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The Role of the Middle East in Global Climate Diplomacy



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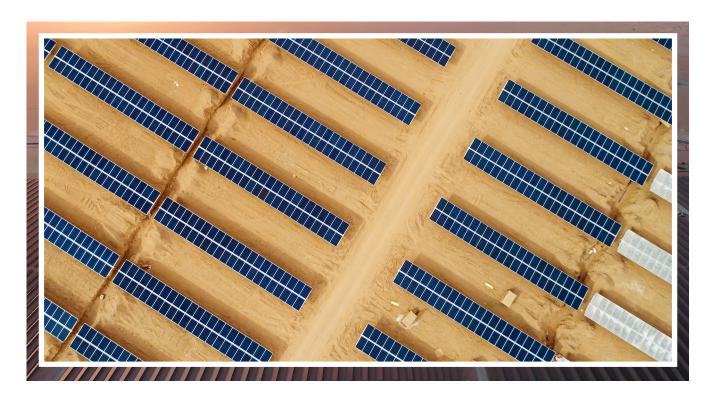




The Middle East is playing a growing role in international climate diplomacy through giant clean energy investments on its own soil, and also in emerging regions (particularly Africa). It is achieving these through combined efforts of ministries, sovereign wealth fund (SWFs) and national energy companies. However, the various Middle East countries exhibit different interests, levels of engagement and strategies. What do their efforts mean for future climate ambition? What are their approaches to climate diplomacy, and where is it helping or hindering global progress?

SUSTAINABILITY REPORT

This research paper is part of a 12-month series published by the Al-Attiyah Foundation every year. Each in-depth research paper focuses on a current sustainability topic that is of interest to the Foundation's members and partners. The 12 technical papers are distributed to members, partners, and universities, as well as made available on the Foundation's website.





- The Middle East is significantly impacted by climate change, both "present and future". It is one of the areas that are most vulnerable to sea level rise.
- Attention on the effects of climate change on the region has seen a meaningful increase only in the last half-decade as part of the global movement to mitigate and adapt to its worst impacts.
- COP18 hosted by Qatar in 2012 was the first in the Middle East, and it brought to limelight the changing perception of Middle Eastern nations with respect to environmentalism and climate action.
- Ambitious visions for low-carbon strategies in the form of giant renewable projects and new global partnerships seek to establish the region as an integral partner of the international climate action project.

- Current climate diplomatic efforts of the Middle East focus on strategies, policies and technologies that can keep hydrocarbons "relevant" for the longest time possible, even after peak oil and gas demand has passed.
- New interests and objectives are associated with current Middle East climate diplomacy.
 For net energy importers, these include securing support for adaptation and mitigation of climate change effects. For exporters, these include carbon trading, technology transfers, and access to investments in non-oil and gas related ventures.
- Bilateral cooperation with Europe, Asia, and other international players has the dual benefit of building favour and securing potential future offtakers for Middle East clean energy supplies. It can also lead to collaboration and partnerships on steering standards and market regulations on hydrogen and carbon trading.

The Middle East is significantly impacted by climate change, both "present and future". It is one of the areas "most vulnerable to sea level rise"i, and is projected to be the first region in the world to run out of water and be "uninhabitable" by 2050 without urgent action on climate change.

Climate shocks like temperature rises, "super and ultra-extreme heat waves", scorching summers, intensified depletion of freshwater resources, and sea-level rise (of up to 11% of Bahrain's total land areaⁱⁱ, ~70 km², for example) are expected to become routine by mid-century. This will create an added challenge in the urban context. 92% of the Middle East's current population lives on just 3% of the available territory, making current inhabited areas extremely concentrated or "population dense".

Figure 1 Sea-level rise projections for Alexandria, Egypt for the scenarios RCP2.6 and RCP8.5 ⁱⁱⁱ

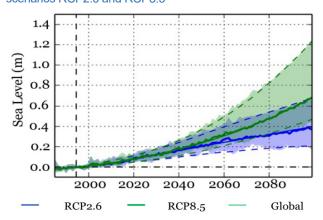
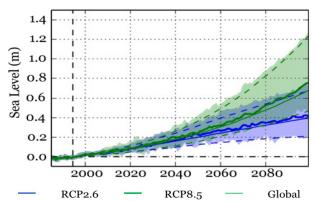


Figure 2 Sea-level rise projections for Muscat, Oman for the scenarios RCP2.6 and RCP8.5 $^{\mbox{iv}}$

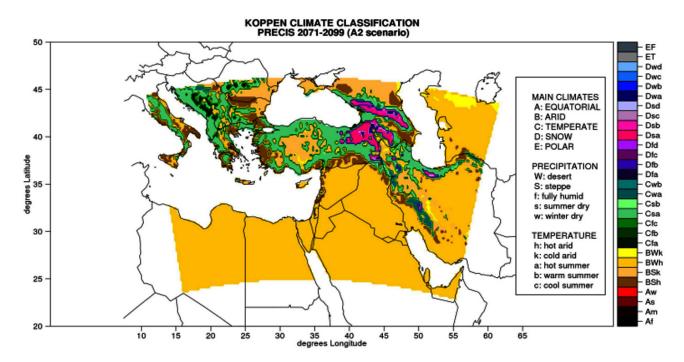


Such concentration (in some scenarios the population in cities is forecast to increase 100% by 2040°), when matched with rapid rates of urbanisation (already well above the world average of 56.2%° at 66%° and growing), will further aggravate climate change, driving sharp increases in drought activity, rural-urban migration patterns, high levels of air and noise pollution, overcrowding, and higher unemployment.

As Figure 3 shows, by 2071–99, under one scenario for emissions, the BWh (hot arid desert) climate zone would have expanded to cover nearly all of the Middle East. The cold arid highland zones in parts of Jordan, Syria and Iran largely disappear, the hot arid areas of northern Iraq become full desert, and the mountainous snowy areas of Iran and Turkey turn to temperate with hot, dry summers.



Figure 3 Middle East climate zones, 2071-99^{viii}



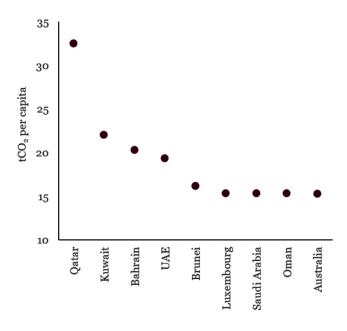
This will have further important implications, including the shrinkage of agriculture, less liveable areas especially without abundant airconditioning, and a loss of winter snow to feed the Tigris-Euphrates river system.

Despite making up only 5% of the world population, the region^{ix} contributes >8% of the global GHG emissions, with the GCC countries making up $4.7\%^{x}$ of this figure. 85% of the region's GHG emissions come from energy production, electricity generation (from hydrocarbon-based feedstocks), the industrial and transport sectors, and domestic energy consumption. Out of the nine countries in the world with the highest CO_2 emissions per capita, 6 are in the Middle East (Figure 4).

Attention towards the effects of climate change on the region has seen a meaningful increase only in the last half-decade as part of the global movement to mitigate and adapt to the worst impacts of climate change.

Prior to this, action from state governments and policymakers had been relatively limited, mainly in the form of a few large-scale renewable energy projects and some (limited) action on subsidy reform.

Figure 4 CO₂ emissions (metric tonnes per capita) climate diplomacy^{xi} ²



Prior to the ratification of the 2015 UNFCCC^{xii} Paris Agreement, the Middle East did not have a lot to show in terms of "climate action", apart from developing renewable capacity and initiating (limited) action on subsidy reform, mainly as a response to declining oil prices.

In the past the Middle East countries were reluctant to sign international environmental agreements.

A few notable exceptions include: the UAE, having just become the permanent host country of the International Renewable Agency (IRENA) in 2009, embraced the Copenhagen Accord in recognition of its need to diversify and better position its economy for the future; Qatar also welcomed the Accord in the runup to COP18 that it hosted in 2012, and as part of a campaign to project itself as a world player, after winning the bid to host the 2022 FIFA World Cup.

COP18 in 2012, the first to be hosted in the Middle East, brought to the limelight the changing perception of Arab Gulf states with respect to environmentalism and climate action. Qatar was described as "the epicentre of climate change"xiii, being a barren desert with little indigenous food or water, which made it "better suited" to host international climate dialogue.

The COP18 summit marked the beginning of a shift in the region's economic and development priorities, and a new ambition to be formally linked to the global consensus on climate action. Ambitious visions for low-carbon strategies in the form of giant renewable projects and new global partnerships following COP18 sought to establish the region as an integral major player in international climate action.

Table 1 Summary of Middle East countries that have ratified the major UNFCCC Agreements (Kyoto Protocol, Doha Amendment and the Paris Agreement)^{xiv}

Country	Kyoto	Doha	Paris		
	Protocol	Amendment	Agreement		
Bahrain	31 January,	x	23		
	2006		December,		
			2016		
Kuwait	11 March,	08 May, 2019	23 April,		
	2005		2018		
Oman	19 January,	×	22 May,		
	2005		2019		
Qatar	11 January,	28 October,	23 June,		
	2005	2020	2017		
Saudi	31 January,	x	03		
Arabia	2005		November,		
			2016		
UAE	26 January,	26 April, 2013	04		
	2005		November,		
			2016		
Egypt	12 January,	03 February,	29 July,		
	2005	2020	2017		
Iran	22 August,	×	х		
	2005				
Iraq	28 July,	x	01		
	2009		November,		
			2016		
Jordan	17 January,	03 January,	04		
	2003	2020	November,		
			2016		
Lebanon	13	x	05 February,		
	November,		2020		
	2006				
Palestine	x	x	22 April,		
			2016		
Syria	27 January,	×	13		
	2006		November,		
			2017		
Yemen	15	×	×		
	September,				
	2004				



Current Middle East climate diplomacy has evolved from a backseat abstraction to a fluid, dynamic, strategic, and alliance-based activity that overarches the current and future economic transformation policies in the region.

Fact Box 1 How does the Paris Agreement spur climate action ambition?^{xv}

At COP26, negotiators established a common timeframe to review countries' NDCs and transparency in emissions reporting, through a 5+5 approach. This means that new NDCs put forward in 2025 shall have an end-date of 2035, with a review in 2030 when new commitments put forward will have an end-date of 2040. Aligning NDC targets' dates around 5-year cycles should spur ambition and action in the near-term, and ensure countries keep pace with the Paris Agreement's 5-year review cycle to strengthen their plans.

Two global initiatives have been responsible for this shift. One, the 2015 UNFCCC Paris Agreement signed at COP21, which became the first "legally" binding international treaty on climate change, and two, the emergence of a global sustainability agenda via 17 Sustainable Development Goals (SDGs) adopted in 2015 as part of the UN 2030 Agenda to succeed the former Millennium Development Goals (MDGs).

While the obligations under the Paris Agreement are not legally binding, if participating countries, particularly those that are major polluters, offer too limited ambitions or fail to meet their targets, they run the risk of reputational damage and could face severe backlash from other participating countries. This poses a further risk of losing out on important investments, financing, and support in other areas of cooperation, and/or foreign policy issues.

Historical precursors to the current consensus on climate action and sustainable development have been several, but often fell short of establishing major definitions, milestones, and

review mechanisms that bound participating countries to action.

The Paris Agreement, largely, and the 2030 Agenda to a certain extent, have overturned this through the combined impetus of international pressure from the relevant global bodies, participating countries, private sector, civil society, and media.

This has changed climate diplomacy from what it looked like previously: from a mainly UN-led, state-centred stimulus, it has now become a tool for realising strategic interests of nations, expanding influence and soft power, becoming frontrunners or pioneers of novel or niche technologies and research to enable the global transformation, and to re-establish and/or redraw energy trade and migration patterns.

Since 2015, there has been an expansion of actors and participation modes in climate diplomacy of the Middle East. Several regional collaborations

have been formed in the last few years with the intention of managing climate issues and ensuring national interests "holistically".

For example, the League of Arab States (LAS) oversees the Council for Arab Ministers Responsible for Environment (CAMRE), a mechanism which aims to facilitate regional strategies on climate change. It produced the Arab Framework Action Plan on Climate Change which concluded in 2020 as one of the first, comprehensive, action-based capacity strengthening exercises for member states to develop skillsets to address climate change issues.

Alongside the LAS is also the Arab Ministerial Council, which launched the Arab Water Security Strategy in 2010, and with the support of the UN, the Arab Centre for Climate Change Policy (ACCCP) in 2018, to provide technical assistance and advisory services,

Table 2 Middle East transnational and/or regional diplomatic administrations / initiatives on climate change since the Paris Agreement A

Initiative	Formed After	Туре	UN-based
	COP21		
Council for Arab Ministers Responsible for Environment	No	Transnational / Regional	Yes
Arab Framework Action Plan on Climate Change	V1.0 2012; Revised 2017	Transnational / Regional	×
Arab Water Security Strategy	No	Transnational / Regional	×
Arab Centre for Climate Change Policy	Yes / 2018	Transnational / Regional	Yes
UAE Regional Dialogue for Climate Action	Yes / 2021	Transnational / Regional	×
Middle East Green Initiative	Yes / 2022	Transnational / Regional	×
Africa & Middle East Regional Dialogue (PDD Climate Vulnerable Forum)	Yes	Transnational / Regional	х
Middle East and North Africa Regional Climate Week	Yes / 2022	Transnational / Regional	Yes

build capacity and strengthen institutions with respect to climate action and sustainable development, promote policy dialogue across regional platforms, and enable access to regional knowledge.

All Middle East countries have submitted intended nationally determined contributions

(INDCs) to the Paris Accord, but not all have submitted their NDCs, such as Iran and Yemen.

As shown in Table 3, only a handful of Middle East countries' NDCs reveal strong ambition, a consistent scope, and (sometimes) transparent information. Unsurprisingly, these countries lead current climate diplomatic efforts on the regional and international scene.

Table 3 Key features of major Middle East countries' NDCs xviii

Country	Updated / Enhanced NDC	Key Features	Net Zero Target	Major Focus	NDC Targets Clarity
Bahrain	✓	 Exemplifies how it will "need" to take actions that will have mitigation co- benefits, including economic diversification, CCUS, and renewable energies 	√ 2060	International support for adaptation and methodological guidance	Very low
Kuwait	√	 Reduction of 7.4% in 2035 relative to BAU with total GHG emissions capped at 131.7 MtCO₂e in 2035, a reduction of 10.6 MtCO₂e Vision "New Kuwait 2035" 2035 Carbon Control Target Plan 	X	Economy will be affected negatively from international policies and procedures of the UNFCCC	Very low
Qatar	1	 25% reduction of GHG emissions below BAU level by 2030 Flaring and Evaporated Gas Recovery Project CCUS being considered in all LNG designs and facilities 	X	Gas as an enabler of the energy transition due to its lower-carbon content	Low
Oman	✓	 GHG emission reduction of 7% by 2030 from BAU of 125.3 MtCO₂e National Adaptation Plan (NAP) to foster low carbon, climate-resilient projects and transition pathways 2030 Carbon Control Target Plan through large scale renewables, energy efficiency, and carbon reduction for the oil and gas sector (PDO net zero 2050) 	X	Mobilising climate finance through grants and concessional financing International assistance with capacity building and access to appropriate technologies	Moderate
Saudi Arabia	1	 Removing GHG emissions by 278 MtCO₂e annually by 2030 Exported hydrocarbons will not contribute to GHG emissions Carbon reduction through renewables, energy efficiency, CCUS, hydrogen Adaptation with mitigation co-benefits 	√ 2060	Holistic and harmonised programs, policies, initiatives, and collaboration platforms to address climate change challenges at the national, regional and global scale	Very low

UAE	√	 Reduction of 23.5% in GHG emissions for 2030 relative to BAU (310 MtCO₂e emissions in 2030) Clean energy infrastructure assets and services, energy efficiency, CCUS, hydrogen ADNOC GHG emissions intensity reduction 25% by 2030 	√ 2050	 Sustainable finance Technology development and innovation Youth and women in climate action International cooperation in renewables, cleaner hydrocarbons, hydrogen, industrial energy efficiency, green mobility, waste management and sustainable agriculture 	Average
Egypt	1	 33% reduction in electricity sector GHG emissions from BAU baseline of 87.7 MtCO₂e by 2030 42% renewables in electricity mix by 2035 65% reduction in oil and gas sector GHG emissions from BAU baseline of 2.1 MtCO₂e by 2030 7% reduction in transport sector GHG emissions from BAU baseline of 48.3 MtCO₂e by 2030 	x	 International financial support, ensuring just transition, and appropriateness to national capabilities Data availability, financing, digital transformation, technology and innovation 	Moderate
Jordan	✓	 GHG emission reduction target raised from 14% in the first NDC to 31% in updated NDC against BAU in 2012 (28 MtCO₂e) Renewable energy to contribute 35% of electricity generation by 2030 Improving energy efficient consumption in all sectors by 9% 	x	 International support and finance Capacity building, technology transfer NDC partnership support Gender mainstreaming in NDC implementation Targeting vulnerable groups 	Moderate
Lebanon	√	 Unconditionally increase GHG emission reduction relative to BAU from 15% to 20% Unconditionally generate 18% of power demand and 11% of heat demand from renewables in 2030 	x	 Improved governance and institutional capacities Incentivised action and fiscal reform Strengthened partnerships Innovative R&D Enhanced monitoring and transparency 	Low
Iraq	x	 Reduction of flaring and increased capture of associated gas Fuel switching from liquid fuels to natural gas Improved energy efficiency and expanding renewables Deploying sustainable public transportation technologies 	x	 International financial support through grants and localisation of sustainable investment Supporting innovation and transfer of technology Capacity building and institutional strengthening 	Extremely low
Syria	x	 Renewable energy production of 10% by 2030 Investing in renewable energies Improving solid waste sector Considering green architecture 	x	 International financial support and concessions Transfer of technology Capacity building and institutional strengthening 	Extremely low

11 FROM COP18 TO COP27 AND COP28: A NEW CLIMATE ROLE FOR THE MIDDLE EAST

Recent advancements in international climate diplomacy have resulted in a shift in some Middle East countries' engagement with the global movement. Climate diplomacy has become a platform that now incorporates a more constructive agenda geared towards educating governments and exposing new discourses and working jointly with these governments to identify solutions for their countries' sustainable development. After the successful hosting of COP18 by Qatar in 2012, Egypt and the UAE, will be hosting the upcoming COP27 and COP28 summits, respectively.

Fact Box 2 COP18 Doha continues to underpin climate action strides in the region

Being the first Middle East country to host a COP summit, Qatar's climate advocacy following COP18 in 2012 resulted in a proactive regional climate of cooperation on research and knowledge building which continues to underpin the strides being made by regional heavyweights on climate issues. The upcoming COP summits could take this further by helping pioneer financial mobility, incentivising action, and partnerships, strengthening research, development, and training, and enhancing transparency and monitoring.

The relatively low-profile engagements on global climate policy by other Middle East countries, except for Saudi Arabia, could also witness a change. New investment into the region, particularly in clean energy, sustainable future-focussed technologies, and climate-smart solutions could drive economic growth and job creation in socio-economically stressed countries, and countries most vulnerable to the consequences of climate change.



Back-to-back COP summits in the Middle East highlight the advent of the region as a key enabler of the global transformation. It enjoys excellent renewable energy resources and some of the lowest costs for natural gas in the world, which can support the uptake of low-carbon fuels, such as blue hydrogen in the mediumterm, and green hydrogen in the longer-term.

It also has geological advantages for CO_2 sequestration, particularly in the GCC, where saline aquifers and voided oil and gas fields can be used for storage^{xix}.

More visibly, the region is fast becoming the site of futuristic "metapolis" cities based on low-carbon and/or carbon-neutral innovation (Table 4).

Table 4 Futuristic cities of the Middle East are fast becoming a reality $^{\mathbf{x}\mathbf{x}\mathbf{i}}$

City	Location	Innovation Rating	Innovation Justification
Masdar City	Abu Dhabi	Low-carbon to carbon-neutral city	Original design as carbon neutral city; currently using renewables and energy certification for buildings
Sustainable City	Dubai	Smart city to low- carbon city	Designed to be first operational net-zero city in Dubai, modelled to become an international showcase for high quality sustainable living
NEOM	Saudi Arabia	Low-carbon to carbon neutral city	Designed as a 100%-renewables city; proposition of several sustainability technologies
Lusail City	Qatar	Smart city to low- carbon city	Mostly based on smart city applications; local energy certification systems; use of renewables
Education City	Qatar	Low-carbon to carbon-neutral city	LEED energy certifications; renewables deployment; green campus initiatives
Hope City	Cairo	Smart city to low- carbon city	Mostly based on smart city applications; proposition of several sustainability technologies

INTERESTS AND OBJECTIVES OF CURRENT MIDDLE EAST CLIMATE DIPLOMACY



A review of the NDCs of oil and gas producing Middle East countries confirms the strong push to sustain fossil fuel activity within the overall climate framework.

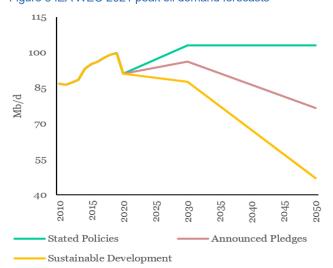
As such, current climate diplomatic efforts of these countries emphasise focus on strategies, policies, solutions, and technologies that can keep hydrocarbons "relevant" for the longest time possible, even after peak oil and gas demand has passed. While the notion of peak oil demand was contested by some major players, the demand collapse from the COVID-19 pandemic reaffirmed the imminent decline of oil and gas consumption, with some scenarios bringing forward peak demand by several years, to 2019 for oil and 2025 for natural gas.

Although demand recovered remarkably in 2021, the climate push to achieve the Paris Agreement's 1.5°C target meant $\mathrm{CO_2}$ emissions would need netting out between 2044 and 2050**xii*, and total GHG emissions between 2063 and 2068**xiii*. This put the spotlight on oil, which is responsible for over 33% of $\mathrm{CO_2}$ emissions**xiv*.

Moreover, carbon border tariffs, proposed by the EU for implementation beginning 2023, has put pressure on Middle East countries to impose carbon prices within their own economies, or face higher costs for their carbon-intensive exports to the EU.



Figure 5 IEA WEO 2021 peak oil demand forecasts xxv



The slightly later peak in gas demand, when compared to oil, has made gas a cornerstone of the current climate policies of the major oil and gas producers in the Middle East. These countries are simultaneously complementing these policies with ambitious renewables and green energy targets^{xxvii}.

Memberships with international (voluntary) oil and gas sector-led initiatives like the Oil & Gas Climate Initiative (OGCI) and the Net-Zero Producers Forum also reinforce continued

hydrocarbon relevance in these countries' climate strategies. For example, Saudi Arabia and Qatar are founding members of the Net-Zero Producers Forum, which aims to advance decarbonisation of member countries through hydrocarbon-relevant climate-smart solutions like CCUS, methane abatement, and low-carbon fuels (like hydrogen

Table 5 summarises the key interests and objectives of current Middle East climate diplomacy.

Figure 6 Peak natural gas demand forecasts xxvi



Table 5 Key interests and objectives of Middle East climate diplomacy^{xxviii}

Objective	Why?	Diplomatic Action	Country examples
Sustain use of oil and gas within climate framework	 Future exports Economic revenue stream Can enable circular carbon economy (such as Saudi Arabia's proposed circular carbon economy) Retain access to finance investments 	 OPEC+ Oil and Gas Climate Initiative (OGCI Net Zero Strategy) Zero Routine Flaring Global Methane Pledge CCUS and hydrogen in NDCs 	Saudi Arabia, UAE, Kuwait, Qatar, Iraq (does not have CCUS or hydrogen in its NDC)
Target non- oil/gas-related emissions (coal, waste, agriculture/defo restation)	 Reduce scrutiny on oil and gas-related emissions Higher attention to nitrous oxides from the agricultural and fertilisers sectors, which are "more polluting" and have higher heat-trapping properties Afforestation 	 Rebranding coal plants to natural gas plants (UAE former Hassvan coal plant now converted to gas) Global Methane Pledge Global Deforestation Pledge Afforestation in desert (Saudi Green Initiative) 	UAE, Saudi Arabia, Qatar
Secure support for relevant adaptation	 Bolster domestic capacity and capabilities to adapt to effects of climate change Strengthen institutional capacity 	 National Adaptation Plans (NAPs) Green Climate Fund 	Iraq, Syria
Target non- oil/gas-related emissions (coal, waste, agriculture/defo restation)	 Reduce scrutiny on oil and gas-related emissions Higher attention to nitrous oxides from the agricultural and fertilisers sectors, which are "more polluting" and have higher heat-trapping properties Afforestation 	 Rebranding coal plants to natural gas plants (UAE former Hassyan coal plant now converted to gas) Global Methane Pledge Global Deforestation Pledge Afforestation in desert (Saudi Green Initiative) 	UAE, Saudi Arabia, Qatar
Secure support for relevant adaptation	 Bolster domestic capacity and capabilities to adapt to effects of climate change Strengthen institutional capacity Develop robust climate action framework Energy security in case of climate-related disruptions to imports Financial mobilisation; secure technology transfers 	 National Adaptation Plans (NAPs) Green Climate Fund UNFCCC/UNEP Adaptation Fund 	Iraq, Syria
Expand carbon trading / credits	 Carbon offsetting Carbon "sinks" Trading of credits from CCUS projects Enables investment in green energy or forestry renewal by allowing emission intensive industries to purchase carbon credits Encourages reforestation, DAC Renewable credits 	 Paris Agreement Article 6 ADGM (Abu Dhabi Global Markets) Carbon Trading Platform PIF Carbon Trading Platform 	UAE, Saudi Arabia

Climate diplomacy of Middle East oil and gas producing countries has often come under the spotlight for alleged "obstructionism" of the global climate action and sustainability agenda.

The most recent example is Saudi Arabia's move to "water down" fossil fuel phaseout language in the IPCC's 6th Assessment Report (AR6), with the document finally concluding "a substantial reduction in overall fossil fuel use"xxix. Saudi Arabia allegedly pushed for a stronger emphasis on CCUS technologies as a potential solution to extend the lifespan of hydrocarbon infrastructures. Language on risks and feasibility concerns over CCUS has also allegedly been toned down, and references to shifting away from fossil fuels are now qualified with the words "unabated"xxx .This comes just months after Saudi Arabia also rejected COP26 text that opposed fossil fuel subsidies, with the final text from the summit reading "phaseout of all inefficient fossil fuel subsidies"xxxi.

Other Middle East oil and gas producing countries have typically sided with past Saudi attempts to resist "tough" and "stringent" climate agreements, although this has faded considerably in the last-half decade. GCC counterparts Qatar and the UAE have typically been regarded as being "more favourable" towards climate action and now regarded to be "genuinely there to find a solution"xxxii.

Accusations of "obstructionism" and "lukewarmism" levelled against oil and gas producing countries are quietening down in recent times, mainly due to a surge in climate ambition and diplomacy from these states (Figure 5). Concepts like the "green economy" and a "circular carbon economy" underpin a lot of these ambitions to secure a future role for the fossil fuel sector, although it is now widely

accepted that hydrocarbons will be majorly confined to uses in hard-to-abate sectors, transforming consumption patterns from what they are today.

Investing in renewables in LDCs and small island developing states (SIDS) has also become a key component of Middle East climate diplomacy to expand influence as an enabler of the energy transition in these countries. It allows them to expand their international low-carbon portfolios while lessening global attention on their domestic energy policies that may not always match up to global climate goals. The UAE leads the charge with a number of such renewable energy investments in Africa through its Etihad 7 Programme, which aims to provide clean power to 100 million people on the continent by 2035**xxiii.



7 IMPLICATIONS FOR LEADING OIL & GAS PRODUCERS

Middle East climate diplomacy has transformed dramatically in recent years. In countries like Bahrain, Oman, and Saudi Arabia, it represents a race against time as it becomes increasingly evident that domestic growth and resource use inefficiency will jeopardise the major revenue stream of oil and gas exports. That is why these countries have accelerated efforts on the demand side to improve efficiency and optimise domestic consumption so that future oil and gas exports are not affected.

Current diplomatic efforts could reduce some carbon and energy intensities, effectively pushing oil and gas producing countries further down the road of engagement within the global sustainability agenda. Emerging new alliances and alignments between major international energy producers could take the form of more active and dynamic engagement on renewables, exchange of policies and knowledge on CCUS or bioenergy CCS, formation of hubs for low-carbon fuels like blue hydrogen, and an entry into formal negotiations and review processes of carbon trading regulations.

In the near-to-medium term, it is expected that there will be some focus on fossil fuel-compatible approaches such as coal-to-gas switching, methane leakage mitigation and reduction of flaring, blue hydrogen, and CCUS. Two back-to-back COP summits in the Middle East will result in intense global attention, which could lead to major announcements of projects and policies impacting the oil and gas industry.

CONCLUSION

Middle East countries like the Egypt, Qatar, Saudi Arabia, and to a lesser extent Jordan, are now sophisticated, active members of the global consensus on climate change. The recent transformation efforts of key Middle East countries towards a more diversified, low-carbon, knowledge-based and resourceefficient model can be attributed to rising awareness of future oil and gas demand trajectories, economic resourcefulness, and ambitious national visions. This new era of Middle East climate diplomacy prioritises collaboration and partnerships to extend its influence on international climate action movements. It envisions win-win outcomes through technology and innovation, with concomitant recognition of the value of forging alliances on new and emerging areas. such as hydrogen and carbon trading.

Developing holistic and harmonised programmes, policies, initiatives, and collaboration platforms with major climate action-oriented countries at COP27 and COP28 could place the region in prime position to effectively address climate change challenges.

APPENDIX 1

i. Climate Centre, "Region-level: Climate fact sheet Middle East", https://www.climatecentre.org/wp-content/uploads/ RCCC-ICRC-Country-profiles-Region Middle East.pdf ii. EcoMENA, "Climate Change Impacts in the GCC", May 2021, https://www.ecomena.org/climate-change-gcc/ iii. Waha, K., Krummenauer, L., Adams, S. et al. Climate change impacts in the Middle East and Northern Africa (MENA) region and their implications for vulnerable population groups. Reg Environ Change 17, 1623-1638 (2017). https://doi.org/10.1007/s10113-017-1144-2; Median estimates are given as full thick lines and the lower and upper bound given as shading. Full thin lines are global median sea-level rise with dashed lines as lower and upper bounds. iv. Waha, K., Krummenauer, L., Adams, S. et al. Climate change impacts in the Middle East and Northern Africa (MENA) region and their implications for vulnerable population groups. Reg Environ Change 17, 1623-1638 (2017). https://doi.org/10.1007/s10113-017-1144-2; Median estimates are given as full thick lines and the lower and upper bound given as shading. Full thin lines are global median sea-level rise with dashed lines as lower and upper bounds. v. Global Facility for Disaster Reduction and Recovery, 2019

vii. World Bank, 2021

(UNCTAD), 2021

viii. https://www.researchgate.net/publication/277952967 Regional Climate Modelling in the eastern Mediterranean and the Middle East Aspects of summer warming and related feedbacks under a changing climate/link/5576f38908aeacff2000414d/download

vi. United Nations Conference on Trade and Development

ix. Comprising of the countries outlined in Fact Box 1 x. The Guardian, "Apocalypse soon': reluctant Middle East forced to open eyes to climate crisis", October 2021, https://www.theguardian.com/environment/2021/oct/29/apocalypse-soon-reluctant-middle-east-forced-to-open-eyes-to-climate-crisis

xi. Data from World Bank, https://data.worldbank.org/indicator/EN.ATM.CO2E.PC

xii. United Nations Framework Convention on Climate Change

xiii. Gulf News, "Gulf leaders fly the flag for green future", November 2012, https://gulfnews.com/world/gulf/qatar/gulf-leaders-fly-the-flag-for-green-future-1.1109022

xiv. Qamar Energy Research

xv. Qamar Energy Research; see also Al-Attiyah Foundation Sustainability Digest Issue 36: December 2021

xvi. Possibly the only exception to these UN-dominated processes has been the Earth Chapter, which has witnessed strong leadership from civil society

xvii. Qamar Energy Research

xviii. Data from Qamar Energy Research, UNFCCC NDC Registry, Climate Centre, "Region-level: Climate fact sheet Middle East", https://www.climatecentre.org/wp-content/uploads/RCCC-ICRC-Country-profiles-Region Middle East.pdf

xix. Qamar Energy Research

xx. An entity that is larger than a metropolis by virtue of its physical and virtual interconnections between its citizens, institutions and organisations

xxi. Qamar Energy Research; Mohammad Al-Saidi, Esmat

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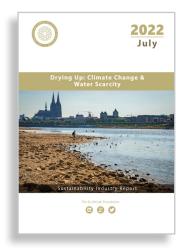
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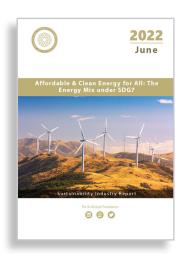


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