum about the possibility of a hydrogen pipeline to the EU. The UAE’s Mubadala Investment Company is already working on options for hydrogen pipelines with Italian energy infrastructure operator Snam.

If Europeans shape their new relations to the Gulf monarchies in a way that factors in the energy transition from fossil fuels to green energy, they would have found a formula that combines the needs of energy security with those of climate security, two issues that remain very important in European politics. Moreover, the Europeans will have learned from their excessive

dependency on Russia that energy sources must be part of a diversified portfolio, that long-term thinking is necessary and that energy and geopolitics are indivisible. These three considerations are bound to be reflected in the new energy ties between Europe and the Gulf.

we

CINZIA BIANCO

She is the Gulf Research Fellow at the European Council on Foreign Relations and a non-resident scholar at the Middle East Institute.



The European Parliament in Brussels. The European Union (EU) recently formalized a commitment to reduce Russian gas imports by two thirds by 2023, and is currently working to achieve a total Russian oil embargo by the end of 2022.



The skyline of Doha framed by the arches of the patio of the Museum of Islamic Art. After agreeing with the United States to increase the supply of liquefied natural gas, Europe has also turned to Qatar, which together with the United States is the world’s largest producer of LNG.



The Green Planet in Dubai, United Arab Emirates. The bio dome is a rainforest that is home to more than 3,000 species of plants, animals and birds.



The Saudi capital Riyadh. The collaboration of Saudi Arabia and the United Arab Emirates, as OPEC leader, could serve to control the surge in prices induced by the growth in demand and the scarcity of supply.



BACK TO THE FUTURE?

by David Roberts

WHILE A NEW DAWN APPEARS TO BE RISING FOR THE UNITED KINGDOM AND ITS GULF ALLIES, IT IS DIFFICULT TO AVOID THE SENSATION THAT THEY HAVE BEEN PUSHED TOGETHER BY IMMEDIATE CIRCUMSTANCE, AND THAT LONG-STANDING DIFFICULTIES HAVE, FOR THE MOMENT, BEEN SET ASIDE

MUCH HAS BEEN MADE RECENTLY of Gulf-UK relations. For the UK, still coming to grips with post-Brexit realities with only the flimsy adage of “Global Britain” guiding foreign policy, doubling down relations in the Gulf region seems to make sense as an area where the UK has extensive historic relations as well as goodwill among regional leaders. As for the monarchies, they too seem increasingly inclined to greater engagement with the UK. The United States was once perceived among Gulf leaders as their own regional police, but U.S. presidents are increasingly disinterested in the Gulf region. Regional leaders are consequently casting around with increasing insistence for ways to dilute their dependence on Uncle Sam. Into what



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Gulf leaders fear might become a void, the UK is stepping up, engaging and striving to make itself more important and useful to Gulf allies, for a price. So far, so good. But British foreign policy, unlike those of, for example, French counterparts, remains more changeable and dependent upon the whims of British governments and the vicissitudes of personal politics. So, while the UK's conservative government seems eager to ignore a litany of loud human rights-based concerns that infuriate so many, subsequent governments may not. And Gulf leaders know this.

HISTORICAL CONTEXT

The UK-Gulf historical record is extensive, going back at least two centuries when the UK was a world power, governing places and peoples around the world. For much of the colonial period, the UK did not care that much about the Gulf. Rather, its importance stemmed from its geographic location on key trade and mail routes to and from India, and the perennial desire to deny influence to other powers. Consequently, the Gulf received a light-touch version of British colonialism. A few so-called British residents sprinkled around the Arabian Peninsula's east and southern shores wielded vast power. They worked with whichever local Sheikh happened to be in ascendancy at the time, locking him and his family in power.

The UK took almost no interest in developing the proto-states on the Arabian Peninsula. Rather, all the British resident cared about was quelling local quarrels and subduing piracy. The elites that the UK engaged with tended to like these kinds of arrangements. In return for kowtowing to British demands, local leaders were able to extract a range of concessions that ranged from official agreements that the UK would deal with this and not that part of the Royal family to agreements for weapon delivery. Local discontent emerged sporadically against the British, particularly so in the early twentieth century as decolonizing ideas brought by tens of thousands of migrant workers swept around the monarchies. However, there was, overall, a notable lack of anti-British sentiment in the monarchies, partly because the monarchies have never been any kind of democracy. Nor were the British particularly overbearing or invasive as a foreign power. What this means is that the British name in the Gulf is comparatively unsullied by colonial overtones. In 1971, the last three monarchies—Qatar, Bahrain, and the United Arab Emirates (UAE)—sought independence, and the British role that had been declining for forty years finally ended.

UNCLE SAM ARRIVES

Britain tended to retain an outsized presence and influence—notably in the military forces—in Oman into the 1980s. Otherwise, the monarchies quickly diversified their foreign relations from a British focus, striking out independently. How-



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ever, the invasion of Kuwait in 1990 traumatized the region. The U.S.-led liberation of Kuwait in 1991 humiliatingly trounced Iraqi forces, even their highly vaunted and experienced Republican Guard. In the aftermath, and with the concept of invasion no longer being classed as merely theoretical or unlikely and with the awesome display of U.S. power, all monarchies deeply embedded themselves in the U.S. camp. U.S. military bases sprang up around the region in all monarchies, despite often strong local objections, and U.S. military equipment was purchased in still greater quantities. In hindsight, we can now say that from this moment onwards the Gulf monarchies—and particularly Saudi Arabia, Kuwait,

Bahrain and Qatar—de facto abrogated their security to Uncle Sam. Leaders luxuriated in the sense of security thanks to the growing ranks of U.S. forces based on military bases sometimes barely a kilometer from where the leaders slept at night. Meanwhile, Oman and the UAE cultivated similarly close relations with the U.S. But Oman retained more of a distinct sense of mission in its own armed forces. And Mohammed bin Zayed, the de facto UAE leader by the 2000s, believed passionately that effective local armed forces would be needed where sub-state threats—such as from Islamists—emerge, where the U.S. would offer less assistance. During these extended days of Gulf-U.S. courtship, the UK and most



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other international states were often sidelined as critical allies, if they retained important niche roles.

DIVERSIFICATION

September 14, 2019 will go down as a pivotal date in modern Gulf history. Dozens of missiles and drones, certainly from Iranian proxy forces, whistled their way through expensively assembled defenses and struck with force and unerring accuracy the world's most important oil refining facility at Abqaiq, Saudi Arabia. Another Saudi oil facility at Khurais was also struck. The attacks were unprecedented and were the sum of all fears for the Gulf monarchies. Their most important infrastructure was attacked by enemies seemingly with ease and they could do nothing about it. Decades of engagement with the U.S., throughout which time the Gulf monarchies spent in total hun-

dreds of billions of dollars on U.S. military equipment, proved entirely incapable of preventing the attack. The significant U.S. military presence in the region also proved to be no deterrent. And, as the coup de grâce, President Trump's reaction offered negligible comfort.

In truth, U.S. leaders from at least President Barak Obama onwards gave the impression they were evermore unsure why U.S. servicepeople were defending autocratic monarchies thousands of kilometers from U.S. shores. And the monarchies were aware of the increasing U.S. distance, not least when President Obama did not support the Bahraini and Egyptian elites during the Arab Spring. Or when he entered into the Joint Comprehensive Plan of Action (JCPOA) deal with Iran, potentially selling out their interests in favor of a modus vivendi with Iran. Irrked and concerned, Gulf leaders swiftly began casting around

for ways to mitigate the impact of the decreasing U.S. engagement, or, if regional doomsayers were to be believed, prepare for the U.S. leaving the Gulf. Russian and Chinese engagement certainly increased. The Gulf-Chinese relationship had long been increasing in importance, riding atop the ever-increasing energy supplies going eastwards from the Gulf. Aside from the energy dimension, Chinese financial and commercial engagement in the Gulf certainly increased too. China had long been a small, niche supplier of military kit to the region— notably material that U.S. and NATO allies would not sell, such as ballistic missile launchers and armed drones. China also constructed a military base in Djibouti in 2017—after years of protestations that it was not a military base but a supply station—indicating an increasing engagement in the broader region. Russia, meanwhile, was flavor of the month for a while.

Its engagement in Syria supporting President Assad cut against Gulf policies. Nevertheless, even this position was broadly respected through the lens of Russian clarity and consistency. Yet, any meaningful extension of Russian influence in the Gulf was illusory even before its armed forces were revealed to be as deeply inefficient as its leadership was brutal and foolish with the invasion of Ukraine.

BACK TO THE FUTURE?

As Gulf leaders were fretting about their strategic international relations, the UK was in a near-existential identity crisis of its own. With the Brexit debacle unfolding, the cold, hard realities of leaving the EU beset the conservative government, cueing a desperate scurrying around to chalk up some kind of a Brexit win under the loose adage of “Global Britain.” In this moment of mutual need, historic ties became ever more important and trumpeted, and a range of new agreements were signed, most of which revolved around security, defense and investment. After making permanent an already long-established military base in Bahrain in 2014, another British base was announced to open in Oman in 2017. Similarly, the depth of UK-Qatari relations is shown by the first standing up of a new RAF regiment since the Second World War, a joint effort with the Qataris based at RAF Coningsby. Also, RAF and Royal Navy personnel and equipment will be providing security for Qatar's 2022 FIFA World Cup. It has also been announced that all GCC citizens will receive visa-free access when the UK launches its new Electronic Travel Authorization system in 2023, and this is something the Gulf monarchies have been seeking for years. The Gulf as savior for the UK or Europe more generally as a replacement for Russian energy supplies is, at best, a medium-term aspiration. No state has meaningful quantities of oil or gas just lying around. A few cargoes can be re-designated, but it is difficult to see how supplies agreed years ago with long-standing customers can be diverted. Crucially, it is difficult for a state like the UK, whose government often shifts significantly, to undertake a fundamental foreign policy move. A sensible government would strive to write a long-term strategy for engagement and even make it bipartisan. But such a sentiment stretches domestic British political realities, leaving the UK and its Gulf allies engaging while they can.

We

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Museum of Islamic Art, Doha, Qatar. The museum exhibits objects from Spain, Asia and India dating back to between the 7th and the 19th century. The structure was designed by the Chinese-American architect Ieoh Ming Pei, who also designed the Louvre pyramid in Paris. Emir Tamim bin Hamad Al Thani aims to make Qatar a regional and international hub for culture and education.



London, November 12, 1965. Sheikh Sabah Al Salim Al Sabah, newly appointed Ambassador of Kuwait, with Rear-Admiral David Charles Cairns, 5th Earl Cairns, traveling to Buckingham Palace in a diplomatic carriage.



Kuwait City, 1956. An American car refuels at a gas station in the capital of Kuwait, where a gallon of gasoline costs around ten cents.



Kuwait City, 1956. A busy road in the city center. In the 1950s, the country's roads were widened to cope with the ever-increasing number of imported cars.

THE CHALLENGE OF SOVEREIGN FUNDS

by Bernardo Bortolotti



GROWTH HAS BEEN HALTED BY LONG-TERM TRENDS SUCH AS FALLING OIL PRICES, GROWING PROTECTIONISM AND GROWING BARRIERS TO INTERNATIONAL FLOWS OF CAPITAL. NOW COMES THE DOUBLE WHAMMY OF COVID-19 AND THE OUTBREAK OF WAR. BUT THE COURSE CAN BE REVERSED

SOVEREIGN WEALTH FUNDS (SWFs) are widely recognized as key players in global finance. Boasting assets worth USD 11 trillion and an impressive concentration of wealth, over the last two decades these new financial powerhouses have stabilized financial markets and contributed to the diversification of their domestic economies.

The rise of commodity based (primarily hydrocarbons) funds has been particularly spectacular. Thanks to the oil price boom fueled by the resource intensive growth of emerging markets, oil SWFs account today for 53 percent of funds in operation and 52 percent of global asset under management (see Table 1). However, the macroeconomic factors that caused their spec-

tacular growth over the last two decades today look a spent force. The age of the great accumulation is over, and SWF today grapple with the challenges posed by an uncertain scenario characterized by new industry fundamentals and enhanced geopolitical risks.

THE OIL SUPER CYCLE

First, if one looks at long-term projections, the oil super-cycle is ending, with demand estimated by the IMF to peak by 2030. Indeed, whether in response to bouts of high oil prices, regulations, or societal concerns over climate change, many economies have been making efforts to reduce their consumption of oil helped by improved technology. The impact of these efforts has thus far been submerged underneath the sustained growth of oil demand fueled by global economic and population expansion. But it is expected to become more prominent during the incoming recession and could significantly accelerate with faster innovation and stronger regulatory push for environmental protection. These developments have significantly reduced both current and future potential global demand for oil, and consequently the projected growth of SWF assets. Furthermore, in 2020, SWF weathered the COVID-19 crisis,

an adverse shock that due to its black-swan features, intensity, and disruptive potential, tested profoundly their mission and mandates. With a handful of exceptions, including pension reserve funds and stabilization funds, most SWFs abruptly realized that, while lacking explicit liabilities, they are required to meet implicit liabilities: contingent obligations to their sponsoring governments when their economies are hit by severe, unexpected shocks. Indeed, SWFs have been called on to both fill gaps in the public budget outright and to support their ailing domestic economies via corporate bailouts. According to recent estimates, SWF liquidated assets worth USD 211 billion to help governments to cope with the crisis, while investing USD 57 billion in distressed companies, especially in aviation bailouts. Hit by the double whammy of declining hydrocarbon revenues and the pandemic, SWF are dealing today with the aftershocks of the outbreak of the Ukrainian war. According to the IMF, the war will rise the average price of oil to USD 106.83 a barrel in 2022 and to USD 92.63 in 2023, up USD 38 from 2021, improving fiscal and external balances of exporting countries. Oil revenues will increase by USD 320 billion moving in tandem with official reserves, with an expected upgrade of USD 235 billion. Saudi Arabia has been one of the main beneficia-

ries of high crude prices, with its oil revenue in the first quarter soaring to USD 49 billion, up 58 percent compared with the same period in 2021. Saudi Arabia plans to increase the firepower of its SWF, the USD 620 billion fund that is chaired by Crown Prince Mohammed bin Salman, the kingdom's day-to-day leader.

Oil producing countries are thus reaping considerable short-run benefits in terms of windfall revenues and may also ramp up production to reap the extra-profits stemming from the current price spike. The future of oil-based SWF looks bright as they will have new petrodollars to spend in the near future and will boost investments. However, these benefits can be a flash in the pan if importing countries hasten the transition to renewables and diversify supply to improve energy security in the years to come. Furthermore, this temporary relief may induce complacency and slow down the required diversification efforts of hydrocarbon economies, given the inescapable long-run trends affecting the industry.

THE NEW GEOPOLITICAL SCENARIO

Importantly, SWF of all stripes have now to consider the implications of the new geopolitical scenario on their investment

strategies. Established during the golden age of globalization, SWF have initially played out their investments primarily with the objective of full-fledged diversification across countries and sectors to maximize their risk-adjusted returns. The mounting tensions between the United States and China and the deterioration of the Western relations with Russia caused by the war have changed the picture completely, forcing sovereign investors to redefine their strategies in a context with enhanced geopolitical risks. Indeed, governments are raising barriers to foreign direct investment in strategic sectors, increasing scrutiny on international deals, so that some targets might no longer be up for grabs. Assets in critical jurisdictions can be frozen by international sanctions, causing SWF to compound the risk of asset impairments and write-offs in their international portfolio. More generally, it will be more challenging to separate SWF investment activity from the will of their political masters, turning them into foreign policy tools. We can expect to observe increased deal flow at home or crossing friendly borders in politically motivated deals. From an asset allocation perspective, SWF will face new trade-offs between risk and return. International diversification of investments, one of the raison d'être of SWFs will be constrained and less effective in generating financial returns. Domestic investment will instead be safer if less lucrative.

If one looks at the recent evolution of equity investments by commodity SWFs, some interesting trends emerge. As Figures 1 and 2 show, green energy investments picked up considerably since mid decade and in 2020 accounted for 7 percent and 6 percent of deals and value, respectively. The data are broadly consistent with the view that SWF are strongly committed to foster the energy transition from hydrocarbons to renewables. As any other investor with a long-term investment horizon, they need to integrate sustainability into their investment framework to minimize the impact of this secular trend on future returns and to take advantage of the alpha generation opportunities that it can provide. As sovereign owned entities, however, SWF are asked by their political stakeholders to decarbonize their portfolios and accelerate the green agenda to secure access to energy in a post-hydrocarbon future. Figures 3 and 4 show the international profile of investments by commodity SWFs, splitting foreign and domestic deal activity. Again, the data clearly show that equity investments have been primarily carried out abroad and are geared towards international diversification. However, we observe a larger concentration of activity at home at times of economic shocks (the global budgetary crisis, the 2014-15 oil shock, and the COVID-19 pandemic). Most recent data will allow us to understand whether geopolitical considerations will push SWF to expand their investment activity at home or in friendly countries to mitigate political risk. SWF are thus navigating an uncertain territory as the global

petrolMoney

LEADING SOVEREIGN COMMODITY FUNDS (USD BILLION)

Top 20 commodity sovereign wealth funds by asset under management. Thanks to the boom in oil prices, sovereign wealth funds now account for 53 percent of operating funds and 52 percent of the world's assets under management.

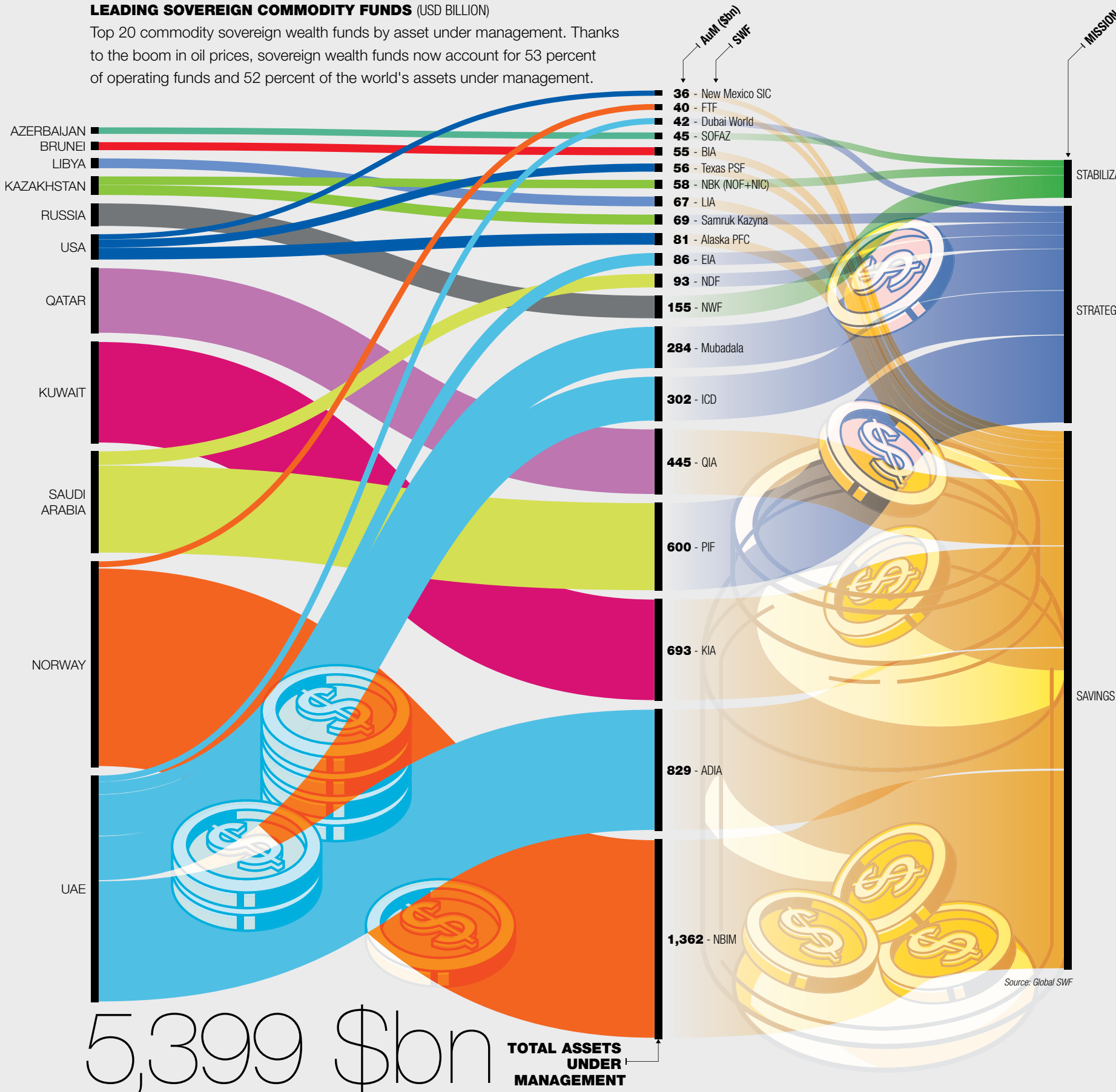
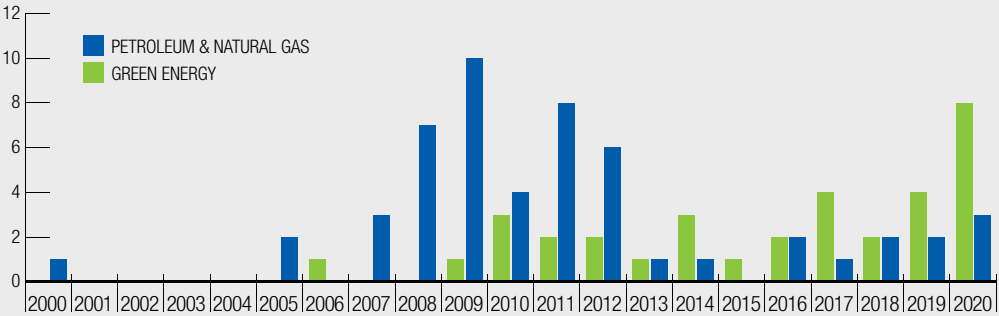


FIGURE 1 ENERGY TRANSACTIONS CARRIED OUT BY SOVEREIGN COMMODITY FUNDS (NUMBER)

The number of energy contracts made by sovereign wealth funds on commodities highlights how investments in green energy have increased considerably since the middle of this decade.



Source: Sovereign Investment Lab, Bocconi University

FIGURE 2 ENERGY TRANSACTIONS CARRIED OUT BY SOVEREIGN COMMODITY FUNDS (VALUE, USD MILLION)

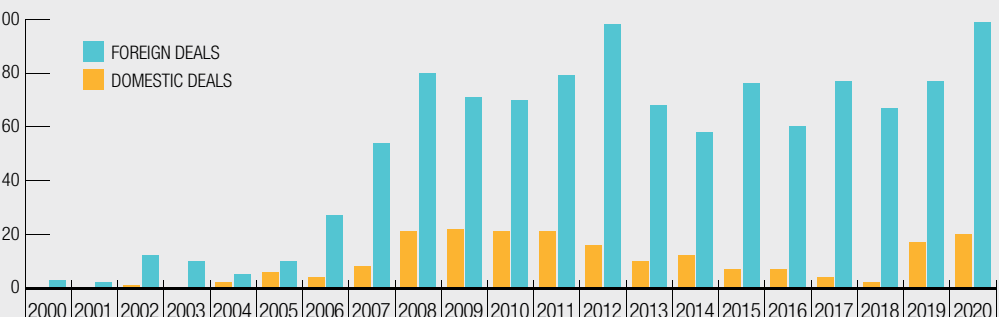
Green energy investments in 2020 accounted for 7 percent of operations and 6 percent of value. The data is broadly consistent with the strong commitment of sovereign funds to promote the energy transition from hydrocarbons to renewables.



Source: Sovereign Investment Lab, Bocconi University

FIGURE 3 DOMESTIC AND FOREIGN TRANSACTIONS CARRIED OUT BY SOVEREIGN COMMODITY FUNDS (NUMBER)

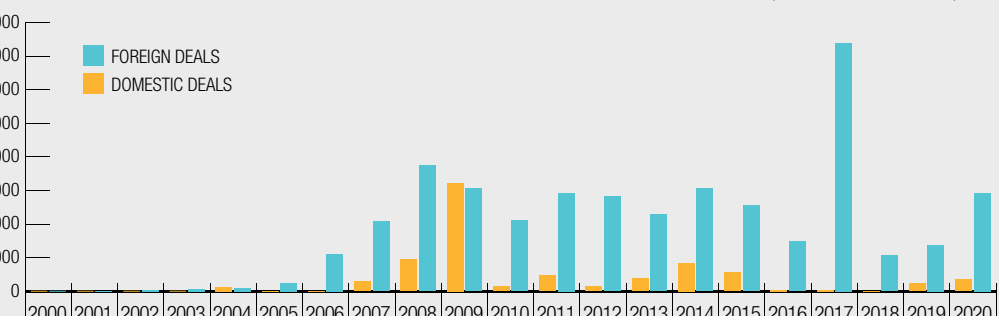
The data clearly show that equity investments are mainly made abroad and geared towards international diversification.



Source: Sovereign Investment Lab, Bocconi University

FIGURE 4 DOMESTIC AND FOREIGN TRANSACTIONS CARRIED OUT BY SOVEREIGN COMMODITY FUNDS (VALUE, USD MILLION)

A greater concentration of activities at home is observed in periods of economic shock (world financial crisis, oil shock of 2014-15, COVID-19 pandemic).



Source: Sovereign Investment Lab, Bocconi University

FIGURE 5 THE MOST ECONOMICALLY RESILIENT COUNTRIES

According to the EFRI, developed by the author, Norway is the most resilient resource-rich country. Second and third place in the ranking go to the United Arab Emirates and Kuwait.



Source: Authors' elaborations. Simple means of standardized values (z-scores) of Adjusted Sovereign Wealth, Debt Ratio (with minus sign), HH Index (with minus sign), and Truman Score



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A scenic view of the residential buildings of Pearl Qatar, an artificial island in Doha that spans nearly 1.5 square miles.



Port of Mo I Rana, Norway. According to the Economic and Financial Resilience Indicator (EFRI), developed by the author, Norway is the most resilient resource-rich country.



A view of Luanda, capital of Angola. Angola, again according to the Economic and Financial Resilience Indicator (EFRI), is the least resilient country, as it was hit by the COVID-19 crisis in a situation of extreme fragility.

economy is shaken by multiple crises. Predicting their future evolution is a difficult, if not impossible, task. However, there are fundamental questions that cannot be escaped. How resilient are resource-rich countries in the face of this new challenging environment? More specifically, how strong are oil producing nations' buffers in terms of pledgeable sovereign assets, resource diversification and institutional capital? Data can provide some tentative, preliminary answers and help canvass some possible future trajectories of SWFs.

ECONOMIC AND FINANCIAL RESILIENCE

We have developed a new indicator, the Economic and Financial Resilience Indicator (EFRI), which allows a meaningful comparison across resource-rich nations. EFRI is based upon four pillars:

1. The Adjusted Sovereign Wealth, the ratio between a country's total sovereign (marketable) assets net of government short-term liabilities and the non-oil fiscal deficit, broadly capturing the number of years a government would take to exhaust its assets if maintaining a constant level of expenditure while facing an absence of oil revenues.

2. The debt ratio, a conventional measure of one country's fiscal sustainability.
3. The Hirshmann-Herfindal (HH) index, a normalized measure of one country's effective degree of diversification based on the shares of non-hydrocarbon exports.
4. The Truman score, a measure of SWF transparency and accountability, as a proxy of the overall "quality" of government and fiscal policies, a fundamental ingredient of resilience in times of distress. EFRI is computed as the mean of the standardized values (each with mean zero and standard deviation of one) of the four pillars for each year.

The EFRI provides a neat illustration of relative resilience within our sample of oil producing nations. The ranking in Figure 3 confirms a well-established fact: Norway is the most resilient resource-rich country in our sample, boasting a level of economic and financial resilience 7.4 standard deviations above the mean. This extraordinary result is driven by the immense wealth stored in its SWF, the strength of its fiscal position and the almost perfect score achieved in SWF governance. While Norway can be considered an outlier in our sample, two Gulf Cooperation Council (GCC) countries, the UAE and

Kuwait, make it to the podium in second and third position in the EFRI ranking. The UAE, particularly, combines the largest sovereign wealth (that would allow to finance up to 20 years of current expenditure even absent any oil revenue) with an advanced stage of resource diversification. Kuwait has not found its way out of oil, but gains prominence thanks to the assets of its long-standing sovereign fund and to effective institutional governance in the management of SWF assets. EFRI allows also to identify the least resilient countries of our sample. Two above-mentioned nations, Iraq and particularly Angola, entered the COVID-19 crisis in extremely fragile conditions. The macroeconomic outlook of Angola recently deteriorated, reflected in an EFRI 3.3 standard deviations below the sample mean. For these two countries, the pandemic could be the last straw for debt sustainability, and the question of painful adjustment will loom large in their policy agendas. Below average EFRI's are also reported for a group of Middle East and North Africa (MENA) economies including Bahrain, Oman and Algeria. For these countries, the scenario is bleak and it will be difficult for them to recover a sustainable fiscal path without a lifeline from abroad. Within the region, Qatar, a country surviving a 5-year blockade, improved its economic and financial resilience throughout, giving it an EFRI score very close to the mean. Further down the league table, we find Saudi Arabia in a middle-rank (7), above the mean, due in part to the sizable reserves of the central bank and a low level of government debt.

CHANGES HARD TO FORECAST

To conclude, long-term trends such as declining oil prices, mounting protectionism and increasing barriers to international capital flows have halted the spectacular rise of commodity SWF of the last two decades. The double whammy of the COVID-19 shock and the outbreak of the war represent quintessential challenges, causing irreversible changes that are hard to predict. However, some SWFs in the developed and in GCC countries have shown that the resource curse can be broken, and SWF can be suitably designed to diversify the economy and to grant resilience to the prospects of oil producing nations.

we

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LOOKING FOR A new EAST

by Roberto Di Giovan Paolo

MAJOR SPORTING EVENTS HAVE ALWAYS BEEN AN OPPORTUNITY FOR GROWTH FOR THE HOST COUNTRY, AS WELL AS ONE OF THE RARE MOMENTS OF DIALOG AND ACTIVE DIPLOMACY, KNOWN TODAY AS “SOFT POWER”

IT IS NOT THE FIRST TIME that the football caravan departs from the preestablished shores of Europe and South America to make “global” forays into new worlds. Indeed, we could say that it is a story that repeats itself from the beginning, given that, every time an event is held in England (or is concluded there, like the recent Finalissima won by Argentina at Wembley), the English always talk about football “coming home,” as if they were a priori the founders, patent-holders and, ultimately, rulers of its final destiny.

In spite of the results, at least at the level of World Cups won, since the only one they have won remains that played at home in 1966 against a strong West Germany, which began a cycle, however, and played that final as a “sacrificial victim,” twenty years or so after the bombs of the Third Reich fell on the city of London. They needed it, at least a “sporting revenge.”

But this time, we travel a lot further. To Qatar. And what's more, due to the meteorological problems, the heat and the conformation of the country, the organization really changes a lot: the matches in five places no more than 40 miles apart; the calendar which, instead of the traditional June-July schedule (which also corresponds to the vacation period, especially for working people in Northern Europe), runs from Nov. 21 to Dec. 18. Finally, the match times, which, as has now been the case since the televised Mundial, that is more or less since Mexico 1970, will firstly meet the demands of the broadcasters that pay for the broadcasting rights in the world and then, of course (but we can't really swear to it), possible physical issues that arise due to climatic conditions that will put a strain on teams and accompanying medics, with the heat and the temperature range.

AN ARABIAN WORLD CUP

It had been in the air for some time that an Arabian World Cup would be the next stop in the football caravan, considering that the TV rights had already increased over time from a cost—which back then seemed to belong to science fiction—of USD 112 million for France 1998 to over 2.5 billion for Brazil 2014 (in Russia the figures have remained confidential but there are those who swear it was over USD 3 billion) and the cost of organizing the event, proportionally, had risen stratospherically (moreover, like the cost of organizing a Formula One Grand Prix or Moto GP, which Arab countries have been hosting for some years now). And second only to the cost of the Olympics, to which are added the need to find a more complex and environmental-friendly formula for the reuse of facilities for the approximately one hundred sports involved. With football, it's easier. So to speak, if the World Cup is held, as it will be in Qatar, in a country that does not have a great tradition of leagues and local teams.

And the controversies surrounding the awarding of the event certainly included the construction in accordance with FIFA rules of the five stadiums where the group matches will be

SPORT & HISTORY



1930 The 1930 FIFA World Cup, also known as Uruguay 1930, was the inaugural edition of the World Cup. It was held in Uruguay, from July 13 to 30, 1930. In the final, in front of an audience of 93,000 spectators, Uruguay beat Argentina 4-2.

1930

1966 The World Cup was played in England in 1966. The host country was victorious, beating West Germany at the end of extra time. This is to date the only trophy—in World Cup and the European Championships—raised by the English national team.



1966

1978 Argentina hosted the World Cup in 1978, and won, beating the Netherlands 3-1. But the atmosphere was dark: the military dictatorship used the sporting event and the victory instrumentally to strengthen itself, giving a demonstration of efficiency.



1978



1990 The 1990 World Cup was held in Italy, and it was a magical event, despite the end of Yalta, the crumbling of Eastern Europe and German reunification just around the corner. West Germany won, beating Argentina.

1990

2010 This was the first World Cup in Africa (won by Spain). There were many doubts about the feasibility of this event in South Africa, but it was strongly advocated by Nelson Mandela. After all, these were the years of strong economic revival, and the country was part of the BRICS group.



2010



played and then the direct clashes that will lead to the crowning of the winners of the 2022 World Cup.

With all the implications and consequences. Just think that Qatar has even had to change social and labor legislation in order to prevent the continued use of labor, mostly foreign—over two million mainly Asian and African, of which at least half in the construction sector—under labor laws closer to 19th century Arab history than to modern societies in the twenty-first century. But it did it. And this will certainly be another arrow in the bow of those who insist that sporting competitions ultimately force the improvement of the countries in which they take place. Certainly, in parallel with the progress in the field of labor law, Qatar has also taken a step forward in the institutional and political field, electing for the first time with direct elections 30 of the 45 members of the Shura Council, which—under the given conditions—begins to resemble a Parliament, perhaps with too many consultative powers rather than legislative or executive control, but this is certainly an advance that is undeniably linked to the planetary dimension of attention ahead of the upcoming World Cup.

It is clear that we are not talking about a system in which European-style political parties operate, and there were over 200 completely individual initial candidacies for the approximately 30 seats; but it is a process that has begun and that may continue if the effects are carried over beyond the end of the tournament. The extent to which this process will be followed by a growth of active citizenship will be discovered only in the years to come.

On the other hand, the fact that sport has now become one of the rare moments of diplomatic dialog and meeting and of active national diplomacy—what many now define as “soft power”—is nothing new at all.

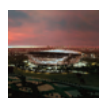
THE POLITICAL ROLE OF SPORTS EVENTS

The Olympics established a moment of peace between the internal wars even in Greece and, returning to modern-day Olympics and the World Cup, which began with Uruguay 1930, we certainly cannot forget that the tension between the drive for improvement of the chosen host country and the comparison of the conditions of development and life in the same country have often been the basis of even international debates on whether or not to take part in competitions. With related political arrows and boycotts that are certainly not painless (just watch the great series *Una Squadra* on the Italian tennis team of the Adriano Panatta era, to see how it works). Sometimes even with contradictory behavior even in a short space of time: think of the protests in 1968 for the Olympics in Mexico, and the very different climate at the World Cup, also in Mexico, in 1970. It certainly cannot be said that in just two years such a large and socially differentiated country suddenly found itself as one on the road to improvement.

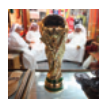
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A rendered image of the iconic Lusail Stadium in Qatar, which will host the opening matches and the final of the 2022 World Cup. The stadium was designed by the British firm Foster + Partners.



Today, the World Cup in Qatar is launching a path of sports diplomacy that is bringing about important changes, demonstrating that sport is becoming one of the rare moments of active diplomacy, which many now refer to as “soft power”.



Major sporting events have always played an important role in geopolitical context. Already in the eighth century BC the Olympics sanctioned a moment of truce, interrupting the ongoing wars in ancient Greece.

Or the Argentina of the Mundial in 1978, in full military dictatorship, which many have also described with explicit reference to individual matches and their significance for political prisoners, such as Marco Bechis with his film *Garage Olimpo* and memoir *La solitudine del sovversivo* (The Solitude of the Dissident).

The World Cup, like the Olympics, has accompanied the epochal changes and, whilst the only English victory was also fondly remembered by the other nations for the years of “swinging London,” the same was true for the 1990 Italian World Cup. Despite the end of Yalta, the crumbling of Eastern Europe and German reunification just around the corner (but they were still playing divided and East Germany played their last winning match in September 1990 against Belgium, a European qualification that became...friendly) the Italian World Cup was that of harmony and, as the song went, *notte magiche* (magical nights) for everyone, while the world was shaking on both sides of the Wall, whose function was by now at an end.

However, it took another decade to carry the World Cup far from its usual safe and well-established places: in 2010, it finally landed in Africa, a continent that had begun to ensure football profits through its thousands of talented players, first of all naturalized in France, Champions for the first time in 1998, at home, with a team that bore very little of French tradition, given that more than half of the players came from the *département*

ments d’outre mer. In Africa, it was played safe: in South Africa pacified by the luminous presence of Nelson Mandela, also enjoying great economic growth, and part of the group of BRICS countries (Brazil, Russia, India, China and, precisely South Africa), to the extent that there remained a thin connecting thread for the subsequent 2014 World Cup in Brazil and 2018 in Russia.

AN OPPORTUNITY FOR CHANGE

Today, the World Cup in Qatar marks the start—more solidly than a simple weekend of Grand Prix, and perhaps even the Expo Dubai in the neighboring UAE—of a path of sporting diplomacy that is bringing about important changes not only in labor and electoral laws, but also in Islamic-style welfare, so closely linked to the ethical idea of *Zakât*, or charity: this should no longer be interpreted only as a religious precept but as an invitation to justice and not just to the traditional method of aid perpetuated over the years by the ruling dynasties and by the tribes unified into kingdoms and nations. Even the Arab countries and Eastern religion feel a spirit of change and not necessarily merely in imitation of the Western model.

The issues of social justice are not yet so publicly debated, and we doubt that this can occur simply because they are interwoven with the gentleman’s game. But the buzz of a worldwide event, the small and large transgressions to normal daily life in the countries that host so many sports people, team staff, fans and journalists, have often created a far-reaching phenomenon; certainly further reaching than they could have imagined even just ten years earlier or more, when they competed for the award.

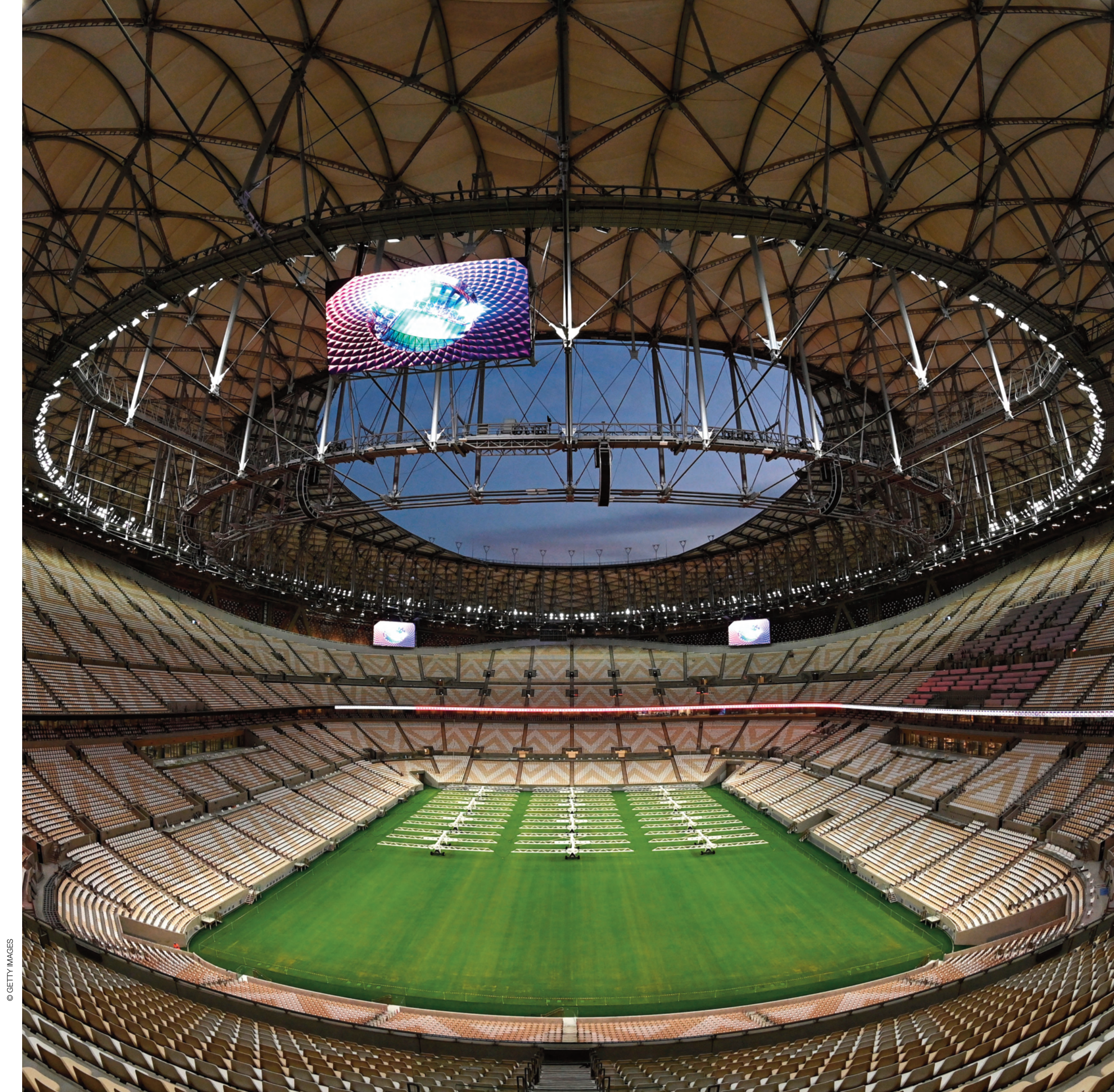
And, also seizing this World Cup as an opportunity, certainly Qatar in 2022 is certainly no longer the Qatar that won the contest to host the World Cup in 2010.

There will be no Italian triumph like we enjoyed in the European Championships, but there will certainly be no shortage of reasons—not only sporting but also social—to look to the World Cup in Qatar with a certain interest: soft power and diplomacy don’t just show up every four years.

we

ROBERTO DI GIOVAN PAOLO

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KUWAIT Soul

WEDGED BETWEEN IRAQ AND SAUDI ARABIA, KUWAIT IS ONE OF THE SMALLEST AND RICHEST COUNTRIES IN THE WORLD. SELDOM IN THE SPOTLIGHT, THE EMIRATE FOUND ITSELF CENTER STAGE IN 1990-91 DURING

THE FIRST GULF WAR. BUT WHY DID A STRIP OF DESERT COMPLETELY

DEVOID OF ATTRACTIONS END UP IN THE LIMELIGHT THIRTY YEARS AGO? FOR THE MAIN RESOURCE THAT THE COUNTRY IS RICH IN: OIL.

THE FIRST RESERVES WERE DISCOVERED IN 1934 AND KUWAIT'S ECONOMY IS STILL ALMOST COMPLETELY SUPPORTED BY OIL RESOURCES. TODAY, THIS WEALTH HAS LED THE COUNTRY TO DEVELOP A RATHER EXTREME VISION OF THE CAPITALIST MODEL: A REALITY IN WHICH A MATERIALISM OF ALMOST DYSTOPIAN LEVELS IS BLENDED WITH STRONG ISLAMIC TRADITIONS. IN THIS PORTFOLIO, WE CAN SEE SOME EXAMPLES OF "PEACEFUL" COEXISTENCE OF TYPICALLY WESTERN CUSTOMS AND ELEMENTS OF TRADITIONAL MUSLIM CULTURE.

📷 Gabriele Cecconi is an Italian documentary photographer who follows cultural, political and environmental issues. His project on the environmental impact of Rohingya migration in southern Bangladesh has received numerous international awards. His works have been exhibited all over the world and published by Italian and international newspapers and magazines.

Subiya, Kuwait. On National Independence Day (25 February) Kuwaitis celebrate in the desert with a big kite-flying event. In 1961 Kuwait was the first of the Gulf Emirates under British rule to obtain its independence. In 1962 it introduced its Constitution and one year later the national assembly was sworn in.

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Kuwait City. A woman practices at the shooting range. Shooting is a popular activity among Kuwaiti women.



Kuwait City, Art Gallery, Kuwait. Two young women take a selfie at the opening of an art exhibition. In spite of censorship, cultural awareness is growing in the country. Also on the rise is the phenomenon of cosmetic surgery, not only for women.

Sheik Al Saleem Cultural Center, Kuwait City, Kuwait. A woman at the controls of a space shuttle simulator at the Sheik Al Saleem Cultural Center, an educational theme park recently built by the government for families. Kuwait has the highest literacy rate of the Gulf States and is the cultural capital of the Persian Gulf.





Kuwait City, Downtown, Kuwait. Skyscrapers seen from a car park in the centre.



Wafra, Kuwait. A horse at a stud farm pictured in front of a recreation of Rome's Colosseum. Kuwait has long been one of the most important centres for the sale and export of purebred Arabian horses, one of the fastest and most resistant breeds in the world.

Kuwait Water Towers are 31 water towers in Kuwait City, completed in 1976. Water consumption in the country is among the highest in the world, with an average of 447 litres per capita each day. Underground springs are the only natural water resource in the country, which has no permanent rivers or lakes.

Camel Racing Club, Kuwait. A group of camels wait for a race to begin. The jockeys are small robots that can be controlled remotely by the camels' owners.



Heritage Mall, Kuwait. Bengali immigrants during a working day in the Al Moruth shopping centre. Situated in the desert near the Saudi border, the centre is famous because its architecture recreates a typical 19th century Kuwaiti village. Immigrants are hired to perform as ancient Kuwaitis in traditional dress.



Mutla, Kuwait. A Kuwaiti boy near his campsite in the desert of Mutla, to the north of Kuwait City.



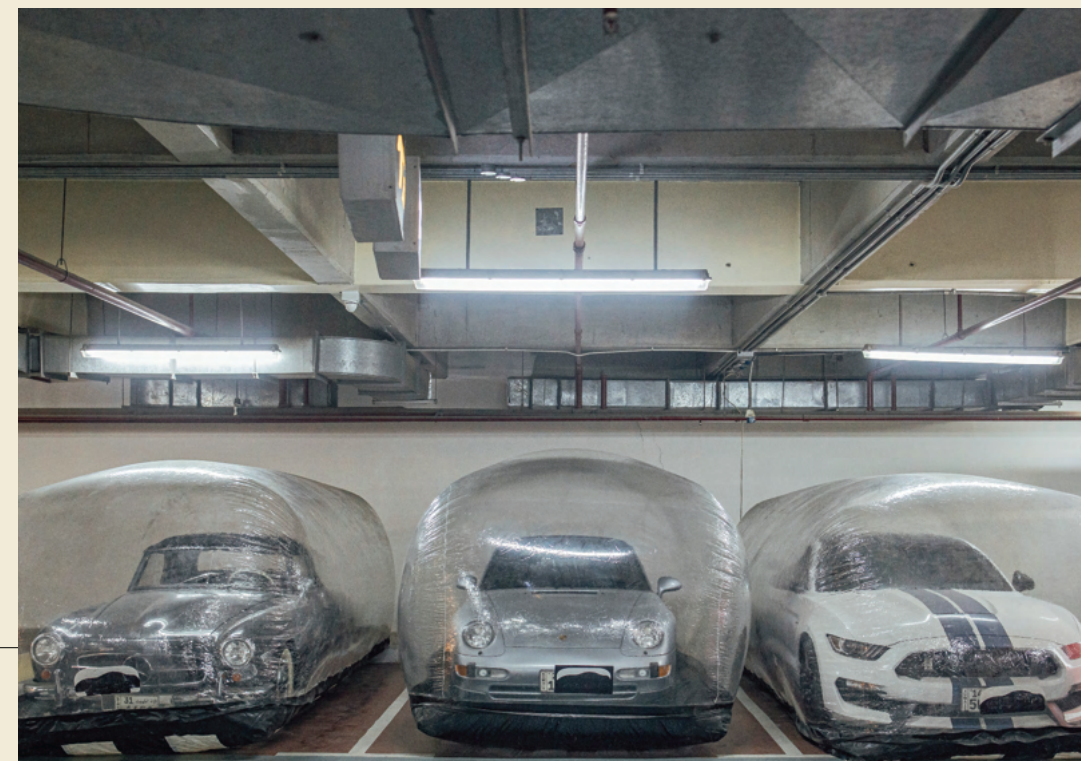
Kuwait City, Avenue's Mall, Kuwait. Two women sit talking on their phones in a specialist jewelry shop for babies at the Avenue's Mall.



Kuwait City, Kuwait. A cheetah in a private home. Mohammed (not his real name) always dreamed of keeping exotic animals as pets: after having raised a lion for 3 years, he now takes care of two cheetahs that roam freely around the sitting room in his home. Keeping wild animals is illegal in Kuwait, but is widespread among the population.



Fintas, Kuwait City, Kuwait. Luxury cars in a shopping centre car park. Vehicles were the leading import in 2018 in Kuwait (16.4% of total imports) for an overall business volume of 3.6 billion U.S. dollars.



Kuwait City, Kuwait.
An actor and crew during the filming of a satirical video depicting a politician promising four wives in exchange for votes. Previously censored, this group recommenced filming recently. Kuwait is in first place among the Gulf States on the Index of Press Freedom 2016 compiled by Reporters without Borders. Nevertheless, the fact that the country is ranked 103rd out of a total of 179 countries shows that journalists still face restrictions when reporting particular topics, including Islam and the royal family, which are still the subject of censorship.



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