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Unjust transitions: the Gulf states' role in the “sustainability shift” in the Middle East and North Africa

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Unjust Transitions: The Gulf States' Role in the "Sustainability Shift" in The Middle East and North Africa

Christian Henderson

In recent years the Gulf states' ability to deal with climate change has been subject to speculation in the Western media. In some cases, the very survival of these countries has been called into question. According to one article in the UK's *Guardian*, the region is likely to face an "apocalypse" in the near future as a result of temperature increases and rising sea levels.¹ The piece paints a picture of states that are shaped by hostile environments, with fragile societies that will be pushed over the edge by the climate crisis. In addition to the challenges of climate change, the article also intimates that a decline in demand for oil and gas will be an additional cause of the demise of the Gulf states, due to their dependence on the export of hydrocarbons.

Aside from their dramatic tone, reports of this kind have serious analytical shortcomings. They tend to assume that the Gulf states are passive actors in the politics of climate change. Rather than a source of power, their control of 30-40 percent of proven oil reserves is framed as a vulnerability, and it is implied that the increased use of renewables will mean these countries become superfluous as the global economy makes a transition to green forms of energy. Based on a perception of shared environmental and climatic conditions, this framing also surmises that the Gulf region is in the same boat as other parts of the Middle East and North Africa (MENA) when it comes to the threat of the climate crisis and the challenges of the energy transition.

This chapter contradicts these assumptions. It shows how, rather than being powerless producers, the Gulf countries are working to ensure they remain at the centre of the global energy regime. This entails the formulation of a dualistic policy: one that allows them to benefit from both fossil

fuels and renewable energies. The Gulf Cooperation Council (GCC) countries are intent on extracting, producing and selling oil and gas, and their downstream by-products, for as long as there is demand.² At the same time, they are also gaining a foothold in renewable energy markets and in the development of other fuels, such as hydrogen, and they are using their capital to invest in wind and solar farms across the MENA region. In contrast to the assumption that the Gulf countries are subject to the same socioecological dangers as other MENA countries, this chapter also illustrates that some of the GCC states are investing in infrastructure that will offer some protection from crises. This will give them a capacity to manage food, water and energy that far surpasses that of other countries in the region, and in doing so may offer some defence from environmental disruption.

Comprehending these dynamics is essential to understanding the contours of a just transition in the MENA region. Energy flows, extraction and development in this area have been characterised by historical patterns of domination of the global South by the North. The colonial period led to the subordinate integration of many regional societies within the global economy. The economies of North Africa, for example, were defined by the extraction of agrarian commodities and natural resources, a legacy that continues to this day.³ What should be understood, however, is that this hierarchy also has a regional manifestation. The emerging political and economic power of the Gulf states is creating a highly polarized regional dynamic. The capital of the GCC is invested in the formal economies of some of the most populous Arab countries: the Gulf is one of the largest sources of foreign capital in countries such as Jordan, Egypt and Sudan.⁴ At the same time, the Gulf countries are also playing a role in superintending the internal politics of these states: their aid and investment is propping up their leaderships, allowing them to weather economic storms and repress internal political dissent. As a result, the power of the Gulf states stands in the way of the social and democratic progress on which a just energy transition depends. Equal access to clean energy and other resources, such as food and water, and forms of restitution, such as climate reparations, requires a political transformation as much as environmental-technical innovation.

This highly polarized regional dynamic also has global implications. One political goal of the GCC countries is to ensure that the rising social concerns about the grim realities of the climate crisis do not result in government regulation that interferes with the demand for fossil fuels and leads to a devaluation of fossil fuel endowments. This is an objective that is shared with other companies, markets and ruling classes in the global economy. In

this sense, a successful strategy for a just transition should take into account the Gulf’s role in such alliances, and the outcome of their influence in the global economy. The Gulf states’ power is manifested in their investment in global markets, advertising, sports and various institutions, such as the forthcoming UN Climate Conference in the United Arab Emirates.

A GREEN ENERGY SHIFT IN THE GULF?

In recent years the buzzwords of “sustainability” and the “green economy” have been used in the Gulf states as much as they have been anywhere else. The GCC countries are keen to portray themselves as eager participants in environmental change.⁵ This is most apparent in Saudi Arabia, the UAE and Qatar, the three countries that are the focus of this chapter. These countries have promoted their investment in renewable energy and have publicized a programme of environmental modernization, including plans for “decarbonized oil and gas”, a circular economy, vertical farming and an array of technology-based solutions.^{6,7} However, these conceptions obfuscate an actuality that is very far from the principle and practice of environmental sustainability. In reality, these countries have no intention of curbing their oil production and have articulated their commitment to expanding production for as long as there is demand. In this sense, the Gulf’s position is completely aligned with that of most other hydrocarbon exporters and oil companies.

This position has been explicitly stated by Gulf officials. In the summer of 2021, the Saudi energy minister, Prince Abdulaziz bin Salman Al Saud, communicated it with crystal clarity. According to a *Bloomberg* report, at a private meeting the prince commented on his country’s intention to continue producing and selling oil no matter what. “We are still going to be the last man standing,” he said, “and every molecule of hydrocarbon will come out.”⁸ This sentiment has also been echoed by other officials in the region. In 2022, the UAE minister of state for climate and food security, Mariam al-Mheiri, stated that “for as long as the world needs oil and gas, we’re going to give it to them.”⁹ This intention to protect the value of hydrocarbon assets and meet demand is reflected in the plans of every single Gulf state to ramp up its production of oil and gas.¹⁰

In light of this unwavering commitment to oil and gas, how do renewables fit into the energy policies of the Gulf states? First, it should be underscored that present progress in the transition to renewable energy within the Gulf states remains very slow. In 2019, the UAE had the largest production of

renewable energy within its energy mix compared to all other GCC states, with a figure of 0.67 percent of the country's total national energy consumption.¹¹ This is far lower than many other non-GCC countries.¹² However, some Gulf countries have said that they intend to change this. The UAE has announced a commitment to meet 50 percent of its electricity demand with "clean energy" by 2050, using a combination of renewables, nuclear and "clean coal".¹³ Saudi Arabia intends to achieve the same target by 2030.¹⁴

These are highly ambitious policies, and they should be treated with some scepticism. Making such declarations allows these countries to present the appearance of pursuing environmental sustainability. The commitment to the transition to renewable energy is thus part of a broader apparent commitment to environmental sustainability, which is also manifested in public exhibitions, such as Dubai's Expo 2020, which was pervaded with narratives about sustainability.¹⁵ Narratives about ecological consciousness also underpin major developments, such as Neom, the new futuristic city that is planned for Saudi Arabia's Red Sea coast. According to the promotional material, Neom will be a "blueprint for tomorrow in which humanity progresses without compromise to the health of the planet."¹⁶ In some cases these public relations campaigns result in pronouncements that are patently false. The organizers of the 2022 World Cup in Qatar claimed that it was the first carbon-neutral tournament in history, an assertion that was quickly debunked by journalists and activists.¹⁷

Irrespective of the questionable and superficial nature of these claims, this hyperbolic greenwashing serves an important purpose. It helps to obfuscate the reality of the Gulf states' function as major producers of oil and gas in the global economy. It allows these countries to maintain their legitimacy on the international stage and ensure that they are central actors in debates over energy politics. On the one hand, the commitment to oil and gas will ensure that the GCC states will retain their control over energy markets, manifested in the leading role of Saudi Arabia, the UAE, Kuwait and Qatar in the Organization of the Petroleum Exporting Countries (OPEC). On the other hand, the image of sustainability and environmental consciousness portrays the Gulf states as important stakeholders in renewable energy markets and a lower-carbon future. One example is the next United Nations Climate Change Conference of Parties, COP28, in 2023, which will be held in Dubai. These global climate summits, which have been taking place for three decades, are intended to lead to an international agreement that will result in the reduction of greenhouse gas emissions and thereby curb climate change. However, in the UAE the negotiations at the COP 28 will be presided over by

the head of the Abu Dhabi National Oil Company (ADNOC), a move that one activist described as “putting the fox in charge of the henhouse”.¹⁸ This obviously presents a contradiction, but it is one that characterizes sustainability politics everywhere.

Aside from politics, however, it is likely that the Gulf states will eventually take steps to increase the level of renewables in their domestic energy mix. They may not attain the rapid transition that they have pledged to achieve, but renewable energy is likely to take hold in the heart of world oil extraction. In order to understand this, we need to look deeper into the configuration of the region’s energy economy and the requirements of a social metabolism in a hot and arid ecology.¹⁹ These countries have very high levels of domestic power consumption. Saudi Arabia, the UAE and Qatar have some of the highest levels of electricity consumption per capita in the world,²⁰ and all of the GCC states have consumption per capita that is higher than the average for high-income countries. One cause of this high usage is the domestic consumption of energy for air conditioning, a demand that has been exacerbated by subsidized energy, although this support is now being rolled back by many GCC governments. Another cause of this demand arises from the production of desalinated water, which accounts for the majority of domestic water consumption in most Gulf states. The desalination of water is a highly energy-intensive process. In Saudi Arabia, for example, it accounts for around 20 percent of energy consumption.²¹ One estimate suggests that desalination plants in the Gulf states account for 0.2 percent of the world’s electricity consumption.²² As a result of economic and demographic growth, this energy demand has expanded in recent years. In Saudi Arabia, for example, consumption of energy has more than doubled from 1,335 terawatt hours (TWh) in 2000 to 3,007 TWh in 2021.²³ Similar increases can be observed elsewhere in the region.

This huge level of energy consumption is becoming a costly hindrance for the Gulf economies. Electricity in the Gulf countries is provided mostly by oil- and gas-fired power stations. As a result of the increasing domestic demand, increasing amounts of oil are being diverted away from export to global consumers, who pay market rates. The internal demand for oil shows no sign of abating, and some estimates suggest that the domestic consumption of oil could continue to increase by as much as five percent a year.²⁴ One study suggests that by 2030 the internal consumption of oil in Saudi Arabia could match the amount that is exported.²⁵ These trends are spurring the expansion of renewable energy production in the Gulf states. In these countries the green energy shift is actually impelled by the need to retain oil for

export: it is motivated by a commitment to fiscal sustainability, rather than environmental concerns.

A NEW MARKET

Aside from the need to reconfigure domestic energy production, the Gulf states also view renewables and fuels such as hydrogen as a new market opportunity. Green energy is an investment asset for the GCC's surplus capital. The sector is relatively low-risk: it receives support from development finance institutions and guarantees from host governments. As a result, Gulf conglomerates are active in the sector. New energy companies have emerged that often receive a degree of state backing and funding. One example is Masdar in the UAE. Owned by the state of Abu Dhabi, Masdar initially became known for its plan to build a city in Abu Dhabi that would be based on the principle of sustainability and that would utilize renewable energy.²⁶ The company also has a large investment arm that owns around \$20 billion in renewable energy assets in a number of markets across the world.²⁷ Another case is ACWA, which is partly owned by the Saudi state. This company, which has a global presence, owns \$75 billion in assets, but of these assets only a minority are in the renewable energy category.²⁸

These firms are very active in the MENA region. Economies such as those of Morocco, Jordan and Egypt are accessible to Gulf companies as a result of close bilateral relations. Renewable acquisitions are often included in packages of state-led Gulf aid and investments, thereby ensuring that ventures receive backing at the highest level. This is part of the trend of the Gulf states' expanding influence over the politics and economics of the region. It is a pattern that is concomitant with investment in other sectors, such as food production and infrastructure, and also direct government aid to regional allies. The clearest example of this is Egypt: it is estimated that between 2014 and 2016 Saudi Arabia, the UAE and Kuwait gave President Abdelfattah al-Sisi's government around \$30 billion in aid. This played a central role in enabling his rule and stabilizing the country in the counter-revolutionary phase, following the 2011 revolution. This flow of money was central to the restoration of authoritarian rule in what is the most populous Arab country.

One example of state-to-state support for the renewables sector was evident at COP27, held in Sharm al-Sheikh in November 2022. Sheikh Mohammed bin Zayed, the president of the UAE, and Abdelfattah al-Sisi both personally attended the signing of an agreement between Masdar and

Infinity, the largest renewables company in Egypt, for a wind farm that would be the largest of its type in the country.²⁹ Another example is a deal that was signed between the governments of the UAE, Egypt and Jordan in 2022, named the Industrial Partnership for Sustainable Economic Growth. This covers food, fertilizers, textiles, pharmaceuticals, minerals and petrochemicals.³⁰ The agreement also includes plans to enhance renewable energy production.

One dimension of these deals is the role of financing from development banks. Institutions such as the World Bank, the European Bank for Reconstruction and Development and the African Development Bank have financed projects in which Gulf states have invested. The involvement of both governments and these international institutions creates powerful stakeholders in these projects and de-risks them. This type of support has allowed Gulf investors to become major stakeholders in the renewable energy policies of some governments in the MENA region. Gulf capital has entrenched itself in the future of energy in the region, ensuring that it can syphon off profits from the transition to renewables.

One clear example of the powerful combination of government and institutional stakeholders is the Ouarzazate Solar Complex in Morocco, which is one of the largest concentrated solar power plants in the world. This project is funded by a consortium that includes Saudi Arabia's ACWA, the Moroccan Agency for Solar Energy and TSK, a Spanish company. Other backers include the World Bank and several other development banks. Another example is the investment by AMEA Power, a UAE company, in a wind farm and solar energy plant in Egypt. These projects are being implemented in partnership with the Sumitomo Corporation, and are financed by the International Finance Corporation, the Dutch Entrepreneurial Development Bank and the Japan International Cooperation Agency.³¹

An additional example of the extent to which money from the GCC is embedding itself in the future of renewables and resource governance in the region is a proposal that has been signed by the UAE, Israel and Jordan. These three states have agreed on a plan for UAE's Masdar to invest in a solar energy facility in Jordan that will sell all of its electricity to Israel. In return, Israel will sell desalinated water to Jordan.³² If it proceeds, the deal will illustrate how UAE capital and Israeli technology can gain a greater foothold within the region. This deal will also normalize and deepen Israel's occupation of Palestinian territories and the system of apartheid that it imposes on the Palestinian population. It is an illustration of how these types of projects can have highly uneven results. Power from a solar farm constructed on Jor-

danian territory will be diverted to the Israeli market. Networks of water and electricity production will be delivered to wealthier consumers, while excluding deprived populations who are subjugated by military occupation.

In conjunction with solar and wind, hydrogen may play a role in the energy transition, as an alternative fuel/energy carrier.³³ Several Gulf countries, such as Saudi Arabia, Qatar, Oman and the UAE, are unveiling projects that will cater to a growing global demand for hydrogen. Whether these projects will produce “green” hydrogen (from renewables), “blue” hydrogen (from gas with carbon capture) or “grey” hydrogen (from fossil fuels without carbon capture) remains to be seen. It is difficult to ascertain to what extent the final product will be a zero-carbon or low-carbon fuel. The competitive advantage of these countries is natural gas: by using this fuel they will be able to produce hydrogen at a far cheaper cost than using renewable power and huge amounts of desalinated water (which would require more energy consumption). Green hydrogen will cost as much as 11 times more than natural gas, five times more than grey hydrogen and two times more than blue hydrogen.³⁴ With this considered, the details of these plans are vague and it is possible that the classification of the categories of hydrogen could be blurred, making it difficult to determine whether these fuels genuinely have low or zero carbon emissions.

Gulf investors are also acquiring foreign assets in the hydrogen sector. Egypt is seeking to become a hub for the production of green (and blue) hydrogen, and GCC companies are seeking to capitalize on these plans. For example, Masdar has signed a proposal to invest in two green hydrogen sites in Egypt, one on the Mediterranean coast and another in the Suez Canal Economic Zone at Ain Sukhna on the Red Sea coast.³⁵ The agreement also includes a plan to produce green ammonia, which can be used to make “carbon-neutral” fertilisers. Other Gulf companies are also investing in Egypt’s strategy to become a hub for the production of green hydrogen. Financing for an Egyptian company involved in this plan has also been provided by the European Bank for Reconstruction and Development. Thus, these projects have been de-risked by finance from the Gulf and Europe.³⁶

Whether these plans are feasible and realistic remains to be seen, but the focus on hydrogen has strong political overtones. Hydrogen is touted as a panacea within energy markets. It is seen as a means to reduce consumption of fossil fuels, and this has taken on an added urgency since Russia’s invasion of Ukraine in 2022, which has forced many European governments to seek alternatives to their dependency on Russian gas exports. Should these plans be realized, they will result in the expansion of renewable energy projects

(solar and wind), with Gulf and Western capital investing in state-led projects that will be integrated into European energy networks. From the perspective of Gulf producers, one possible motive for this policy is the role of gas in the production of hydrogen. Growing hydrogen markets provide a hedge that allows the Gulf economies to partake in the energy transition but also maintain the value of their gas reserves.

A REGION OF INEQUALITY

How are the Gulf states using their hydrocarbon revenues to safeguard their future in light of the risks of climate change? The resources and capital of the Gulf states place them at the top of the regional political and economic hierarchy, which is characterized by increasing polarization. There is chasmic inequality between the poor countries of the region and the wealthy ones. For example, GDP per capita in Yemen is \$701, while in the UAE it is \$44,315.³⁷ Other examples of this differential can be found elsewhere in the region: GDP per capita in Syria is \$533, while in Qatar it is \$66,000.³⁸ As a result of this imbalance the MENA countries do not share the same prospects in terms of the effects of climate change. The political and economic power of the Gulf states means they have more capacity to manage the problems of a warming climate. This ability contrasts with that of other countries in the region, such as Yemen, Lebanon and Syria, which are suffering from a combination of economic collapse, suffocating public debt, conflict and internal instability.

The status of the Gulf states' food security is one example of this regional inequality. The GCC states are highly reliant on food imports, and between 80 and 90 percent of commodities are imported. This creates a vulnerability to geopolitical disruption that could affect logistics and supply chains. The Gulf countries have used their capital to mitigate this risk. They have invested heavily in transport and storage infrastructure. This means that they can import food from several different global locales, thus ensuring that they have a diversified source of commodities. Gulf countries import food from all global regions, and they have also acquired land in North Africa, the Black Sea region, the US and Latin America.³⁹ They have also established large food processing, poultry and dairy operations. These facilities serve Gulf markets and provide some self-sufficiency, but they still require the import of raw commodities, such as cattle feed. More recently, the Gulf states have begun investing in agri-tech capabilities that allow them to grow food in fully controlled indoor environments.⁴⁰ These projects are

energy intensive and they benefit from a subsidized supply of electricity and other inputs from Gulf governments.⁴¹

They are also a form of ecological modernization and constitute an attempt to gain greater control over the social and environmental relations of food production, which provides benefits in a warming climate. The absence of domestic agriculture creates a reliance on imports, but it also lessens the direct exposure to climate change. Societies that depend heavily on smallholder agriculture as a source of income and employment are more vulnerable to the effects of climate breakdown. Agriculture in Yemen, Egypt and Morocco accounts for between 20 and 35 percent of employment, while in the Gulf states it accounts for less than five percent.⁴² The Gulf states are not immune from this danger altogether, as climate breakdown may compromise production in regions from which they source commodities, but their buying power and diversified network of supply chains reduces their exposure – at least for the time being. The use of oil revenues to finance food imports is another example of the way in which these states remain highly dependent on the export of oil and gas. It is a matter of existential importance for them.

The regional inequality is also manifested in Gulf investment in agribusiness abroad. There is sometimes a tendency in development literature to assume that cooperation and regional investment flows are a means to address the food security needs of MENA states. These flows are presented as a means to resolve the food insecurity of the Gulf states and at the same time invest in the agriculture sectors of poorer Arab economies.⁴³ However, the reality of Gulf investment in agriculture contradicts this interpretation. The acquisition of large areas of land in Egypt, Sudan and Ethiopia constitute plantations that consume water and other resources for food that is exported directly back to the Gulf states. One of the most common crops on these enclosures is alfalfa, a cattle feed that is used in the large dairy operations that have been established in the Gulf states.⁴⁴ These calories are removed from economies that have high levels of food insecurity and a history of famine. In Sudan, for example, Gulf investors have acquired more than 500,000 hectares of land, often in prime agricultural areas that are adjacent to the Nile – land that is often claimed by small farmers.⁴⁵ These farms produce grain and cattle feed that is exported back to the GCC economies, even as the Sudanese population continues to experience food insecurity, with 12 million people, out of a total population of 44 million, currently estimated to face acute food insecurity.⁴⁶ Half a million children are estimated to suffer from severe acute malnutrition in the country. These

kinds of large-scale land acquisitions are often described as “land-grabbing” and pose well-documented threats to the rights, livelihoods and health of local people.⁴⁷ Such land grabs and export-oriented large-scale agricultural production weaken the food sovereignty of countries like Sudan.

Another dimension of the regional inequality is storage capacity for food grains, which creates a buffer against price rises and supply shocks. This is particularly important for Arab countries, given their reliance on imported food and the potential for climate and market shocks. The Gulf states have invested heavily in grain silos and food stores, and this infrastructure has been included in port and airport projects in these countries. As a result, their storage capacity far outstrips that of other countries in the region. For example, Saudi Arabia has a grain storage capacity of around 3.5 million tonnes, for a population of 35 million,⁴⁸ whereas Egypt’s grain storage capacity is around 3.4 million tonnes, for a population three times larger than Saudi Arabia’s, at around 105 million people.⁴⁹ Qatar’s storage capacity is around 250,000 tonnes, for a population of 2.6 million,⁵⁰ while Yemen has a similar capacity, for a population of 30 million. This contrast also exists in other comparisons with countries around the region, particularly with those societies that have been hit by war and disasters. For example, the devastating Beirut port explosion in August 2020 destroyed the harbour’s 100,000-tonne grain silos.

In addition to food silos, the Gulf states are also investing in other forms of infrastructure that will provide a means to manage their essential resources in the face of the effects of climate change. Saudi Arabia, Qatar and the UAE have recently completed water storage facilities that will guarantee supply. In some cases, these facilities are some of the biggest in the world: Qatar’s 6.5 million cubic metre water tank is sufficient for seven days of national consumption.⁵¹ The construction of this infrastructure illustrates how the Gulf states are securitizing their social metabolism: water and food storage capacity can offer resilience in the face of conflict, climate crisis and logistical disruption. This provides an insight into the divergence of the region’s developmental trajectories: the capacity to deal with climate change, environmental stress and their potential shocks is highly uneven.

THE GULF AND THE JUST TRANSITION

The social and economic principles that are inherent to a just transition are at odds with the strategies that have been described in the preceding pages.

By investing in renewable energy, agribusiness and infrastructure upgrades, the Gulf states are pursuing a capital-intensive and technological programme of environmental modernization. This involves techno-fixes and accumulation by dispossession in the name of “sustainability”. These methods are primarily motivated by profit and security considerations, with a commitment to environmental sustainability being a secondary concern. This approach places little or no emphasis on equality, justice and universal basic needs. It is premised on the idea that environmental sustainability is a technocratic issue, one that can be dis-embedded from the highly political questions of the distribution of wealth and resources, consumption, and the extraction of profit.

This is a propensity that has regional ramifications. As described above, the influence of the Gulf states is patent in renewable energy investments in economies such as those of Egypt, Tunisia, Morocco and Jordan. Through their investments, state-led GCC conglomerates are entrenching themselves within the regional renewable energy transition. However, this influence is also present on a broader level across the region. Aid and investment from the Gulf states helps underpin a number of Arab governments, such as those of Egypt, Jordan and Tunisia: the Gulf states provide loans that finance these governments and prop them up. In addition to financing, the Gulf states also steer regional politics in other ways. Saudi Arabia and the UAE launched a military intervention in Yemen, and Qatar and Saudi Arabia have supported reactionary proxies in Syria. These interventions foreclose the democratic space that is required for a truly just transition; they hinder the emergence of social movements that can demand a more equitable and sustainable use of national resources. Furthermore, as discussed above, the use of large areas of land for renewable energy production and agribusiness enclosures often relies on the dispossession of other land users, appropriation that is achieved through authoritarian and repressive forms of governance. For a just transition to be achieved within many countries in the Arab area, the question of social and environmental justice must consider this regional dimension. The path of revolutionary and social change cannot be understood as involving only struggles that are determined by class conflict at the national level: the weight of Gulf influence within the regional political economy must also be included in the equation.

Such obstacles to a just transition can also be observed at a global level. The Gulf states have a presence within the politics of climate change and they use their resources to launder the image of the oil-based economy. This

is manifested in the greenwashing and sustainability branding that is at work within these countries and is apparent in the appointment of an oil executive as president of COP28. This marketing is also evident in investments by the Gulf states in high-profile assets in the West. The clearest example is football teams, and some of the largest football clubs in Europe are owned by Gulf countries or have signed advertising deals with Gulf airlines and entities. Gulf states' ownership of clubs such as Paris Saint Germain, Barcelona, Newcastle and Manchester City launders the reputation of these states and internalizes their oil and gas revenues within these emblems of working-class pride and identity; it is an effort to sustain the familiarity of fossil fuels through culture, and ensure their ongoing demand in the global market.

The Gulf states are not alone in their intention to safeguard a political climate that continues to accept the carbon emissions from oil and gas. Their commitment to fossil fuels aligns with global capital; they share this objective with multinationals, financial markets and states. The Gulf states are indispensable to the hegemony of these structures, because of their export of oil and gas and through their capital, which is invested across the global economy. This will ensure that the Gulf states remain a locus of imperial power for some time. Furthermore, the growing energy demands of emerging economies in Asia will ensure that the Gulf states retain this relevance. With this considered, attempts to bring about a just transition within the societies of the Middle East will have to confront this alliance of national ruling classes, the Gulf states and global capital.

However, despite their power, a number of uncertainties are on the horizon for the Gulf states. As with all societies, those of the Gulf states are not immune from the realities of climate change. Their economic reliance on oil and gas means that they must diversify their economies in order to pay for the rising cost of their food imports, energy production and water consumption. Rising temperatures may affect food yields globally and cause shocks to international commodity chains, and this disruption could hit these economies. On a regional level, their ability to shore up an authoritarian alliance, on which their accumulation and extraction of food partly rests, could also be tested. The pressures that led to the Arab revolutions of 2010 and 2011 have not been resolved; deep structural reconfiguration is still needed. It is too early to foresee how these quandaries will develop but the Gulf states are not immune from popular calls for democracy, equity and redistribution that define the just transition.

NOTES

1. Patrick Wintour, “Apocalypse Soon’: Reluctant Middle East Forced to Open Eyes to Climate Crisis”, *The Guardian*, October 29, 2021, <https://tinyurl.com/yckkm49d>.
2. The GCC is a political and economic union of six countries on the Arabian Peninsula: Saudi Arabia, the United Arab Emirates, Qatar, Kuwait, Bahrain and Oman. The union was founded in 1981. With the possible exception of Kuwait, democratic representation in these countries is minimal.
3. Two examples of this are cotton in Egypt and wine in Algeria, two crops that dominated these economies during the colonial period. See: Giulia Meloni and Johan Swinnen, “The Rise and Fall of the World’s Largest Wine Exporter – And its Institutional Legacy”, *Journal of Wine Economics* 9, Vol. 1(2014), pp. 3-33, <https://doi.org/10.1017/jwe.2014.3>; Aaron G. Jakes, *Egypt’s Occupation: Colonial Economism and the Crises of Capitalism*, (Stanford University Press, Stanford, 2020).
4. Adam Hanieh, *The Lineages of Revolt*, (Haymarket Books, Chicago, 2013); Armelle Choplin and Leïla Vignal, “Gulf Investments in the Middle East: Linking Places, Shaping a Region”, in Leïla (ed.), *The Transnational Middle East*, (Routledge, London, 2016), <https://doi.org/10.4324/9781315535654>; Karen E. Young, *The Economic Statecraft of the Gulf Arab States: Deploying Aid, Investment and Development Across the MENAP*, (I.B. Tauris, London, New York, Dublin, 2022), <https://doi.org/10.5040/9780755646692>; Christian Henderson, “The Rise of Arab Gulf Agro-Capital: Continuity and Change in the Corporate Food Regime”, *The Journal of Peasant Studies* 49, No. 5 (2021), pp. 1079-100, <https://doi.org/10.1080/03066150.2021.1888723>.
5. Tobias Zumbraegel, *Political Power and Environmental Sustainability in Gulf Monarchies*, (Palgrave Macmillan, 1st ed, London, 2022).
6. “As long as the world needs oil and gas, we’re going to give it to them, says UAE minister”, *CNBC*, Video, 03:41, September 27, 2022, <https://tinyurl.com/28e53fyn>.
7. The meaning of decarbonized oil and gas is vague but it refers to technological innovations such as carbon capture and the electrification of production.
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