

Note

CLIMATE DIPLOMACY OF THE GULF MONARCHIES: MEANS OF INCLUENCE AND POWER TOOL









The Defence and Climate Observatory, launched in December 2016, aims to study climate-related security and defence issues.

It is coordinated by IRIS as part of the contract carried out on behalf of the French Ministry of Armed Forces's Directorate General for International Relations and Strategy (DGRIS). The Observatory's multi-disciplinary team includes researchers specializing in international relations, security, defence, migration, energy, economics, climatology and health. It is directed by Mathilde Jourde and François Gemenne.

The Observatory has initiated numerous collaborations with European partners (Netherlands, Luxembourg) and international partners (Australia, United States, India), international NGOs and national and international public bodies. These initiatives have strengthened cooperation on climate issues and their security implications.

The Climate and Defence Observatory produces reports and notes, organises restricted seminars and conferences open to the public, and hosts the podcast "On the climate front".

www.defenseclimat.fr/en

The Ministry of Armed Forces regularly calls upon private research institutes for outsourced studies, using a geographical or sectoral approach to complement its external expertise. These contractual relationships are part of the development of the defence foresight approach, which, as emphasised in the latest White Paper on Defence and National Security, "must be able to draw on independent, multidisciplinary and original strategic thinking, integrating university research as well as specialised institutes".

Many of these studies are made public and available on the Ministry of Armed Forces website. In the case of a study published in part, the Directorate General for International Relations and Strategy may be contacted for further information.

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For several decades, the member states of the Gulf Cooperation Council (GCC)¹—Saudi Arabia, Bahrain, the United Arab Emirates (UAE), Kuwait, Oman and Qatar—have been increasingly involved in climate change issues² at the national, regional and international levels. Some of these states began addressing environmental issues at the national level as early as the 1980s. However, it was in the late 2000s that they stepped up their efforts to address climate change, particularly in connection with their ambitions for economic diversification and energy diplomacy. These initiatives take different forms depending on the country, with some developing specific public policies and integrating these concerns into their strategic visions more prominently than others. Since the mid-2010s, the Gulf monarchies have stepped up their presence on the international stage, notably through growing participation in the multilateral climate system, actively engaging in global climate conferences such as the Conferences of the Parties (COP)³.

This growing involvement of GCC states in climate issues highlights two major components.

Firstly, it demonstrates an awareness of the risks associated with climate change, whether physical (the Arabian Peninsula is particularly vulnerable to these changes), social or economic. Secondly, it reveals a recognition of climate as a lever for foreign policy and influence, capable of supporting the various power projection strategies of the GCC states and extending their position on the international stage despite the various disruptions caused by climate change.

Although there is no universal definition of climate diplomacy, the concept traditionally refers to the use of diplomacy to support the ambition and functioning of the international climate change regime and to mitigate its negative effects (Council of the European Union, 2018). However, the understanding and implementation of climate diplomacy vary according to the priorities and interests of each state. Therefore, in this note, we adopt a broad definition of the concept. Climate diplomacy will be understood as all actions taken by a state — or a group of states — to influence the dynamics of interpretation and implementation of climate issues in the international arena. The influence strategies deployed by the GCC states rely on both *soft power* (Nye, 1990) — such as diplomacy, cooperation and development aid — and hard power, including economic pressure and, in some cases, the deployment of military capabilities.

¹ The geographical scope of this note focuses on the six member states of the Gulf Cooperation Council (GCC) — namely Saudi Arabia, Bahrain, the United Arab Emirates (UAE), Kuwait, Oman and Qatar. Although other names, such as 'Cooperation Council for the Arab Gulf States' (CCAG) or 'Cooperation Council for the Gulf States' (CCGS), may sometimes appear, the acronym GCC will be used in this text as the main reference. For the purposes of this analysis, the terms 'Gulf monarchies', 'Gulf states' and 'GCC states' will be used interchangeably to refer to this regional group.

² See definition in the glossary.

³ See definition in the glossary.



Countries are rolling out their influence strategies in both multilateral and bilateral settings.

Multilateralism is a great place to implement influence strategies, especially by shaping global perceptions, emerging norms, and the main directions of international climate action. At the same time, bilateral relations make it possible to extend these efforts to influence through targeted cooperation. Multilateralism and bilateralism thus appear to be two complementary levers of climate diplomacy deployed by the GCC states. This note will focus more specifically on the **UAE**, **Saudi Arabia and Qatar**, three Gulf players that stand out from the other members of the organisation (Bahrain, Kuwait and Oman) due to their growing and now significant involvement in climate-related initiatives. Their commitment thus illustrates how certain states, particularly oil-producing ones, are redefining their strategies for exerting influence in the context of the global energy transition.

The Defence and Climate Observatory report therefore proposes to study the climate diplomacy of the Gulf monarchies as a lever of influence and a tool of power. The first part of this note examines the exposure of the GCC states to climate risks and the responses provided (I). The analysis will then focus on the commitment of these states to global climate multilateralism, highlighting this multilateralism as a space for influencing their climate strategies (II). The third part will focus on the link between climate issues and the foreign policy of Gulf states on the African continent, highlighting the logic of environmental cooperation as well as influence (III). Based on these analyses, the note will finally propose three prospective scenarios, accompanied by strategic recommendations for the Ministry of Armed Forces (IV).



PART 1 CLIMATE EXPOSURE OF THE ARABIAN PENINSULA: VULNERABILITIES THAT GCC STATES ARE TRYING TO ADRESS



A - Development patterns vulnerable to climate change

1. Carbon and Energy intensive economies

In the Arabian Peninsula, the 1950s to 1970s were marked by a wave of nationalisations of foreign oil companies, with the creation of the Organisation of the Petroleum Exporting Countries (OPEC) in 1960 and then the Arab Organisation of Petroleum Exporting Countries (AOPEC) in 1968 (Kellner & Djalili, 2006). The takeover of national resources led to **rapid economic development in the GCC states**, characterised by carbon-intensive and energy-intensive activities.

The need for labour in these countries, particularly for infrastructure construction and maintenance, has led to **significant migration flows since the 1950s** (Cadène, 2012). During the 1970s, conflicts and the economic situation in the Middle East led to the arrival of Palestinian, Lebanese, Jordanian, Syrian, Iraqi, Yemeni and Egyptian nationals in the Gulf states (Cadène, 2012). In the 1980s, regional economic development accelerated migration and led to an influx of labour from South Asia, particularly India and Pakistan, and from Southeast Asia, particularly Indonesia and the Philippines (Cadène & Dumortier, 2009). As a result, **the population of the GCC states has grown rapidly, largely supported by immigration**, rising from a total of 5.7 million in 1970 to more than 57 million in 2023 (World Bank, n.d.).

These demographic changes are leading to rapid urbanisation (Bonnenfant, 1985). In 2023, around 85% of the population of the Gulf monarchies is urban, with this figure approaching 100% in Qatar and Kuwait. As hypermodern showcases for the success of the GCC countries, cities embody a regional economic development strategy with an international focus. As part of the diversification of national economies, these cities are turning to luxury goods and tourism (Dubai), sport (Doha) and culture (Abu Dhabi) (Stadnicki, 2022). In Saudi Arabia, new urban development projects, such as The Line and King Salman Park, aim to overcome the constraints of the arid environment to create sustainable sites (Institut d'aménagement et d'urbanisme de la Région parisienne, 2022).



Figure 1 – Urban Population Growth in Gulf Countries (millions of inhabitants), 1960-2023

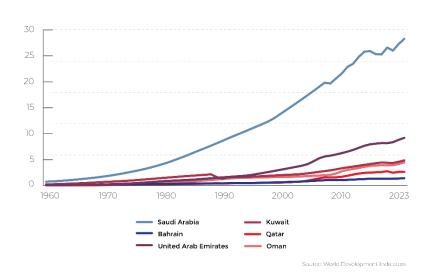
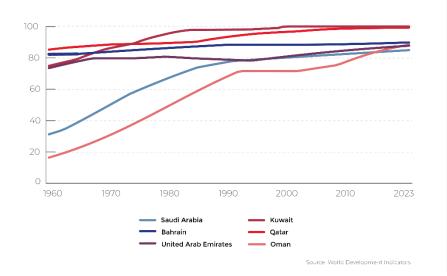


Figure 2 – Urban Population Growth in Gulf Countries (percentage), 1960-2023



In 1960, the Gulf had 1.3 million urban inhabitants, largely due to the urban population of Saudi Arabia with 761,063 inhabitants.

Due to population growth and urbanisation in GCC countries, the urban population of region the has increased more than 37-fold in sixty years to reach 50.8 million in 2023. With over 28 million urban residents in 2023, Saudi Arabia continues to account for more than half of the regional urban population.

This economic development is causing pressure on water and food supplies. Due to low rainfall and high evaporation rates, the Gulf region is the most water-scarce in the world, both in absolute terms and per capital⁴. The regional agricultural and industrial sectors consume 77% and 18% of water resources respectively, with the remaining 5% used for domestic purposes⁵ (Abdelraouf, 2024). However, efforts invested in agriculture involve intensive use of non-renewable water resources, leading to their gradual depletion, with poor

⁴ In 2017, per capita freshwater availability in GCC countries was 82.55 m³, compared to 6,500 m³ for the global average.

⁵ See definition in the glossary.



results. Furthermore, due to low tariffs, the absence of meters and inadequate water-saving devices, domestic water consumption in the GCC was twice as high as that of people living in countries with a comparable level of development but significantly greater water resources (World Bank Group, 2017).

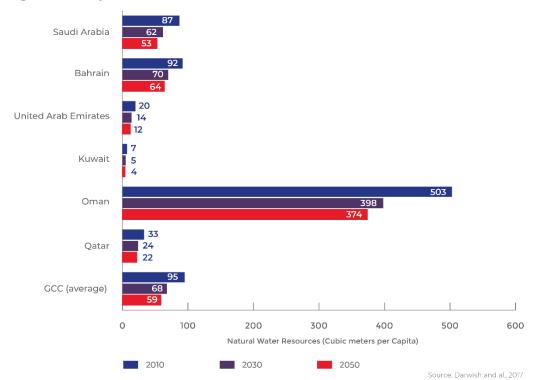
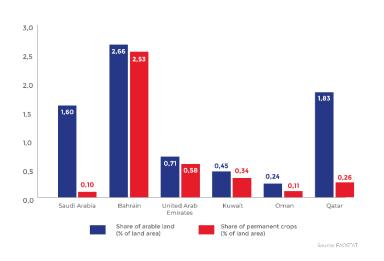


Figure 3 – Projected Trends in Natural Water Resources in Gulf Countries

Due to low annual rainfall and high evaporation rates, Gulf countries face water shortages, and natural water resources per capita are expected to decline further in all Gulf countries by 2050. With 503m³ of natural water per capita in 2010, Oman was the only Gulf state experiencing chronic water scarcity (between 500m³ and 1000m³ per capita per year); with less than 100m³ of natural water per capita, the other GCC countries are all already in a situation of absolute water scarcity (<500m³ per capita per year). Between 2010 and 2050, the average natural water resources of the entire GCC are expected to fall from 95m³ to 59m³ per capita, a contraction of 37.89%.



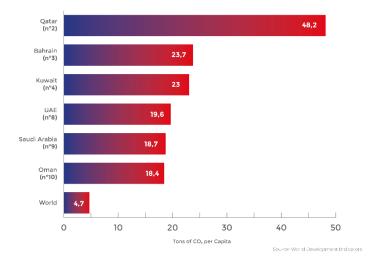
Figure 4 – Comparison of the Area of Arable Land and Permanent Crops in Gulf Countries in 2021 (percentage)



The first challenge to their food security is that Gulf countries have only a tiny proportion of arable land within their borders. Added to this are limited natural water resources due to low rainfall and high evaporation, which means that the proportion of land under permanent cultivation in the GCC countries is even smaller. In Saudi Arabia, for example, only 1.6% of the country's land area is arable and 0.1% is under permanent cultivation in 2021.

At the same time, the rapid economic development of the GCC countries has led to **an increase in energy demand**. During the 2000s, regional energy consumption increased by an average of 5% per year, faster than in India, China and Brazil. The six GCC countries are among the ten largest emitters of greenhouse gases per capita in 2023 (Toute l'Europe, 2024)⁶. Their carbonintensive and energy-intensive economies have thus been contributing to climate change for several decades, with consequences already being felt in the region.

Figure 5 – CO₂ Emissions per Capita (Tons per Inhabitant) in 2023 (Global Country Ranking)



⁶ The ten largest emitters of greenhouse gases per capita in 2023 are, in order: Palau, Qatar, Kuwait, Bahrain, Brunei, the United Arab Emirates, Mongolia, Trinidad and Tobago, Oman and Saudi Arabia.



2. Environmental consequences of climate change in the Arabian Peninsula

The Gulf region is experiencing **rising land and sea temperatures**, which is **disrupting the water cycle and increasing heat stress**⁷ among populations. These changes are leading to **an increase in the frequency and/or duration of certain extreme weather events**, which have already been occurring for several years.

As a result, GCC countries are experiencing an increase in average annual temperatures, maximum temperatures and the number of hot days, threatening human safety. In inland areas in summer, the Land Surface Temperature (LST)⁸ can reach 50°C, posing urban planning challenges⁹. People living in coastal areas are exposed to lower surface temperatures but suffer from higher heat stress due to humidity: in summer, the LST in coastal cities is around 40°C, but marine humidity increases the Wet Bulb Temperature¹⁰ (WBT) by 3 to 6°C (Safieddine et *al.*, 2022). In Saudi Arabia, the heat-related mortality rate, currently 1.03 per 100,000 people, is expected to increase 13-fold under the IPCC's low emissions scenario (SPP1-2·6) and 63-fold under a high emissions scenario (SSP5-8·5) for the period 2061-2080 (Shakoor et *al.*, 2023). In some Gulf countries, however, current mortality **figures could be much higher when foreign workers are considered**. Over the period 2009-2017 in Qatar, the annual mortality rate for Nepalese migrant workers alone was 150 per 100,000 people, with the main cause of death reported as cardiovascular arrest during high humid temperatures (>31°C WBT) (Pradhan et *al.*, 2019).

⁷ See definition in the glossary.

⁸ This is an index that measures air temperature. See definition in the glossary.

⁹ Inland cities are SUCIs (*surface urban cool islands*) during the day, in comparison with the arid areas surrounding them. Conversely, at night, cities are SUHIs (*surface urban heat islands*) because desert environments cool down more quickly than urban areas (Safieddine et *al.*, 2022). There are therefore real urban planning challenges in designing liveable cities in the context of rising temperatures in the Gulf.

¹⁰ This is an index measuring the temperature and humidity of the air. A high humidity temperature corresponds to air that is very humid, which prevents perspiration from evaporating, with serious consequences for human health. This is the lowest temperature to which air, an object or a person can be cooled by the evaporation of water at constant pressure. See definition in the glossary.



Figure 6 – Average Mean Surface Air Temperature, Saudi Arabia, 1901-2023

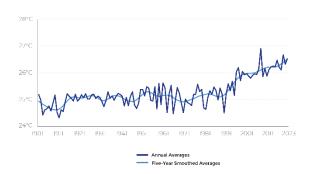


Figure 7 – Average Mean Surface Air Temperature, United Arab Emirates, 1901-2023

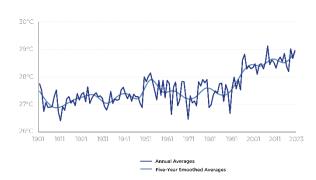
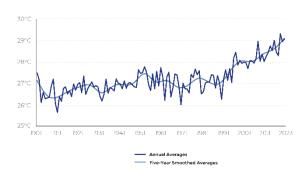


Figure 8 – Average Mean Surface Air Temperature, Qatar, 1901-2023



At the same time, water temperatures in the Gulf are rising faster than the global average, leading to an increase in marine heatwaves. During the summer season, the rate of increase in sea surface temperature (SST)¹¹ has been 0.36°C per decade since 1995, and up to 0.6°C in the northern Gulf, compared to 0.06-0.08°C globally (Shaltout & Eladawy, 2024). Rising sea temperatures have led to coral bleaching and mortality and affected the distribution, reproduction and survival of many fish species, some of which are moving to deeper or cooler waters (Shaltout & Eladawy, 2024). In the summer of 2020, for example, the sea surface temperature in Doha and Abu Dhabi was 34°C, exceeding the tolerance of many pelagic fish species¹² (Bordbar et *al.*, 2024). The Gulf's marine environments are also directly **disrupted by human activities** such as oil and gas exploitation, overfishing and seawater desalination.

Under the dual effect of rising land and sea temperatures, the water cycle in the Gulf is disrupted, causing, in turn, an increase in the intensity of heavy rainfall events and

 $^{^{\}rm 11}$ See definition in the glossary.

¹² See definition in the glossary.



sandstorms. For example, record rainfall was recorded in the region¹³ in April 2024, causing at least 20 deaths and several hundred million dollars in damage (World Weather Attribution, 2024). Sand and dust storms originating in the Tigris and Euphrates basins are also influenced by the disruption of the water cycle (Mousavi et *al.*, 2024). In the Arabian Peninsula, the UAE in September 2021 and Bahrain in March 2022 experienced severe sandstorms that reduced visibility to less than 500 metres and 1,000 metres respectively (Misak, 2024).

Impacts of climate change on the sea are also evident in **rising sea levels** and, to a lesser extent, **tropical cyclones**. In Muscat, two tropical cyclones, Gonu in June 2007 and Phet in June 2010, brought heavy rainfall and flooding, causing several deaths and significant damage to infrastructure (World Bank, 2014). In the longer term, rising sea levels in the Gulf¹⁴ threaten many cities: the island state of Bahrain¹⁵, Ras Lafan in Qatar, Dammam and Al Khobar in Saudi Arabia, and Dubai in the UAE (Bakhamis et *al.*, 2024).



Figure 9 - GCC States Exposure to Sea Level Rise

is from Climate
Central, a nonprofit news
organisation that
analyses and
reports on

climate science.

This map of sea level rise and coastal flooding (areas shown in red on the map)

Source : Climate Central

¹³ With 254 mm in 24 hours, Al Ain and Dubai (UAE) experienced the heaviest rainfall since 1954 (World Economic Forum, 2024). The 230 mm of rainfall in Muscat (Oman) also greatly exceeded the city's annual average (100 mm) (Al Jazeera, 2024).

¹⁴ Sea levels in the Gulf are estimated to be rising by 4.3 mm per year, with a margin of error of 0.4 mm, compared with 3.3 mm per year in the Indian Ocean, with a margin of error of 0.4 mm (Bakhamis et *al.*, 2024).

¹⁵ In Bahrain, 5 to 18% of the country's total land area could be submerged if sea levels were to rise by 0.5 to 2 meters (Osseiran, 2023).



B - Climate change impacts on oil monarchies¹⁶ : multidimensional vulnerabilities

1. Societal vulnerability

The impacts of climate change on human security exacerbate pre-existing vulnerabilities caused by the arid climate of the countries of the Arabian Peninsula. Difficulties associated with water and food supply and the gradual decline of cities' habitability pose threats to local populations, which could eventually lead to migration or social tensions.

On the one hand, low water availability and excessive use of local water resources are leading to the **depletion of the region's groundwater resources**. Currently, approximately 71% of the total water supply in the GCC countries comes from desalination, 24% from groundwater and surface water, and 5% from wastewater treatment. Despite the energy, economic and environmental constraints associated with this practice¹⁷, **governments are relying on desalination to meet the growing needs of their societies**: the UAE, Kuwait and Bahrain aim to double their desalinated water production by 2030 (Eyl-Mazzega & Cassaignol, 2022).

On the other hand, to meet their needs, the GCC countries have invested heavily in food imports (see below, p. 31). However, these flows are also subject to climate change and geopolitical instability. The 2007-2008 food crisis, marked by the imposition of export restrictions on food products in more than 30 countries, revealed their dependence on imports and the risk of food supply disruptions linked to price fluctuations and possible import interruptions (Ben Hassen & El Bilali, 2019). In this regard, Oman, Saudi Arabia and the UAE's access to the Red Sea and/or the Gulf of Oman makes them less vulnerable than Bahrain, Kuwait and Qatar, which are almost entirely dependent on the Strait of Hormuz (Lavandier, 2020).

In addition, populations are threatened by the gradual uninhabitability of cities, particularly on the coast, due to rising temperatures and sea levels. For example, the city of Ras al Khaimah in the United Arab Emirates has already exceeded the lethal WBT threshold of 35°C for one to two hours on several occasions (Raymond *et al.*, 2020). This threshold is lethal in the

¹⁶ See definition in the glossary.

¹⁷ Desalination results in the discharge of brine, which accelerates the degradation of the marine environment (Abdelraouf, 2024). This discharge, coupled with rising sea temperatures and evaporation, contributes to increasing the salinity of Gulf waters, thereby requiring more energy for desalination (Al-Maamari, 2024).



absence of artificial cooling, leading to widespread use of air conditioning in GCC countries¹⁸. Reaching these thresholds obviously raises **public health** issues.

These vulnerabilities, combined with other factors (climatic, economic or security-related), are likely to eventually trigger **internal migration within the GCC countries** (Kumetat, 2009), posing new challenges in terms of governance, management and reception of these populations.

2. Economic and Energetic Vulnerability

The Gulf region's ambitions for economic diversification and renewable energy development are hampered by **challenging weather and climate conditions**, further exacerbated by climate change, and by **structural economic constraints** in rentier states.

Sand and dust storms, whose frequency, duration and intensity are exacerbated by rising temperatures (World Health Organisation, 2024), risk covering the panels and mirrors of photovoltaic and concentrated solar power systems¹⁹, thereby reducing their energy production. In addition, in coastal areas or following rainfall, sand and dust storms could cause short circuits in the electricity grid (Pouran, 2022). Gulf cities will also face episodes of extreme precipitation, requiring the implementation of drainage systems and the use of permeable surfaces in urban planning (World Economic Forum, 2024).

Rising temperatures and ecosystem degradation threaten various sectors of activity in the GCC countries, such as tourism²⁰ (Darwish, 2021). The decline in fishery resources is also likely to cause job losses and reduce fishermen's incomes in the Gulf (Zakaria & Goniewicz, 2023). The construction sector is also directly threatened: by 2030, increased heat stress is expected to cause a 40% loss of workable hours in Arab countries. Such an impact would lead to higher unemployment and lower wealth production in the GCC, where the construction sector accounts for 23% of jobs (Darwish, 2021). Rising temperatures are also likely to impact transport infrastructure and electricity distribution networks, leading to increased maintenance costs (Zakaria & Goniewicz, 2023). More generally, the economic diversification²¹ undertaken by the GCC states to reduce the dependence of their national

¹⁸ When air conditioners are used indoors, hot air is released outside buildings and immediately warms the streets. In the longer term, air conditioning emits greenhouse gases, as does the electricity needed to power it if the energy used is not renewable, also contributing to global warming.

¹⁹ See definition in the glossary.

²⁰ The tourism sector in the Arabian Peninsula states is threatened by climate change, such as rising temperatures, which reduce the attractiveness of destinations, particularly for outdoor activities and cultural events.

²¹ Economic diversification in the GCC countries represents a strategic shift undertaken by the states in the region since the 2000s. To reduce their dependence on oil, the Gulf rentier states are developing the private sector and new sectors of activity (tourism, logistics and health in particular), in line with the development of renewable energies and the global call to reduce the use of fossil fuels.



economies on hydrocarbon exploitation is likely to be affected by the consequences of climate change.

3. Political vulnerability

Despite geopolitical tensions in the Middle East, the GCC countries enjoy relative political stability, partly thanks to revenues from fossil fuel²². In this regard, the success of their national economic diversification is a highly political issue, but one on which it still seems risky to speculate at this stage. In the shorter term, however, climate change could give rise to internal tensions, posing a risk to political stability in the peninsula. For example, the inflation triggered by the 2007 food crisis prompted a group of Saudi clerics to warn of the risks of theft and resentment between richer and poorer sections of the population, going so far as to remind leaders of their political responsibilities under Muslim tradition (Gulf News, 2007). Within the GCC population, the poorest 10% spend 30% to 50% of their income on food, particularly in Qatar, the UAE and Kuwait, where expatriate workers make up the bulk of the population (Ben Hassen & El Bilali, 2019). New tensions over supply or prices on the global food market could therefore be a factor in political instability in the Gulf.

Water security is equally sensitive in the region. The attempt to tax water to reduce individual consumption in Saudi Arabia sparked strong protests, ultimately leading to the dismissal of the Minister of Water and Electricity, Abdallah Al Hassin, in 2016 (Scieur-Aparicio, 2017). Finally, the heavy dependence of GCC countries' public finances on fossil fuels constitutes a risk. Indeed, the ability of states to subsidise food and water may be limited by fluctuations in global markets, in which case the political stability of the peninsula could be threatened.

C - Transformation strategies aimed at securing existing regimes

Figure 10 – Climate Strategies and Targets, Economic Capacity and Development Projects

Countries	Political Leaders	National Climate Strategies	Net- Zero Target	Sovereign Wealth Fund Assets under management (billions of dollars) Global Ranking	Development Programs (Launch Year)
Saudi Arabia	Mohammed bin Salman	National Circular Carbon Economy - Saudi Green Initiative	2060	Public Investment Fund 925 / 11	Vision 2030 (2016)
United Arab Emirates	Mohammed bin Zayed Al Nahyan	National Climate Change Plan of the United Arab Emirates	2050	Abu Dhabi Investment Authority 1,110 / 8	UAE Vision 2021 (2010) & We the UAE 2031 (2023) - UAE

²² In rentier state theory, the distribution of rent to the national population and low taxation are accompanied by political loyalty of citizens to their government. This leads to "an authoritarian social contract in which citizens exchange their political rights for social rights" (Louër, 2021).

17



				Mubadala 330 / 32	Centennial 2071 (2017)
Qatar	Tamim bin Hamad Al Thani	Qatar Environment and Climate Strategy	None	Qatar Investment Authority 510 / 20	Qatar National Vision 2030
Bahrain	Hamad bin Issa Al Khalifa	No (Supreme Council for Environment)	2060	Mumtalakat 18 / 218	Barhein Economic Vision 2030 (2008)
Oman	Haïtham bin Tariq	National Strategy for Adaptation and Mitigation to Climate Change, 2020-2040 - National Carbon Neutral Strategy	2050	Oman Investment Authority 50 / 154	Oman Vision 2020 (1995) & 2040 (2017)
Kuweit	Mechaal Al Ahmad Al Jaber Al Sabah	None	2060	Kuwait Investment Authority 969 / 9	Kuwait Vision 2035 (2010)

Source : Climate Central

Among the GCC countries, there is regional competition to develop climate strategies and targets, which are a means of embracing a form of political modernity, but also of promoting their respective visions of environmental sustainability. While all these monarchies rely on their sovereign wealth funds to finance these strategies, their respective capacities vary greatly. Given the dominant role of fossil fuel revenues in feeding these funds, fluctuations in energy commodity prices regularly lead to a revision of the ambitions of various projects.

Climate issues pose a major dilemma for Gulf monarchies, whose response strategies could either strengthen their political legitimacy or seriously undermine it. To secure their regimes, GCC countries are putting in place co-optation mechanisms that enable them to broaden the legitimacy base of their leaders. These dynamics lead to bureaucratic hypertrophy²³, which undermines the effectiveness of the state apparatus as well as the quality and coherence of environmental policies. The result is a developmentalist approach based on technosolutionism and strong communication around multiple national visions.

1. Proximity and loyalty of key stakeholders vis-à-vis existent regimes

Numerous studies highlight the tension that exists between the costs of inaction and action on climate change for GCC countries, which have developed around hydrocarbon exploitation (Krane, 2020; Zumbraëgel, 2022). The shift to the oil era has thus acted as a **destructuring factor for the economy and the power of economic actors, benefiting the ruling families**, whose interests have gradually become intertwined with those of the oil and gas industry (Kamrava, 2016). The new paradigm of decarbonisation imposed by climate change seems to

.

²³ Bureaucratic hypertrophy refers to an organisational phenomenon characterised by excessive and inefficient expansion of the administrative and procedural structures of an institution, company or state. It manifests itself in a disproportionate increase in the number of rules, formalities, hierarchical levels and administrative staff, leading to a rigidification of decision-making processes, a decrease in efficiency and a loss of flexibility in the execution of tasks.



be integrating into the political logic that characterises these regimes. Far from disadvantaging them, this integration leads to **chronic nepotism** aimed at extending the political legitimacy of members of royal families (Zumbraëgel, 2022; Kamrava, 2016). This is an effective strategy, but it is not without risk, as it **grants more power to influential figures**, while fuelling accusations of clientelism and political inefficiency (Fatallah, 2019).

To counter these accusations, **key positions are given to businessmen** and expert technocrats, provided that their loyalty to the regime is assured (Zumbraëgel, 2022). These mechanisms enable the incorporation of actors outside the royal families into the state apparatus, although their ties to these familieq are most often pre-existing and decisive in their ability to attain and maintain such positions.

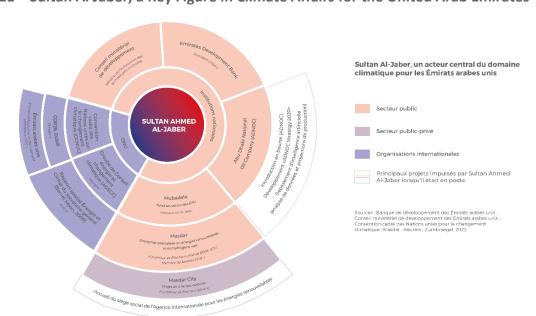


Figure 11 – Sultan Al Jaber, a Key Figure in Climate Affairs for the United Arab Emirates

Although from a relatively politically uninfluential clan (Zumbraëgel, 2022), Sultan Ahmed Al Jaber is the perfect example of a technocrat whose technical skills are being used to lend credibility to the UAE' climate discourse. His presence in multiple spheres with sometimes divergent agendas is not without creating some tension given the multiplicity of interests he represents. At the same time, the ambitious outcomes on fossil fuel transition from COP28 in Dubai serve to moderate the criticisms of its various stances.

These changes, along with the prevalence of relationships, cause **skills issues throughout the hierarchy**, affecting the quality of environmental policies. In Bahrain, for example, the lack of political structure in the solar energy sector has led to operational deadlocks²⁴ that the

²⁴ Despite growing citizen initiatives to install solar panels, the Water and Energy Agency (EWA) is, for example, unable to respond to problems of connectivity to or malfunctioning of the electricity grid.



government seems unable to resolve (Mahmoud, 2024). The widespread use of **consulting firms** to formulate and implement development strategies also regularly marginalises the state apparatus, thereby limiting the development of the skills and capacities of environmental administrations (Fathallah, 2019).

2. Environmental policies: bureaucratic hypertrophy and inefficiency

Beyond a tendency towards bureaucratic hypertrophy, the **coexistence of multiple actors in the field of environmental policy leads to numerous inconsistencies in development** logic and projects. The marginalisation of political bodies in favour of consulting firms and the lack of coordination between these different actors has, for example, led Saudi Arabia to announce two contradictory projects simultaneously. The launch of the *Qatrah* (meaning 'droplet' in English) project in 2019, led by the Minister of Environment, Water and Agriculture, aimed to establish a new programme for managing and reducing water consumption (Argaam, 2019). At the same time, the strategic committee for Vision 2030 announced the launch of several projects, including King Salman Park and Green Riyadh, which would negate the potential water savings envisaged in the ministerial plan (Fathallah, 2019). In addition to the inefficiency of such approaches in terms of results, **the financial costs involved are considerable** and very often represent a significant share of the state budget (Quamar, 2024).

Finally, knowledge production supporting environmental policies is at the heart of many power struggles. Very often subordinate to the will of those in power, the creation of various institutions²⁵ (*fiefdoms*) contributes to the inclusion of certain approaches to sustainability on the agenda, as well as to the positioning of strategic figures (Zumbraëgel, 2022). Furthermore, the lack of consistency and constant reorganisation of the environmental bureaucracy testify to the peripheral role of these issues in the political arena. Seen primarily as a reputational asset, the environmental policy sector remains an adjustment variable that must not hinder the interests of energy rent and oil and gas revenues (Al-Sarihi et *al.*, 2020). This logic sometimes leads to climate policies being used to cover up the pursuit of highly carbon-intensive economic development.

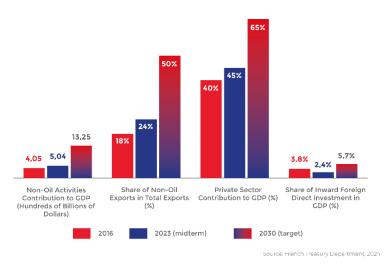
²⁵ The creation in 2010 by King Abdullah of the *King Abdullah City for Atomic and Renewable Energy* (K.A.C.A.R.E) is a prime example of the creation of entities aimed at promoting the vision of the ruling leader. Initially conceived as a tool to promote the country's energy and economic transformation, this move was met with strong opposition from key institutions such as SAUDI ARAMCO and the SEC (Saudi Electricity Company), which perceived the threat of a structure directly under the control of the ruler (Zumbraegel, 2022).



3. Technosolutionism and communication: strategic pillars of the GCC countries

Although the Gulf monarchies do not constitute a monolithic bloc in terms of environmental policy integration²⁶, **they nevertheless share a developmentalist approach**²⁷ (January 2025). These approaches have led to the emergence of numerous national plans and visions **aimed at supporting economic diversification**, **in which energy continues to play a central role**. The goals of diversification are to **secure rent mechanisms**, with renewable energy production serving both as a means of diversifying sources of income and as a strategy for allocating a larger share of fossil fuels to exports (Bianco, 2021; Krane, 2014; 2021). While environmental issues are leading to a redefinition of certain elements of the social contract²⁸, the core focus of these development plans lies more in the promotion of large-scale projects than in a reformist approach. These projects convey a **futuristic image of sustainable development**, while reflecting a form of **techno-optimism** common to the GCC countries (Moneer, 2024).





²⁶ The UAE is a leader in this area, thanks to the stability of its commitments and its early recognition of the issue compared to its neighbours. Bahrain and Kuwait also stand out for the relative stability of their environmental policies, the latter having been particularly affected by the Iraqi bombing of more than 750 Kuwaiti oil wells and the spillage of hundreds of barrels of oil into the Gulf during the First Gulf War (1990-1991) (Zumbraegel, 2022).

²⁷ Developmentalism can be understood as an approach focused on goals rather than means ('development for development's sake'). By overlooking the levers for action, the role of actors, particularly residents, and the importance of transparency and local democracy, the strategy adopted risks failure or, at best, very mixed results.

²⁸ The reduction in energy subsidies, long considered the basis of social welfare in rentier state theory, and the introduction and increase in VAT in Saudi Arabia from 5% in 2018 to 15% in 2021, are evidence of these transformations.



In 2023, Saudi Arabia will be halfway to achieving the goals set out in its Vision 2030 diversification strategy, published in 2016. While most indicators are improving, the pace of progress does not currently appear to be sufficient to meet the targets set for 2030. The development of the private sector, driven by the Saudi Public Investment Fund (PIF) as part of the Privatisation Programme, is slow. Its contribution to GDP gained only five percentage points between 2016 and 2023 and still needs to gain another 20 points over the next seven years. This is linked to the country's difficulties in attracting FDI: inward FDI flows represent a smaller share of GDP than in 2016, and this proportion must almost double by 2030 to reach the target set by the Saudi strategy.

Gulf monarchies share a **common vision of innovation and technological development**, which they see as **promising solutions to the climate and environmental crisis** (Zumbraëgel, 2025). This ambition is explained by the ability of technosolutionism to respond to these crises without fundamentally addressing their causes or imposing a paradigm shift (Moneer, 2024). Another element of this technocentric approach is the **strategy of communication** and staging of **major architectural projects** (Masdar City, Neom, The Line²⁹...), or the organisation of international events such as the COPs or sporting or cultural gatherings (2025, January). While the sustainability of these projects is open to question, we need to look beyond the simplistic criticism of greenwashing to understand that **such strategies are used to convey an image of modernity**, often associated with national historical references that fuel nationalist sentiment among the population (Koch, 2022).

The proliferation of smart cities³⁰ (Masdar, Neom, etc.) is evidence of an economic diversification rationale that combines technological progress with a questionable approach to sustainability, given the failure to consider the emissions linked to the exploitation of the resources required for such projects (Moneer, 2024). The aim of these development projects is to ensure strong economic growth that is not directly dependent on oil (Quamar, 2024). However, many of them struggle to go beyond mere announcements, as shown by the limited appeal of Masdar (Moneer, 2024; Koch, 2022), or the downgrading of the Saudi project The Line, following the fall in oil prices (2024, December; Magid et *al.*, 2024).

GCC countries have been able to take advantage of the economic resources linked to the exploitation of the region's oil fields to build their political and economic systems. At the

²⁹ Initiated by Sultan Ahmed Al Jaber in 2006, Masdar City is a \$20 billion 'intelligent' city project financed by the State of Abu Dhabi. Home to the International Renewable Energy Agency (IRENA) and a major communications tool designed to accommodate 50,000 people, this technological island is now home to 6,000 residents. The Saudi Arabian Neom project is part of the same futuristic architectural development process, designed to attract international companies, tourists, industrial and energy projects, etc. Initiated by Crown Prince Mohammed bin Salman in 2017, the project, which is backed by the Public Investment Fund to the tune of \$500 billion and is based exclusively on renewable energy consumption, has recently suffered a few setbacks. The hasty departure of the managing director, the delay and the contraction of the government's finances have forced the project to be scaled back.

³⁰ See definition in the glossary.



same time, however, the globalisation of the use of these resources poses a threat to the habitability of these countries. The region's pre-existing climatic and socio-economic vulnerabilities, coupled with consumerist and energy-guzzling development logics, are being reinforced by the effects of climate change. Paradoxically, far from weakening these oil monarchies, the new climate has led to their transformation to maintain their control over political power. This logic is sometimes to the detriment of the effectiveness of climate strategies, and therefore of the human security of populations.



PART 2 CLIMATE MULTILATERALISM: A TOOL FOR PROMOTING THE CLIMATE STRATEGIES OF GCC COUNTRIES



Having examined the vulnerabilities of the GCC states to the effects of climate change, it is now necessary to analyze how the Gulf monarchies are engaging with climate multilateralism as a space for influence. Their positions within these forums have evolved considerably, and international climate negotiations have gradually become a lever through which these states promote their various influence strategies.

A - Evolving attitudes of GCC countries towards multilateral climate negotiations

1. Actors initially reluctant towards negotiations

During the 20th century, the Gulf monarchies were reluctant to engage in multilateral environmental negotiations (Al-Saidi et *al.*, 2019). Indeed, in the context of the decolonisations of the 1950s to 1970s³¹, the 1972 Stockholm Summit was perceived by the so-called 'developing' countries - of which the GCC States are a part - as a new instrument of subjugation that would limit their economic development (2024, December; Najam, 2005). In addition, between the 1970s and the early 2000s, the strong 'reckless' growth (Al-Saidi et *al.*, 2019, p.6) of the Gulf monarchies influenced their attitude towards global action to protect the environment. Indeed, their opposition often reflected fears of harming their oil and gas industries, or a reluctance to engage in what they perceived as an unacceptable trade-off between economic growth and sustainability (Al-Saidi et *al.*, 2019).

In addition, the Gulf monarchies were often more resistant than other so-called 'developing' countries within climate negotiations. These states have been a force of opposition to the scientific consensus linking climate change to human activities (2024, December) and to global agreements aimed at reducing carbon emissions. Thus, in opposition to pro-environmental proposals, OPEC countries demanded compensation for their potential loss of revenue from the energy transition, called for reduced carbon tax in developed countries³², and blocked progress in the negotiations using techniques of delay, refusal, doubt and obstruction (Barnet, 2008). Influencing other G77 countries³³, Saudi Arabia led these obstructionist strategies and maintained a climate- skeptical and oppositional stance until the 2010s³⁴ (Al-Saidi et *al.*, 2019).

³¹ Saudi Arabia began its state-building process at the beginning of the 20th century, while the other tribal kingdoms in the region only gained independence from the British protectorate in 1971 (Al-Saidi, 2020).

³² OPEC countries have argued that such taxes could reduce demand for oil from developed countries, which account for more than 60% of global oil consumption, thereby lowering average oil prices and leading to a loss of revenue for oil-producing countries (Barnet, 2008).

³³ Created by 70 countries in 1964, the group now has 134 members. The coalition was created to represent developing countries, defend their interests and promote their sustainable development agenda.

³⁴ Saudi Arabia was one of the only countries not to take part in the decision-making process at COP15 in Copenhagen in 2009, which ended in failure (Dimitrov, 2010). More generally, the Saudi delegation to the COPs was led until 2015 by Mohammed Al Sabban, a climate-skeptical diplomat with a reputation for holding up progress in the negotiations (2025, February; Lemaizi, 2016).



2. Actors increasingly involved in climate issues since the 2000s

In 1992, the member states of the United Nations, including the GCC countries, adopted the United Nations Framework Convention on Climate Change (UNFCCC). However, as so-called 'developing' countries, the Gulf monarchies were excluded from Annex 1³⁵. This status enabled them to argue for a 'right to development' and, above all, to **reject any constraints that might curb their hydrocarbon-based economic growth**. However, since the 1990s, the Gulf monarchies have experienced dazzling economic development and have become the countries with one of the highest per capita greenhouse gas emission rates in the world.

In parallel with these developments, the participation of the GCC States in the global environmental agenda **gradually increased after the 1992 Rio Conference**, leading to greater efforts to protect the environment (Al-Saidi et *al.*, 2019; Zumbraegel, 2022). Several reasons explain this shift in attitude, which also concerns most countries worldwide. First, the global environmental agenda and the associated discourse have evolved, encouraging the engagement of developing countries³⁶ (Najam, 2005). Secondly, the anticipated decline in oil revenues, the deterioration in regional environmental conditions – particularly caused by the first Gulf War – and the consolidation of growth in the Gulf monarchies have pushed them to undertake on an **essential diversification of their economies** (Al-Saidi et *al.*, 2019). **As a result, the GCC states signed the Paris Agreement in 2015, subjecting themselves to obligations to reduce their emissions³⁷.**

The UAE and Qatar were the first to initiate this transition, having early on perceived engagement in environmental and climate issues as a suitable political tool to strengthen their influence and enhance their reputation while diversifying their economies, particularly through large infrastructure projects (Zumbraegel, 2022). The two monarchies were the first to emancipate themselves from Saudi Arabia's blocking strategies within environmental negotiation frameworks (Al-Saidi et *al.*, 2019). Before the importance of diversification, linked in part to the fall in oil prices in 2014, was recognised, Qatar hosted COP18 in 2012, and the new UAE city of Masdar became the headquarters of IRENA (the International Renewable Energy Agency) in 2009.

Despite differences between the six monarchies, most of these developments have resulted in the GCC countries abandoning their 'obstructionist' positions (Aminjonov & Li, 2023) and adopting a more

³⁵ Annex 1 of the UNFCCC includes industrialised countries that are members of the OECD and economies in transition that are subject to requirements to reduce greenhouse gas emissions. The Gulf monarchies are not among the developed countries or countries in transition to a market economy that have committed to reducing their greenhouse gas emissions under the Kyoto Protocol (signed in 1997 and entered into force in 2005).

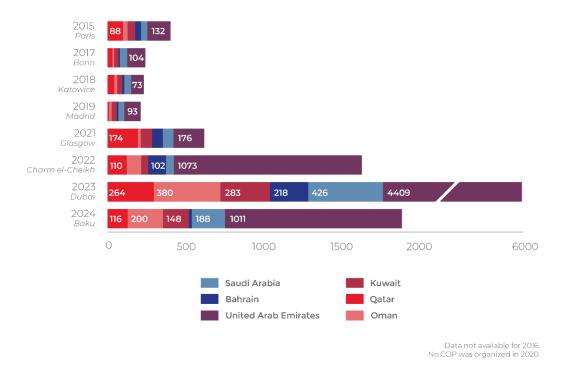
³⁶ The integration of the concept of sustainable development into global environmental discourse has enabled developing countries to join the global environmental enterprise, as well as to assess the effectiveness of global environmental policies based on environmental conditions and in terms of achieving sustainable development—and thus poverty reduction (Najam, 2005).

³⁷ The adoption of the Paris Agreement in 2015 changed this distinction between countries, by imposing commitments on all countries, albeit differentiated according to their historical capacities and responsibilities.



proactive stance. States began to **join multilateral agreements**³⁸, engage in international development and integrate certain elements of the sustainable development agenda into their national policies. Above all, between 1992 and 1996, all the GCC states became part of the global climate framework by joining the UNFCCC. As a result, **the presence of the Gulf monarchies in environmental negotiations has grown steadily since the 1990s**, particularly over the last two decades (Al-Saidi et *al.*, 2019). This is reflected in the general increase in the number of participants in negotiating delegations at COPs (see Figure 13 below)³⁹.

Figure 13 – Number of delegation members from GCC countries at COPs between 2015 and 2024



This voluntarisme is also illustrated by the determination of the GCC countries, particularly Qatar and the UAE, to establish themselves as key players in negotiations, by **hosting multilateral summits** on environmental, climate or energy issues, both within and outside the UN framework. The map⁴⁰ below, produced by the Defence and Climate Observatory, illustrates their lead in this area, with multilateral summits being organised as early as 2010 - COP18 in Doha being the first event of this type to be held in the Arabian Peninsula. This map also shows the willingness of the other four countries, particularly

³⁸ During the 1990s, the Gulf monarchies joined the Basel Convention, the Convention on Biological Diversity, the Bonn Convention on the Conservation of Migratory Species and the United Nations Convention to Combat Desertification (Zumbraegel, 2022).

³⁹ COP28 in Dubai in 2023 brought together more than 20,000 official delegates, ahead of the most closely attended COP with more than 80,000 participants. The Gulf monarchies sent their largest delegations to this COP, with a particularly large delegation from the USA (almost 4,500 delegates), 426 from Saudi Arabia, 380 from Oman, 264 from Qatar, 283 from Kuwait and 218 from Bahrain (Carbon Brief, 2024).

⁴⁰ The data for this map was collected by the Defence and Climate Observatory from open sources and is therefore not intended to be exhaustive.



Saudi Arabia, to engage in this multilateral agenda through the increased hosting of summits since 2020.

The organisation of international events represents generally a lever of influence, often serving a political and strategic agenda for the Gulf monarchies, particularly in the sporting and cultural fields. In line with their climate strategy, some of these events are claimed to be 'carbon neutral', such as the 2022 FIFA World Cup held in Qatar, despite numerous criticisms and doubts regarding the carbon footprint of such events (Dagorn, 2022).

IRAQ Dé ense ISRAEL JORDAN 2022 - 5th UN Conference on the Least Developed Countries Member of the Gulf OMAN 2017 - International Conference on Financina for Developmen Cooperation Council (GCC) Capital KUWAIT Multilateral commitment 2023 - COP 28 on climate change (8) 2022 - MENA Climate Wee Number of international BAHRAIN by country between 2012 and 2025 **SAUDI ARABIA** PAKISTAN Headquarters of the International Renewable Energy Agency (IRENA) in Masdar City (UAE) Muscat EGYPT 2024 - COP16 desertification 2023 - MENA Climate Week Infrastructure investment Major sustainable urban development projects Kuwoit Towers Completed Red Se In progress Arabian Sea SOUDAN megawatts Solar (25) BAHRAIN ERITREA YEMEN H₂ Green hydrogen (5) Wind (3) 3. Nuclear (1) Dub P Abu Dhabi Green ammonia (1) DIIBOUTI ETHIOPIA UAE SOMALIA 500 kn

Carte 1 – Climate Diplomacy in the Gulf Monarchies

For the Gulf monarchies, engagement in climate negotiations and their growing involvement in these issues are **strategic stakes**. Four major strategic objectives can be identified to explain these countries' willingness to engage in multilateral environmental and climate negotiations (Zumbraëgel & Sons, 2025). **The first is reputational,** as it enables states to gain greater influence on the international stage by demonstrating a willingness to act collectively to address environmental and climate crises. Secondly, climate diplomacy allows for **the creation of alliances and new forms of cooperation,** notably with non-allied countries such as Iran, around security issues related to sand and dust storms⁴¹. This engagement is also - and perhaps most importantly, perceived as a means to promote and drive

⁴¹ Iran and the Gulf monarchies have experienced episodes of tension since the Iranian Revolution of 1979. However, Iran, Iraq, Kuwait and Syria have announced a coalition called 'sand diplomacy', and in September 2023, Iran organised a summit on the growing threats posed by these storms (Zumbraegel, 2023). A Saudi delegation (Saudi Press Agency, 2023) and a Qatari delegation (The Peninsula, 2023) were present at this conference, marking an important step in the normalisation of relations between Iran and Saudi Arabia.



the **economic diversification** of the Gulf monarchies⁴². In particular, the energy transition, as a pillar of economic diversification and the fight against climate change, has become an economic opportunity (2025, January). Indeed, the opportunity **to acquire expertise and skills** in the technologies associated with the energy transition represents a genuine economic added value for the Gulf monarchies (Zumbraëgel & Sons, 2025).

The evolution of the Gulf monarchies' positions within international environmental and climate negotiations since the 1990s is characterised by **their gradual recognition of the influence and strategic issues associated with climate.** In this regard, their involvement in these negotiations and their energy transition primarily respond to **strategies of influence and economic and technological development**, without fundamentally challenging the regional economic system based on natural resources extraction.

B - Shared ambitions but diverging interests amid rivalry for regional leadership

The changing attitudes of the GCC states in recent years show that they have moved away from the binarity of rejecting or accepting the rules of global climate governance. While pursuing relatively similar objectives, the interests of these countries differ, as they compete for regional leadership.

1. The different approaches of the GCC states to climate negotiations

Overall, the GCC countries are pursuing relatively similar objectives, seeking to defend fossil fuels and pursue minimally transformative strategies, albeit with varying degrees of openness. However, the GCC does not form a homogenous bloc, as each country is distinguished by its specific energy and political characteristics, as well as its own diversification dynamics. Consequently, the level of engagement, interests, and rhetoric of these countries in climate negotiations vary. Two approaches emerge: on the one hand, Saudi Arabia, the USA and Qatar demonstrate a strong desire to influence the climate negotiations; on the other hand, Oman, Bahrain and Kuwait show a more moderate level of engagement.

Classification of the Gulf states in global climate governance

According to Farkhod Aminojonov and Li-Chen Sim (2023), the GCC states can adopt four distinct approaches within global climate and energy governance bodies.

1. Rule breaker - Defenders of the fossil fuel-based status quo

⁴² The sudden drop in oil prices in 2014 led to a global realisation of the need for the Gulf monarchies to reduce their dependence on fossil fuels and diversify their economies to sustain their growth and development.



The rule breaker approach corresponds to the GCC states' desire to maintain fossil fuels as the cornerstone of the global energy system by delaying the energy transition as long as possible. This strategy is typically manifested through the explicit promotion of fossil fuels. As such, these states continue to increase their fossil fuel extraction capacities.

2. Rule shaper - Adapting the rules to their advantage

The rule shaper approach aims to preserve the use of fossil fuels as much as possible within a context of increasing restrictions, while participating in global climate initiatives. This approach involves accepting certain principles of the energy transition, but under specific conditions. The aim is to influence anti-fossil fuel positions by highlighting certain fossil fuels portrayed as less polluting. This approach is often reflected in the promotion of emission reduction technologies, carbon capture, utilization, and storage⁴³ (CCUS).

3. Rule promoter - Complying with international standards

The rule promoter approach involves complying with certain dominant standards and policies regarding the energy transition. It aims to institutionalise commitment to climate governance through participation in international forums and the adoption of domestic policies. The UAE has adopted this approach, being the first country in the region to ratify the Paris Agreement and to publish its nationally determined contributions⁴⁴ (Embassy of the United Arab Emirates, 2016).

4. Rule taker - Aligning with established powers

The rule taker approach refers to a country aligning itself with the interests of established powers in a rather passive manner, due to a lack of capacity and expertise on climate issues. A rule taker supports the regime in principle but is not able to provide significant reinforcement. Therefore, the support provided remains relatively weak (Lavenex et *al.*, 2021).

GCC states navigate between these four distinct approaches to global climate governance and may even adopt several of them simultaneously. According to the authors, the UAE, Qatar and Saudi Arabia most frequently adopt the roles of rule shaper and rule promoter, although they are also capable of assuming rule breaker positions. Bahrain, Oman and Kuwait, on the other hand, are predominantly rule takers. This divergence can be partly explained by differences in capacity and financial resources among these countries.

The UAE, as a regional pioneer in addressing climate issues, distinguished itself in the 2000s by its commitment to the energy transition (Al Sarihi, 2023). This avant-gardism is reflected in its officially progressive approach, compared to other monarchies on the peninsula, in climate negotiations. This position can be explained, on the one hand, by their more diversified economy, which is less dependent on oil and gas interests, allowing them to be more supportive of ambitious climate policies (2025, February). This voluntarism then makes it possible to influence climate policies, as in 2010,

⁴³ See definition in the glossary.

⁴⁴ See definition in the glossary.



when Masdar consultants campaigned for the CCUS to be included as a climate change mitigation⁴⁵ strategy (Günel, 2024). On the other hand, the UAE quickly recognized climate issues as a lever of foreign policy, to which their proactive stance can also be attributed. This understanding of the political dimension of climate negotiations is reflected for example in the country's frequent role as an informal mediator (2025, January). This awareness has also been demonstrated through the UAE's determination to achieve a landmark agreement at COP28. Furthermore, integrating climate issues within a security approach also highlights their pioneering role at the regional level. In 2023, the Ministry of Defense unveiled, on the sidelines of COP28 at Expo City Dubai, the region's first armed forces strategy on climate change, aiming to reduce their carbon footprint⁴⁶ (Ardemagni, 2024, 23 July). Building on this commitment, in 2024, the UAE joined the United Nations Climate Security Mechanism, aimed at anticipating climate risks and promoting peace (United Arab Emirates Ministry of Foreign Affairs, 2024). Despite this declared voluntarism, it should be emphasised that the UAE intends to keep fossil fuels at the heart of their global energy system and delay the energy transition as mush as possible (see below).

Saudi Arabia, unlike the UAE, moved away from climate-skepticism at a later stage, mainly because of a late diversification process. Today, however, the country is taking climate issues on board, even if it sees them primarily through the prism of energy, the central pillar of its climate diplomacy (2025, January). This diplomacy, which is illustrated by major urban planning and energy infrastructure projects, is more a matter of display to consolidate the country's position at the heart of decision-making bodies and strengthen the image of its Crown Prince Mohammed bin Salman (Bianco, 2021). The country is regularly accused of deliberately obstructing negotiations, as in Baku at COP29 (Niranjan, 2024). Saudi Arabia thus adopts an ambiguous position: while openly defending its oil interests (2024, December), it aspires to be recognised as a key player by supporting various projects that remain minimally transformative (2025, January).

Qatar is more discreet and seems less opposed to global greenhouse gas mitigation regimes⁴⁷. However, the country plans to continue its liquefied natural gas (LNG) projects, being the world's second-largest exporter in 2019, notably through the exploitation of the world's largest natural gas field (France 24, 2022). However, Qatar wants to 'green' its LNG to make it easier to export as part of the global energy transition (2025, January). The country thus seeks to promote it as a transition fuel, arguing that it is cleaner than oil but still compatible with existing technologies and infrastructures,

⁴⁵ See definition in the glossary.

⁴⁶ Unveiled on 7 December 2023, this strategy aims to strengthen the resilience of the armed forces in the face of growing environmental challenges. The strategy includes mitigation and adaptation measures and is built around five main pillars: (1) sustainable procurement and green equipment, (2) sustainable infrastructure and energy, (3) waste management, (4) culture, communication and participation, (5) adaptation to climate change (Emirates News Agency, 2023).

⁴⁷ See definition in the glossary.



pending the deployment of green energy sources. Qatar intends to develop more CCUS technologies to reduce its net emissions and to develop 'green LNG'⁴⁸ (Bianco, 2021).

In recent years, **Oman** has shown some responsiveness regarding sustainability. However, **the financial constraints the country faces limit its ability to rapidly implement ambitious climate initiatives** (Zumbraëgel, 2024). Like its neighbours, Oman is focusing mainly on low-carbon technologies, CCUS and energy efficiency. In the climate negotiations, Oman is positioning itself neither as a leader nor as a country holding up negotiations and is instead calling for greater financial and technological support from developed countries.

Finally, **Bahrain and Kuwait** share a similar position, with a rather superficial consideration of climate issues, and both **lag behind their neighbours in terms of commitments to multilateral climate negotiations** (Bianco, 2024). They therefore tend to align themselves with the influential states in the region, i.e. Qatar, Saudi Arabia and the USA, and tend to follow their lead (Todman et *al.*, 2023). It is important to note, however, that as part of the hosting of the NATO Regional Centre in Kuwait, both Kuwait and Bahrain have taken part in discussions on the security risks of climate change (NATO, 2023).

2. Competition for regional leadership in climate diplomacy

The differences between these countries in climate negotiations are part of a competition for climate leadership between the most influential states in the region - the UAE, Saudi Arabia and Qatar (Chatham House, 2021). This rivalry is reflected in the competition for major infrastructure projects, a succession of national and regional sustainable development initiatives, and the appointment of key figures to strategic climate-related positions.

C - Multiple strategies to promote their agendas in the United Nations framework, but also in other multilateral institutions

1. The Conferences of the Parties (COPs)

Beyond these regional dynamics, between converging interests and rivalries, GCC states have adopted various strategies to advance their agenda within the UN framework. COP28 and COP29, whose inefficiency has been partly attributed to the blockades orchestrated by certain countries, including Saudi Arabia, illustrate the different strategies employed by the Gulf monarchies to slow down or limit progress in the negotiations (Günel, 2024). Within the framework of the COPs, levers of influence - whether direct or indirect, official or informal, can be exerted at two levels: firstly, in the organisation of the COPs, and secondly, within the negotiations themselves (2025, January).

⁴⁸ For Qatar's Energy Minister, Saad Sherida Al Kaabi, gas and renewables will therefore have to 'stay together for a very long time to ensure a successful transition' (Bloomberg. 2021).



Firstly, the choice of venue for the COP is a first lever of influence. This trend has been evident in recent years: the last three COPs have been held in oil-producing countries - COP27 in Egypt, COP28 in the USA, COP29 in Azerbaijan - and COP30 will be held in Brazil. At the same time, COP16 on desertification was held in Saudi Arabia in 2024. This gradual relocation of COPs to oil-producing and oil-exporting countries represents a strategic challenge, since by hosting these events, host countries can shape the agenda and steer discussions. The host country also has a remarkable ability to influence the format of the conference, by proposing numerous side events, which can also affect the effectiveness of the discussions by diverting the attention of COP participants⁴⁹. Researcher Gökçe Günel describes COP28 as a 'tradeshow'⁵⁰, highlighting its evolution since COP18 into an event more focused on entertainment and the promotion of sustainable innovation, thereby relegating political discussions to the background.

Various tactics can then be employed as levers of influence within the negotiations, starting with the delegations. In this regard, the level of expertise, the profile of the delegates and the size of the delegations can serve as tools of influence in the COPs. Until recently, the Saudi delegation argued that it only had a government mandate to speak on climate issues but not on fossil fuels, thereby preventing them from addressing fossil-related matters and blocking progress on the subject (2025, January). Saudi Arabia also deploys senior figures to bolster the credibility of its delegation and strengthen their weight in the negotiations (2025, January). The size of the delegations reflects both the role the country intends to play in the negotiations and the extent of the financial resources it allocates to this effort. At COP28, the USA, China, Brazil and Nigeria - all major oil producers, had the largest delegations (Günel, 2024). Finally, the increasing participation of lobbies representing private interests - sometimes aligned with those of states - within the COPs may also strengthen the positions defended by certain delegations, particularly those of the Gulf States. The number of lobbyists increased by 25% between COP26 in Glasgow and COP27 in Sharm el-Sheikh (Bosman-Delzons, 2023). In addition, COP28 and COP29 recorded record numbers of accredited lobbyists, with 2,500 (Le Monde, 2023) and 1,770 (Le Monde, 2024) respectively at these events.

The GCC states frequently employ semantic strategies and subtle control of language to steer climate negotiations in their favour. By influencing the vocabulary used, they impact the wording of the final agreement in ways that leave room for interpretation. At COP29, Saudi Arabia was accused of altering the official text presented by the Azerbaijani presidency to soften its climate impact (*The Guardian*, 2024). Similarly, at COP28, Sultan Al-Jaber, openly opposed to the 'phase-out' of fossil fuels⁵¹, defended the use of the term 'phase-down', a semantic nuance designed to limit the ambition of the commitments made (*The Guardian*, 2023).

⁴⁹ This is what Gökçe Günel describes in his report on COP28 in Dubai: 'It was easy to be overwhelmed by the side events at COP28 and to lose sight of the official purpose of the summit: to establish formal mechanisms for global cooperation on climate change'. (2024).

⁵⁰ The expression 'tradeshow' is used by Gökçe Günel to highlight the fact that this COP served more as a showcase for companies' various investments in sustainable development than as a truly ambitious climate event.

⁵¹ At COP28, Sultan Al Jaber said there was 'no scientific evidence' that a phase-out of fossil fuels was necessary to limit warming to 1.5°C (*The Guardian*, 2023).



The GCC states also deploy discursive strategies to put forward their own narratives and a rhetorical framework more in line with their position, as when OPEC presented itself as an entity vulnerable to climate change because of the economic losses associated with the energy transition (2025, February). The aim of setting up certain narratives is to reformulate concepts to limit their binding implications. The narratives put forward by these states are therefore built around two main axes: the concept of 'Decarbonation through carbonization', which aims to justify technosolutionism, and that of 'Mitigation through adaptation'⁵², which emphasises an approach based on adjusting the current energy system rather than transforming it (2024, December). In practice, these discourses serve to legitimise the reliance on technologies as a solution, drawing on normative stories that avoid a fundamental questioning of the dominant energy model based on fossil fuels. They prioritize optimizing the performance of fossil fuels rather than their gradual elimination.

Another possible strategy is temporal, manifested through excessively long speeches that limit the time devoted to substantive debates and thereby prevent any effective progress in the discussions. Another tactic is to block negotiations with *poison pills* (Friedman, 2024). This tactic consists of inserting terms or clauses into draft agreements that make the text unacceptable to other parties, thus forcing them to reject or renegotiate the agreement (Friedman, 2024). This makes it possible to **block negotiations** by prolonging them until late hours, thereby paralysing the decision-making process (2024, December). This strategy is particularly effective, as it considerably reduces the time available for other subjects on the agenda, as COPs and negotiations are subject to strict time constraints. COP29 perfectly illustrates this tactic: discussions on climate financing, which only reached a consensus after the conference had been extended, monopolised attention and limited the time devoted to other issues, such as gender-related matters.

Finally, the Gulf monarchies frequently use systems of strategic alliances to promote their interests. These coalitions enable them to increase their influence on final decisions. They are also relatively dynamic, bringing together heterogeneous players who join forces temporarily as their interests converge. This explains why states with generally divergent interests can nevertheless join forces on a specific issue. This is the case of the Like-Minded Developing Countries (LMDC) coalition, which brings together more than 20 countries from Asia, the Middle East (including Saudi Arabia and Kuwait), Latin America and Africa. It defends the right to economic development and industrialisation, while calling for fair climate action and increased funding from rich countries to support adaptation and the energy transition in so-called 'developing' countries. In this context, Saudi Arabia, the 9th largest emitter of greenhouse gases per capita in 2023 (Olivier, 2024), but also one of the richest, finds itself alongside countries such as Bangladesh, Indonesia and Sudan, which are among the most vulnerable to the effects of climate change while having limited financial resources to deal with it. This asymmetry suggests that the Gulf monarchies sometimes instrumentalize so-called 'developing' countries by leveraging the political and moral legitimacy of these vulnerable countries to strengthen their own position in the negotiations, notably by contesting international pressure for a rapid reduction of fossil

⁵² See definition in the glossary



fuels (2025, February). By intertwining issues of solidarity among 'developing' countries with the defence of economic privileges, GCC states amplify their influence under the guise of multilateral cooperation. This alliance system effectively gives more weight to positions advocated by Saudi Arabia, thereby counterbalancing the influence of states pushing for the end of fossil fuels. Presenting itself as a defender of 'developing' countries, Saudi Arabia uses this coalition as a particularly useful relay. The Gulf States are also part of other coalitions such as the Arab Group, which has become a major leverage point to influence negotiations and which Saudi Arabia has long led (2025, February).

Lastly, these obstructionist techniques are also observed at the **Bonn Conferences on climate change** organised by the UNFCCC, which serve as **essential preparations for the COPs** and represent a key forum for defining the subjects to be addressed. The Gulf monarchies therefore form alliances at these negotiations, led mainly by Saudi Arabia, to keep issues related to mitigating emissions or reducing the use of fossil fuels out of the debates, so that these subjects are not addressed at the COPs. Conversely, the GCC states are pushing issues such as CCUS, claiming that these technologies would enable oil and gas to continue to be used 'cleanly' (2025, January).

The Gulf States, in particular Saudi Arabia, the UAE and Qatar, have therefore adopted, and sometimes even developed, techniques for putting forward their own agendas at the COPs. This analysis of the COPs makes it possible to **understand the different strategies used** to influence their organisation or negotiations and thus participate in these events while limiting their scope. These techniques are also used in other forums, whether climate-related or not.

2. Intergovernmental Panel on Climate Change (IPCC)

The GCC states have also engaged with other multilateral climate bodies such as the IPCC, the technical and scientific body that synthesises climate research and supports the work of the UNFCCC. Saudi Arabia, in particular, tries to exert influence by sending experts and authors from the ARAMCO company and by being heavily involved in the review process of the IPCC's work (2025, January). Saudi delegations attempt to reduce the scope of the IPCC's conclusions by demanding delays or causing setbacks (Delpedge, 2008), even though Riyadh abandoned its climate-sceptic stance in the 2010s. For instance, during negotiations for the IPCC's 6th report (2021-2022), the Saudi kingdom repeatedly hindered calls for a rapid phase-out of fossil fuels. The Saudis also insisted on removing the expression 'nationally determined contributions' (NDC) from the summary for decision-makers in the special report on the consequences of 1.5°C global warming. Considered too prescriptive as it was linked to the UNFCCC, it was replaced by the vaguer phrase 'mitigation ambitions expressed at the national level' (de Pryck, 2022). Saudi Arabia and other states seek to distinguish the IPCC's work from that of the COPs, thereby weakening the scientific basis on which the international community relies to act against global warming (Stam, 2019). Similarly, in February 2025, Saudi Arabia was singled out among

⁵³ See definition in the glossary.



the countries slowing down the IPCC's work following the failure of negotiations aimed at validating the publication schedule of upcoming climate status reports⁵⁴ (Goar, 2025).

Negotiations on a global treaty against plastic pollution

Negotiations for a global treaty against plastic pollution, which began in 2022, aim to establish a legally binding treaty based on a comprehensive approach covering the entire life cycle of plastics. **However, a division quickly emerged during the negotiating sessions between a coalition of 104 countries** - including EU states, as well as African and Latin American nations, that demanded binding reductions in plastic production and bans on harmful substances, **and oil-producing countries** such as Saudi Arabia, Russia and Iran. The latter group has systematically expressed a desire to focus solely on plastic waste management and recycling, deliberately excluding the plastic production phase from the treaty's scope. Led by Saudi Arabia, this coalition has frequently employed procedural delays and obstruction tactics during the COPs (Cassella, 2024). These divergence and tactics contributed to the failure of negotiations at the 5th session of the Intergovernmental Negotiating Committee⁵⁵ (INC) in South Korea at the end of 2024. The delegations were unable to agree on the treaty's final text, leading to the postponement of discussions to a later date (Cater & Cokelaere, 2024, December 1).

3. Non-climate multilateral bodies, such as the G20

More broadly, Saudi Arabia attempts to ensure that its interests, and indirectly the common interests of oil-producing countries, are considered in multilateral bodies not dedicated to climate issues, such as the G20⁵⁶. This group, which accounts for 80% of global carbon emissions, could be a key driver of climate action, but the divergence of interests and positions within it is preventing the development of a genuine common strategy to reduce emissions. The Saudi kingdom has already blocked texts favourable to climate action and has promoted the 'circular carbon economy' concept (Al Shehri et al., 2022), which emphasises CCUS rather than reducing emissions from fossil fuels. This approach is sometimes echoed by the United States or other states such as China and Russia, creating alliances of convenience to temper climate ambitions (2025, February).

⁵⁴ The IPCC aims to publish three documents before COP33 in 2028, so that they can inform the next 'Global Stocktake', the worldwide assessment of the actions taken by governments since the 2015 Paris agreements (Goar, 2025).

⁵⁵ The INC is the body set up in March 2022 by the United Nations Environment Assembly with a mandate to take forward the legally binding international agreement on plastic pollution, particularly in the marine environment (United Nations Environment Assembly, 2022, 7 March).

⁵⁶ The G20 is made up of Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, the United States, the EU and the African Union.

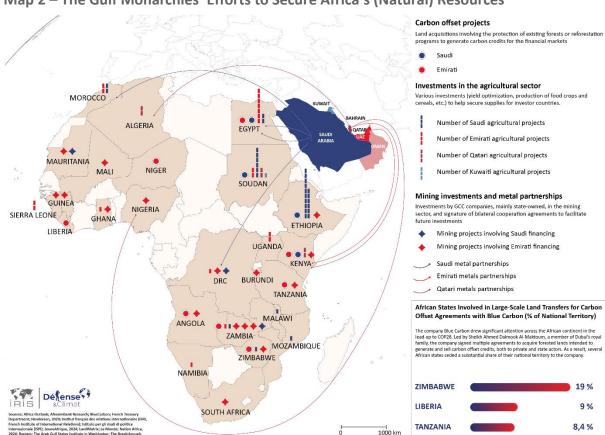


PART 3 CLIMATE ISSUES AT THE HEART OF THE GULF STATES' FOREIGN POLICY IN AFRICA



Alongside the multilateral arena, bilateral relations are another arena in which the Gulf monarchies exercise their climate diplomacy, particularly through targeted partnerships. This is particularly true of the cooperation established with several African states, which offers GCC countries the opportunity to outsource part of their response to climate challenges.

A – Between bilateral cooperation and securing resources



Map 2 – The Gulf Monarchies' Efforts to Secure Africa's (Natural) Resources

Since the early 2000s, the involvement of the GCC states - primarly the UAE, Saudi Arabia and Qatar – in Africa has grown stronger. This engagement on the continent is evolving and multidimensional. It has a religious dimension, particularly through programmes that enable the deployment and funding of Muslim charitable organizations (Bagayoko, 2024). It also has political and diplomatic dimensions, forming part of a broader strategy to increase their influence on the continent. Over the past decade, for example, Qatar and the UAE have doubled the number of their embassies in Africa (Kozlowski, 2024). This involvement is also driven by concerns about food and water security, as well as politico-military issues, especially since 2011 (Bagayoko, 2024). Lastly, it has an economic dimension, aligned with efforts toward



economic diversification. Between 2012 and 2022, the UAE became the fourth-largest foreign investor in Africa, after China, the European Union and the United States (Kozlowski, 2024). This presence is mainly expressed through investments made by GCC states in various African countries. In this regard, their direct investments on the continent exceeded \$100 dollars between 2012 and 2022 (Koné, 2024). These investments contribute, for example, to the development of energy infrastructure – whether oil, gas, or renewable – as well as civil port infrastructure projects, such as those carried out by DP World, or even military ones.

Climate issues also play a key role in relations between GCC states and the African continent. This growing cooperation is first reflected in multilateral climate forums, such as the COPs. Indeed, these states occasionally align to advance shared interests, enabling them to defend common positions – such as the promotion of fossil fuels – particularly within coalitions such as the LMDC (see Part II). These states also share environmental issues, such as desertification and water stress, which also foster a form of environmental diplomacy.

This increased cooperation on climate issues is also evident in bilateral relations. Gulf states' development aid to African countries is increasingly directed toward environmental issues, through the funding of climate mitigation or adaptation projects (Zumbraegel & Sons, 2025). Mitigation projects are often financed through state-owned financial institutions or companies controlled by sovereign wealth funds, such as ACWA Power (Saudi Arabia), Masdar Clean Energy (USA), or Nebras Power (Qatar). This 'greening' of development aid also takes shape through adaptation initiatives, notably *via* a 'climate risk diplomacy' approach (Zumbraëgel, 2025, p. 12). To this end, the UAE contributed \$100 to the Loss and Damage Fund⁵⁷ (Boitel, 2023). In 2019, it also provided emergency financial aid to Mozambique, Zimbabwe and Malawi following Cyclone Idai (Reliefweb, 2019). Saudi Arabia, through its Public Investment Fund⁵⁸, delivered substantial financial and humanitarian aid *via* its emergency relief programmes in Mozambique and Tunisia, as well as loans for reforestation programmes in Burundi and Eritrea (Zumbraëgel & Sons, 2025).

Some GCC states are also developing a form of 'disaster diplomacy'⁵⁹ by deploying their armed forces for humanitarian assistance and disaster relief (HADR) operations. Qatar, which has reiterated the importance of preparing its armies for natural disasters (International Peace Institute, 2010), supported Libya following the 2023 floods (Qatar Fund, 2023). The

⁵⁷ In 2022, at COP27 in Sharm El-Sheikh, Egypt, a 'loss and damage' fund was created to compensate for the irreversible damage already caused by climate change in the most vulnerable countries. This fund will enable these countries to access financing to deal with both slow-onset and extreme phenomena. At COP28, the 200 million dollars needed to capitalise the fund were raised, in particular by the USA and Germany, which pledged 100 million dollars.

⁵⁸ The Saudi Arabian Public Investment Fund (PIF) is the sovereign wealth fund of the Kingdom of Saudi Arabia.

⁵⁹ Disaster diplomacy refers to the expansion of soft power by certain states to other states and their populations in the context of extreme climatic events (de Guglielmo Weber et *al.*, 2024).



Kuwaiti army also participated in HADR operations, notably in Sudan in 2013, delivering food, medical supplies, and construction materials via an air bridge to flood victims (Unipath, 2014).

However, like other foreign actors present on the continent, the presence of the Gulf monarchies in Africa reveals a form of ambivalence. This cooperation offers the GCC states a means to structure part of their national response to climate change. By leveraging the resources available on the African continent, the GCC states partially externalize the core components of their climate strategies, particularly their mitigation and adaptation efforts. In terms of mitigation efforts, the GCC States are investing in the mining sector, partly to secure the materials essential to the development of renewable energies. As part of their decarbonisation goals, Gulf monarchies are acquiring land to convert it into carbon credits⁶⁰ (see below, p.51), in a form of 'green grabbing' (Caramel, 2024). Finally, in terms of climate adaptation, these states are securing access to food resources through the acquisition of agricultural land. However, such land acquisitions are often opaque and raise ethical questions (Le Bihan, 2022). In this context, many analyses refer to the concept of 'land grabbing' to describe the land acquisition dynamics implemented by the GCC states. Although the term is not new, it has seen a resurgence since the early 2000s (Cochrane & Amery, 2017; Margulis, 2013). Moreover, while 'green grabbing' is not yet a scientifically established concept, it nevertheless serves to describe a new, specific form of land grabbing. Here, we define it based on the work of Cochrane and Amery (2017) and IPES-Food (2024) as a process of large-scale land acquisition or leasing by foreign players, whose legitimacy is contested, with the aim of converting that land into carbon credits. The following sections present three case studies focused on land acquisition dynamics.

B - The UAE's mining strategy: reflecting the ambitions of GCC countries in Africa

Africa's mineral wealth continues to attract the interest of many countries, including China, Russia, Japan and the EU member states, which are also resorting to land grabs. **To a lesser extent, the GCC countries – and especially the UAE - have incorporated these resources into their climate diplomacy** particularly in connection with renewable energy ambitions and broader economic diversification strategies. This is reflected in supply strategies and, at times,

⁶⁰ Carbon credits correspond to a reduction in greenhouse gas emissions by a given player, which can then be traded, in the form of credits, to enable players who find it more difficult to reduce their emissions to achieve their climate objectives. These credits may be the result of emissions that have been reduced or, as in the case of carbon grab processes, of emissions avoided through protection against deforestation. These credits can be traded within two main frameworks: the Clean Development Mechanism, set up under the Kyoto Protocol to enable countries to meet their commitments, and voluntary markets, which are much less regulated (Lovell & Liverman, 2010). See definition in the glossary.



in resource appropriation strategies implemented through a range of political, military, and economic levers.

The economic diversification efforts of the GCC countries, including the UAE, have increased their interest in securing access to minerals and metals⁶¹. These minerals are essential to the development of strategic industries, such as the defence and the energy transition (Procopio & Čok, 2024). This need is exacerbated by the Arabian Peninsula's limited mineral reserves—particularly for smaller countries like the UAE. Moreover, successful diversification is seen as crucial for maintaining high living standards and low taxation, key pillars of political stability in these rentier states (see Part One). Within the GCC, the UAE is currently best positioned to exploit Africa's mineral resources. However, its model – and the intra-regional competition it sparks - may encourage other Gulf states to follow suit or expand their mining investments on the continent.

The UAE's mining strategy is also closely linked to its broader ambition to assert itself as both a regional and global power. This ambition includes cooperation major international players, such as the United States, China and France (Samaan, 2022). Regionally, this assertion of influence has been partially driven by the desire to preserve the traditional monarchical system. The UAE's increased engagement in Africa followed the Arab Spring of 2010, during which democratic uprisings in Tunisia, Egypt, Libya, and Sudan were perceived as threatening. Abu Dhabi feared a domino effect, particularly the empowerment of Islamist groups, such as the Muslim Brotherhood, with whom the Emirati government has had tense relations—especially with its local affiliate, Al Islah⁶². In this regard, extending Emirati influence across Africa — by extracting and controlling mineral resources and supporting existing regimes has become a key tool for reinforcing domestic and regional political stability (Samaan, 2021)

The UAE's mining strategy closely links metals supply and military power, pursuing two objectives: securing its mining investments and expanding its geopolitical influence, particularly in unstable areas (Ardemagni, 2024, 6 May). Its investments focus on minerals critical to the energy transition and defense industries, including lithium, nickel, copper, bauxite, gold, and diamonds (Procopio & Čok, 2024). In several African countries where it has

⁶¹ Ore is the rock or mineral from which the metal can be extracted by refining. Iron is extracted from ores such as haematite or magnetite; aluminium is mainly extracted from bauxite. The UAE has several refining plants, including Al Taweelah (Emirates Global Aluminium), Ruwais (Abu Dhabi National Oil Company) and the Dubai Multi Commodities Centre (DMCC). ⁶² The presence of the Muslim Brotherhood in the Emirates dates to before the creation of the federation (1971), with arrivals from Egypt as far back as the 1950s. The relationship between the local branch, Al-Islah, and the Emirati government has at times been tense, but it deteriorated irreversibly in 2011, when many of the signatories of a petition calling for a parliament with legislative powers were identified as members of the organisation. Al-Islah has been considered a terrorist organisation by the UAE since 2014 (Orient XXI, 2014).



invested, **the UAE also deploys its armed forces**. These operations not only protect economic interests but also help to build military capacity and project Emirati power regionally.

To support its mining strategy, the Emirates has invested massively in transportation infrastructure (Ardemagni, 2023, 6 May). Since the 2000s, Dubai-based DP World and Abu Dhabi-based AD Ports have established a robust logistical network along the African coastline (The Guardian, 2024). Backed by the royal families of the UAE's wealthiest emirates, these companies now operate in North Africa (Algeria and Egypt), West Africa (Angola, Congo, Democratic Republic of Congo, Guinea, Senegal), East and Southern Africa (Kenya, Mozambique, Tanzania), and the Red Sea (notably Puntland and Somaliland). This strategic port network facilitates land access, mineral extraction, and military deployment, allowing the UAE to secure raw material transport and control vital supply chains (Mahjoub, 2025). To counter terrorism and piracy – threats to Emirati shipping – the UAE often supports local regimes through military cooperation, bolstering these states' territorial control and protecting Emirati commercial interests.

Alongside its support for partner states, the UAE has also faced accusations of backing non-state armed groups (Ardemagni, 2024, 6 May). Although the Emirati authorities deny these claims, the country has been criticized for its alleged involvement in conflicts in Libya, Ethiopia, and Sudan through the supply of arms and other military support to armed factions. In Sudan, for example, the UAE has been accused of supporting the Rapid Support Forces (RSF), particularly through arms deliveries. This support may be aimed at securing control over gold mining operations in RSF-controlled regions such as Darfur. This alignment directly serves the UAE's economic interests, enabling it to access critical mineral resources through local partnerships in fragile states. The UAE is currently the world's second largest gold importer and the leading destination for African gold exports, sourcing significant volumes from countries such as Rwanda and Uganda (Mahjoub, 2025)⁶³. However, much of this trade reportedly takes place outside official channels. There is a notable discrepancy between the gold volumes declared for import by the UAE and those reported as exported by several African countries (Reuters Graphics), suggesting the existence of informal or illicit flows, potentially involving networks linked to non-state actors.

The UAE's presence in Africa blends investment, military power and political influence. Its economic interests, especially in the mining sector, are backed by military operations that encompass both training and combat roles. The proliferation of ports operated by DP World and AD Ports ensure the secure movement of goods while consolidating Emirati penetration

⁶³ This situation is explained by the illicit transport of more than 90% of the DRC's gold to neighboring countries, including Rwanda and Uganda, before being exported (U.S. Department of the Treasury, 2022).



of the continent. Through support for stable regimes or proxy alliances with armed groups, the UAE promotes political models aligned with its rentier state structure—regimes that are unlikely to challenge its geopolitical or economic order.

A growing involvement of the UAE in Africa, linked to an expanded Emirati military presence on the continent

Historically present in the Horn of Africa since the 1990s, the UAE has, in recent years, sought to expand its influence across the rest of the African continent.

The Emirati armed forces began to develop in the 1990s through the integration of the various federal military branches and the acquisition of sophisticated weapons and military equipment, following a trajectory like other GCC states in the aftermath of the Gulf War. This military buildup made it possible to embed the armed forces into the country's defense strategy and to position them as a tool to 'exert greater influence on regional dynamics' (Gervais, 2013). The 2010s marked a diversification and deepening of the UAE's strategic partnerships with France (2008), India (2017) and Israel (2020), while maintaining a balance between China and the United States, as well as the creation of a military command structure within the GCC in 2013 (Clément, 2022). At the same time, the UAE developed its national defence industry, notably through the creation of the EDGE group in 2019, rapidly ranked among the world's largest arms companies and the first in the Middle East (SIPRI, 2020), and through technology transfers with foreign partners from France (Naval Group, 2024) and Turkey (Ali, 2025).

This military empowerment has enabled the UAE to expand into West Africa, which is strategically important for oil trade and the country's food supply. The African continent also offers the Emirates an opportunity to counter Turkish influence and to explore partnerships with China as part of the Belt and Road Initiative, notably through Emirati port investments (Clément, 2022).

To extend their influence beyond the Horn of Africa, the UAE opened embassies in Angola, Chad, Ghana, Mozambique, Rwanda, and Zimbabwe in 2017 and 2018. Complementing this diplomatic presence, the UAE has signed several cooperation agreements with African states⁶⁴ since 2016 and has been providing military training to several of them⁶⁵ since the 2010s (Ardemagni, 2024, 6 May). To deepen defense and security relations in Africa, the UAE also exports weapons and military equipment. Emirati defense firms thus play an active role in the country's diplomacy: in the past two years, the Emirati company Calidus has exported MCAV-20 armored vehicles to Ethiopia (Kenyette, 2024), the DRC (Binnie, 2023), and Mozambique (Martin, 2025). Additionally, it has been reported that between June and September 2023, over one hundred flights from the UAE to Chad may have been used to transfer weapons to Sudan's Rapid Support Forces (RSF), under the guise of humanitarian missions (Olech, 2024).

⁶⁴ Along with Somalia, Le Punt - an autonomous region in north-eastern Somalia also known as Puntland, Ethiopia, Chad, Mauritania, Mali, Senegal, Kenya and Mozambique.

⁶⁵ In Somalia, Puntland, Somaliland, Ethiopia, Chad, Mauritania, Mali and Morocco.



Beyond military diplomacy and capacity-building cooperation, the UAE occasionally deploys expeditionary forces. It took part in NATO's Operation Unified Protector in Libya in 2011, deploying twelve fighter jets – six Mirage 2000-9s and six F-16s – and participated in airstrikes on ground targets (Lake, 2011). Similarly, in Somalia, the USA has been active since the UN's humanitarian and peacekeeping operations in 1993-1994 and has supported the Puntland Maritime Police Force since 2010. Since at least the summer of 2023, the UAE has conducted drone strikes in Jubaland in support of the regional authorities (Levy, 2024), maintaining relations with them as well as with the central government in Mogadishu.

When force projection is sustained over time, the UAE also establishes military bases in Africa. These are often based on a flexible system of forward operating posts, used temporarily, and distinct from the traditional military base system⁶⁶ (Ardemagni, 2024, 6 May).

The projection of Emirati military power thus reflects a geographical expansion – from its historical foothold in the Horn of Africa to the rest of the continent. The various military cooperation initiatives led by the UAE illustrate the growing power of its armed forces, enabling it to support its strategic and economic ambitions in Africa.

C - Externalisation of food security from Gulf States

Since the 1980s, population growth, combined with a specific development model, an arid climate and the aggravating effects of climate change, has undermined the food security of GCC States. In response to these vulnerabilities, they have developed strategies to increase their food resilience, particularly through partnerships with African countries, enabling them to import foodstuffs - mainly wheat, barley, and rice (Brun, 2019). As a result, the GCC is heavily dependent on food imports: 90% for Qatar (Baker, 2012), 85% for the UAE (Kozlowski, 2024) and 80% for Saudi Arabia (Dargin, 2023).

While supply issues have existed for decades, the global food price crisis of 2008 highlighted the GCC states' vulnerability due to their dependence on markets. The cost of agricultural and food imports for the UAE, Saudi Arabia and Qatar rose from \$15 billion to \$22 billion between 2007 and 2008 (Brun, 2019), partly due to the decision by 25% of the major exporting countries to restrict their international exports (Pirani, 2016). Faced with new pressures on agricultural goods linked to climate change, this situation prompted the GCC states to adopt strategies aimed at reducing their dependence on imports by enhancing food security.

⁶⁶ In Libya, Egypt, Eritrea, Somaliland, Puntland, Somalia and Chad.



Since 2008, the Gulf monarchies have implemented land acquisition strategies abroad, becoming agricultural producers outside their national territories (Brun, 2019). These land investments allowed them to gain direct ownership of arable land via sovereign wealth funds and through public or private companies close to ruling families. This ensures greater control over the entire supply chain – from production to transport – through firms like DP World. For instance, Abu Dhabi owns land in Nigeria, Namibia, Morocco, Ghana and Sudan (Kozlowski, 2024). To access these lands, some GCC states rely in part on clientelist systems (Samaan, 2021), sometimes conditioning investments on the alignment of African heads of state and local elites with their interests (Kozlowski, 2024), as illustrated by the UAE's support for authorities in Libya, Chad, Mauritania and Sudan.

The countries of the Horn of Africa are among the GCC's preferred destinations for outsourced food security strategies. This region's geographical proximity to the Arabian Peninsula, coupled with the abundance of arable land – particularly irrigated by the Nile – makes it especially attractive. In addition, the institutional and political characteristics of the region, such as weak legal framework regulating land acquisition or political and economic instability, contribute – deliberately or not – to facilitating land acquisition by foreign players. For example, 9% of South Sudan's total surface area was allocated to domestic or foreign agricultural investors in the years preceding its independence (Schwartzstein, 2024). To farm Sudanese land, Gulf countries rely on investment funds and agribusinesses: Jenaan Investment and Al Dahra for the UAE, the Qatar Investment Authority and Hassad Food for Qatar, and the Saudi consortium Jannat Agriculture Investment Company for Saudi Arabia (Brun, 2019).

According to the Land Matrix Initiative (LMI)⁶⁷, Sudan - where foreign investment in food security dates to the 1970s (Rinaldi, 2024) - has been a primary recipient of capital from Gulf countries (Le Bihan, 2022). In 2016, the Emirates were farming more than 500,000 hectares in Sudan, Qatar 100,000 ha and Saudi Arabia 30,000 ha (Diop, 2016). Bahrain and Kuwait also hold land there, though to a lesser extent. The land grab in Sudan is part of the competition between the UAE and Saudi Arabia. Ethiopia is also a key target for foreign agro-investments, thanks in part to its government's support for land transfers (Brun, 2019). Saudi acquisitions in Ethiopia – mainly through the consortium Development Research and Overseas Commerce (Midroc) – grew significantly from the late 2010s (Brun, 2019).

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⁶⁷ The Land Matrix Initiative (LMI) is a collaborative and independent database of international data on land acquisition. It was created in 2009 to address the lack of reliable data on large-scale land acquisitions, particularly in developing countries. The main objective of the LMI is to promote transparency and accountability in decisions relating to large-scale land acquisitions, by collecting and sharing data on these transactions *via* an open-access online platform. Since 2012, the LMI has recorded 1,785 completed transactions, covering more than 50 million hectares of land.



This land grabbing has considerable impacts on local populations. According to the LMI, Sudan ranks among the worst countries in terms of compliance with the Voluntary Guidelines on the Responsible Governance of Tenure of Land⁶⁸ adopted by the UN Committee on World Food Security (CIRAD, 2022). Land transfer contracts are often negotiated without adequate consultation with local communities, and compensation is generally inadequate or nonexistent for displaced populations (Le Bihan, 2022). These acquisitions in Sudan threaten the livelihoods of local populations – particularly nomadic pastoralists and small farmers – who are marginalised by major agro-industrial projects (Shazali, 1999). Their food security is also impacted, as subsistence agriculture land is increasingly absorbed by these projects. This poses a major risk in countries like Sudan, where 5.6 million people are already facing food crisis levels (UNICEF, 2024). In such a context, large-scale land acquisitions can seem paradoxical, especially since the UAE donated \$70 million to UN agencies to help mitigate the humanitarian crisis in Sudan (Courrier international, 2024). Finally, the outsourcing of food security by some countries has security implications for the recipient countries. The UAE, for instance, is accused of supporting the Rapid Support Forces (RSF) in Sudan's civil war against the Sudanese Armed Forces (SAF) by supplying weapons (see box p. 47), thereby fuelling violence against the population⁶⁹, with the goal of protecting mining (gold) and food investments (Rinaldi, 2024). The GCC states are not the only ones using food-security outsourcing strategies in Africa, other global powers have adopted similar approaches (Cochrane & Amery, 2017).

D - GCC countries' mitigation strategies in Africa: carbon offsetting, a new wave of green grabbing

Far from being the sole or even the main actors in the emerging "green grabbing" dynamic (Lyons & Westoby, 2014; IPES-Food, 2024), the Gulf monarchies nevertheless play a key role in the development of this sector. This dynamic is part of their broader strategies to continue exploiting fossil fuels while leveraging mechanisms negotiated under the UNFCCC – such as carbon credits – to underline their efforts towards carbon neutrality and thus enhance their image as climate-responsible states. The goal is to **exploit a portion of African land resources**

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⁶⁸ The Voluntary Guidelines on Tenure, officially endorsed in May 2012 by the Committee on World Food Security (CFS), aim to promote responsible governance of tenure arrangements for land, fisheries and forests, considering all forms of tenure: public, private, community, indigenous, customary and informal. Since then, implementation of the Guidelines has been encouraged by the G20, Rio+20, the United Nations General Assembly and the Assembly of French-speaking Parliamentarians. ⁶⁹ The Sudanese civil war, which has been going on since 2023, pits two rival military factions against each other, led by the two men behind the October 2021 putsch. On the one hand, the Sudanese Armed Forces (SAF), led by General Abdel Fattah al-Burhan, and on the other, the Rapid Support Forces (RSF) of General Mohammed Hamdan Daglo, known as 'Hemetti'. This war resulted in the deaths of around 28,000 people and the displacement of 11 million Sudanese.



to support the decarbonization of public and private actors who, by purchasing carbon credits, can offset their emissions (Ramachandran et al, 2024). Moreover, these strategies represent a major diversification challenge for the Gulf monarchies and a means of securing revenue from the environmental economy (Greenfield & Tondo, 2023).

To support the **development of these new financial assets**, the Gulf monarchies have been closely involved in establishing the Africa Carbon Market Initiative (ACMI)⁷⁰, presenting themselves both as reliable potential buyers⁷¹ while also investing directly in the initiative. One member of ACMI's steering committee is the Saudi businesswoman Riham El Gizy, who heads the Regional Voluntary Carbon Market Company (RVCMC). The Gulf monarchies are **actively negotiating bilateral agreements with many African states to secure access to carbon credits** – often at prices unfavorable to the host countries (Lidigu, 2024). The evenue-sharing arrangements between companies and African states – comparable to oil royalties – are often criticised for being heavily skewed in favor of the Arab monarchies (Ramachandran et *al.*, 2024). The debt crisis that followed the COVID-19 pandemic has left many African states financially drained, making the promises of economic spin-offs from these contracts even more attractive (Hanieh, 2024). Finally, local populations, who are rarely consulted, are the first victims of these 'predatory' strategies⁷² (Dooley et *al.*, 2022; Marshall, 2023).

The case of **Blue Carbon**, an Emirati company led by a member of Dubai's royal family (Greenfield & Tondo, 2023), is arguably the most striking example of this **new form of green grabbing**. Clearly framed within Article 6 of the Paris Agreement⁷³ (Blue Carbon, 2024), the company seeks to acquire and preserve forests land to generate carbon credits. Beyond the inexperience of its leader's in forest management, **the company has been criticised for its aggressive strategies⁷⁴** and lack of consideration for local populations (Pearce, 2023). Far from

⁷⁰ Many other players are involved in the development of these institutions, including private (the Rockefeller Foundation, Jeff Bezos's Earth Fund, etc.) and public (USAID) funding foundations, as well as numerous international carbon market companies such as the American firm Verra and its Norwegian namesake Green Resources.

⁷¹ At the African Climate Summit in Nairobi in September 2023, a group of Emirati energy and financial companies (UAE Carbon Alliance) pledged to acquire nearly \$450 million worth of carbon credits over the next six years.

⁷² In Kenya, following negotiations with Saudi and Emirati delegations over land acquisitions for carbon offset projects, the Ogiek indigenous community was illegally expropriated from its ancestral lands in the Mau Forest (Marshall, 2023).

⁷³ Article 6 of the Paris Agreement establishes a cooperation mechanism between Parties in pursuit of their Nationally Determined Contributions (NDCs). Concretely, it enables the exchange of carbon credits, under the control of an *ad hoc* supervisory body. The aim is to hel^p reach global greenhouse gas reduction targets by formalizing the transfer of 'surplus' emissions reductions

⁷⁴ In the case of the contract signed with Liberia, the Emirati company will retain 70% of the revenue from the sale of carbon credits. In addition, the government is obliged to prohibit any project on the land transferred for a period of thirty years (Pearce, 2023).



promoting effective strategies to combat climate change⁷⁵ (Greenfield, 2023), these dynamics resemble what some have called 'carbon neo-colonialism' (Mwangi, 2023).

In conclusion, the GCC countries – particularly the UAE – are increasingly investing across the African continent to externalize part of their climate responses, notably in the mining and agricultural sectors. These engagements, tied to broader national strategies of influence and military projection, simultaneously promote the Gulf states' mitigation efforts through carbon offset mechanisms in the fight against climate change.

⁷⁵ A recent study found that 90% of the carbon credits issued by Verra – the leading carbon certification company – are ultimately worthless, providing no real benefits for climate action. A key issue is the overestimation of deforestation risks, which inflates the number of emissions supposedly avoided—and thus the number of carbon credits issued (Greenfield, 2023). Moreover, the incompatibility of the carbon credit sector with other land uses has been highlighted by the LandGap Report, which notes that the total area covered by such commitments is now equivalent to all cultivated land worldwide.



PART 4 FORESIGHT SCENARIOS AND RECOMMANDATIONS



Scenario 1: 2042 – Loss of French influence in the UAE after a devastating cyclone

In June 2042, a violent cyclone hit the UAE, paralysing transport and communications infrastructures. China offered swift and effective aid, outpacinf France, whose military bases suffer significant damage and whose humanitarian response is delayed. The event prompted the UAE to reassess its strategic and military partnerships. The climatic resilience of French bases was called into question, requiring greater responsiveness to crises and international competition.

In 2042, the Arabian has experienced a temperature increase of more than 2.5°C above preindustrial levels (based on IPCC SSP5-8-5), with temperature peaks reaching 55°C in some inland areas. For decades, the population has been forced to live in air-conditioned environments, but the heat is now claiming the lives of many vulnerable individuals. Episodes of wet-bulb temperatures⁷⁶ reaching 35°C have been recorded in Saudi Arabia, Oman and the UAE. Climate change is also intensifying extreme weather events, such as heavy rainfall and tropical cyclones. These hazards exacerbate the vulnerability of critical infrastructure⁷⁷, and cities such as Manama, Dubai and Kuwait City now face frequent water cuts and rationing. Despite these challenges, governments have failed to adapt their economic and social systems, clinging instead to a fragile status quo aimed at maintaining domestic stability and preserving relationships with international partners. Supposedly 'sustainable' cities like Abu Dhabi, NEOM and Doha have become high-tech climate-controlled enclaves, heavily reliant on technology and highly vulnerable to extreme weather and overload infrastructure. Since the 1970s, widespread urban development has rendered the soil impermeable, despite advanced drainage systems implemented in the UAE during the 2020s. Meanwhile, the growing influence of China, India and Turkey in the region is accentuating tensions with Western countries. This rivalry is especially visible around maritime routes, critical logistical infrastructure, and energy partnerships.

In June 2042, a violent cyclone strikes the eastern coast of the Arabian Peninsula, causing catastrophic flooding in Dubai, Abu Dhabi and Sharjah. Energy, desalination, port and airport infrastructures are rendered inoperable, paralysing communications, logistics and economic activities. Major arteries such as the Sheikh Zayed Road are submerged, disrupting all ground transport. Thousands of homes are without water and electricity – a critical danger given daily temperatures around 40°C. Dozens of deaths are reported, with serious losses expected in migrant worker housing areas. In Sharjah, stagnant contaminated water raises

 $^{^{76}}$ Maximum temperature that the human body can with stand. See definition in the glossary.

⁷⁷ See definition in the glossary.



serious public health concerns. Overwhelmed by the magnitude of the disaster and hampered by ineffective crisis management plans, Emirati authorities issue an international call for assistance. France, whose military presence in the UAE dates back to 2009 and which has strong bilateral relations across political, economic, cultural, and defense domains, is especially expected to respond. However, French military installations are severely impacted: Zayed port and Al-Dhafra air base, suffer significant damage. The operations tower lost power, runways are blocked, and the French A400M transport aircraft cannot land to deliver equipment and essential goods. Electrical grid failures shut down parts of the French military complex, halting some cooling systems – raising concerns about the troops' ability to operate in extreme heat. Despite these difficulties, the French government insists on a military response to assert France's role in the region and supports its diplomatic and military ambitions in Asia. French engineering units⁷⁸, medical and logistical equipment – including three mobile water purification units (MALTEM), and all-terrain vehicles from French forces in Djibouti – are dispatched aboard an amphibious helicopter carrier (PHA), to restore base operations. After three days of repairs, French forces announced their readiness to participate in the international aid effort.

However, French humanitarian action takes place in an increasingly competitive international environment. China, which had developed a strategic presence in the humanitarian field – especially via its facilities in Gwadar (Pakistan) and Djibouti – swiftly offers large-scale assistance and coordinates international support. Beijing rapidly deploys two hospital ships, logistics drones, mobile desalination units, and satellite support for communication restoration, even assisting with the recovery of Al-Dhafra Air Base. India also provides timely and effective relief efforts. This competition extends into the informational battle, with each power trying to highlight its commitment to local populations and on the international stage. Chinese actors, often via indirect channels and social media, attempt to discredit France's response, highlighting military shortcomings. In the Emirates, the government's failure to anticipate and organise a rapid, coordinated crisis response undermines its credibility. Federal President Khaled ben Zayed considers a reassessment of strategic alliances, expressing interest in diversifying partnerships to ensure national security. In this respect, China offers to formalize a formalised joint exercise with Asian countries on the theme of military emergency response. Meanwhile, the death of five Qataris nationals in Dubai due to the flooding reignites tensions between the UAE and Qatar. Doha accuses the Emirati government of mismanagement and negligence.

⁷⁸ See definition in the glossary.



The cyclone has severely tested the climatic resilience of France naval and air bases. A floating or disaster-resistant naval base could have better protected France's military assets and improved operational reactivity in response to Emirati requests. The loss of air conditioning in some areas also prevented soldier deployment during extreme heat, raising questions about the French military's energy capabilities to sustain base operations in a high-temperature environment. A lack of anticipation compromised military readiness and slowed the humanitarian response. Furthermore, China's swift and technologically advanced response highlights France's relative lag in crisis deployment. French forces also struggled with competition from other powers – particularly China and India – in the realm of soft power projection through emergency aid. China's information operations, aiming to undermine France's image, went unchallenged due to insufficient preparation and poor crisis communication coordination. Ultimately, China demonstrated clear military, operational and technological superiority, significantly expanding its regional influence and contributing to France's declining legitimacy in the Gulf.

Scenario 2: 2035 – French support for the UAE against the resurgence of Islamist terrorism in West Africa

In the 2030s, terrorist armed groups increasingly capitalized on local resentment stemming from carbon offsetting projects, which involved the privatization of vast forested areas in Africa. As leaders in this sector, the USA became the target of several attacks, notably in Conakry and Ghana. Under the bilateral defense agreement between France and the UAE, French armed forces were called upon to assist – amid a tense context in which the risk of political manipulation of their involvement was high.

By 2035, the climate and security situation in West Africa has deteriorated significantly. Greenhouse gas emissions continued to follow the IPCC's most pessimistic scenario (SSP 5-8.5), while renewable energy development remained insufficient to be scaled continent-wide. Meanwhile, oil-producing states – chiefly Saudi Arabia – exerted increasing influence in global climate negotiations, resulting in weakened international climate ambitions. Emissions mitigation strategies now relied heavily on carbon capture and offsetting mechanisms. Many African and South Asian countries became increasingly critical of the Gulf monarchies' aggressive investment strategies, which often amounted to resource appropriation, but their voices are struggling to be heard. The surge in land privatization to generate high-value carbon credits – used by countries to meet their climate targets – sparked widespread opposition, particularly in Gulf of Guinea nations where dense forests attracted global investors. Pastoral communities and vulnerable indigenous populations,



already forced to migrate due to changing transhumance routes, are opposed to these privatisation projects, resisted these land grabs that severely hindered their climate adaptation efforts and undermined their land rights. At the same time, **terrorist groups affiliated to Al-Qaeda and the Islamic State gained ground**, exploiting both political instability climate insecurity. Intercommunal tensions and a pervasive sense of abandonment by national governments created fertile ground for recruitment.

On the morning of 25 October 2035, a bombing at the UAE embassy in killed twenty-three people, including two security guards and one Emirati official, and injured 47 others. A few hours later, an armed group attacked a UAE-owned company facility in Wa, northwestern Ghana, taking four hostages, three of whom were Emirati nationals. The Sahel branch of the Islamic State in the Great Sahara quickly claimed responsibility for both incidents. A video broadcast by Wilaya al-Sahil, operating in southern Burkina Faso, accused foreign powers of plundering African resources and called upon local populations to join the jihadist cause against foreign oppression. Undeniably targeted by this attack, the UAE denounced terrorism and urged unity in the fight against Islamist terrorism. At the same time, it moved swiftly to bolster its security posture in a region now central to climatic, economic and geopolitical strategy. Emirati forces were deployed to secure its embassies in Ghana and Côte d'Ivoire. Additionally, an emergency counter-terrorism mission was launched from an advanced base near Yamoussoukro, whose existence had previously been undisclosed. This revelation triggered strong opposition from several Gulf of Guinea countries and was heavily exploited by jihadist groups to denounce Emirati interference in Africa. In parallel, the UAE formally requested French military support under Article 4 of their bilateral Defence Agreement, invoking France's counterterrorism experience and continued military presence at its Abidjan base.

For France, the situation is complex: it had to uphold its strategic military partnership with the UAE while navigating a region where diplomatic relations with African states had become increasingly fragile. The French Ministry for the Armed Forces opened talks with Côte d'Ivoire to authorize the deployment of special forces and intelligence assets from the now Ivorian-controlled Abidjan base. In this tense geopolitical climate, rival powers sought to undermine France's involvement in the Emirati-led intervention. Disinformation campaigns surged on social networks, targeting both French and Emirati operations. In response, French and Emirati forces implemented a robust STRATCOM (strategic communications) campaign to counter hostile narratives. The French Ministry of Europe and Foreign Affairs also issued a statement reaffirming France's commitment to the sovereignty of the region's states, local development and the fight against terrorism. Meanwhile, China's growing military presence intensified competition over influence with Ivorian authorities. Anticipating heightened



scrutiny during the upcoming COP, France reiterated its position that climate action must not come at the expense of vulnerable populations or human rights. It called for increased transparency in carbon credit mechanisms and urged for the fair inclusion of affected communities in governance and negotiations.

This crisis severely tested French diplomacy and its military posture in a region where its presence remains subject to frequent controversy and manipulation. Criticism mounted over the perceived decline of France's and the EU's climate ambition, especially from African states. During the COP negociations, a broad coalition of African countries condemned both industrialized nations and Gulf monarchies, accusing them of shifting the climate burden onto Africa. Considering growing regional hostility, Côte d'Ivoire initiated a national deliberation process to assess whether to maintain or terminate its military agreement with France. Given Beijing's close ties to Ivorian authorities, there is a tangible risk that foreign interference could sway this decision, potentially resulting in the cancellation of the France—Côte d'Ivoire defense partnership.

Scenario 3: 2038 – Escalating tensions in the Persian Gulf following the attack on desalination plants in the UAE.

By 2038, the growing dependence of GCC countries on desalination plants has exposed the vulnerability of their water supply systems. In July, several such facilities came under attack, prompting internal and regional sociopolitical tensions in the UAE. The French Forces in the UAE (FUAE) sought to support the Emirati response to ensure access to water, prevent the outbreak of conflict in the Gulf, and secure water supplies for their own troops.

In 2038, the average annual temperature in the UAE reached 29.44C, an increase of 1.69°C compared to the early 20th century (based on IPCC SSP5-8.5). Despite the slight increase in rainfall, water resources dwindled to 12m³ per capita, compared with 16m³ in 2021. In Abu Dhabi, efforts to rationalise water consumption – then averaging 500 litres per person per day – failed to offset growing demand driven by demographic growth with the capital reaching 2.2 million residents. As a result, water stress intensified, as did the country's reliance on desalination from the Persian Gulf, which accounted for 50% of the UAE's total water supply and provided 100% of its potable water. Underground water sources were allocated for agriculture and green spaces. The year 2038 was marked by early heatwaves exceeding 50°C from the beginning of June. Air conditioning and water use spiked, while outdoor work was restricted or banned for several hours each day. Migrant construction workers faced extreme working conditions, compounded by rising unemployment due to these restrictions.



On the night of 13 to 14 July, at 01:37 a.m., an explosion struck Sas Al Nakhl island, damaging the Umm Al Nar combined-cycle thermal power plant. The resulting fire spread quickly to the adjacent Umm Al Nar desalination plant. Firefighters extinguished the blaze by 05:22 a.m., but the damage halted water production at the facility. From France, where they were attending Bastille Day celebrations, the President of the UAE and the Emir of Abu Dhabi issued a joint statement urging voluntary water rationing and seeking to reassure the population. However, an investigation was announced. Hours later, foreign workers began denouncing forced water cuts on social media. That same day, supermarket shelves were stripped of bottled water, and household consumption soared to 560 liters per person as people began stockpiling. At 6:00 p.m., the government imposes an official rationing limit of 300 liters per person per day, contradicting earlier statements. This drastic reduction in consumption should enable part of the stocks to be redirected to the capital to compensate for the suspension of production and preempt social unrest. Yet, accusations emerge regarding **unequal application** of water restrictions, particularly in Abu Dhabi's poorer neighborhoods. On 15 July, repair work begins at the Umm Al Nar plant, with exceptions granted to the heatexposure work ban. That same day, temperatures peak at 49.3°C, resulting in two worker deaths. Several prominent figures from different political backgrounds - including Islamist sympathisers and human rights activists - criticize the government's crisis management and call for greater public oversight. Rumours of political arrests spread. Several foreign organisations, both Islamist and humanitarian, expressed their support for the population. The Muslim Brotherhood in several countries calls on Emiratis to demand their rights.

In Paris, following his Bastille Day speech, the French President reaffirms the longstanding Franco-Emirati friendship and the commitment of FFEAU alongside UAE forces to uphold regional stability. That same day, the King of Saudi Arabia expresses his solidarity and offers assistance to ensure the water supply to Abu Dhabi. He alludes to the possibility of a foreign-backed criminal attack, and pledges to defend GCC water security alongside the UAE. On 15 July, a Saudi frigate and two corvettes are deployed to the Persian Gulf. Iran's Ministry of Foreign Affairs responds with concern over what it calls the 'threatening reinforcement of Saudi posture'. Riyadh, for its part, continues to implicitly accuse Iran of involvement in the fire. On July 17, Emirati authorities announce that during the night they had foiled a cyberattack targeting the Mirfa 2 desalination plant, operated by Veolia. Without naming a perpetrator, the UAE accuses a "hostile neighbor" and asserts readiness to retaliate militarily. Emirati forces formally notify France of their request to activate the defense agreement. Responding to the UAE's call, a U.S. aircraft carrier arrives in the Arabian Sea on July 18. The following day, China announces the deployment of a naval unit to safeguard maritime trade in the Gulf, fearing disruptions to hydrocarbon exports due to growing



instability. In response to water supply disruptions, French forces deploy two mobile desalination stations – provided by a Veolia group subsidiary – *via* two Airbus A400Ms. These units are installed at the FFEAU naval base, securing water access for both FFEAU command and the Indian Ocean Maritime Zone Command, while offering fallback options in case of breakdowns at Air Base 104 or Zayed Military City. Amid regional rising tensions, France bolsters its presence in the Persian Gulf through the European-led military operation "Dikaios" (Greek for "just"), aiming to ensure freedom of navigation and prevent escalation. Given the risk of prolonged water disruptions, France assumes command of Operation Dikaios from its base in Djibouti (FFDj), fearing deteriorating conditions at the Abu Dhabi naval base. Two French frigates are immediately dispatched to the Gulf.

Any disruption of water supply to one or both FFEAU bases would result in major logistical costs, or even a partial troop withdrawal. This could undermine France's airpower projection from Air Base 104 or force it to suspend army cooperation activities hosted at Zayed Military City. The threat of attacks on Emirati desalination plants—crucial to French forces' water supply—prompts the Ministry of Armed Forces to consider either relocating the command of the Indian Ocean maritime zone to Djibouti or deepening bilateral military relations with another player in the region, to develop a new naval base capable of hosting ALINDIEN (French Indian Ocean maritime zone commander). For their parti, the UAE expresses a strong desire to maintain the French military presence and warns that relocating ZMOI would send a negative signal, potentially prompting Abu Dhabi to strengthen defense ties with other powers that have already shown interest — notably Turkey and China.



Recommandations

1

Introduction of a climate side-event during strategic dialogues with the GCC state members

- Set up a side-event, as part of the strategic dialogues, on climate and defence issues, co-chaired by France and another GCC state.
- Identify and share best practices, in accordance with the guidelines of the Ministry of Defence's Climate and Defence Strategy, regarding the adaptation of soldiers and infrastructure to the physical consequences of climate change:
 - **Map climate risks**: identify the main common climate risks affecting France and the GCC States, such as rising temperatures, declining water resources, or sea level rise.
 - **Exchange best practice**: share each country's best practice responding to these challenges, to develop suitable and effective solutions.

2

Development of an operational partnership for training UAE Armed Forces for HADR operations

- **Share knowledge** on emergency relief operations and their impact on the armed forces in the context of climate change.
- Establish a partnership/program to train UAE armed forces, focused on anticipating extreme climate events and implementing the necessary adaptation measures for military personnel.



3

Adaptation of pre-positioned French forces in the UAE to climate change

- Conduct a detailed mapping of the main climatic risks (sandstorms, extreme temperatures, sea rise levels, etc.) affecting the FFUAE, based on an analysis of meteorological and climatic data.
- **Draw up foresight scenarios** to identify high-risk areas and climatic phenomena likely to impact on military operations and soldiers' safety in the region.
- Implement measures to strengthen French military infrastructures in the UAE against climate impacts (construction of resilient buildings, improvemed weather protection systems, etc.).
- Ensure the implementation of **sustainable** water **resource management** systems for French military bases in the USA.
- **Deploy advanced monitoring systems** to anticipate extreme climatic events in the region and to anticipate potential requests for assistance.

4

Develop a better understanding of security issues in Africa related to strategic supplies within the framework of the green transition

- Initiate an interministerial consultation involving the Ministry of Europe and Foreign Affairs, the Ministry of Ecological Transition and the Ministry of the Armed Forces, to analyse the challenges linked to strategic supply chains in Africa involving Gulf States within the ecological transition context.
- Assess the influence of this presence on regional stability and security dynamics, as well as the potential repercussions on French forces pre-positioned in Africa, particularly in terms of cooperation, competition or emerging threats.



GLOSSARY



Adaptation: societal and technical adjustment to climate change to mitigate its harmful effects, exploit its beneficial effects and, ultimately, guarantee the functional integrity of socio-political systems.

Mitigation: measures taken to reduce greenhouse gas emissions or strengthen carbon sinks, to limit the extent of climate change. Adaptation refers to actions taken to adjust to the current or predicted effects of climate change and mitigate its impact on societies and ecosystems.

Climate change: variations in the state of the climate observed since the end of the 20th century, attributed directly or indirectly to human activity, modifying the composition of the atmosphere. These variations result in the occurrence of specific, slow-onset hazards, which can have both environmental and security implications.

Conference of the Parties (COP): a generic term for the supreme decision-making body of a convention. In the field of climate change, the COP is the supreme body of the United Nations Framework Convention on Climate Change (UNFCCC) and brings together all the countries that are Parties to the Convention. It meets once a year to ensure that international efforts to combat climate change are maintained and accelerated. The climate COPs have been meeting since 1995 and have become more than just a 'COP', bringing together three Conferences of the Parties: those of the UNFCCC, the Kyoto Protocol and the Paris Agreement. Other conventions have led to the creation of COPs, such as the Convention to Combat Desertification.

Water consumption: the quantity of water withdrawn that is actually absorbed. It cannot be reintroduced directly into nature after use.

Nationally Determined Contributions (NDC): each country's commitments to reduce greenhouse gas emissions under the Paris Agreement. Each country must submit its own climate targets in line with its national capacities and circumstances. The NDCs are revised every five years, and each revision must reflect a higher level of ambition than the previous one, with the aim of achieving the overall objectives of the Paris Agreement.

Carbon credits: a reduction in greenhouse gas emissions by a given actor that can then be traded, in the form of credits, to enable actors who have greater difficulty in reducing their emissions to achieve their climate objectives. These credits may be the result of emissions that have been reduced or, as in the case of *carbon grab* processes, of emissions avoided through protection against deforestation. These credits can be traded within two main frameworks: the *Clean Development Mechanism*, set up under the Kyoto Protocol to enable countries to meet their commitments, and voluntary markets, which are much less regulated (Lovell & Liverman, 2010).



Climate diplomacy: refers to environmental negotiations conducted by nation states (Zumbraegel, 2022). More broadly, all the actions, positions and strategies deployed by a State - or a group of States - in international forums and multilateral processes relating to climate issues.

Rentier state: a rentier state derives a large part of its revenue from the sale of natural resources rather than from taxes levied on the domestic production of wealth. This source of revenue places the rentier state in the position of a distributor state rather than a redistributor state, influencing the country's political, social and economic structure. Low or non-existent taxation reduces the demand for political participation by citizens, and the nationalisation of resources tends to create a command economy in which the private sector struggles to develop. In the end, the rentier state's dependence on international markets means that the social contract is partly based on the world price of the resource exploited.

Military engineering: all the construction, fortification and destruction techniques and operations used by the armed forces to support military operations. This function must enable or facilitate the mobility of the armed forces and hinder the mobility of enemy forces.

Critical infrastructure: systems and installations essential to national security, public health, economic stability and the general well-being of the population (energy, water, transport and communications networks). They must be adapted to climate change to ensure that society continues to function properly.

Land Surface Temperature (LST): index measuring the temperature of the earth's surface.

Petromonarchy: the term petromonarchy (*Oil Monarchy*) comes from the book *Oil Monarchies: Domestic and Security Challenges in the Arab Gulf States* by F. Gregory Gause III (1994). Focusing on the Gulf Cooperation Council, the analysis invites us to understand the domestic political environment of the member countries beyond the conventional characteristics relating to the traditional and tribal character of these societies. Looking at the effects of oil wealth on politics, Gause identifies five consequences: governments are the dominant actors in GCC societies, they provide valuable services to their populations, the state apparatus develops significantly, political opposition is weakened or absent, and political power is concentrated in the hands of the royal family (Lowi, 1996).

Pelagic fish: marine fish that live in waters close to the surface or between the surface and the bottom of the sea, below -200 metres in the water column.

Sea Surface Temperature (SST_{skin}): the temperature of the water at a depth of around 10 to $20 \mu m$, obtained by satellite observation. It is affected in particular by turbulence at the sea surface, solar radiation, heat absorption and emission and cooling by evaporation, i.e. interactions between the atmosphere and the ocean (Bordbar et al., 2024).



Smart cities: an extension of the sustainable city concept, incorporating the role of digital transition in the development of cities and regions.

Surface Urban Cool Island (SUCI): an urban cool island. In arid climates, changes in surface properties due to urbanisation can lead to urban cooling compared with the surrounding rural environments, most often observed during the day.

Surface Urban Heat Island (SUHI): Changes in surface properties due to urbanisation lead to urban warming, caused in particular by higher surface resistance to evapotranspiration. In arid climates, this phenomenon is particularly noticeable at night, due to the greater release of heat storage compared with the surrounding rural environment.

Thermal stress: the inability of the human body to maintain a normal temperature due to heat and humidity.

Water stress: the phenomenon of severe strain on an area's water resources, occurring when demand for water exceeds the quantity available, or when its poor-quality limits its use. This expression is also used to describe the biological phenomenon whereby the quantity of water transpired by a plant is greater than the quantity of water absorbed.

Carbon Capture, Utilisation and Storage (CCUS) technologies: a set of technologies aimed at capturing carbon dioxide (CO₂) emitted by industrial or energy sources, reusing it in industrial processes or storing it permanently in underground geological formations. This approach is seen as an important tool for mitigating greenhouse gas emissions, particularly in sectors that are difficult to decarbonise.

Wet-Bulb Temperature (WBT): an index measuring the heat and humidity of the air. A high wet-bulb temperature corresponds to air with a high moisture content, which prevents evaporation of perspiration, with serious consequences for human health. The WBT corresponds to the humid temperature and the LST to the ambient temperature: the greater the difference between these two temperatures, the lower the humidity.

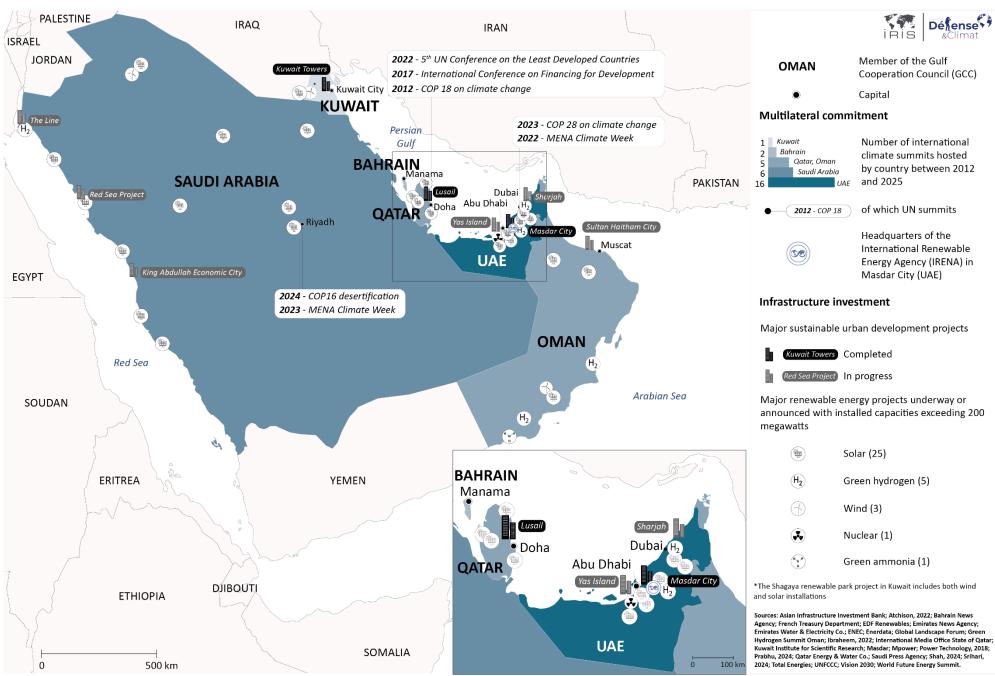


APPENDICES

Dé ense &Climat

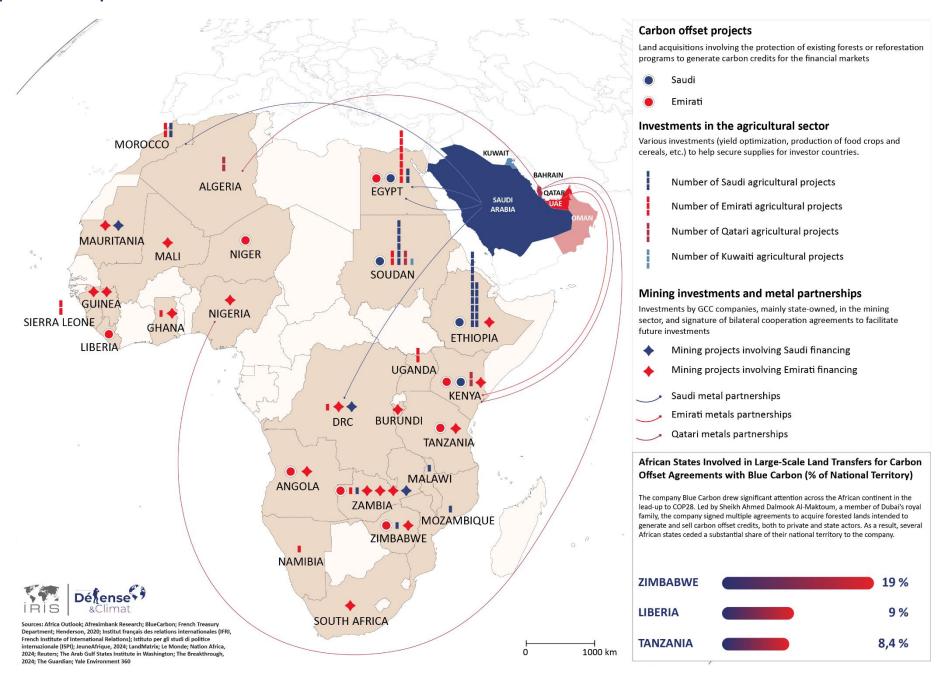


Appendix 1. Map: Climate diplomacy of Gulf monarchies





Appendix 2. Map: The Gulf Monarchies' effort to secure Africa's natural resources





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Interviews

- Interview with François Gemenne, Co-Director of the Defence and Climate Observatory, lecturer at HEC and Sciences Po Paris
- Visioconference interview with Jim Krane. Energy and geopolitics research fellow at the *Baker Institute* Rice University.
- Visioconference interview with Kate Dourian. Energy expert, associate editor at the *Middle East Economic Survey* (MEES).
- Visioconference interview with Justin Dargin. Research Fellow at the *Middle East Council of Global Affairs*.
- Visioconference interview with Tobias Zumbraegel. Research Fellow at Heidelberg University.
- Visioconference interview with Olivier Fontan. Deputy head of mission at the French Embassy in Brazil
- Visioconference interview with Gökçe Günel. Associate Professor of Anthropology at Rice University.
- Interview with Paul Watkinson. Climate change independant expert, former chief negotiator of the French delegation to the Climate Convention, Former advisor of the Dubai COP28 emirati presidency.
- Visioconference interview with Sebastian Sons. Research fellow at CARPO.
- Visioconference interview with two members of the European and Foreign Affairs Ministry.

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