

THE GREEN ECONOMY IN THE COUNTRIES OF THE GULF COOPERATION COUNCIL

Salomé AUDIÉ, Hanan BAKR, Sana BEN ABDALLAH, Danil BEKRAR,
Christophe GERMAIN, Arnaud LACHERET, Brahim BELASRI-NOGUEIRA,
Diane de SAINT-AFFRIQUE, Dhafer SAÏDANE

Supervised by Dhafer SAÏDANE
(Director of the MSc Sustainable Finance & Fintech – SKEMA Business School)

November 2025

SKEMA PUBLIKA

SKEMA PUBLIKA is an independent think tank whose purpose is to produce international, accessible thinking, free from standardised formats, in order to enrich public debate and better inform national and international decision-makers upstream.

Affiliated with SKEMA Business School, the think tank addresses political and societal issues related to public policy, on which SKEMA has a clear legitimacy to speak. It approaches these topics through the lens of early warning signs, anticipates developments, and formulates recommendations for what comes next. Its work is grounded in a multidisciplinary and hybrid method of information analysis, combining human and digital intelligence. It draws on SKEMA's international and cross-cultural reach, spanning five continents and supported by thousands of students and hundreds of researchers.

TABLE OF CONTENTS

FOREWORD	i
INTRODUCTION	1
I. A MATTER OF SURVIVAL	3
II. THE GCC'S GREEN TURNING POINT: A FASTER TRANSITION THAN EUROPE	4
A. Economic diversification as strategic imperative.....	4
B. Other Gulf countries are also accelerating their development	6
III. FINANCING THE TRANSITION: AN ABUNDANCE OF CAPITAL.....	8
IV. RAPID ESG REGULATORY EVOLUTION: A NEW FRAMEWORK FOR TRANSPARENCY	9
V. AN INCREASING TREND IN ESG PERFORMANCE ACROSS THE GCC.....	10
RECOMMENDATIONS AND STRATEGIC OUTLOOK.....	12
1. Recognising the Gulf as a strategic partner in global climate solutions	12
2. Accelerating the transition: Scale, speed, and inclusion.....	13
3. Deepening ESG integration across businesses and industrial ecosystems	13
Authors.....	15
Reading Committee	17

FOREWORD

This contribution is the result of a collective work led by a group of experts of the Executive MSc Sustainable Finance and Fintech (Dubai Campus) and professors from SKEMA Business School. Dhafer Saïdane, SKEMA Publika contributor on the topic of sustainable finance, coordinated this paper.

It is in a world polarized between deregulated capitalism and ecological dogmatism that SKEMA Publika aims to embody a third way: a transition towards realistic and pragmatic sustainable finance promoting growth that is compatible with sustainability. This work is part of that ambition.

INTRODUCTION

“The awarding of COP28 to the Emirates by the UNFCCC Secretariat allowed a whole country, perhaps a whole region, to be greenwashed”¹

As illustrated by this quote from an article published in *The Nation* in December 2023, there is a common misconception that Gulf countries engage in greenwashing². However, the aim of this note is to challenge this idea by demonstrating that the climate action taken by the Gulf Cooperation Council (GCC) countries is not greenwashing. This assertion is based on an analysis grounded in local realities and observations that highlight the urgency of the climate transition in the GCC countries. Through this note, we also aim to challenge persistent *clichés* and forms of ethnocentrism that hinder effective international cooperation.

The GCC consists of six countries from the Gulf region: Saudi Arabia, Kuwait, Bahrain, Oman, Qatar and the United Arab Emirates (UAE). Their economies are younger compared to their counterparts in advanced economies (that often are Western economies). Notwithstanding, they face expectations to match the environmental standards of industrialized countries. The GCC is an economic alliance founded in 1981 with the goal to rapidly industrialize the Gulf region. It was initially inspired by other regional integration experiences such as the European Union. The paradox is that the GCC has only existed for four decades, and they are expected to rapidly industrialize while adapting to contemporary environmental standards. In comparison European and North American Economies have had generations to industrialize and evolve. In this regard the objective of the GCC is to promote industrialisation in the Gulf countries while aligning national trajectories with today’s environmental standards.

In reality, the Gulf’s aggregate contribution to global emissions remains comparatively modest, around 2 to 3% of global CO₂, compared with roughly 7% for the European Union³. Saudi Arabia, the region’s largest emitter, represents about 1.6% of global fossil-fuel emissions⁴. Yet, despite this share, the Gulf is moving faster than most other regions in redefining its economic and environmental model.

In addition, what makes the Gulf’s trajectory so distinctive is its accelerated pace. Countries like the UAE have transitioned from modest trading hubs into global economic centers within 50 years. Dubai International Airport, for instance, now ranks among the busiest in the world and is a major contributor to the emirate’s gross domestic product (GDP). This accelerated development has resulted in a dual

¹ COLE (J.), “Big Oil Is Greenwashing the Planet”, *The Nation*, Environment, 28 Dec. 2023, <https://www.thenation.com/article/environment/saudi-arabia-greenwashing-cop28/>.

² The United Nations defines greenwashing as an attitude aiming to mislead the public to believe that a company or other entity is doing more to protect the environment than it is actually doing.
“Greenwashing – the deceptive tactics behind environmental claims”, United Nations. <https://www.un.org/en/climatechange/science/climate-issues/greenwashing>.

³ Service des données et études statistiques, *Chiffres clés du climat - France, Europe et Monde - Édition 2024*, 8 Nov. 2024, <https://www.statistiques.developpement-durable.gouv.fr/chiffres-cles-du-climat-france-europe-et-monde-edition-2024>.

⁴ Emissions Database for Global Atmospheric Research, “Country Fact Sheet – Saudi Arabia”, *edgar.jrc.ec.europa.eu*, Data Explorer, https://edgar.jrc.ec.europa.eu/country_profile/SAU.

imperative: to continue building resilient, diversified economies while urgently adapting them for climate transition and sustainability. This is a dual challenge no Western economy has faced at similar scales and timelines. Since the older Western economies first industrialized before facing the challenges of climate transition.

Consequently, several questions arise:

Is the image of the Middle East as a polluter consistent with reality? How are countries in this region managing to reconcile economic growth with sustainable development?

In the first part we will see that the need to adapt to climate change is a matter of survival for the Gulf countries. In the second part, we will highlight that the GCC countries have been more successful than European countries in adapting to the energy transition. The third part will emphasize the role of abundant capital in the success of this transition. In the fourth part, we will assess the rapid growth of ESG (environmental, social and governance) regulation. Finally, the last part will suggest several recommendations for the future.

I. A MATTER OF SURVIVAL

Building on the context described above, it is important to emphasize that the Gulf region is one of the most climate-vulnerable regions on the planet. It is exposed to a warming nearly twice the global average. The region has already experienced unprecedented extremes: in 2023, heat indices—combining temperature and humidity reached 66°C in Iran and parts of the Gulf⁵. In April and May 2025, the UAE broke temperature records with highs of 42.6°C and 51.6°C⁶, respectively, even before the official start of summer. Without major mitigation efforts, such extremes could become commonplace by 2070, and some areas could exceed human survival levels due to wet-bulb temperatures exceeding 35°C. In addition, water scarcity is compounding the climate challenge. All the CCG member states are among the 25 most water-stressed countries with Qatar leading the way. The region's reliance on energy-intensive desalination, combined with dwindling groundwater reserves and growing demand, jeopardizes long-term food security and urban development.

Furthermore, the Gulf's coastal ecosystems are under threat. Rising sea levels, urbanization, and increased salinity are leading to the collapse of mangrove forests. These are essential natural barriers that protect coastlines from storm surges and erosion⁷. The degradation of these ecosystems weakens climate resilience, particularly for low-lying urban centers such as Abu Dhabi, Doha, and Manama. Preserving and restoring mangroves is therefore not only an ecological priority, but a key component of climate change adaptation in the region.

While mitigation is essential, adaptation remains urgent. GCC countries are investing in heat-resilient urban planning, flood protection systems, and AI-powered early warning systems. Abu Dhabi's green infrastructure standards aim to reduce urban heat islands, while Qatar is exploring vertical farming to offset its dependence on food imports.

⁵ CHATURVEDI (K.), "Heat Index At Iran Airport Hits 66 Degrees Celsius As Climate Scientist Warns Earth Will Become 'Inferno'", *ndtv.com*, 17 July 2023, <https://www.ndtv.com/world-news/heat-index-at-iran-airport-hits-66-degrees-celsius-as-climate-scientist-warns-earth-will-become-inferno-4215534>.

⁶ Franceinfo, "Les Emirats arabes unis enregistrent un nouveau record de température en mai, avec 51,6 degrés Celsius", *franceinfo.fr*, 24 May 2025, https://www.franceinfo.fr/environnement/crise-climatique/les-emirats-arabes-unis-enregistrent-nouveau-un-record-de-temperature-en-mai-avec-51-6-degrees-celsius_7270161.html.

⁷ France 24, "Environnement : 50 % des écosystèmes de mangrove risquent de s'effondrer", *france24.com*, 22 May 2024, <https://www.france24.com/fr/info-en-continu/20240522-50-des-%C3%A9cosyst%C3%A8mes-de-mangrove-risquent-de-s-effondrer-uicn>.

II. THE GCC'S GREEN TURNING POINT: A FASTER TRANSITION THAN EUROPE

The Gulf's trajectory is addressing misconceptions often repeated in global narratives. As the region's transition is not only underway but accelerating at a rate unmatched by many advanced economies. The GCC countries are at a critical turning point. Long defined by their hydrocarbon wealth they are now paradoxically positioning themselves as global leaders in sustainable development and climate innovation⁸. The reason is simple; this transformation is not a matter of image; it is a strategic necessity.

As mentioned earlier, the region is facing mounting climate risks (extreme heat, water scarcity) and growing global pressure to decarbonize. Consequently, GCC countries are rapidly transitioning away from fossil fuel dependency⁹. This green turning point is not optional; it is a national imperative to protect vulnerable populations, preserve fragile ecosystems, and ensure long-term economic resilience in a carbon-constrained world. The transformation of the structure of the GDP of the GCC countries has been driven at a very fast pace: in 2013, the GDP share of non-oil was 54,4%¹⁰. This share raised to 65% in 2022 and 71,5% in 2023¹¹. This speed of change is unique in the 21st century for a group of countries.

What distinguishes the Gulf's approach is not only the scale of ambition but also the speed and pragmatism with which it is being implemented. Indeed, the Gulf countries are governed by authoritarian governments that can be criticised on many points but thanks to centralized governance, substantial financial resources, and streamlined decision-making, GCC countries can launch and scale projects with a level of efficiency that often surpasses that of more decentralized systems, particularly in parts of Europe. This combination of urgency, institutional capacity, and strategic clarity is enabling the GCC not only to lead the region but to shape global narratives around what climate leadership can look like in the 21st century, especially for resource-rich economies in transition.

A. ECONOMIC DIVERSIFICATION AS STRATEGIC IMPERATIVE

This diversification already reflects the Gulf's evolution from being perceived as part of the climate challenge to becoming an indispensable partner in the global solution. There are numerous examples of bold climate policies, and we will present a few of them below. For instance, the UAE was the first

⁸ ESG News, "Forbes Moyen-Orient révèle ses leaders en matière de développement durable pour 2024", *esgnews.com*, Actualités ESG, 14 Oct. 2024, <https://esgnews.com/fr/Forbes-Moyen-Orient-r%C3%A9v%C3%A8le-ses-leaders-en-mati%C3%A8re-de-d%C3%A9veloppement-durable-2024/>.

⁹ HACHE (E.), RAMDANI (S.) et al., Report | *Les stratégies énergétiques et minières des États du Golfe et leurs répercussions sur la sécurité des approvisionnements en France*, Observatoire de la sécurité des flux et des matières énergétiques, April 2025, <https://www.iris-france.org/les-strategies-energetiques-et-minieres-des-etats-du-golfe-et-leurs-repercussions-sur-la-securite-des-approvisionnement-en-france/>.

¹⁰ GCC-STAT, Annual Report | *GCC National Accounts for the year 2017*, n° 4, June 2019, 83 p., p. 17, Figure 3, https://gccstat.org/images/gccstat/docman/publications/national_account-en.pdf.

¹¹ HASSAN (N.), "GCC non-oil sector adds \$1.5tn to GDP, led by mining", *Arab News*, 17 Aug. 2025, Business, <https://www.arabnews.com/node/2612103/business-economy>.

country in the MENA (*Middle East and North Africa*) region to commit to achieving carbon neutrality by 2050¹². This commitment has been supported by more than \$40 billion in clean energy investments over the past 15 years¹³. Clean capacity has grown from 100 MW in 2015 to over 4 GW in 2025, with a national target of 14 GW by 2030¹⁴. The UAE's Energy Strategy 2050 aims to produce half of its electricity from clean sources, including 44% renewable energy and 6% nuclear power¹⁵. Projects such as the Barakah nuclear power plant, which already provides about a quarter of the country's electricity¹⁶, and the massive Mohammed bin Rashid Solar Park, expected to reach 5 GW by 2030¹⁷, reflect this ambition. The 2 GW Al Dhafra solar power plant alone powers more than 200,000 homes and avoids 2.4 million tons of CO₂ emissions annually¹⁸. Masdar City in Abu Dhabi continues to grow as a regional hub for cleantech startups, home to more than 900 companies and powered by solar energy and sustainable design¹⁹.

Saudi Arabia has also made climate change a core component of its Vision 2030 development strategy. The Kingdom aims to be carbon neutral by 2060, thanks to more than \$180 billion in green investments²⁰. Its renewable energy targets aim to increase to nearly 59 GW by 2030²¹. Projects such as the Sudair solar power plant (1.5 GW), Sakaka (300 MW), and Dumat Al-Jandal (400 MW)²² are already contributing to this goal. The NEOM megacity project includes one of the world's largest green hydrogen facilities, expected to produce up to 600 tons of clean hydrogen per day by 2026²³.

¹² AMSILI (S.), "Climat : les Emirats arabes unis s'engagent à atteindre la neutralité carbone d'ici à 2050", *LesEchos*, 8 Oct. 2021, <https://www.lesechos.fr/monde/afrique-moyen-orient/climat-les-emirats-arabes-unis-sengagent-a-atteindre-la-neutralite-carbone-dici-a-2050-1353425>.

¹³ InvestinDubai, "Énergies et technologies propres", *investindubai.gov.ae*, Industries, <https://www.investindubai.gov.ae/fr/industries/energy-and-cleantech>.

¹⁴ Direction générale du Trésor, "Les énergies renouvelables aux Emirats Arabes Unis", *tresor.economie.gouv.fr*, Trésor-Info, 10 May 2024, <https://www.tresor.economie.gouv.fr/Articles/2024/05/10/les-energies-renouvelables-aux-emirats-arabes-unis>.

¹⁵ *Ibid.*

¹⁶ Energynews, "Les Émirats arabes unis inaugurent la première centrale nucléaire arabe", *energynews.pro*, Énergie Nucléaire, 6 Sept. 2024, <https://energynews.pro/les-emirats-arabes-unis-inaugurent-la-premiere-centrale-nucleaire-arabe/>.

¹⁷ AGUENIER (M.), "Les Plus Grands Parcs Solaires au Monde", *energynews.pro*, Énergie Solaire, 29 July 2022, <https://energynews.pro/les-plus-grands-parcs-solaires-au-monde/>.

¹⁸ Connaissance des énergies, "Al Dhafra, vitrine solaire des Émirats arabes unis avant la COP28", *connaissancedesenergies.org*, Innovations et Insolites, 27 Nov. 2023, <https://www.connaissancedesenergies.org/al-dhafra-vitrine-solaire-des-emirats-arabes-unis-avant-la-cop28-241104>.

¹⁹ Planète énergies, "Masdar City : une ville 'laboratoire'", *planete-energies.com*, 23 Feb. 2024, <https://www.planete-energies.com/fr/media/article/masdar-city-ville-laboratoire>.

²⁰ Connaissance des énergies, "L'Arabie saoudite vise la neutralité carbone d'ici à 2060", *connaissancedesenergies.org*, L'essentiel de l'actualité, 23 Oct. 2021, <https://www.connaissancedesenergies.org/afp/larabie-saoudite-vise-la-neutralite-carbone-dici-2060-211023-2>.

²¹ Oxford Business Group, "Global energy leader Saudi Arabia invests in renewables", *The Report: Saudi Arabia 2023*, 2023, <https://oxfordbusinessgroup.com/reports/saudi-arabia/2023-report/energy-utilities/switched-on-the-kingdom-remains-a-key-player-in-the-global-energy-market-and-is-securing-its-future-by-investing-in-renewables-overview/>.

²² *Ibid.*

²³ Connaissance des énergies, "En Arabie Saoudite, les premières éoliennes arrivent à l'usine d'hydrogène vert de Neom", *connaissancedesenergies.org*, L'essentiel de l'actualité, 11 Oct. 2023, <https://www.connaissancedesenergies.org/afp/en-arabie-saoudite-les-premieres-eoliennes-arrivent-lusine-dhydrogene-vert-de-neom-231010>.

Meanwhile, Saudi Arabia is also investing in large-scale carbon capture and storage (CCS), aiming to eliminate 44 million tons of CO₂ per year by 2035²⁴.

Qatar, traditionally one of the world's largest per capita CO₂ emitters, is changing course with its National Vision 2030 and Climate Action Plan. It has committed to reducing its greenhouse gas emissions by 25% by 2030²⁵ and is expanding its solar capacity, aiming to reach 30% of its electricity by that year²⁶. The 800 MW Al Kharsaah Solar Park already offsets 900,000 tons of emissions annually²⁷. A new 2 GW solar project is underway in Dukhan²⁸, and QatarEnergy is developing blue ammonia²⁹ and carbon capture initiatives³⁰. Qatar is also a leader in climate finance innovation through the Global Carbon Council, which provides carbon credit certification services across the region.

B. OTHER GULF COUNTRIES ARE ALSO ACCELERATING THEIR DEVELOPMENT.

Economic diversification is not limited to the countries cited as examples in the preceding paragraphs. Other countries in the region are accelerating their development, as illustrated below. Oman's Vision 2040 seeks to reduce oil dependence through diversification into tourism³¹, logistics, and manufacturing, with plans to invest \$31 billion in tourism alone. The country launched Hydrogen Oman (Hydrom), a platform that has already awarded projects totalling 18 GW of renewable energy and aims to produce 1 million tons of green hydrogen annually³².

Bahrain is targeting 10% renewable energy by 2035 and is investing in rooftop solar, waste-to-energy pilot projects, and offshore wind feasibility³³.

²⁴ HELMAN (Ch.), "Saudi Aramco s'engage-t-elle véritablement dans la transition écologique malgré sa domination dans le secteur pétrolier ?", *Forbes*, Business, Sustainability, 20 June 2024, trad. DELEFORTERIE (L.), <https://www.forbes.fr/business/analyse-saudi-aramco-sengage-t-elle-veritablement-dans-la-transition-ecologique-malgre-sa-domination-dans-le-secteur-petrolier/>.

²⁵ Ministry of Municipality and Environment, *Qatar National Climate Change Action Plan 2030*, Sept. 2021, 69 p., p. 14.

²⁶ Connaissance des énergies, "Qatar : une nouvelle centrale solaire pour doubler les capacités renouvelables du pays d'ici à 2030", *connaissancedesenergies.org*, L'essentiel de l'actualité, 2 Sept. 2024, <https://www.connaissancedesenergies.org/afp/qatar-une-nouvelle-centrale-solaire-pour-doubler-les-capacites-renouvelables-du-pays-dici-2030-240901>.

²⁷ Power Technology, "Power plant profile: Al Kharsaah Solar PV Park, Qatar", *power-technology.com*, <https://www.power-technology.com/data-insights/power-plant-profile-al-kharsaah-solar-pv-park-qatar/>.

²⁸ Connaissance des énergies, "Qatar : ...", *op. cit.*

²⁹ Direction générale du Trésor, *op. cit.*

³⁰ Ministry of Municipality and Environment, *op. cit.*, p. 31.

³¹ Courrier international, "Dans le Golfe, le boom touristique aura-t-il la peau du camping traditionnel ?", *courrierinternational.com*, Économie, 15 Aug. 2024, https://www.courrierinternational.com/article/societe-dans-le-golfe-le-boom-touristique-aura-t-il-la-peau-du-camping-traditionnel_220501.

³² Omanet, "Oman's Hydrom Secures Impact Hydrogen Project Award 2025: Opportunities for Investors in Clean Energy", *omanet.om*, News, 6 Sept. 2025, <https://omanet.om/en/news/business/omans-hydrom-2025-hydrogen-award/>.

³³ JOANTEGUY (S.), "Le Bahreïn transforme son Écosystème Énergétique", *energynews.pro*, Énergies fossiles, 24 June 2022, <https://energynews.pro/le-bahrein-transforme-son-ecosysteme-energetique/>.

Kuwait plans to increase the share of renewable energy to 15% of its mix by 2030, with major investments in the Al Shagaya Energy Park and two 5 000 MW photovoltaic tenders currently underway³⁴.

Across the region, solar-powered desalination, smart grid investments, and new electric mobility platforms are emerging at scale. Battery storage, grid interconnection, and AI-driven demand-side management are becoming essential. Saudi Arabia is piloting large-scale storage at NEOM, while TAQA, a holding company combining the energy assets of the United Arab Emirates in the is investing in grid modernization to support variable renewable energy.

REGIONAL INTEGRATION AND GLOBAL ENGAGEMENT

The green transition is also taking on a growing regional dimension. The GCC Interconnection Authority is expanding high-voltage links among member states, enabling electricity exchanges and the cross-border optimization of solar and wind resources³⁵. Notably, projects like the \$660 million Saudi-Omani interconnector will facilitate shared access to clean energy capacity and enhance energy security³⁶. On the global stage, Gulf countries are asserting themselves as active climate actors. The UAE's leadership at COP28 in 2023 led to the creation of the ALTERRA Climate Fund, a \$30 billion platform aimed at mobilizing \$250 billion in global climate finance by 2030³⁷. Qatar is contributing to the UN Green Climate Fund, and Oman is partnering with India and Japan to co-develop clean energy infrastructure. Saudi Arabia, through its Public Investment Fund and Saudi Green Initiative, has committed billions to climate technologies and reforestation efforts³⁸.

Meanwhile, the region is also positioning itself as a future leader in global carbon markets. The UAE is launching a voluntary carbon trading platform through the Abu Dhabi Global Market, while the Qatar Global Carbon Council is establishing high-integrity offsetting standards.

This proactive international engagement reflects a strategic recognition: the Gulf's sustainable development agenda is not only national, but also a lever of geopolitical and economic influence.

Beyond public megaprojects, private sector startups and SMEs are gaining ground. The Gulf's green technology ecosystem is growing, with incubators like Hub71 and Flat6Labs supporting projects in

³⁴ Service économique du Koweït, "L'impact de la crise Covid-19 sur les grands projets au Koweït", *tresor.economie.gouv.fr*, Trésor-International, 29 March 2023, <https://www.tresor.economie.gouv.fr/Pays/KW/secteurs-porteurs-de-l-economie-koweitienne>.

³⁵ GCC Interconnection Authority, "Our Strategy", *gccia.com.sa*, Who we are, <https://gccia.com.sa/about-us/strategy/>.

³⁶ Arab News, "Oman to receive electricity connection boost after \$500m GCC grid", *arabnews.com*, Business, 12 Sept. 2025, <https://www.arabnews.com/node/2615065/business-economy>.

³⁷ CURNIS (K.), "Monde : le plus grand fonds climatique privé peine à trouver des opportunités d'investissements en Afrique", *eeom-eco.net*, Monde, 22 Nov. 2024, <https://zoom-eco.net/monde/monde-le-plus-grand-fonds-climatique-prive-peine-a-trouver-des-opportunites-dinvestissements-en-afrique/>.

³⁸ Programme pour l'environnement des Nations Unies, "L'Arabie saoudite s'efforce de reverdir les déserts pour lutter contre la sécheresse et la dégradation des sols", *unep.org*, Actualités, récits et discours, 6 May 2024, <https://www.unep.org/fr/actualites-et-recits/recit/larabie-saoudite-sefforce-de-reverdir-les-deserts-pour-lutter-contre-la>.

energy efficiency, smart agriculture, and carbon monitoring. However, to fully unlock this potential, improving SMEs' access to green financing will be critical to accelerate locally driven solutions.

This economic dynamism is already visible in macroeconomic data. In 2024, the non-oil sector across the GCC grew by 3.7%, outpacing the region's overall GDP growth of 1.8%³⁹. These figures validate the strategic shift underway: diversification is not only a climate necessity, but also a growth engine.

However, as the Gulf moves toward green energy, it is essential to ensure a just and inclusive transition. Reskilling programs, the creation of local jobs in renewable energy, and the inclusion of underrepresented groups, particularly women and youth, will determine the equitable sharing of the benefits of the green economy. Initiatives such as Saudi Arabia's Human Capacity Development Program and the UAE's commitment to reforming STEM (*Science, Technology, Engineering, Mathematics*) education are essential to preparing the workforce for the future.

III. FINANCING THE TRANSITION: AN ABUNDANCE OF CAPITAL

These national visions are underpinned by a rapidly evolving financial ecosystem. Green and sustainable finance in the Gulf has grown significantly over the past five years. In 2023 alone, GCC countries issued over \$15,5 billion in green bonds, a record⁴⁰. The UAE led the region with \$8.7 billion in issuance, nearly double the 2022 figure, closely followed by Saudi Arabia with \$6.7 billion⁴¹. This wave of financing was driven by sovereign wealth funds, state-linked entities, and private banks.

Sovereign wealth funds are playing a catalytic role. Saudi Arabia's Public Investment Fund (PIF) launched its own Green Finance Framework and supports nearly 70% of the country's renewable energy deployment through equity and debt⁴². In the UAE, Mubadala has invested more than \$15 billion in domestic and international clean energy⁴³, while the Abu Dhabi Investment Authority (ADIA) now integrates climate risk into its asset allocation strategies⁴⁴. In Qatar, the Qatar Investment

³⁹ World Bank Group, "GCC: Growth on the Rise, but Smart Spending Will Shape a Thriving Future", *worldbank.org*, News, 19 June 2025, <https://www.worldbank.org/en/news/press-release/2025/06/19/gcc-growth-on-the-rise-but-smart-spending-will-shape-a-thriving-future>.

⁴⁰ ABOUDOUH (A.), "Green finance is picking up in GCC, but its challenges may restrain the transition across MENA", *kalam.chathamhouse.org*, 3 April 2025, <https://kalam.chathamhouse.org/articles/green-finance-is-picking-up-in-the-gcc-but-its-challenges-may-restrain-the-transition-across-mena/>.

⁴¹ *Id.*, p. 41.

⁴² BARRY (I.), *La stratégie d'investissement du fonds souverain saoudien (PIF)*, Ambassade de France en Arabie saoudite, Service économique de Riyad, 30 Oct. 2022, 3 p., p. 2, <https://www.tresor.economie.gouv.fr/Articles/aa549f58-31ad-473b-ae7c-9c8a6f7dc354/files/8ec101aa-4823-461e-b391-1ea700d97a10>.

⁴³ Emirates News Agency, "Mubadala Capital commence ses opérations en tant que filiale de gestion d'actifs à part entière de la Compagnie d'Investissement Mubadala", *wam.ae*, 19 Nov. 2021, trad. MAHMOUD (M.), <https://www.wam.ae/fr/article/hszrdkyq-mubadala-capital-commence-ses-op%C3%A9rations-tant-que>.

⁴⁴ ADIA, "Sustainable Investing", *adia.ae*, <https://www.adia.ae/en/purpose/responsible-long-term-investing/case-studies/sustainable-investing>.

Authority (QIA) has committed more than £1.3 billion to climate technology projects in the United Kingdom, including next-generation aviation and hydrogen mobility⁴⁵.

Regional banks are also aligning with sustainable development. Emirates NBD, First Abu Dhabi Bank, and Qatar National Bank have launched ESG-linked loan products and now monitor financed emissions. Meanwhile, the Central Bank of the UAE has launched an AED 1 trillion (\$272 billion) green lending strategy to be rolled out by 2030, covering energy efficiency, sustainable transport, and clean industry.

These financial developments are not limited to voluntary initiatives. ESG-linked *sukuk* are gaining popularity, with \$6.2 billion issued in the GCC in the first three quarters of 2023 alone, nearly double the total for 2022⁴⁶. These instruments are being adopted by both private and public financial institutions, offering attractive returns while aligning with long-term sustainable development goals.

IV. RAPID ESG REGULATORY EVOLUTION: A NEW FRAMEWORK FOR TRANSPARENCY

Another key accelerator of green finance and business transformation in the GCC is the rapid evolution of ESG regulatory frameworks.

In 2025, the UAE became the first country in the region to mandate ESG reporting for all listed companies and major financial institutions. The Securities and Commodities Authority (SCA), together with leading financial free zones such as DIFC and ADGM, has aligned its disclosure requirements with international standards, including those of the Task Force on Climate-related Financial Disclosures (TCFD) and the International Sustainability Standards Board (ISSB).

Oman and Saudi Arabia have followed the trend; each introducing national green finance frameworks to encourage sustainable bond issuance and establish standardized “use of proceeds” disclosure requirements⁴⁷. Stock exchanges in Dubai and Riyadh have also launched ESG indices and sustainability reporting platforms, providing investors with tools to benchmark performance and assess climate-related risk. These frameworks are supported by targeted incentives, including listing fee waivers for green bond issuers and streamlined disclosure requirements. They are expected to attract institutional capital seeking high-integrity ESG-aligned investment opportunities.

Taken together, these regulatory advances are helping to institutionalize sustainability across the region’s financial system. By embedding climate risk into corporate governance and expanding the

⁴⁵ ESG News, “Le Qatar investit 1.3 milliard de dollars dans la technologie climatique au Royaume-Uni”, *esgnews.com*, Actualités ESG, 4 Dec. 2024, <https://esgnews.com/fr/Le-Qatar-consacre-1-milliard-de-dollars-%C3%A0-la-technologie-climatique-au-Royaume-Uni/>.

⁴⁶ DRUM (P.), *GCC Sukuk: A Primer – Investment characteristics of US Dollar-Denominated Sukuk Originating from the Gulf Cooperation Council*, Saturna Capital, 3rd ed., March 2024, 39 p., p. 13, https://www.saturna.com/sites/saturna.com/files/2025-02/WP-2024_03-GCC-Sukuk-web.pdf.

⁴⁷ See Sustainable Finance Framework, Sultanate of Oman et Green Financing Framework, Kingdom of Saudi Arabia.

pipeline for impact-oriented investment, the GCC is laying the foundation for a more transparent, accountable, and resilient economic model.

V. AN INCREASING TREND IN ESG PERFORMANCE ACROSS THE GCC

To assess the effectiveness of these shifts, we conducted an analysis of environmental, social, and governance (ESG) performance and related controversies among publicly listed companies across the six GCC countries. Using data sourced from the LSEG (Refinitiv) database, we examined the median ESG scores and ESG controversies scores over the last ten fiscal years (from 2015 to 2024). The dataset comprises a sample of 71 firms, disaggregated as follows: Oman (6), Bahrain (10), Kuwait (9), Saudi Arabia (12), UAE (22), and Qatar (12).

Findings show a consistent upward trend: the median ESG score rose from 35.4 in 2015 to 42.86 in 2024. While the region's ESG scores are still converging toward global benchmarks, typically between 50–65 in advanced economies, the trajectory is encouraging. This improvement reflects enhanced disclosure practices, greater alignment with national visions (like Saudi Vision 2030 and UAE Vision 2050), and growing investor pressure for transparency.

Environmental disclosures remain less prominent, due to structural reliance on hydrocarbon industries and the early stage of climate-related regulation. However, there is a clear movement toward improvement, supported by stronger regulatory guidance and alignment with global standards. This emerging maturity is further illustrated by the region's performance on ESG controversies. While ESG scores are still gaining in strength, the ESG Controversies Score rated out of 100 (100 meaning no controversy) has remained consistently high across the last decade. It is estimated ranging from 97.6 to 100 according to LSEG Refinitiv, with many companies reporting no major incidents. This suggests that, despite moderate ESG performance levels, firms across the GCC have managed to avoid serious reputational or greenwashing risks related to ESG issues. Such outcomes may reflect improving governance practices and effective internal risk controls.

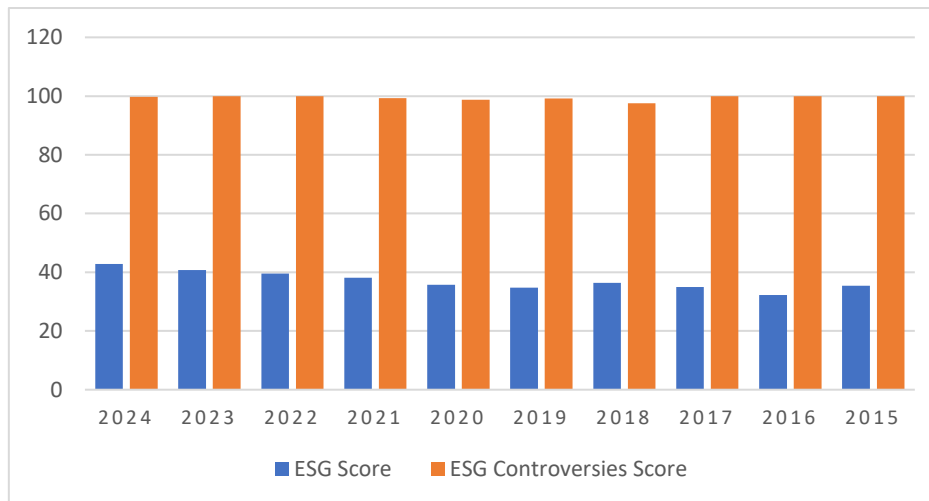


Figure 1. Median ESG and controversy scores for the GCC between 2015 and 2024.

These findings indicate that the region is not engaging in widespread greenwashing but is instead making tangible and sustained progress toward meaningful ESG integration. The rise in ESG scores reflects a growing alignment with international frameworks, the maturation of sustainability reporting practices, and increasing investor demand for credible disclosures. Far from superficial compliance, the ESG trajectory in the GCC is marked by a structural shift, embedding environmental and governance considerations into corporate governance.

Building on this momentum, the region is now extending its sustainability agenda beyond disclosure and governance toward a deeper transformation, one that links corporate sustainability, state policy and international climate diplomacy. The Gulf's approach to sustainability is no longer confined to regulatory alignment. It has become a strategic pillar of economic diversification and geopolitical positioning. Indeed, the region increasingly acts as a bridge between advanced and emerging economies, channelling capital, technology and policy collaboration to accelerate the global transition. From the Paris Agreement to the commitments reaffirmed at COP28 in Dubai, the Gulf has embraced a shared vision of carbon neutrality, by 2050 in countries such as the UAE and Oman, and by 2060 in Saudi Arabia and Bahrain, grounded in the understanding that progress depends on collective responsibility across the entire value chain, from governments and investors to producers and consumers.

Accusations of greenwashing towards Gulf countries can be explained by actions that are not always aligned with the announced climate commitments. The CGG countries often proclaim ambitious climate-related goals, but these often remain non-binding. Consequently, this reality creates the illusion of double standards and contradictory attitudes. One example is when the CEO of the United Arab Emirates' leading oil company, Adnoc, was appointed to chair COP28 in Dubai⁴⁸. This appointment created confusion among the public who saw it as contrary to the proclaimed climate commitments.

⁴⁸ Ouest-France, "Le président de la Cop28 accusé de greenwashing sur Wikipédia", *ouest-France.fr*, Environnement, 30 May 2023, <https://www.ouest-france.fr/environnement/cop21/le-president-de-la-cop28-accuse-de-greenwashing-sur-wikipedia-bfd5b65e-fefd-11ed-99f6-73959f90f93e>.

RECOMMENDATIONS AND STRATEGIC OUTLOOK

The GCC's transformation from oil-dependent economies to diversified, sustainable powerhouses is not greenwashing. It is a strategic shift, rooted in necessity, enabled by capital, and propelled by long-term national vision. Across the region, countries have made clear and measurable commitments to decarbonization and sustainable development, backed by robust investment strategies and institutional frameworks.

1. RECOGNISING THE GULF AS A STRATEGIC PARTNER IN GLOBAL CLIMATE SOLUTIONS

This recognition is not a theoretical aspiration, but an empirical reality demonstrated throughout the paper; through investments, institutional capacity, and transparent ESG frameworks.

Yet the global energy transition cannot succeed through supply-side efforts alone. Without a credible and sustained shift in consumption patterns, asking fossil fuel producers to rapidly scale back output risks destabilizing both climate goals and the global economy. For instance, while GCC states face mounting pressure to accelerate their transition, several major international oil companies—such as Shell and BP—have reduced their renewable energy ambitions since 2023, citing shareholder concerns and profitability constraints⁴⁹. According to the International Energy Agency (IEA), oil and gas firms globally accounted for less than 1% of total clean energy investment as of 2024⁵⁰.

At the same time, Europe's decarbonization efforts, though ambitious, have been complicated by energy security priorities in the wake of the Russia–Ukraine war. Several EU member states have reactivated coal-fired power plants, ramped up LNG (Liquefied natural gas) imports from the Gulf, and delayed aspects of their green agendas due to inflationary and geopolitical pressures. Meanwhile, China accounted for over half of global oil demand growth in 2023 and remains the world's largest consumer of coal⁵¹.

This global context reveals a structural imbalance, the countries that drive global energy demand must align their climate rhetoric with coherent and consistent policy action. Progress toward global net zero requires symmetrical commitments on both the supply and demand sides of the energy equation. Rather than being cast as part of the problem, the Gulf should be acknowledged as an essential partner in the solution. Its combination of financial resources, institutional capacity, and long-term strategic planning positions the region to lead in key transition areas, from climate finance and clean hydrogen to renewable energy, and carbon markets.

⁴⁹ Energynews, “Les majors pétrolières européennes ralentissent leur transition énergétique”, *energynews.pro*, Pétrole, 28 Feb. 2025, <https://energynews.pro/les-majors-petrolieres-europeennes-ralentissent-leur-transition-energetique-2/>.

⁵⁰ ESG News, “Un rapport de l’AIE révèle que les investissements dans les énergies propres étendent leur avance sur les combustibles fossiles”, *esgnews.com*, Actualités ESG, 25 May 2023, <https://esgnews.com/fr/un-rapport-de-l%27iea-r%C3%A9v%C3%A8le-que-les-investissements-dans-les-%C3%A9nergies-propres-%C3%A9tendent-leur-avance-sur-les-combustibles-fossiles/>.

⁵¹ Service économique régional de Pékin, *Charbon : État des lieux et perspectives*, Ambassade de France en Chine, 13 Dec. 2024, 4 p., <https://www.tresor.economie.gouv.fr/PagesInternationales/Pages/e44534c1-d977-47b7-92ee-77d12d83efc8/files/cfa04448-266f-415d-a054-c39a7a6ed132>.

2. ACCELERATING THE TRANSITION: SCALE, SPEED, AND INCLUSION

The Gulf's leadership depends on maintaining current momentum through inclusive growth models that ensure equitable benefits across generations, genders, and sectors.

The shift from fossil legacy to climate leadership is already underway. Through bold national strategies, regional coordination, and global partnerships, the GCC is building a blueprint for how resource-rich economies can redefine their future. What remains to be seen is whether international stakeholders will rise to the occasion - not with fragmented expectations or short-termism, but through genuine collaboration.

The trajectory is clear. But as with any transition, success will depend on speed, scale, and inclusion. If the Gulf maintains its current momentum and deepens its global coalitions, it will not only transform its own economic model but also chart a path for others to follow. Now is the time for global investors, innovators, and policymakers to engage, not simply to observe this transition, but to help shape it.

3. DEEPENING ESG INTEGRATION ACROSS BUSINESSES AND INDUSTRIAL ECOSYSTEMS

Beyond government-led initiatives and CSR level, the next frontier of sustainability in the GCC lies in embedding ESG principles into the industrial and manufacturing sectors. This requires the creation of an enabling ecosystem, underpinned by region-specific taxonomy, incentives, and capacity-building, that promotes circularity, decarbonization, and industrial symbiosis.

The key enablers for the integration are:

- **Regulatory and Policy Infrastructure:** GCC governments should establish regional or local ESG taxonomy that build on international best practices while being adapted to local socio-economic contexts. This approach would guide investment and disclosure while ensuring both alignment with global standards and regional competitiveness. This approach implies developing a “smart law”. This is a concept being developed by researchers at SKEMA Publika. “Smart law” enables the implementation of pragmatic regulations, combining soft and hard law rules in order to achieve social and sustainability goals. This while taking into account the specific characteristics of each economic sector. This approach aims to make the law more flexible by giving it the ability to adapt to situations, which is key in a complex regulatory and competitive environment.
- **Industrial transformation:** Manufacturing clusters must evolve into low-carbon production zones through incentives for recycling, energy efficiency, and green exports.
- **Human capital transition:** Upskilling and reskilling of the existing unsustainable industries' workforce are essential to ensure a just transition. Technical and managerial training in sustainable technologies, sustainable finance, and R&D should become part of national education agendas.

- **Education and knowledge ecosystem:** From primary to tertiary levels, educational programs must integrate sustainability literacy, while Business Schools and universities, such as those in the UAE, should act as accelerators for applied research, ESG leadership, and corporate transformation.

AUTHORS

Salomé Audié, Hanan Bakr, Sana Ben Abdallah, Danil Bekrar, Christophe Germain, Arnaud Lacheret, Brahim Belasri-Nogueira, Diane de Saint-Affrique, Dhafer Saïdane

Salomé Audié is an ESG professional working on sustainability strategies, environmental management, and climate risk across the energy and infrastructure sectors in the middle East, Africa, and Asia-Pacific. Her work focuses on integrating ESG and climate considerations into investment decisions and supporting the transition toward a net-zero carbon trajectory. She previously advised EU climate and energy policy at TotalEnergies in Brussels and coordinated high-level strategic initiatives for ENGIE at Expo 2020 Dubai. She also lectures in Sustainable Finance and Climate Risk at SKEMA Business School in Dubai, combining academic insight with practical industry expertise.

Hanan Bakr holds 25 years of experience across advisory, corporates, and banking. Hanan has cultivated expertise in sustainability leading initiatives like the African Carbon Market Initiative at Cop27 and private sector engagement at Cop28. As the former Energy Transition Sector head for HSBC in the Middle East, North Africa, and Turkey, Hanan focuses on sustainable finance spans green loans, bonds, and project finance, with a track record of originating complex deals. Through strategic initiatives like the Net Zero Transition Charter and Cop28 & SME Climate Hub, Hanan bring innovative solutions to climate change. Hanan's extensive global network positions her to guide businesses in adopting best E.S.G. practices, have better access to capital finance , and navigating regulatory risks which ultimately enhances profitability and corporate social standing.

Sana Ben Abdallah is Doctor in Economics and Associate professor at University of Sfax. Her areas of interest include sustainable finance, CSR, banking and finance. She is an ESG expert at European Federation of Financial Analysts Societies (EFFAS) and contributed to the chapter on Africa within the CESGA Module 10 ESG regional developments. She is a member of the International Observatory of Sustainable Finance Observatoire international de la finance durable. Sana BEN ABDALLAH is co-founder of the Fintech SPI and CSR Advisor to the Union of Maghreb Banks (UBM). She has recently published academic articles in international journals such as Finance Research Letters, Economics Bulletin, Computational Economics, Business Ethics: A European Review, and Revue d'économie financière (Best Paper Award in Responsible Finance 2019: Responsible Finance Competition for Researchers from Francophone Emerging Countries).

Danil Bekrar is Director within ING's Financial Institutions Middle East team, based in the UAE, where he leads strategic coverage of non-banking financial institutions and government-related entities across the MENA region. With over 15 years of experience in Wholesale Banking, Danil has developed deep expertise in advising sovereign wealth funds, central banks, and institutional investors on complex financing and investment strategies. His work frequently intersects with policy and governance issues, reflecting a nuanced understanding of regional dynamics and institutional frameworks. Danil holds a Master of Science in Corporate Finance from SKEMA Business School in France and serves as an Adjunct Professor of Sustainable Finance at SKEMA, where he mentors future finance leaders on ESG integration and responsible investment strategies. His academic contributions are complemented by active participation in global forums such as the Future Investment Initiative (FII), where he advocates for sustainable finance and institutional innovation. Passionate about sustainability, Danil combines commercial acumen with a commitment to long-term environmental and social goals, positioning him as a trusted advisor in the region's transition to a low-carbon economy. His current focus includes aligning institutional finance with ESG principles and driving innovative solutions that support the Middle East's evolving sustainability landscape.

Christophe Germain is the Vice-Dean of SKEMA Business School in France. Before joining SKEMA, Christophe held the positions of Deputy Director of the Grande École programme (2002-2007), Academic Director (2007-

2015), Deputy Director General from 2010 to 2015, and then from 2016 to 2018. In 2016, he was appointed Acting Chief Executive Officer, then Chief Executive Officer of Shenzhen Audencia Business School in China from 2016 to 2018. He joined Skema in October 2023 as Vice-Dean in charge of the new schools of AI, law, geopolitics and design, and as special advisor to Alice Guilhon, the school's Chief Executive Officer.

Arnaud Lacheret holds a PhD in Political Science from the University of Grenoble. He is Academic Director of the Dubai campus and Associate Professor at SKEMA Business School. He was before in charge of the M.Sc Program and Project Management and Business Development in the Grand Paris Campus. Arnaud has been a parliamentary assistant at the European and then the French Parliament. Moreover, he has worked in taken various positions of chief of staff of many mayors and president of French local collectivities. Arnaud has also held various management positions with French local authorities and the Ministry of Foreign Affairs. Before joining SKEMA, he headed the French Arabian Business School (ESSEC – Arabian Gulf University) in Bahrain. His work focuses on intercultural management and public policy.

Brahim Belasri-Nogueira leads Westland's investment and tokenization strategy in the UAE, structuring real estate deals that combine private equity discipline with blockchain -based finance. His work spans investment strategy, deal structuring, regulatory compliance, and investor relations, with a focus on mobilizing global capital and building scalable investment platforms. He brings international experience in strategy consulting and venture building, with previous roles at Accenture and global innovation launchpads. Brahim holds a law degree from Toulouse Capitole University (France) and a dual master's in business & technology from the University of California, Berkeley (USA) and SKEMA Business School (France), where he graduated valedictorian. He is also an Adjunct Professor at SKEMA Business School in Dubai, where he teaches fintech, blockchain, and the integration of digital investment with ESG and sustainable finance principles.

Diane de Saint-Affrique holds a doctorate in law from the University of Paris 2, Panthéon-Assas. She is a professor at SKEMA Business School, where she created and directed the dual Masters in Business Law and Business Contract Law. She is also involved in SKEMA Venture, SKEMA's incubator, where she advises start-ups on their strategy in the context of their entrepreneurial and legal development. She trains managers in governance and CSR. Her areas of research are corporate law, corporate governance and CSR. Her research also focuses on bioethics, AI and ethics. Diane de Saint-Affrique is a board member of AQUAVERA (a non-profit organisation). She is a board member of AFD&M (Association française droit et management).

Dhafer Saïdane holds a PhD in Economics - HDR (Paris 1 -Sorbonne). He is Full Professor at SKEMA Business School, Director of the MSc "Sustainable Finance & FinTech" and responsible for the global coordination (Belo, Paris, Suzhou, Sophia) of the MSc "Corporate Financial Management". He is a member of the Economic Analysis Council of the Tunisian Head of Government, an expert for international institutions (ECA, ADB, UNCTAD, UMA, UBM...) and an advisor to the "Club of Bank and Credit Institution Executives in Africa". Dhafer has recently published 7 books including "La finance durable", October 2011, Editions de la Revue Banque - TURGOT Prize awarded by the Minister of Finance in 2012. His latest book entitled "Banques Africaines: les grands défis" was published in June 2021.

READING COMMITTEE

Sean Scull, think tank Project manager, PhD student in information and communication science at Paul Valéry-Montpellier III University. Graduate in political science with a minor in international relations from the University of Gothenburg and a master's in international politics with a minor in English-speaking politics, from the University of Toulon. Sean has academic and professional experience from Sweden and the United States of America.

Grégoire Kraoul-Riera is a student in the Master's programme in International Governance and Diplomacy at Sciences Po Paris. A graduate of SKEMA Business School's Grande École Programme and holder of a Master's degree in Business Law, with a specialisation in European Law and New Economies (Université du Littoral-Côte d'Opale), he devoted his Master's thesis to the regulation of digital industries in the European Union, a work at the intersection of law, industrial economics and international governance. After completing his Master's degree at Sciences Po, he hopes to join international organisations in order to contribute to multilateral dialogue and the development of global governance of new technologies.

Publication: November 2025

Find all our publications at publika.skema.edu

Contact: publika@skema.edu