SDG-CLIMATE FACILITY
Human Security in the Arab States

UN environment programme

finance initiative

The Road Towards Banking Decarbonisation: The Case of MENA

A maturity analysis of the state of banking decarbonisation in MENA and a set of recommendations for public actors and banks in the region to accelerate transition

July 2023

Suggested citation: United Nations Environment Programme (2023). The Road Towards Decarbonisation: The Case of MENA. Geneva.

Production: United Nations Environment Programme Finance Initiative

This product is one of the outputs of the 'SDG-Climate Facility: Climate Action for Human Security' project. With financial support from the Swedish International Development Agency (Sida), the project is a multi-partner platform focusing on the impacts of climate change on human security in the Arab region, especially in the context of countries in crisis. It brings together the League of Arab States (LAS), Arab Water Council (AWC), United Nations Development Programme (UNDP), United Nations Environment Programme Finance Initiative (UNEP FI), World Food Programme (WFP), United Nations Office for Disaster Reduction (UNDRR), and United Nations Human Settlements Programme (UN-Habitat), to deliver climate-oriented solutions that address climate challenges and bring co-benefits across the SDGs. In doing so, it aims to scale up access to and delivery of climate finance, including through innovative partnerships with the private sector.

Author

Orestis Velentzas
Senior Advisor, Net-Zero and Sustainable Finance

Acknowledgements

The author would like to acknowledge the support and expertise of the following UNEP FI colleagues towards the management and completion of this report:

Nuran Atef
AME Regional Coordinator

David Carlin
Climate Risk Programme Lead

Remco Fisher
Climate Lead

Sarah Kemmitt
Lead Secretariat, Net-Zero Banking Alliance

Paul Smith
Senior Climate Consultant

Rob Wilson
Design Lead

The author would also like to acknowledge the cooperation and insights of a number of banks and institutional actors from the Middle East and North Africa region.

Contents

Acronyms and abbreviations

ADGM	Abu Dhabi Global Market
BAU	Business-As-Usual
CBE	Central Bank of Egypt
CBUAE	Central Bank of the United Arab Emirates
COP	UNFCCC Conference of the Parties
CRREM	Carbon Risk Real Estate Monitor
DFSA	Dubai Financial Services Authority
DIFC	Dubai International Finance Center
ESG	Environmental, Social and Governance
FEB	Federation of Egyptian Banks
FRA	Financial Regulatory Authority (of Egypt)
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GFANZ	Glasgow Financial Alliance for Net Zero
GRI	Global Reporting Initiative
ICMA	The International Capital Market Association
IEA	International Energy Agency
IFC	International Finance Corporation
IRENA	International Renewable Energy Agency
ISSB	International Sustainability Standards Board
JIM	Joint Impact Model
LMA	Loan Market Association
MENA	Middle East and North Africa
MOCCAE	Ministry of Climate Change and the Environment (of the United Arab Emirates)
NDC	Nationally Determined Contributions
NGFS	Network of Central Banks and Supervisors for Greening the Financial System
NZBA	Net-Zero Banking Alliance
PCAF	Partnership for Carbon Accounting Financials
PRB	Principles for Responsible Banking
SBTi	Science-Based Targets initiative
SFWG	Sustainable Finance Working Group (of the United Arab Emirates)
UNEP FI	United Nations Environment Programme Finance Initiative
UNFCCC	United Nations Framework Convention on Climate Change
TCFD	Task Force For Climate-Related Financial Disclosures

Executive summary

About this report

This report highlights the risks of climate change in the Middle East and North Africa (MENA), discusses the state of banking decarbonisation in the region and outlines a set of recommendations for public actors and banks to accelerate decarbonisation of the region's banking industry. The report focuses on Egypt and the United Arab Emirates (UAE) given their key role in international climate negotiations with COP27 hosted by Egypt in Sharm el-Sheikh and with COP28 taking place in Dubai, UAE. The report aims to:

- analyse the state of banking decarbonisation in the MENA region both from the perspective of public actors and that of the banking industry;
- identify and assess how banks are responding to the transition to a low carbon economy, while taking into consideration aspects of the broader macro-environment they operate in; and
- present recommendations for public actors and banks to accelerate decarbonisation in the banking sector in the MENA region.

The findings of this report have been based on:

- Desk-based research;
- Interviews with institutional actors and executive teams at banks;
- Questionnaire-based qualitative survey.

Context

The MENA region is one of the world's most vulnerable areas to climate change, which is already having a tangible effect on its societies and natural systems. Significant research has been published over the last few years providing scientific evidence and insights on the impact of climate change across the region—from rising surface temperatures caused by GHG emissions which have tripled in MENA over the past 30 years (Crippa *et al.*, 2019); to deteriorating water scarcity that puts agriculture and food security at risk; to sea level rise which is set to threaten about a quarter of the area's coastal GDP (World Bank, 2007). Moreover, climate impacts are projected to deteriorate in years to come, worsening the region's prospects for economic growth and prosperity. Committing to address climate change is therefore an imperative for both public and private actors.

Despite being one of the most climate vulnerable regions, MENA is also at a unique competitive advantage to lead in the carbon transition. This has to do with its unique mix of physical characteristics, economic output, and potential capacity in new zero-carbon areas of the economy. For MENA to fully realise the significant benefits associated with leading the low-carbon transition, a systemic change is required where all public and private actors work collaboratively towards the common goal. For governments this means developing national decarbonisation strategies and providing commensurate incentives to businesses and banks; for policymakers it means building a coherent policy and regulatory environment to accelerate the transition; for businesses it means redefining their business models and diversifying into new low-carbon areas of the economy; and finally, for banks it means orchestrating the transition through their lending and investment activities. Put simply, no transition is feasible without a decarbonised banking sector.

Key findings

Dialogue between public and private actors on climate mitigation has accelerated in the MENA region, particularly in Egypt and the UAE with COP27 taking place in Sharm el-Sheikh in November 2022 and COP28 in Dubai at the end of 2023. An increasing focus is being placed on the banking sector and particularly on the role banks can play in advancing decarbonisation, as well as on the role of policymakers and regulators. Our findings on the state of banking decarbonisation in Egypt and the UAE can be summarised as follows:

- In the **policy and regulatory** space, preliminary ESG disclosure mandates—including emissions reporting—have been introduced for banks. These mandates have leveraged components of some globally established climate reporting frameworks such as the Task Force on Climate-Related Financial Disclosures (TCFD) and the Global Reporting Initiative, however their depth and breadth remain limited, especially in relation to financed emissions. The provision of guidance for the adoption of carbon accounting methodologies and the use of country emissions factors by banks also remains limited. Guidance on target-setting and the introduction of mandates in relation to target-setting, the adoption of sectoral reduction trajectories for financed emissions and the implementation of sustainable finance taxonomies are also very limited. There is currently some ongoing activity with regards to the use of climate scenarios provided by the Central Banks and Supervisors Network for Greening the Financing System (NGFS) for climate stress-testing purposes, however no detailed plans have been developed yet. Overall, public actors in Egypt and the UAE have started taking some initial steps towards a framework for banking decarbonisation, but a lot more needs to be done.
- **Action by banks** on climate mitigation is limited to a small, but increasing, number of banks which are proactively looking to develop their carbon accounting and emissions reporting capabilities in line with globally established methodologies and frameworks while making sure they comply with national disclosure mandates. A few banks are planning to measure the carbon footprint of their operations in

2023–2024, but only a handful of them are planning to measure, in the same period, the carbon footprint of their lending and investment portfolios across some of the sectors they finance. In terms of climate commitments, eight banks from Egypt and the UAE have signed the UN Principles for Responsible Banking (PRB) and chosen climate as an impact area. Two of them have committed, through the Net-Zero Banking Alliance, to achieve net zero by 2050 in line with the 1.5°C scenario provided by the International Energy Agency. These banks have signed the Partnership for Carbon Accounting Financials (PCAF) and have used the PCAF standard to measure the financed emissions of their corporate loan books for some of the sectors they finance and are planning to announce their first set of sectoral reduction targets in 2023. However, most banks have not taken any steps to set targets. With regards to transition strategies, a small number of leading banks have developed initial plans, while a few banks have developed transition finance propositions on an ad hoc basis and not as part of a coherent set of transition strategies. Finally, embedding the identification and mitigation of emissions-related risks in governance structures and the operationalisation of net zero across teams, systems and processes are areas of increased focus, though most banks have not taken any steps in that respect. Overall, most banks in Egypt and the UAE are still in an exploration and planning mode across all aspects of banking decarbonisation, leaving a lot more to be done across the sector.

- **Barriers to transition** towards banking decarbonisation remain significantly high in MENA and to some extent align with what is observed in other regions, however MENA's strong dependence on fossil fuels creates additional challenges for banks that are looking to accelerate their decarbonisation strategies. The maturity of the policy and regulatory environment across the different elements of banking decarbonisation is not fully developed and this is limiting banks' options to develop and implement their decarbonisation strategies. Other key challenges include the lack of clarity regarding the adoption of carbon accounting methodologies and the use of country emissions factors by banks; the lack of emissions data for some sectors; the absence of country-specific climate scenarios and sectoral pathways for commitment and target-setting purposes; and the lack of guidance for banks on the governance and operationalisation of net-zero strategies. Despite these challenges, these barriers can be overcome by banks in Egypt and the UAE willing to lead and commit their business strategies to decarbonisation.

Summary of recommendations

Advancing the decarbonisation of the banking industry both at the global and the jurisdictional levels is a complex exercise which requires coordinated action from policymakers, regulators, and banks towards a common goal. At the jurisdictional level, however, there is a distinct national context that needs to be considered, including the intrinsic characteristics of the national banking sector, the carbon materiality of the sectors that banks finance, the maturity level of clients in terms of transition, and the available sustainable finance opportunities. With that in mind, this study has developed the following set of recommendations:

Recommendations for public actors—to build a mature policy and regulatory environment that not only mandates the alignment of banks towards a decarbonisation pathway, but also practically supports their transition. In summary, these recommendations include:

Area	Description
 Measurement & reporting	Providing guidance and mandating for banks to adopt **carbon accounting methodologies** and **country emissions factors** for emissions measurement and reporting. Introducing and mandating **emissions disclosure requirements** for banks to be measuring and reporting on their carbon footprint for Scopes 1, 2 and 3.
 Commitment & target setting	Providing guidance and mandating banks to **align** their lending and investment portfolios with globally agreed climate commitments and **Nationally Determined Contributions** plans. Providing guidance and mandating banks to **adopt climate scenarios and sectoral reduction trajectories** to develop their decarbonisation strategies and set interim reduction targets.
 Transition strategies	Developing **financial resources and incentivisation schemes** to enhance the bankability of transition projects and thus help banks accelerate transition finance. Developing rigorous **sustainable finance taxonomies** in line with evolving global standards and providing guidance to banks for implementation.
 Governance & operating model	Providing guidance and mandating banks to **incorporate emissions criteria across governance structures** and reflect those in all different parts of decision-making. Providing guidance and mandating banks to deliver **climate capacity-builidng programmes** and to update **data, systems, and processes** to operationalise net zero.

Recommendations for banks—to develop and implement coherent end-to-end decarbonisation strategies without having to necessarily wait for the policy and regulatory environment to mature. In summary, these recommendations include:

Area	Description
 Measurement & reporting	Aligning with evolving **global carbon accounting methodologies** and becoming familiar with the use of **country emissions factors,** where available, for carbon footprint measurement. Aligning with evolving global **climate reporting frameworks** and participating in relevant initiatives to build emissions reporting capability for Scopes 1, 2 and 3.
 Commitment & target setting	Developing a **Board-level commitment** to address climate change in line with globally agreed climate commitments and national decarbonisation plans. Engaging with providers of **climate scenarios and sectoral reduction trajectories** to understand their use cases and suitability for commitment and target-setting purposes.
 Transition strategies	Designing and implementing **forward-looking transition strategies on a sector-by-sector basis**, through a combination of phase-out policies, transition finance and investment. Developing a coherent set of **sustainable finance propositions** across business lines and sectors to drive growth by helping existing and new clients deliver on their transition plans.
 Governance & operating model	Incorporating **emissions across governance structures** and implementing **climate capacity-building programmes** to upskill employees and build a climate-driven culture. Designing and implementing **transformation initiatives** for the operationalisation of net zero across **data, systems and processes** across the banking value chain.

The recommendations included in this report are **by no means exhaustive and should not be read as such**. These recommendations are meant to help public actors and banks in Egypt and the UAE—but also more broadly across the MENA region—to understand where they currently map across the different elements of banking decarbonisation and, based on that, to identify appropriate next steps they can take to accelerate transition. Even though this report primarily focuses on the MENA region, it includes a number of conceptual frameworks and tools on banking decarbonisation that have been developed by the United Nations Environment Programme Finance Initiative (UNEP FI) and are being published for the first time—these conceptual frameworks and tools should be of value to policymakers and banks regardless of the region where they operate in.

1. Introduction

1.1 Climate risks in the MENA region

Rising temperatures

Greenhouse gas (GHG) emissions in the MENA region have more than tripled over the past 30 years (Crippa *et al.*, 2019), leading to a regional temperature rise of 0.4°C per decade (Monforti-Ferrario *et al.*, 2019). This pace of temperature increase has been twice as fast as the rest of the world. In fact, under current climate scenarios established by the IPCC, the region's average temperature is expected to increase by 4°C by 2050, an increase much higher than the 1.5°C target set in the Paris Agreement (Vohra, 2021). What is more, temperatures in MENA are expected to further accelerate in years to come with heat extremes expected to increase significantly both in terms of frequency and intensity (Met Office, 2021). The further temperatures rise, the greater is the negative impact on the area's human populations and natural systems. With regards to human populations, rising temperatures will not only impact quality of life, but life itself since under the current climate scenarios mortality rates caused by rising temperatures in the MENA are expected to grow by 60% to 123 people per 100,000 annually by the end of the century (Hajat *et al.*, 2023). However, if global temperature rise is limited to 2°C, then over 80% of these deaths could be avoided. With regards to natural systems, rising temperatures are associated with desertification, loss of arable lands and biodiversity loss across both terrestrial and marine ecosystems. These effects will have a direct negative impact on MENA's agriculture, vegetation, and food security and could lead to dependencies on imported food.

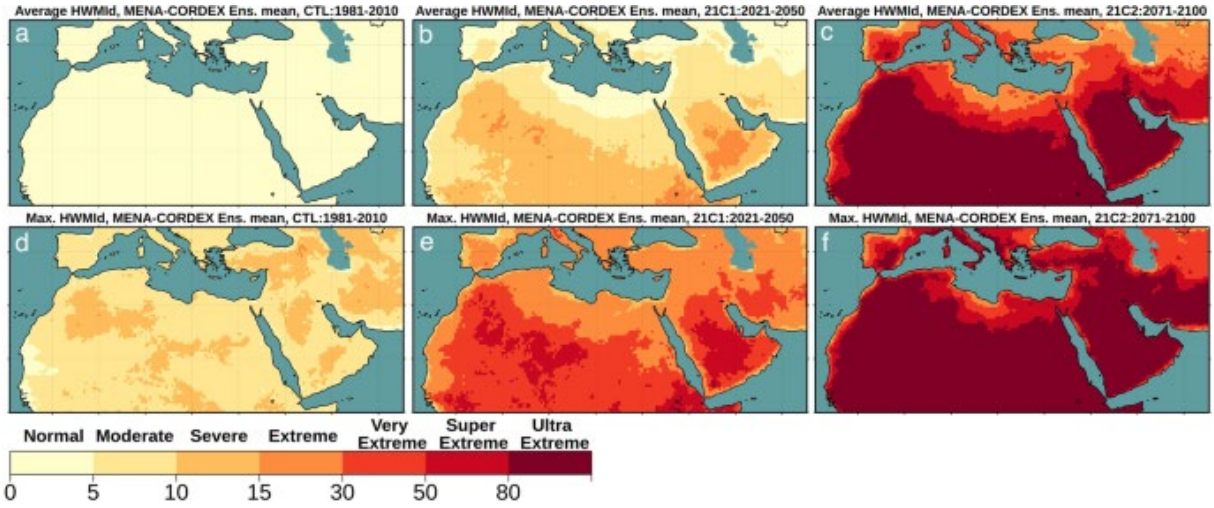


Figure 1: Maps of daily Heat Wave Magnitude Index: Average (a-c) and absolute maximum (d-f) values for 1981–2010 (a+d), 2021–2050 (b+e) and 2071–210 (c+f)/ (Zittis *et al.*, 2021)

Water scarcity

MENA is the world's most water-stressed region. Climate change leads to decreasing levels of groundwater and rainfall, and this only adds to the existing pressures on water demand placed by the area's expanding and urbanising population. Even though MENA is home to 6.3% of the world's population, it has only 1.4% of the world's renewable fresh water resources (Boudiaf *et al.*, 2022). Moreover, 11 of the world's 17 most water-stressed countries are located in the MENA. Under the IPCC's current climate scenarios, water scarcity in the MENA is expected to deteriorate significantly in years to come. Deteriorating water scarcity has a direct negative impact on the area's human populations and natural systems. It is estimated that between 80 and 90 million—approximately 15%—of MENA's inhabitants will suffer from some form of water stress by 2025 as water availability is projected to reach critically low levels (Sieghart & Betre, 2018). The most vulnerable populations tend to be the most severely impacted with children living in areas of high or extremely high-water stress facing significant challenges in relation to their health, nutrition, and cognitive development (UNICEF, 2021). With regards to natural systems, the most direct effect of water scarcity is that it prevents natural cooling from happening and this has a ripple effect which negatively impacts agriculture, vegetation, and the balance of terrestrial and marine ecosystems.

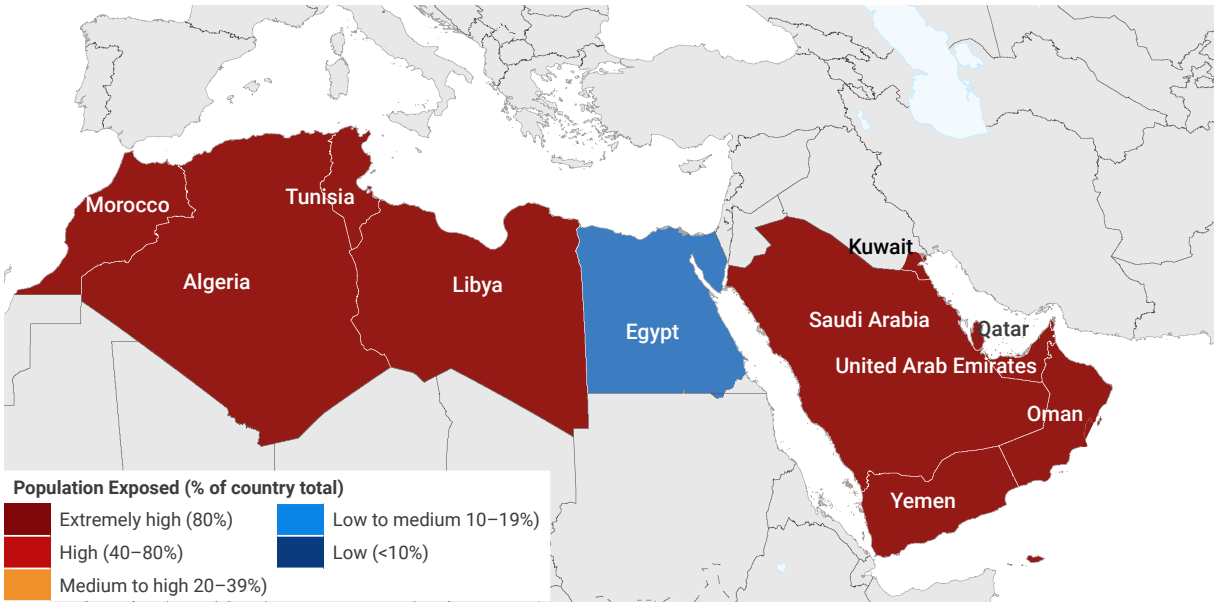


Figure 2: Where water stress will be highest by 2040[1] (Projected ratio of water withdrawals to water supply)

Sea level rise

Climate-linked sea level rise is another serious threat to coastal regions in MENA. According to some studies (Dasgupta *et al.*, 2011), about 24% of the region's coastal GDP and 20% of its coastal urban extent are exposed to the risk of sea level rise. This is twice as much as the global average. In addition, it is estimated that the MENA region would lose more than 90% of its coastal and freshwater wetlands if a one metre sea level rise were to occur and, in that scenario, about 43 port cities would experience devastating effects with Egypt being the most impacted country (Blankespoor *et al.*, 2014). The risk of sea level rise poses significant risks to the region's human populations and natural systems. Sea level rise can have a direct negative impact on communities as people may be displaced by flooding, inundation, and land erosion. In addition, many other climate-sensitive human activities are expected to be impacted by sea level rise including tourism, agriculture, and fishing, potentially leading to significant job losses and economic damage. Sea level rise can also have a direct negative impact on biodiversity and the loss of coastal wetlands which are responsible for significant ecosystem services such as storm buffering and carbon sequestration.

1 impact.economist.com/projects/bluepeaceindex/pdf/EIU_Under%20Pressure_Economic%20Costs%20of%20Water%20Stress_2021

Figure 3: % of population exposed to the risk of sea level rise in the MENA region

1.2 Economic impacts of climate risks

The physical impacts of climate change pose a direct threat to MENA's prospects for future economic growth and prosperity. A significant amount of research has been produced over the last few years focusing on the economic impacts of climate change, specifically for the MENA region. These impacts relate to different aspects of the economy including GDP growth, the outlook of specific sectors and public finances. Below are some key points that highlight the economic impacts of climate change in MENA:

- **GDP growth:** According to some estimates, the effects of climate change are currently responsible for a loss of 0.4% to 1.3% of MENA's GDP, a percentage which is expected to rise to 14% if no appropriate mitigation and adaptation measures are taken (Péridy *et al.*, 2012). Moreover, climate-related water scarcity in MENA alone could lead to economic losses of up to 14% of GDP over the next 30 years, while a 50cm increase in sea level could generate irreparable damages of approximately USD 35 billion in the coastal area between Alexandria and Port Said alone (El-Raey, 1997). More recent studies have underlined the vulnerability of Egypt's Mediterranean coast and cost estimates will have increased with inflation and estimates of more severe impacts (Kareen et al, 2020).
- **Outlook of specific sectors:** Agriculture will be the most negatively affected sector due to changing precipitation patterns, increased water scarcity and loss of arable lands due to rising temperatures and sea level rise. Agriculture is a core sector of employment and income generation in MENA and, therefore, its decline could lead to many job losses and significant economic damage. In fact, under current climate scenarios the effects of climate change are projected to negatively impact about 1/3 of the land area and local food production in MENA (Waha *et al.*, 2017) with agricultural areas in Egypt being particularly at risk.

- **Public finances:** Several studies have concluded that climate change will have a direct negative impact on countries' fiscal balances and public debts. Specifically, under the assumption of a high emissions scenario, MENA countries are expected to experience a significant decrease in their fiscal balance of 7.3% and an increase in their public debt of approximately 16% in 2060–2079 and 18% in 2080–2099. Conversely, under a low emissions scenario, MENA countries' fiscal balance would deteriorate by only 1.7% in 2020–2039 and 2.2% in 2080–2099, while public debt would rise by 5% in 2020–2039 and 6.3% in 2080–2099 (Giovanis & Ozdamar, 2022).

1.3 The business case for banking decarbonisation

Even though MENA is one of the most vulnerable regions to the effects of climate change, it also has some unique competitive advantages it can leverage for transitioning to a low-carbon economy. In particular, due to its unique mix of physical characteristics, economic output, and potential capacity in new zero-carbon areas of the economy, MENA can lead the transition on many fronts and realise the significant benefits that come with it. Below are some example areas where MENA can play a lead role:

- **Renewables:** There is a broad consensus among scientists and researchers that MENA can lead the energy transition towards renewables. MENA is the world's most abundant region in renewable energy resources with considerable potential for solar, wind, hydroelectric and hydrogen projects. A recent analysis for IRENA's World Energy Transitions Outlook (WETO) suggests that the region could obtain a significant amount of its primary energy usage from renewables by 2040 (IRENA, 2022). MENA has indeed the highest photovoltaic power potential capacity globally and could theoretically produce more than 5.8 kilowatt hours (kWh) per square metre daily. Wind power also has a potentially high capacity in the region and is expected to grow significantly to 11.3GW by 2030. Finally, hydrogen is becoming a promising reality in a few MENA countries with several plans underway that are expected to meet growing demand from export markets and hard-to-abate sectors. MENA has the potential to become an export leader in clean energy, including becoming Europe's main provider. According to Global Energy Monitor, Egypt and the UAE are the two countries which currently lead the renewables power sector in terms of capacity, however most MENA countries are developing plans towards renewables (see Table 1 below).

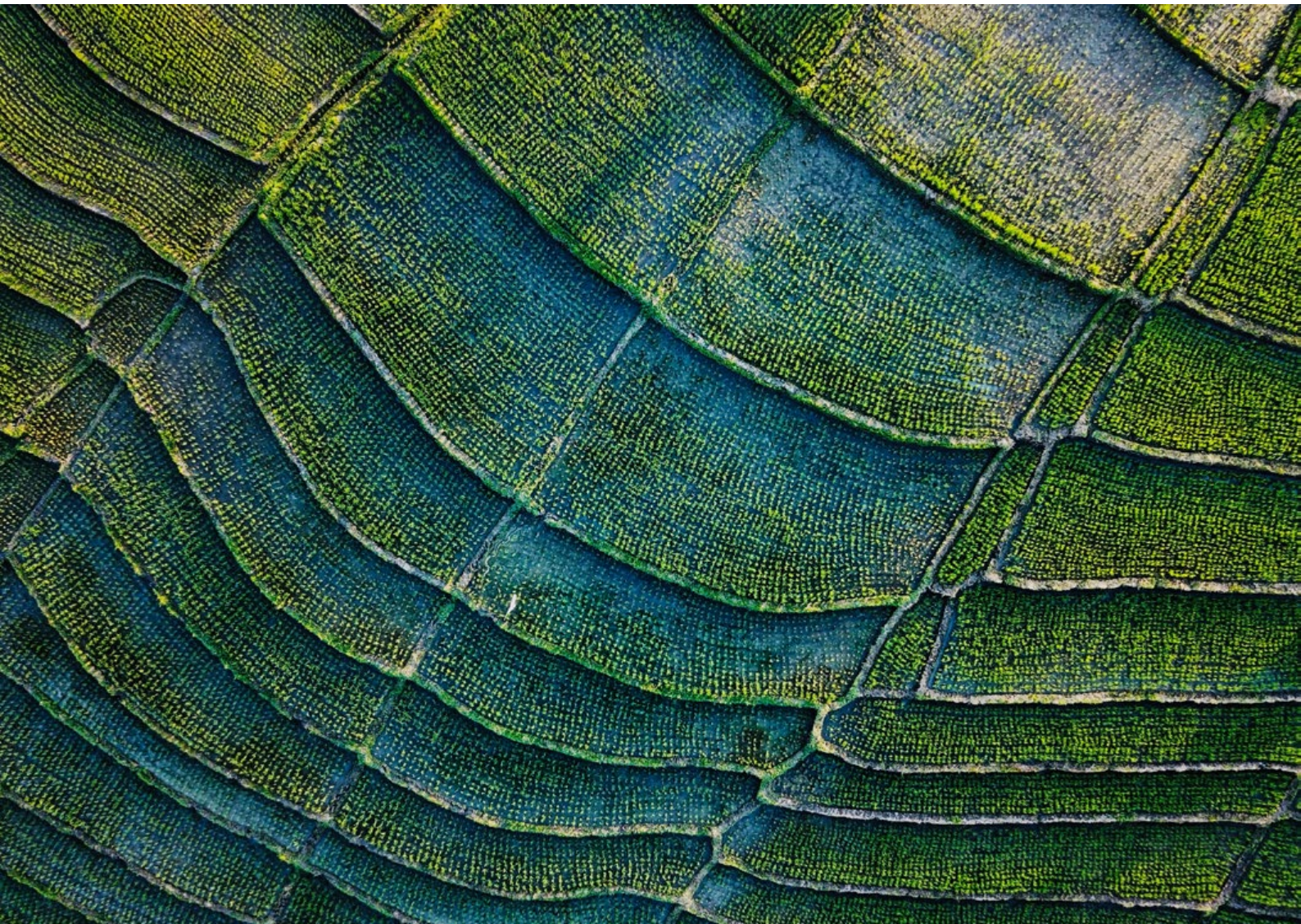
Table 1: Country Level Operating and Prospective Wind and Solar Capacity in MENA (Global Energy Monitor, 2022)

	Current leaders	Installed Capacity (GW)	Prospective leaders	Potential Capacity (GW)
1	Egypt	3.52	Oman	15.3
2	United Arab Emirates	2.60	Morocco	14.4
3	Morocco	1.80	Algeria	10.0
4	Jordan	1.67	Kuwait	9.63
5	Saudi Arabia	0.78	Iraq	5.8
6	Western Sahara	0.66	Saudi Arabia	5.0
7	Algeria	0.44	United Arab Emirates	4.0
8	Tunisia	0.25	Egypt	3.3
9	Oman	0.18	Western Sahara	1.5
10	Mauritania	0.10	Tunisia	1.0
11	Kuwait	0.03	Qatar	0.8
12	Qatar	0.01	Libya	0.7

- **Green production:** Transitioning production is a key component of the decarbonisation pathway globally. The use of clean energy resources in manufacturing can significantly reduce the carbon footprint of heavily emitting industries. Since MENA has the potential to become a leader in clean energy fuels, it can also become a leader in green production. For example, a report recently published by the Institute for Energy Economics and Financial Analysis (IEEFA) suggests that MENA can lead the world if it applies green hydrogen in its steel production. According to the report, MENA's steel sector is dominated by the direct reduced iron-electric arc furnace (DRI-EAF) technology which compared to other technologies releases lower emissions and can more easily switch to renewable energy. In 2021, MENA produced 3% of global crude steel but accounted for nearly 46% of the world's DRI-EAF steel production, so the region's knowledge of this specific technology can greatly assist towards its decarbonisation transition (IEEFA, 2022). With green hydrogen steel production estimated to reach about 56% of primary steel production by 2040, MENA has the clear potential to lead the world given its existing capacity. There are other heavy-emitting industries in MENA with a big potential to switch to green production such as aluminium and chemicals. Switching high-emitting industries to green production comes with significant economic benefits.

- **Carbon capture and storage (CCS) technologies:** MENA is characterised by a high concentration of industrial facilities near giant, well-understood, subsurface reservoirs, in shallow waters offshore or in sparsely populated deserts. This provides MENA with an advantage to build and utilise carbon capture and storage (CCS) technologies which have the potential to be a safe and economically competitive way to reduce the carbon footprint of heavily emitting industries. Some CCS projects are already underway in the region, but a lot more needs to be done for MENA to reach its full potential CCS capacity.

The above are just some examples where MENA can lead in the decarbonisation transition. However, it is not the purpose of this report to provide in-depth analysis across all potential economic transformations. For MENA to be able to fully realise the benefits associated with decarbonisation, significant financial resources need to be allocated towards the transition. This is where MENA banks can play a pivotal role by gradually aligning their lending and investment activities with ambitious decarbonisation pathways. This means banks need to understand transition opportunities across different sectors in the markets they operate in and develop multi-year transition plans. This is underpinned by a significant business case as many studies have highlighted that profitability and returns tend to be higher for transition initiatives and green finance projects (Mirza *et al.*, 2023, Torre Olmo *et al.*, 2021).



2. The state of banking decarbonisation in MENA

2.1 Banking decarbonisation framework

To analyse the state of decarbonisation in the MENA banking sector, it is first necessary to clearly define its components. **Figure 4** provides a conceptual framework which outlines the **four key pillars of banking decarbonisation**. This framework has been developed by UNEP FI by leveraging our ongoing engagement with policymakers and banks from across the world. It can be used to analyse the state of banking decarbonisation both at the macro-level (i.e. what public actors in a specific country are doing) and the micro-level (i.e. how banks are responding). The 4 pillars represent the different areas in which public actors and banks must take action to accelerate the decarbonisation of the banking industry. The term 'public actors' refers to governments, policymakers and regulators whose national decarbonisation plans, policies, and mandates shape the macro-environment that can help banks to develop their decarbonisation strategies. Within that context, banks must redefine their business and operating model to be able to gradually decarbonise their lending and investment portfolios across sectors and across business lines in a profitable way. **The framework is by no means exhaustive and should not be read as such.**

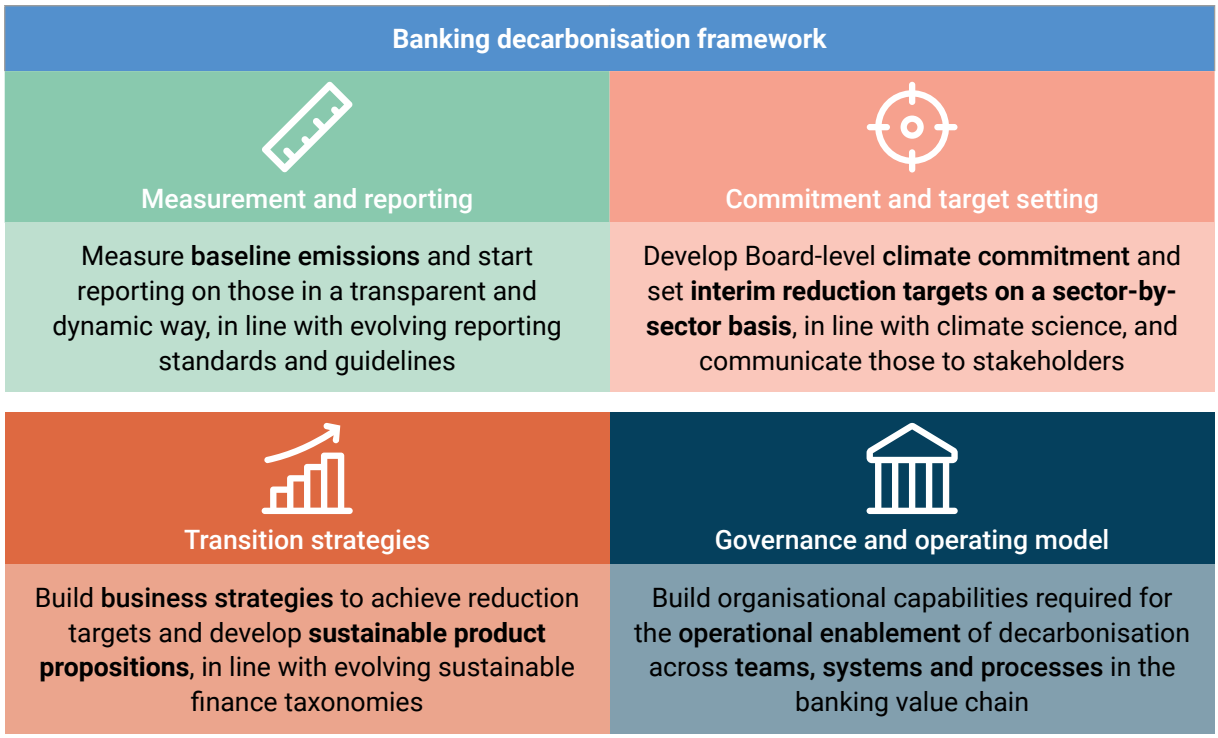


Figure 4: Banking decarbonisation framework

Both public actors and banks have a distinct role to play with respect to each of the four pillars of the banking decarbonisation framework. Below is a brief description of those roles:

1. **Measurement and reporting:** The first step towards banking decarbonisation is for banks to measure their operational and financed emissions and build internal capacity to report on those in a dynamic and transparent way. Public actors can support this through the provision of guidance on carbon accounting methodologies and the use of country emissions factors by banks, the implementation of emissions reporting standards and the issuing of regulatory mandates for measurement and reporting. Within that context, banks need to apply methodologies to calculate the carbon footprint of their operational and financed emissions across sectors and across business lines and start reporting on those.

2. **Commitment and targets:** Once banks understand their carbon footprint, the second step towards banking decarbonisation relates to their overall commitment to reduce emissions, as well as the setting of interim reduction targets on a sector-by-sector basis. Public actors can support financial institutions by providing guidance for target-setting, including the use of climate scenarios and sectoral reduction trajectories, and by implementing country-specific standards and issuing regulatory mandates for the alignment of banks towards transition pathways. Within that context, banks need to adopt science-based approaches to make their overall commitments and apply methodologies and standards to develop their interim reduction targets for operational and financed emissions both at the sectoral level and across the portfolio. They also need to communicate those commitments and targets to investors and stakeholders.

3. **Transition strategies:** Following the development of their high-level commitment and the development of interim reduction targets, banks need to develop and adopt transition strategies that will allow them to deliver on those targets, as well as develop sustainable finance products that will enable them to fulfil their strategies. Public actors can provide financial tools and incentives to help banks accelerate transition finance and issue regulatory mandates for the implementation of sustainable finance taxonomies. Within that regulatory framework, banks need to update their risk models, engage with their clients to understand their transition plans and how they can finance those, and identify growth opportunities in new zero-carbon areas of the economy across sectors and business lines. They also need to build transition finance propositions that comply with evolving taxonomy frameworks in the markets they operate in.

4. **Governance and operating model:** This pillar of the banking decarbonisation framework refers to the development of internal capabilities by banks to enable the identification and mitigation of emissions-related risks across the banking value chain. Public actors can shape institutional capacity building through the provision of guidance with regards to governance structures, the development of a national emissions database that banks can leverage for the implementation of their decarbonisation strategies and the issuing of regulatory mandates for capacity-building programmes across teams and for the incorporation of emissions criteria across systems and processes. Banks need to upskill their employees on the different aspects of decarbonisation, build an emissions data solution, and identify and deliver changes across systems and processes in the banking value chain.

2.2 Policy and regulatory environment

The 4 pillars of the banking decarbonisation framework can be used to analyse the maturity of the policy and regulatory landscape in Egypt and the UAE with regards to banking decarbonisation. **Table 2** outlines the different areas in which public actors can take some sort of action towards the acceleration of banking decarbonisation, as discussed in the previous section. The table outlines 5 different levels of maturity against each of those different areas with **Low** suggesting that no action has been taken by public actors and **High** describing the ideal state in which public actors have adopted a coherent mix of policies and initiatives to help accelerate banking decarbonisation. **The framework is by no means exhaustive and should not be read as such**. Since the path towards banking decarbonisation is complex, the table should be used to help public actors understand where they currently map against each of the different areas and, based on that, identify what the appropriate next steps may be for them.

Table 2: Banking Decarbonisation Maturity Framework for Public Actors

	L2 area	Low	Low–Medium	Medium	Medium-High	High
Measurement and reporting	Carbon accounting	No mandate, no guidance for banks	No mandate, some consultation underway for the adoption of carbon accounting by banks	No mandate, some guidance issued for the adoption of carbon accounting by banks (e.g., PCAF)	Mandate for the adoption of carbon accounting by banks (e.g., PCAF) with some guidance issued	Mandate for the adoption of carbon accounting by banks (e.g., PCAF) with a timeline and detailed guidance issued
	Emissions factors	No mandate, no guidance for banks	No mandate, some consultation underway for the adoption of emissions factors by banks	No mandate, some guidance issued for adoption of emissions factors by banks for carbon measurement	Mandate for the adoption of emissions factors by banks for carbon measurement, with some guidance issued	Mandate for the adoption of emissions factors by banks for carbon measurement with a timeline and detailed guidance issued
	Emissions data	No national emissions database	Some consultation underway to build national emissions database	Some sectoral emissions available and accessible by banks, consultation underway to build national emissions database	National emissions database built with data available for carbon material sectors, national body responsible with some guidance for banks on emissions data	National emissions database built with data available for all sectors, national body responsible with detailed guidance for banks on emissions data
	Emissions reporting	No mandate, no guidance for banks	Generic ESG disclosure mandate for banks excluding financed emissions	Generic ESG disclosure mandate for banks including financed emissions for some carbon material financed sectors	Mandate for detailed reporting on operational and financed emissions for most financed sectors, with some guidance issued	Mandate for detailed reporting on operational and financed emissions for all financed sectors with a timeline and detailed guidance issued
Commitment and target setting	Nationally determined contributions (NDC)	Not in place, no guidance for banks	In place but not Paris-aligned, no guidance for banks	In place and Paris-aligned, with overall interim reduction target set and some guidance for banks to align with it	In place and Paris-aligned, with overall interim reduction target set and mandate for banks to align with it, with some guidance issued	In place and Paris-aligned, with overall interim reduction target set and mandate for banks to align with it with a timeline and detailed guidance issued
	National sectoral targets	Not in place, no guidance for banks	Some consultation underway, no guidance for banks	In place for some carbon material sectors with Paris-aligned scenarios and some guidance for banks on sectoral target setting	In place for most carbon material sectors with Paris-aligned scenarios and mandate for banks for sectoral target-setting, with some guidance issued	In place for all sectors with Paris-aligned scenarios and mandate for banks for sectoral target-setting with a timeline and detailed guidance issued
	Climate scenarios	No adoption of global/no country available, no guidance for banks	Consultation for adoption of global/no country available, no guidance for banks	Adoption of global with some guidance for banks to align their financed portfolios with those	Adoption of global with mandate for banks to align their financed portfolios with those/ developoment of country climate scenarios underway	Country climate scenarios developed and mandate for banks to align with those with a timeline and detailed guidance issued
	Sectoral pathways	No adoption of global/no country available, no guidance for banks	Consultation for adoption of global/no country available, no guidance for banks	Adoption of global for some sectors with some guidance for banks to align their financed portfolios with those	Adoption of global for most sectors with mandate for banks to align their financed portfolios with those/development of country sectoral pathways underway	Country sectoral pathways developed and mandate for banks to align their financed portfolios with those with a timeline and detailed guidance issued

	L2 area	Low	Low–Medium	Medium	Medium-High	High
Transition strategies	Phase-out policies	None	None, exploring global practices	Consultation underway for phase-out of fossil fuel financing	Mandate for banks for gradual phase-out of fossil fuel financing, with some guidance issued	Mandate for banks for gradual phase-out of fossil fuel financing with a timeline and detailed guidance issued
	Transition finance	None	Some ad-hoc funding allocated to transition initiatives	Agreements with DFIs and/or bilateral agreements in place to accelerate transition finance, with some incentives provided to banks	National transition finance requirements calculated for most sectors with strong incentives provided to banks to accelerate transition finance	National transition finance requirements calculated for all sectors with full incentives provided to banks to accelerate transition finance
	Investment	None	None, exploring new-zero-carbon areas for investment	Ad-hoc public/private investment plans for some zero-carbon areas with ad-hoc participation of banks	Coherent public/private investment plans for some zero-carbon areas with active involvement of banks	Coherent private/public investment plans for all zero-carbon areas with active involvement of banks
	Sustainable finance taxonomies	None	None, exploring adoption of global by banks	Consultation underway for the adoption of global by banks or development of national sustainable finance taxonomies	National sustainable finance taxonomies developed with mandate for banks to align with those and with some guidance issued	National sustainable finance taxonomies developed with mandate for banks to align with those with a timeline and detailed guidance issued
Governance and operating model	Governance	No mandate, no guidance for banks	None, exploring adoption of global practices	Consultation underway for policy/ regulatory requirements for banks on governance around emissions	Mandate issued for banks for the implementation of governance standards around emissions with some guidance issued	Mandate issued for banks for the implementation of governance standards around emissions with a timeline and detailed guidance issued
	Emissions data solution	No mandate, no guidance for banks	None, exploring adoption of global practices	Consultation underway for the set-up and minimum standards of emissions data solution by banks	Mandate issued for the set-up and minimum standards of emissions data solution by banks with some guidance issued	Mandate issued for the set-up and minimum standards of emissions data solution by banks with a timeline and detailed guidance issued
	Capacity building	No mandate, no guidance for banks	None, exploring adoption of global practices	Consultation underway for the implementation of capacity-building programmes on decarbonisation by banks	Mandate issued for the implementation of capacity-building programmes on decarbonisation by banks with some guidance issued	Mandate issued for the implementation of capacity-building programmes on decarbonisation by banks with a timeline and detailed guidance issued
	Systems and processes	No mandate, no guidance for banks	None, exploring adoption of global practices	Consultation underway for the update of systems and processes by banks to enable decarbonisation	Mandate issued for the update of systems and processes by banks to enable decarbonisation with some guidance issued	Mandate issued for the update of systems and processes by banks to enable decarbonisation with a timeline and detailed guidance issued

Application of the framework to Egypt and the UAE

In this section we will use the different areas outlined in **Table 2** to analyse the state of banking decarbonisation in Egypt and the UAE from the perspective of public actors. Policymakers in both Egypt and the UAE have introduced preliminary initiatives to advance sustainability in the banking sector.

In Egypt, this is underpinned by the Guiding Principles on Sustainable Finance that were published by the Central Bank of Egypt (CBE) in July 2021. These principles set an overarching framework outlining the different areas of sustainable finance that banks need to start considering including capacity-building, green finance, stakeholder engagemet, climate risk management, internal activities and reporting. In November 2022, the CBE announced binding regulations with regards to sustainable finance, as summarised below:

- Incorporate sustainable finance policies in credit and investment policies through the introduction of procedures consistent with the principles.
- The Board of Directors (BoD) to ensure the implementation of policies and procedures with regards to sustainable financing and reporting.
- Establish an independent department for Sustainability/Sustainable Finance that reports directly to the banks' CEO.
- Build reporting capability through a *Status Report* on the implementation of the principles, a *Quantitative Report* on the bank's sustainable financing activities and a *Sustainability Report* in line with the Global Reporting Initiative.

In the UAE, the Abu Dhabi Global Market, the Dubai Financial Services Authority (DFSA) and other regulatory authorities set up in 2019 the Sustainable Finance Working Group (SFWG) to support the development of sustainable finance and facilitate regulatory cooperation between the UAE authorities on practices and frameworks that can enable the financial sector to advance sustainability. As a first step, the SFWG published the Guiding Principles on Sustainable Finance in the UAE, which outline a generic framework to guide members in fulfilling their respective tasks and include the integration of ESG considerations in governance and risk management, minimum eligibility requirements for sustainable finance products and promotion of ESG reporting and disclosures. Subsequently in 2021, a Public Statement on Collaboration on Sustainable Finance was released outlining a roadmap through which the required scaling up of sustainable finance within the UAE can occur. This was supplemented by a Second Public Statement on Collaboration on Sustainable Finance that was released in November 2022 and summarises the topics that are most relevant to the nature of financial services within the UAE, as below:

- Strengthening sustainability disclosures,
- Fostering sustainability-focused corporate governance,
- Designing the UAE's sustainable finance taxonomy.

The above initiatives represent an initial framework, but more in-depth guidance is required to cover most of the banking decarbonisation elements outlined in **Table 2**.

Measurement and reporting

No specific guidance or mandate has been issued in Egypt and the UAE with regards to the adoption of specific carbon accounting methodologies (e.g. PCAF) and the use of country emissions factors by banks for the purpose of measuring the carbon footprint of their operations and lending and investment activities across business lines and sectors. In terms of emissions data, no body has been identified to be considering the development of a national emissions database that could be accessible by banks and used for measurement and reporting purposes. With regards to emissions reporting, as mentioned above there have been some initial disclosure mandates by authorities in both Egypt and the UAE, however the breadth and depth of those mandates especially in relation to financed emissions are very limited. In July 2021, Egypt's Financial Regulatory Authority issued a resolution requiring all companies whose securities are listed on the Egyptian Stock Exchange to complete disclosures related to the financial effects of climate change in accordance with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). Even though not directed to banks, this is an important initiative as it is a first step to advance climate risk reporting in the country. In the UAE, SFWG is currently monitoring global initiatives with a focus on the International Sustainability Standards Board (ISSB) but no guidance or mandate has been issued for banks to report on their emissions.

Overall, public policy and regulation on emissions measurement and reporting would benefit from further development.

Commitment and target setting

In Egypt, the country's Vision for 2030 is central to the country's unified political, economic, and social vision that includes addressing the effects of climate change through mitigation and adaptation. Egypt has an updated Nationally Determined Contributions plan in place but without a pledge to achieve net zero by 2050 and no interim reduction targets set. There is no guidance or mandate issued for banks to align with those initiatives. The CBE is currently exploring the use of NGFS scenarios for climate stress-testing purposes, but no plans have yet been defined for their adoption by banks. No guidance or mandate has been issued regarding the adoption of climate scenarios and sectoral reduction trajectories for target-setting purposes. In addition, no institution has been identified to work towards the development of country-specific climate scenarios and sectoral reduction trajectories that banks could leverage for target-setting purposes for their lending and investment portfolios. There is no guidance or mandate issued for banks to commit to internationally agreed climate targets and to set sectoral reduction targets.

In the UAE, the country's Energy Strategy 2050 is central to how the country is looking to address the effects of climate change. The UAE has an updated Nationally Determined Contributions plan and is the first Gulf (GCC) country with a national pledge to achieve net zero by 2050 and an interim 31% reduction target by 2030 compared to a business-as-usual (BAU) scenario. At the sub-national level, four emirates have made a handful of sectoral commitments for 2030 or 2040. However, there is no guidance or mandate issued yet for banks to align with those national targets. The Central Bank of the UAE (CBUAE) is currently exploring the use of NGFS scenarios and has launched a banking initiative on climate risk and stress testing, however no plans have been defined yet for their adoption by banks. No guidance or mandate has been issued regarding the adoption of climate scenarios and sectoral reduction trajectories for target-setting purposes. In addition no institution has been identified to be working towards the development of country-specific climate scenarios and sectoral reduction trajectories that banks could leverage for target-setting purposes for their portfolios. There is no guidance or mandate issued for banks to commit to internationally recognised climate targets and set sectoral reduction targets.

Overall, there is considerable scope to develop the policy and regulatory framework to help banks set commitments and targets.

Transition strategies

In Egypt, the country's Vision for 2030 outlines some key areas of economic activity for green finance, but does not provide more detailed plans. The government has in place some national-level agreements with multilateral banks such as the World Bank, the European Bank for Reconstruction and Development (EBRD) and the Agence Française de Développement (AFD) for the financing of green projects. These are important initiatives to accelerate transition, however the role of private banks as financial intermediaries for some of those financial resources is not clearly defined. In 2021, Egypt's Financial Regulatory Authority (FRA) set up the Regional Centre for Sustainable Finance, which is looking at the removal of market barriers for green finance, as well as identfifying available investment opportunities. Egypt launched the first green sovereign bond in the region, worth USD 750 million and sold at a 5.25% yield. According to some estimates[2], Egypt's portfolio of eligible green projects is worth USD 1.9 billion, 16% in renewable energy, 19% in clean transportation, 26% in sustainable water and wastewater management, and 39% in pollution reduction and control. Under Principle 2 of CBE's guiding principles, banks are encouraged to increase financing to green projects and to enhance the innovation and issuance of green banking products. Under Principle 4, banks are encouraged to incorporate climate risks in all new financing. However, there is currently no guidance or mandate in place for banks to phase out fossil-fuel financing. The use of incentivisation schemes for banks to accelerate transition finance is also limited. With regards to sustainable finance taxonomies, this is another area where the policy and regulatory environment is yet to mature.

2 zawya.com/en/business/green-projects-portfolio-in-egypt-hits-19bln-minister-s7agc6lb

In the UAE, the country's Energy Strategy 2050 outlines key areas of economic activity for green finance with some details on transition finance and investment requirements for some sectors such as Power Generation, Transport and Real Estate. Furthermore, the Ministry of Climate Change and Environment (MOCCAE) has launched a Sustainable Finance Strategy 2021–2031 aimed at supporting the development of a strengthened enabling environment for diversified and innovative sustainable finance products, as well as the mobilisation of private capital towards climate-resilient investments. Bilateral agreements with other countries have been agreed to advance investment in zero-carbon technologies and projects, including a partnership with the United States to advance low-emissions energy through a mobilisation of USD 100 billion on clean energy by 2035. At the sub-national level, some transition finance initiatives are in place, such as the Abu Dhabi Fund for Development that focuses on providing finance to green projects.There is currently no guidance or mandate in place for banks to phase out fossil-fuel financing. The use of incentivisation schemes for banks to accelerate transition finance is limited, however this is a topic of increased focus that is outlined in the Second Public Statement on Collaboration on Sustainable Finance. A Sustainable Finance Taxonomy Workstream has been set up within the SFWG and more activity is expected in this area.

In summary, national transition initiatives for banks are mostly ad hoc and a more strategic approach is required to help banks understand how they can build their transition strategies.

Governance and operating model

In Egypt, the Federation of Egyptian Banks has launched a strategic action plan addressing the systemic transformation of all banks from a sustainability, governance, risk and product development perspective. There is currently no guidance or mandate specifically for the incorporation of emissions criteria in decision-making. In addition, there is no guidance or mandate for banks to set up internal emissions data solutions or any minimum requirements to that end. Banks are encouraged to build their internal climate capacity under Principle 2 of CBE's Guiding Principles. With regards to systems and processes, no guidance or a mandate has been issued to require banks to deliver changes across the banking value chain to enable the operationalistion of net-zero strategies.

In the UAE, a Sustainability-Focused Corporate Governance Workstream has been set up within SFWG and more activity is expected in this area. It is not clear, though, to what extent this will cover the incorporation of emissions across different governance structures. Furthermore, there is no guidance or mandate issued for banks to set up internal emissions data solutions or any minimum requirements to that end. Nor is guidance available or a mandate issued on the transformation of systems and processes to enable banks to operationalise decarbonisation strategies.

Guidance or policy on governance and operating models for banks is the least mature policy and regulatory area, as this is normally where banks focus once they have advanced other areas.

2.3 MENA banks' response to climate mitigation

The four pillars of the banking decarbonisation framework introduced in the previous section can also be used to analyse the decarbonization maturity of banks in Egypt and the UAE. **Table 3** outlines the different areas in which individual banks must take action to accelerate banking decarbonisation, as briefly discussed in section 2.1 of this report. It outlines 5 different levels of maturity against each of the different areas with **Low** suggesting that a bank has taken no action and **High** describing the ideal state in which a bank has developed and implemented coherent decarbonisation strategies end-to-end. **This framework is by no means exhaustive and should not be read as such**. Since the path towards banking decarbonisation is complex, this table should be used to help MENA banks understand where they currently map against each of the different areas and, based on that, identify appropriate next steps.

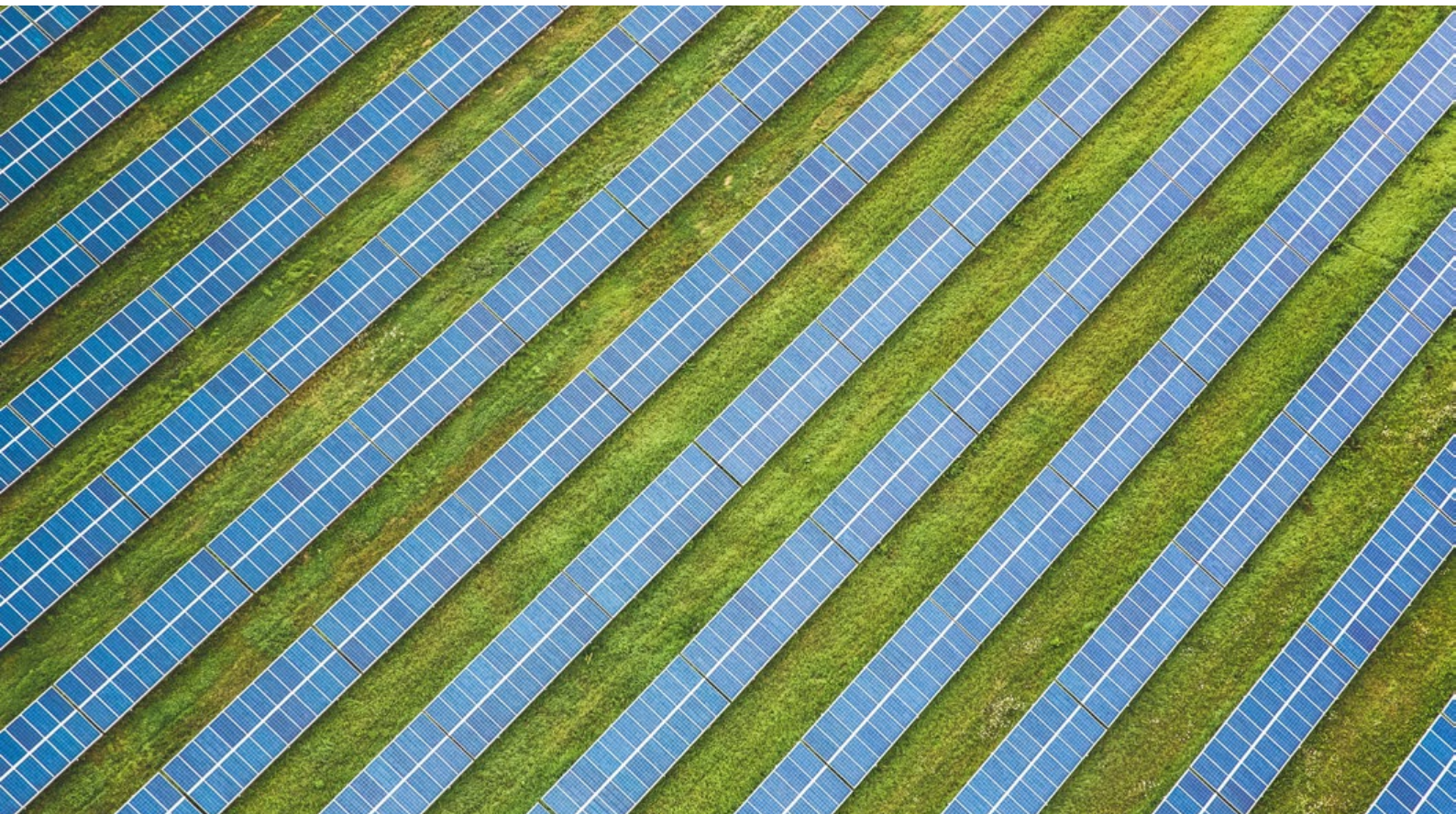


Table 3: Banking Decarbonisation Maturity Framework for Banks (UNEP FI, 2023)

	L2 area	Low	Low–Medium	Medium	Medium-High	High
Measurement and reporting	Carbon accounting	No action	In exploratory discussions for carbon accounting adoption	Carbon accounting (e.g., PCAF) adopted, operational emissions measured and financed emissions measured for some priority sectors	Carbon accounting (e.g., PCAF) adopted, operational emissions measured and financed emissions measured for most sectors	Carbon accounting (e.g., PCAF) adopted, operational emissions measured and financed emissions measured for all sectors across all business lines
	Emissions data	No action	In exploratory discussions for data approach for measurement	Real data used for operational emissions/proxy data used to measure financed emissions for some priority sectors	Real data used for operational emissions/mix of proxy and real data used to measure financed emissions for most sectors	Real data used for operational emissions/real data used to measure financed emissions for all sectors across all business lines
	Emissions reporting	No action	Some ad-hoc emissions reporting capability	Reporting capability built in partial alignment with global standards (e.g., TCFD, GRI) and national requirements	Reporting capability built in full alignment with global standards (e.g., TCFD, GRI) and national requirements/non-dynamic	Reporting capability built in full alignment with global standards (e.g., TCFD, GRI) and national requirements/dynamic and automated reporting
Commitment and target setting	Commitment	No action	Exploring approach and NZBA membership	NZBA member, commitment in place and aligned with 1.5°C/no overall interim reduction target set	NZBA member, commitment in place and aligned with 1.5°C/interim reduction target set and communicated to stakeholders	NZBA member, commitment in place and aligned with 1.5°C/interim reduction target set, communicated to stakeholders and incorporated in BAU business strategy
	Climate scenarios	No action	Exploring use of global ones for risk and climate stress testing	Partially aligned with global ones (e.g., NGFS) for risk and climate stress-testing purposes, in line with national guidance	Fully aligned with global (e.g., NGFS) and/or country ones for risk and climate stress-testing purposes, including country considerations	Fully aligned with global (e.g., NGFS) and/or country ones for risk and climate stress-testing purposes/incorporated in BAU business strategy
	Sectoral pathways	No action	Exploring use of global ones for target-setting	Partially aligned with global ones (e.g., IEA) for sectoral target-setting purposes, in line with national guidance	Fully aligned with global (e.g., IEA) and/or country ones for sectoral target-setting purposes, including country considerations	Fully aligned with global (e.g., IEA) and/or country ones for sectoral target-setting purposes/incorporated in BAU sectoral strategies
	Sectoral targets	No action	In exploratory discussions for sectoral target-setting approach	Interim reduction targets set for some carbon-material financed sectors for some business lines	Interim reduction targets set for all carbon-material financed sectors for most business lines	Interim reduction targets set for all financed sectors for all business lines/incorporated in BAU

	L2 area	Low	Low–Medium	Medium	Medium-High	High
Transition strategies	Risk model	No action	Exploring incorporation of emissions criteria	Emissions criteria partially incorporated for some carbon-material sectors/phase-out of fossil fuels financing under review	Emissions criteria fully incorporated for most sectors for most business lines/plan for gradual phase-out of fossil fuels financing under development	Emissions criteria fully incorporated for all sectors for all business lines/ detailed plan developed for gradual phase-out of fossil fuels financing
	Client engagement	No action	Some ad-hoc engagement on a client-by-client basis	Due diligence on client transition plans conducted for some carbon material sectors/ client engagement plans under development	Due diligence on client transition plans conducted for most sectors for most business lines/client engagement plans developed	Due diligence on client transition plans conducted for all sectors for all business lines/client engagement plans in execution as part of BAU
	Investment	No action	Exploring potential for new zero-carbon areas in markets of operation	Market sizing conducted for some identified priority new zero-carbon areas with investment plans under development	Market sizing conducted for all identified priority new zero-carbon areas with investment plans developed for most of those	Market sizing conducted for all identified priority new zero-carbon areas with investment plans in execution as part of BAU
	Sustainable finance taxonomies	No action	Some ad-hoc propositions in place	Propositions developed for some sectors and partially aligned with leading frameworks (e.g., EU taxonomy) and national guidance	Propositions developed for most sectors and fully aligned with leading frameworks (e.g., EU taxonomy) and national guidance	Propositions developed for all sectors and fully aligned with leading frameworks (e.g., EU taxonomy) and national guidance/incorporated in BAU
Governance and operating model	Governance	No action	Exploring updates on some governance structures	Emissions reflected in some parts of BAU governance for some sectors in some business lines, in line with national guidance	Emissions reflected in most parts of BAU governance for most sectors in most business lines, in line with national guidance and mandates	Emissions reflected in all parts of BAU governance for all sectors in all business lines, in line with national guidance and mandates/incorporated in BAU
	Emissions data solution	No action	Exploring approach for emissions data solution	Data gathered for some sectors for some business lines/offline non-dynamic data solution in place	Data gathered for most sectors for most business lines/dynamic data solution under development	Data gathered for all sectors/ dynamic real-time data solution developed covering use cases across all business lines and corporate functions
	Capacity building	No action	Some ad-hoc training in place for some employee groups	Mandatory training on emissions for some employee groups/ capacity-building programmes under development	Mandatory training on emissions for most employee groups/ capacity-building programmes developed and delivered for most of those	End-to-end capacity-building programmes delivered for all employee groups/emissions incorporated in BAU training, JDs, and organisational culture
	Systems and processes	No action	Some ad-hoc updates in parts of the banking value chain	Target Operating Model under development/some updates delivered in some parts of the banking value chain	Target Operating Model developed for most business lines and corporate functions/updates delivered in most parts of the banking value chain	Target Operating Model developed for all business lines and corporate functions/updates delivered in all parts of the banking value chain

Case study application of the framework to banks in Egypt and UAE

In this section we will use **Table 3** to analyse the state of banking decarbonisation in Egypt and the UAE from the perspective of banks. The analysis that follows has been based on desk-based research, one-to-one interviews with banks' executive teams and a qualitative survey conducted through a questionnaire. Overall, in both Egypt and the UAE, there is a small number of leading banks (4 to 5) that have taken some important initial steps towards decarbonisation with a varying level of maturity across the different areas highlighted in the framework. However, the vast majority of banks are still exploring their approach towards decarbonisation.

2.3.1 Measurement and reporting

Leading banks in Egypt and the UAE

In terms of measurement, a small number of leading banks (2 to 3) in Egypt and the UAE have signed the Partnership for Carbon Accounting Financials (PCAF). These banks have applied the PCAF standard to assess their operational emissions (Scopes 1 and 2), as well as their financed emissions (Scope 3) for their most carbon-material sectors. These leading banks have managed to measure 100% of operational emissions. In terms of financed emissions, they have conducted deep-dive exercises to assess the carbon materiality of different sectors by using either global emissions factors provided by bodies such as the International Energy Agency (IEA) or country emissions factors provided by bodies such as the Joint Impact Model (JIM) and then combining those with the aggregated credit exposures across lending and investment portfolios. These leading banks have used a combination of proxy and real data to conduct measurement of financed emissions for the carbon-material sectors they have identified. They have prioritised their corporate loan books and have plans in place to expand measurement to other asset classes in the future. Sectors that appear to have been prioritised according to their carbon intensity include oil and gas, power generation, real estate, transport and food and beverages. Additionally, these leading banks have plans in place to expand measurement to other carbon-intensive sectors they finance in the future. With regards to reporting, leading banks in Egypt and the UAE have, on a proactive basis, aligned to global climate reporting standards such as the Task Force on Climate-Related Financial Disclosures (TCFD) or other sustainability reporting standards such as the Global Reporting Initiative (GRI). These frameworks are not specific to emissions but include emissions reporting elements.

The emissions reporting capability these leading banks have built is mostly offline and non-dynamic, yet it still forms a good basis they can further build on and evolve. Moreover, all leading banks in Egypt and the UAE have become signatories of the UN Principles for Responsible Banking (PRB), which cover multiple impact areas of sustainability. Many PRB signatory banks globally tend to choose climate as a focus area, aligning with the Net-Zero Banking Alliance, which means that they must report annually on their climate-related initiatives including their plans for reducing their operational and financed emissions. Finally, these banks have been publishing, over the last couple of years, coherent Sustainability Reports with a dedicated climate-related section where they outline their approach with respect to emissions measurement and reporting.

Majority of banks in Egypt and the UAE

Despite the important steps that a small number of leading banks in Egypt and the UAE have taken in the measurement and reporting of emissions, the vast majority of banks in those countries either have not considered or are in the process of considering how to approach climate risks and decarbonising their portfolios. In terms of measurement, most banks have not adopted any specific carbon accounting methodology or any country emissions factors. However, a small but increasing number are exploring options to join the Partnership for Carbon Accounting Financials (PCAF) and adopting PCAF's emissions accounting standard. In fact, some of these banks are planning to achieve 100% measurement of their operational emissions (Scope 1 and 2) in the next 6–12 months, as well as measurement of their financed emissions for some carbon-material sectors in the next 12–24 months. For most banks, their lack of capacity on climate mitigation and the lack of end-to-end guidance from policymakers and regulators regarding emissions measurement and reporting makes them hesitant to move ahead.

With regards to emissions reporting, most banks in Egypt and the UAE have only recently started to build some initial internal emissions reporting capability in view of the disclosure requirements that have been introduced by policymakers and regulators in those jurisdictions. As highlighted in the previous section, the breadth and depth of those disclosure requirements are currently limited in scope, especially regarding financed emissions, so banks in Egypt and the UAE should consider more robust emissions reporting capabilities in line with international standards. Finally, a small but increasing number of banks in Egypt and the UAE expect to publish annual Sustainability Reports from 2023 or 2024 onwards with a dedicated section on climate mitigation, to the standards of Sustainability Reports published by the leading banks in the region.

In summary, emissions measurement and reporting capabilities of banks in Egypt and the UAE is a maturing, but not fully mature area.

2.3.2 Commitment and targets

Leading banks in Egypt and the UAE

In terms of commitment, a very small number of leading banks (2) in Egypt and the UAE have made a Board-level commitment to achieve net zero by 2050 and have communicated that to investors and stakeholders. Those banks' commitments are mostly aligned with the 1.5°C scenario provided by the International Energy Agency and also include an overall interim reduction target for their total carbon footprint by 2030 or 2035. In addition, the commitment of these leading banks also aligns with the Nationally Determined Contribution (NDCs) of Egypt and the UAE, and their respective energy transition visions as briefly discussed in Section 2.2. In terms of operational emissions, these banks have set targets to achieve zero-carbon operations by or before 2030 or 2035. Given their commitment to become net zero by 2050, they have become signatories of the Net-Zero Banking Alliance (NZBA) and through that they have committed to set interim reduction targets for their financed emissions, starting with the most carbon-material sectors they have identified during an initial measurement exercise.

These leading banks are planning to publish their first set of sectoral reduction targets for their corporate loan books in 2023. In the absence of country-specific pathways they have leveraged, for target-setting purposes, a mix of sectoral reduction trajectories provided by bodies such as the Central Bank and Supervisors Network for Greening the Financing System (NGFS) and the International Energy Agency. Priority sectors for target-setting include Oil and Gas, Power Generation, Aviation and Real Estate. These banks are considering their approach for external assurance and/or validation of their targets by engaging with external bodies such as the Science-Based Targets initiative (SBTi). Finally, as they are now concluding the first set of their sectoral reduction targets for their corporate loan books they have plans in place for expanding target-setting for those sectors to include other asset classes as well as expanding to other sectors they finance.

Majority of banks in Egypt and the UAE

Despite some important steps that a small number of leading banks in Egypt and the UAE have taken with regards to commitments and targets, the vast majority of banks have not taken significant steps, as they are still considering how to approach decarbonisation. This is despite increasing momentum from MENA banks on commitments in the aftermath of COP27 in Egypt and in view of COP28 that is planned to take place in the UAE in 2023. For most banks, their lack of climate mitigation capacity and the lack of end-to-end guidance from policymakers and regulators regarding commitments and target-setting makes them hesitant to move ahead. In addition, the lack of country-specific climate scenarios and sectoral reduction trajectories for target-setting makes them even more hesitant. A handful of banks are looking to develop and communicate their commitment to align with a decarbonisation pathway in the next 12–24 months, with some of them planning to develop an interim reduction target for their operational emissions (Scope 1 and 2). Only a few are planning to develop interim reduction targets for the carbon material sectors they finance (Scope 3) in the same period. Some banks have recently joined the UN Principles for Responsible Banking and have chosen climate as a focus area which requires them to develop their long-term commitment towards addressing climate change and to develop their overall emissions reduction target. Some of them are also considering joining the Net-Zero Banking Alliance.

In summary, with the exception of a very small number of leading banks, the capability of the banking sector in Egypt and the UAE to commit to climate mitigation targets is limited.

2.3.3 Transition strategies

Transition strategies refer to the set of business strategies that banks can leverage to gradually reduce their total carbon footprint. For operational emissions, reduction is a clear-cut path. For financed emissions, reduction is a more complex exercise and banks need to leverage different sets of transition levers to drive down the carbon footprint of their lending and investment portfolios across sectors and across business lines. Specifically, there are three sets of transition levers that banks can use:

- The first set of transition levers relate to the Risk Model and how banks can integrate emissions-related risks to gradually eliminate exposure to carbon-intensive sectors or carbon-intensive clients, for example through the introduction of phase-out policies and/or non-strategic renewals of facilities for heavy emitters.
- The second set of transition levers relate to Client Engagement and how banks can drive engagement to understand their clients' transition plans, as well as the opportunity to finance those plans. To do so, they need to build **sustainable finance propositions** and make sure those are in line with evolving taxonomies.
- The third set of transition levers relate to Investment and how banks can conduct market-sizing exercises to assess the growth potential of new zero-carbon areas of the economy and then build multi-year investment plans. To do so, they need to develop **sustainable finance propositions** and make sure those are in line with evolving taxonomies.

There is no golden rule around the mix of transition levers a bank should use to achieve the gradual reduction of its overall carbon footprint. What is important is for the chosen mix of transition levers to enable the bank to deliver on its overall commitment and the interim reduction targets it has set. This section discusses the maturity of transition strategies that banks in Egypt and the UAE have adopted, as well as the state of the sustainable finance propositions they have developed.

Leading banks in Egypt and the UAE

At the aggregate level, a small number of leading banks (4 to 5) in Egypt and the UAE have taken some important initial steps across the different sets of transition levers. However those steps have mostly been ad hoc, rather than being based on the development of coherent end-to-end transition strategies across sectors and across business lines.

In terms of the **Risk Model**, leading banks in Egypt and the UAE have incorporated emissions criteria into their credit analysis and underwriting models covering some or most of the carbon-material sectors they finance. They have built internal ESG risk frameworks incorporating transition risks and have internally populated those across the underwriting and credit teams. These internal frameworks are aligned with global frameworks such as the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) and the Equator Principles for determining, assessing and mitigating climate risks associated with existing and new clients. Leading banks have leveraged emissions criteria for climate stress-testing purposes and to onboard new clients and underwrite new deals.

In terms of **Client Engagement**, leading banks have modelled and calculated the transition finance required for the next few years to be able to deliver on their overall decarbonisation commitment, as well as on the interim reduction targets they have set. They have conducted, mostly on an ad hoc basis, initial discussions with some of their carbon-intensive clients to understand whether they have any transition plans in place, as well as how they could finance those. They have also conducted client site visits and due diligence to identify their clients' potential needs and opportunities for transition. Those activities have been conducted mostly on an ad hoc basis and these banks are currently working towards the development of end-to-end transition plans for the carbon-material sectors they finance. There is a small, but increasing, number of cases where these leading banks have provided finance directly towards their clients' transition plans. Most of these cases relate to financing the energy diversification strategies of power generation companies and retrofitting of industrial facilities and real estate.

In terms of **Investment**, leading banks in Egypt and the UAE have conducted limited market-sizing exercises for new zero-carbon areas of the economy across sectors in the markets they operate in. However, they have financed some flagship projects, such as the financing of new solar and hydrogen facilities and, to a smaller extent, the development of carbon capture and storage (CCS) facilities.

With regards to **Sustainable Finance**, leading banks have launched propositions across sectors and across business lines, mostly on an ad hoc basis as opposed to an end-to-end sustainable finance product strategy. In the absence of sustainable finance taxonomies in Egypt and the UAE, banks have sought to align with the sustainable finance taxonomies provided by other regional or international bodies such as the EU Sustainable Finance Taxonomy, the IFC Green Bond Framework for green bonds, and the sustainable finance guidelines issued by the International Capital Market Association (ICMA) and the Loan Market Association (LMA).

Majority of banks in Egypt and the UAE

At the aggregate level, most banks in Egypt and the UAE have not taken signficant steps with regards to transition strategies and this is the case for all sectors they finance across different business lines.

In terms of the **Risk Model**, most banks in Egypt and the UAE are still considering their approach towards incorporating emissions criteria for some carbon-material sectors they finance and exploring how to reflect those in their due diligence processes. A small, but increasing, number of banks is planning to have emissions criteria incorporated in their Risk Models in the next 12–24 months. There are a few examples of banks considering climate risks when underwriting new deals and, even though this has been done mostly on an ad hoc basis, it is still an important step, signalling the direction in which these banks are heading.

In terms of **Client Engagement**, most banks in Egypt and the UAE have not yet reached the stage of developing their client engagement plans with regards to transition. They are currently considering how they can gather client data and their approach to client engagement.

In terms of **Investment**, most banks in Egypt and the UAE have not yet conducted market-sizing exercises to assess the market potential of new zero-carbon areas in the markets they operate in.

With regards to **Sustainable Finance**, most banks in Egypt and the UAE have launched some preliminary propositions for some of their corporate clients, but have not yet developed a coherent end-to-end product strategy.

In summary, with the exception of a very small number of leading banks, the capability of the banking sector in Egypt and the UAE to develop coherent transition strategies is limited.

2.3.4 Governance and operating model

Leading banks in Egypt and the UAE

In terms of **Governance**, the leading banks in Egypt and the UAE have established, in the last 3–4 years, sustainable finance divisions as an expression of their commitment to incorporate sustainability into corporate governance. A key area of focus for these leading banks is the incorporation of emissions criteria in governance structures and across different parts of decision-making. To date they have taken some initial steps towards this direction, however an end-to-end approach is required.

In terms of **Emissions Data Solution**, leading banks in Egypt and the UAE have built some preliminary emissions data solutions which are offline and non-dynamic, having leveraged data from a number of internal and external sources. They have future plans in place for the development of an emissions management tool to include the classification of internal systems and how the reported data will be collected daily and accessed through a dashboard interface.

In terms of **Capacity Building**, leading banks have designed and delivered some climate training across different teams to introduce the concept and business case for sustainable finance and the definition of climate change, climate change risks, and sustainability reporting. However, these trainings have not been developed to the detail required.

In terms of updates to **Systems and Processes** for the operationalisation of net-zero strategies, leading banks have made updates to their underwriting and credit analysis processes to ensure emissions criteria are properly captured and incorporated in the relevant processes, though these updates have not generally been system-wide. Leading banks have plans in place to build a Target Operating Model for the operationalisation of their decarbonisation strategies and deliver the required changes.

Majority of banks in Egypt and the UAE

Most banks in Egypt and the UAE have not taken any steps with regards the operationalistion of net-zero strategies across their banking value chain and still considering their approach towards governance, the set up of an emissions data solution and the update of systems and processes.

3. The way forward

This report has covered the key climate challenges that the MENA region faces and the need for both public actors and banks to take action towards the acceleration of the decarbonisation transition. The report has also analysed the state of banking decarbonisation in MENA, with a focus on Egypt and the UAE, leveraging a number of conceptual tools developed by UNEP FI. This final section outlines some key recommendations for policymakers and banks. These recommendations are **by no means exhaustive and should not be read as such**. Additionally, they are not necessarily restricted to policymakers and banks in the MENA region, but may also be relevant for policymakers and banks from other regions, depending on their level of maturity.

3.1 Recommendations for policymakers

A first recommended step for policymakers in MENA is to conduct a high-level analysis to understand where they currently map against the different categories of the banking decarbonisation framework outlined in **Table 2: Banking Decarbonisation Maturity Framework for Public Actors** developed by UNEP FI and discussed in section 2.2. This mapping exercise can help policymakers identify the appropriate next steps for them. Below is a dummy example of a mapping exercise that shows a country's maturity across its policy and regulatory environment with regards to banking decarbonisation. Based on that mapping, policymakers in that country can then define how they can further develop the policy and regulatory landscape.

	L2 area	Low	Low–Medium	Medium	Medium-High	High
Measurement and reporting	Carbon accounting	No mandate, no guidance for banks	No mandate, some consultation underway for the adoption of carbon accounting by banks	No mandate, some guidance issued for adoption of carbon accounting by banks (e.g., PCAF)	Mandate for adoption of carbon accounting by banks (e.g., PCAF) with some guidance issued	Mandate for adoption of carbon accounting by banks (e.g., PCAF) with a timeline and detailed guidance issued
	Emissions factors	No mandate, no guidance for banks	No mandate, some consultation underway for the adoption of emissions factors by banks	No mandate, some guidance issued for adoption of emissions factors by banks for carbon measurement	Mandate for adoption of emissions factors by banks for carbon measurement, with some guidance issued	Mandate for adoption of emissions factors by banks for carbon measurement with a timeline and detailed guidance issued
	Emissions data	No national emissions database	Some consultation underway to build national emissions database	Some sectoral emissions available and accessible by banks, consultation underway to build national emissions database	National emissions database built with data available for carbon material sectors, national body responsible with some guidance for banks on emissions data	National emissions database built with data available for all sectors, national body responsible with detailed guidance for banks on emissions data
	Emissions reporting	No mandate, no guidance for banks	Generic ESG disclosure mandate for banks excluding financed emissions	Generic ESG disclosure mandate for banks including financed emissions for some carbon material financed sectors	Mandate for detailed reporting on operational and financed emissions for most financed sectors, with some guidance issued	Mandate for detailed reporting on operational and financed emissions for all financed sectors with a timeline and detailed guidance issued
Commitment and target setting	Nationally determined contributions (NDC)	Not in place, no guidance for banks	In place, but not Paris-aligned, no guidance for banks	In place and Paris-aligned, with overall interim reduction target set and some guidance for banks to align with it	In place and Paris-aligned, with overall interim reduction target set and mandate for banks to align with it, with some guidance issued	In place and Paris-aligned, with overall interim reduction target set and mandate for banks to align with it with a timeline and detailed guidance issued
	National sectoral targets	Not in place, no guidance for banks	Some consultation underway, no guidance for banks	In place for some carbon material sectors with Paris-aligned scenarios and some guidance for banks on sectoral target setting	In place for most carbon material sectors with Paris-aligned scenarios and mandate for banks for sectoral target-setting, with some guidance issued	In place for all sectors with Paris-aligned scenarios and mandate for banks for sectoral target-setting with a timeline and detailed guidance issued
	Climate scenarios	No adoption of global/no country available, no guidance for banks	Consultation for adoption of global/no country available, no guidance for banks	Adoption of global with some guidance for banks to align their financed portfolios with those	Adoption of global with mandate for banks to align their financed portfolios with those of country climate scenarios underway	Country climate scenarios developed and mandate for banks to align with those with a timeline and detailed guidance issued
	Sectoral pathways	No adoption of global/ no country available, no guidance for banks	Consultation for adoption of global/no country available, no guidance for banks	Adoption of global for some sectors with some guidance for banks to align their financed portfolios with those	Adoption of global for most sectors with mandate for banks to align their financed portfolios with those/ development of country sectoral pathways underway	Country sectoral pathways developed and mandate for banks to align their financed portfolios with those with a timeline and detailed guidance issued
Transition strategies	Phase-out policies	None	None, exploring global practices	Consultation underway for phase-out of fossil fuel financing	Mandate for banks for gradual phase-out of fossil fuel financing, with some guidance issued	Mandate for banks for gradual phase-out of fossil fuel financing with a timeline and detailed guidance issued
	Transition finance	None	Some ad-hoc funding allocated to transition initiatives	Agreements with DFIs and/ or bilateral agreements in place to accelerate transition finance, with some incentives provided to banks	National transition finance requirements calculated for most sectors with strong incentives provided to banks to accelerate transition finance	National transition finance requirements calculated for all sectors with full incentives provided to banks to accelerate transition finance
	Investment	None	None, exploring new-zero-carbon areas for investment	Ad-hoc public/private investment plans for some zero-carbon areas with ad-hoc participation of banks	Coherent public/private investment plans for some zero-carbon areas with active involvement of banks	Coherent private/public investment plans for all zero-carbon areas with active involvement of banks
	Sustainable finance taxonomies	None	None, exploring adoption of global by banks	Consultation underway for the adoption of global by banks or development of national sustainable finance taxonomies	National sustainable finance taxonomies developed with mandate for banks to align with those and with some guidance issued	National sustainable finance taxonomies developed with mandate for banks to align with those with a timeline and detailed guidance issued
Governance and operating model	Governance	No mandate, no guidance for banks	None, exploring adoption of global practices	Consultation underway for policy/regulatory requirements for banks on governance around emissions	Mandate issued for banks for the implementation of governance standards around emissions with some guidance issued	Mandate issued for banks for the implementation of governance standards around emissions with a timeline and detailed guidance issued
	Emissions data solution	No mandate, no guidance for banks	None, exploring adoption of global practices	Consultation underway for the set-up and minimum standards of emissions data solution by banks	Mandate issued for the set-up and minimum standards of emissions data solution by banks with some guidance issued	Mandate issued for the set-up and minimum standards of emissions data solution by banks with a timeline and detailed guidance issued
	Capacity building	No mandate, no guidance for banks	None, exploring adoption of global practices	Consultation underway for the implementation of capacity-building programmes on decarbonisation by banks	Mandate issued for the implementation of capacity-building programmes on decarbonisation by banks with some guidance issued	Mandate issued for the implementation of capacity-building programmes on decarbonisation by banks with a timeline and detailed guidance issued
	Systems and processes	No mandate, no guidance for banks	None, exploring adoption of global practices	Consultation underway for the update of systems and processes by banks to enable decarbonisation	Mandate issued for the update of systems and processes by banks to enable decarbonisation with some guidance issued	Mandate issued for the update of systems and processes by banks to enable decarbonisation with a timeline and detailed guidance issued

Figure 5: Dummy example: A country's policy and regulatory maturity of banking decarbonisation

Measurement and reporting

- Engage with international actors that set standards on **carbon accounting methodologies** (e.g. PCAF) and develop a national approach to accelerate their adoption by the country's banking sector.
- Engage with international and/or national actors to understand the use case and availability of **global and/or country emissions factors** and develop national approach to accelerate their adoption by the country's banking sector.
- Issue guidance and/or a mandate for the **adoption of carbon accounting methodologies** and the use of **global and/or country emissions factors** by banks, with minimum requirements and a clear timeline.
- Engage with international and/or national actors to understand **emissions data availability** for carbon-material financed sectors, identify gaps and develop national approach to accelerate use of available emissions data by the country's banking sector.
- Consider options for the development of a **national emissions database** covering the country's carbon-material financed sectors and appoint public institution responsible for it and to accelerate its use by the country's banking sector.
- Issue guidance and/or a mandate for **detailed emissions disclosure requirements**, with minimum requirements and a clear timeline, leveraging where appropriate evolving global emissions reporting frameworks and standards.
- Engage with **international platforms** such as the Glasgow Financial Alliance for Net Zero and the United Nations Environment Programme Finance Initiative to build emissions measurement and reporting capacity for the country's banking sector.

Commitment and targets

- Engage with international actors that have developed **climate scenarios** and **sectoral reduction trajectories** to understand their **use cases and suitability** for the country's banking sector plus any relevant limitations.
- Issue guidance and/or mandate for banks to develop their **overall decarbonisation commitment** in line with the Paris Agreement (e.g. IEA's 1.5°C scenario) and also in line with Nationally Determined Contributions plans and country energy visions outlined in section 2.2.
- Issue guidance and/or mandate for banks to develop **interim emissions reduction targets** for carbon-material financed sectors for their lending and investment portfolios, with minimum requirements and a clear timeline.
- Issue guidance and/or a mandate for banks to **adopt global and/or regional climate scenarios and sectoral reduction trajectories** for target-setting and climate-stress testing purposes.
- Engage with international and/or national actors to explore options for the **development of country climate scenarios and sectoral reduction trajectories** to be used in banks' subsequent target-setting iterations.
- Plan and facilitate activities with banks and other national actors such as the country's climate science community and academia to build **institutional capacity on target setting** for the country's banking sector.
- Engage with **international platforms** such as the Glasgow Financial Alliance for Net Zero and the United Nations Environment Programme Finance Initiative to build commitment and target-setting capacity for the country's banking sector.

Transition strategies

- Issue guidance and/or a mandate for banks to **incorporate emissions criteria in the risk model** across business lines and sectors for both existing and new clients, with minimum requirements and a timeline.
- Issue guidance and/or a mandate for banks to build risk management policies and plans to **phase down the financing of unabated fossil fuels**, with minimum requirements and a clear timeline.
- Issue guidance and/or a mandate for banks to conduct **carbon due diligence** on their clients and to build **client engagement strategies** to understand their clients' transition plans and how they can finance those.
- Build **transition finance tools and incentivasition schemes** such as fiscal subsidies, tax incentives, and central bank financing facilities to support transition finance and enhance the bankability of transition projects.
- Engage with **development finance institutions (DFIs)** to mobilise institutional financing towards transition projects and facilitate the participation of the country's banking sector as intermediaries for some of those financial resources.
- Develop a national approach on **sustainable finance taxonomies** and issue guidance and/or a mandate for banks to adhere to those taxonomy frameworks, with minimum requirements and a clear timeline.
- Engage with **international platforms** such as the Glasgow Financial Alliance for Net Zero and the United Nations Environment Programme Finance Initiative to build transition strategies capacity for the country's banking sector.

Governance and operating model

- Issue guidance and/or a mandate for banks to incorporate **emissions criteria** across governance structures and reflect emissions considerations across all parts of **decision-making**, with minimum requirements and a clear timeline.
- Issue guidance and/or a mandate for banks to design and impement climate **capacity building programmes** with a focus on climate mitigation to upskill employees on the identification and management of emissions-related risks.
- Engage with international and/or national actors including UN agencies, banking associations and academia to **design and facilitate industry-wide capacity building programmes** on climate mitigation.
- Consider options for the development of a **national emissions database** covering the country's carbon-material financed sectors and appoint a public institution to manage and accelerate its use by the country's banking sector.
- Issue guidance and/or a mandate for banks to design and implement an **internal emissions data utility** to cover use cases across business lines and sectors, with minimum requirements and a clear timeline.
- Issue guidance and/or a mandate for banks to deliver **updates on their operating model** across systems and processes for origination, onboarding, underwriting, credit analysis and portfolio management, with minimum requirements and a clear timeline.
- Develop and facilitate a **best practices hub** as a space of knowledge exchange with content and resources covering the different aspects of goverance and the operating model for decarbonisation strategies.

3.2 Recommendations for banks

A first recommended step for banks in MENA is to conduct a high-level analysis to understand where they currently map against the different categories of the banking decarbonisation framework outlined in **Table 3: Banking Decarbonisation Maturity Framework for Banks** developed by UNEP FI and discussed in section 2.3 of this report. Such a mapping exercise can help individual banks identify what may be the appropriate next steps for them. Below is a dummy example of a mapping exercise that shows an individual bank's maturity with regards to banking decarbonisation. Based on that mapping, this specific bank can define how it can advance its decarbonisation journey.

	L2 area	Low	Low–Medium	Medium	Medium-High	High
Measurement and reporting	Carbon accounting	No action	In exploratory discussions for carbon accounting adoption	Carbon accounting (e.g., PCAF) adopted, operational emissions measured and financed emissions measured for some priority sectors	Carbon accounting (e.g., PCAF) adopted, operational emissions measured and financed emissions measured for most sectors	Carbon accounting (e.g., PCAF) adopted, operational emissions measured and financed emissions measured for all sectors across all business lines
	Emissions data	No action	In exploratory discussions for data approach for measurement	Real data used for operational emissions/proxy data used to measure financed emissions for some priority sectors	Real data used for operational emissions/mix of proxy and real data used to measure financed emissions for most sectors	Real data used for operational emissions/real data used to measure financed emissions for all sectors across all business lines
	Emissions reporting	No action	Some ad-hoc emissions reporting capability	Reporting capability built in partial alignment with global standards (e.g., TCFD, GRI) and national requirements	Reporting capability built in full alignment with global standards (e.g., TCFD, GRI) and national requirements/ non-dynamic	Reporting capability built in full alignment with global standards (e.g., TCFD, GRI) and national requirements/dynamic and automated reporting
Commitment and target setting	Commitment	No action	Exploring approach and NZBA membership	NZBA member, commitment in place and aligned with 1.5°C/ no overall interim reduction target set	NZBA member, commitment in place and aligned with 1.5°C/ interim reduction target set and communicated to stakeholders	NZBA member, commitment in place and aligned with 1.5°C/ interim reduction target set, communicated to stakeholders and incorporated in BAU
	Climate scenarios	No action	Exploring use of global ones for risk and climate stress testing	Partially aligned with global ones (e.g., NGFS) for risk and climate stress-testing purposes, in line with national guidance	Fully aligned with global (e.g., NGFS) and/or country ones for risk and climate stress-testing purposes, including country considerations	Fully aligned with global (e.g., NGFS) and/or country ones for risk and climate stress-testing purposes/incorporated in BAU business strategy
	Sectoral pathways	No action	Exploring use of global ones for target-setting	Partially aligned with global ones (e.g.,) for sectoral target-setting purposes, in line with national guidance	Fully aligned with global (e.g., IEA) and/or country ones for sectoral target-setting purposes, including country considerations	Fully aligned with global (e.g., IEA) and/or country ones for sectoral target-setting purposes/ incorporated in BAU sectoral strategies
	Sectoral targets	No action	In exploratory discussions for sectoral target-setting approach	Interim reduction targets set for some carbon-material financed sectors for some business lines	Interim reduction targets set for all carbon-material financed sectors for most business lines	Interim reduction targets set for all financed sectors for all business lines incorporated in BAU sectoral strategies
Transition strategies	Risk model	No action	Exploring incorporation of emissions criteria	Emissions criteria partially incorporated for some carbon-material sectors/phase-out of fossil fuels financing under review	Emissions criteria fully incorporated for most sectors for most business lines/ plan for gradual phase-out of fossil fuels financing under development	Emissions criteria fully incorporated for all sectors for all business lines/detailed plan developed for gradual phase-out of fossil fuels financing
	Client engagement	No action	Some ad-hoc engagement on a client-by-client basis	Due diligence on client transition plans conducted for some carbon material sectors/ client engagement plans under development	Due diligence on client transition plans conducted for most sectors for most business lines/client engagement plans developed	Due diligence on client transition plans conducted for all sectors for all business lines/client engagement plans in execution as part of BAU
	Investment	No action	Exploring potential for new zero-carbon areas in markets of operation	Market sizing conducted for some identified priority new zero-carbon areas with investment plans under development	Market sizing conducted for all identified priority new zero-carbon areas with investment plans developed for most of those	Market sizing conducted for all identified priority new zero-carbon areas with investment plans in execution as part of BAU
	Sustainable finance taxonomies	No action	Some ad-hoc propositions in place	Propositions developed for some sectors and partially aligned with leading frameworks (e.g., EU taxonomy) and national guidance	Propositions developed for most sectors and fully aligned with leading frameworks (e.g., EU taxonomy) and national guidance	Propositions developed for all sectors and fully aligned with leading frameworks (e.g., EU taxonomy) and national guidance/ incorporated in BAU
Governance And Operating Model	Governance	No action	Exploring updates for some governance structures	Emissions reflected in some parts of BAU governance for some sectors in some business lines, in line with national guidance	Emissions reflected in most parts of BAU governance for most sectors in most business lines, in line with national guidance and mandates	Emissions reflected in all parts of BAU governance for all sectors in all business lines, in line with national guidance and mandates/ incorporated in BAU
	Emissions data solution	No action	Exploring approach for emissions data solution	Data gathered for some sectors for some business lines/offline non-dynamic data solution in place	Data gathered for most sectors for most business lines/ dynamic data solution under development	Data gathered for all sectors/ dynamic real-time data solution developed covering use cases across all business lines and corporate functions
	Capacity building	No action	Some ad-hoc training in place for some employee groups	Mandatory training on emissions for some employee groups/capacity-building programmes under development	Mandatory training on emissions for most employee groups/capacity-building programmes developed and delivered for most of those	End-to-end capacity-building programmes delivered for all employee groups/emissions incorporated in BAU training, JDs, and organisational culture
	Systems and processes	No action	Some ad-hoc updates in parts of the banking value chain	Target Operating Model under development/some updates delivered in some parts of the banking value chain	Target Operating Model developed for most business lines and corporate functions/ updates delivered in most parts of the banking value chain	Target Operating Model developed for all business lines and corporate functions/updates delivered in all parts of the banking value chain

Figure 6: Dummy example: An individual bank's maturity of banking decarbonisation

Measurement and reporting

- Engage with regulators to understand any future policies or mandates with regards to the adoption of **carbon accounting methodologies** and the use of **global and/or country emissions factors** by banks.
- Engage with international actors to understand evolving **global standards on carbon accounting** for banks and sign up to initiatives such as the Partnership for Carbon Accounting Financials (PCAF) and the Greenhouse Gas Protocol to familiarise.
- Engage with international and/or national actors such as the Joint Impact Model to understand the use and availability of **global and/or country emissions factors** for emissions measurement.
- Engage with international and/or national public or private actors to understand the **availability and accessibility of emissions and production data** for different financed sectors.
- Apply carbon accounting standards to measure **Scope 1, 2 and 3 emissions** and develop **internal capability** to start reporting on those in line with globally established climate reporting frameworks.
- Conduct initial conversations with selected carbon-intensive clients to understand the **availability and accessibility of emissions and/or production data** needed for emissions measurement.
- Design and set up dynamic, real-time **emissions data solution** built in existing infrastructure, leveraging data capabilities and systems, in line with globally established climate reporting frameworks.
- Engage with **international platforms** such as the Glasgow Financial Alliance for Net Zero and the United Nations Environment Programme Finance Initiative to get access to resources for emissions measurement and reporting.

Commitment and targets

- Engage with international and/or national actors to familiarise with **internationally agreed climate commitments**, the Paris Agreement and key climate mitigation concepts for banking.
- Engage with regulators and national actors to understand **national decarbonisation strategies**, including country commitments and interim reduction targets as outlined in Nationally Determined Contributions plans.
- Develop **Board-level commitment** to align with the decarbonisation pathway and national decarbonisation plans and consider joining global climate banking initiatives such as the Principles of Responsible Banking and the Net-Zero Banking Alliance.
- Engage with providers of **climate scenarios** such as the Network of Central Banks and Supervisors for Greening the Financial System to understand their use and suitability for target-setting and climate stress-testing purposes.
- Engage with providers of **sectoral reduction trajectories** such as the International Energy Agency, the Carbon Risk Real Estate Monitor and Poseidon Principles to understand their use and suitabilility for target-setting for financed emissions.
- Conduct internal analysis to **prioritise financed sectors** for target-setting purposes based on their carbon materiality and aggregated exposures across lending and investment portfolios.
- Build plan for the development of **interim reduction targets**, leveraring global target-setting standarsd such as the Guidelines for Climate Target-Setting for Banks provided by the United Nations Environment Programme Finance Initiative.
- Design and deliver a consistent **communication plans** to communicate commitment and interim reduction targets to employees, investors and other stakeholders, and set up a dedicated sustainability communications team.

Transition strategies

- Update the Risk Model across business lines and sectors to **incorporate emissions criteria across the banking value chain** all the way from origination to onboarding, credit analysis, underwriting, annual reviews and portfolio management.
- Engage with international actors to familiarise with **best practices on transition** and through resources such as the Net-zero Transition Plans—Fundamentals, Recommendations, and Guidance by the Glasgow Financial Alliance for Net Zero.
- Conduct **climate due diligence on a sector-by-sector basis** to understand clients' existing decarbonisation commitments, targets and/or transition plans and the opportunity to finance those.
- Design and develop **client engagement plans** for financed sectors including engagement at the executive level and site visits to understand clients' business plans and transition strategies and the opportunity to finance those.
- Incoporate clients' emissions and transition plans as part of the **onboarding process for new clients** and the **annual review process for existing clients** and upskill Relationship Managers in this regard.
- Conduct **market-sizing exercises** to understand growth potential of new zero-carbon areas of the economy in markets of operation as well as emerging players in those areas and the opportunity to finance their business plans.
- Design and market coherent end-to-end **transition finance propositions** across business lines and sectors, in line with evolving global frameworks and in compliance with national sustainable finance taxonomies.
- Design and implement **transition metrics and KPIs** across business lines and sectors to enable dynamic measurement of transition finance and ongoing monitoring of progress against KPIs.

Governance and operating model

- Conduct internal review of **corporate governance structures** across business lines and sectors and identify and deliver updates to enable the incorporation of emissions across all levels of decision making.
- Conduct **skills gap analysis** to identify climate training needs across different employee groups and design and deliver **capacity building programmes to upskill employees** across the front-line, middle-office and back-office teams.
- Set up internal **knowledge hubs of climate subject experts** to act as ambassadors of banking decarbonisation inside the organisation and help develop a climate-driven culture through on-the-job training and knowledge sharing.
- Incorporate climate mitigation in **roles and responsibilities and job descriptions** so existing and new employees understand how it relates to their specific role and what is expected of them in that regard.
- Conduct an end-to-end **impact assessment across the operating model** to identify changes required across systems and processes to operationalise net zero across the banking value chain.
- Design and deliver a climate mitigation **target operating model** and deliver changes through transformation initiatives to enable the operationalisation of decarbonisation strategies across the organisation.

Ecosystem of actors

As previously mentioned, the abovementioned recommendations can apply to individual banks either in entirety or in parts depending on how mature they are on their decarbonisation journey. It is recommended that each individual bank conducts an analysis to understand its maturity against the different elements of the banking decarbonisation framework outlined in **Table 3: Banking decarbonisation maturity framework for banks** and then assess what recommendations are more relevant to it. In any case, regardless of their level of maturity, all banks that are looking to embark on their decarbonisation strategies have to navigate a complex ecosystem of international and national actors as outlined in **Figure 7**. It is important for banks to be able to navigate that ecosystem and make choices regarding the development and implementation of their decarbonisation strategies.

For non-exhaustive illustrative purposes only

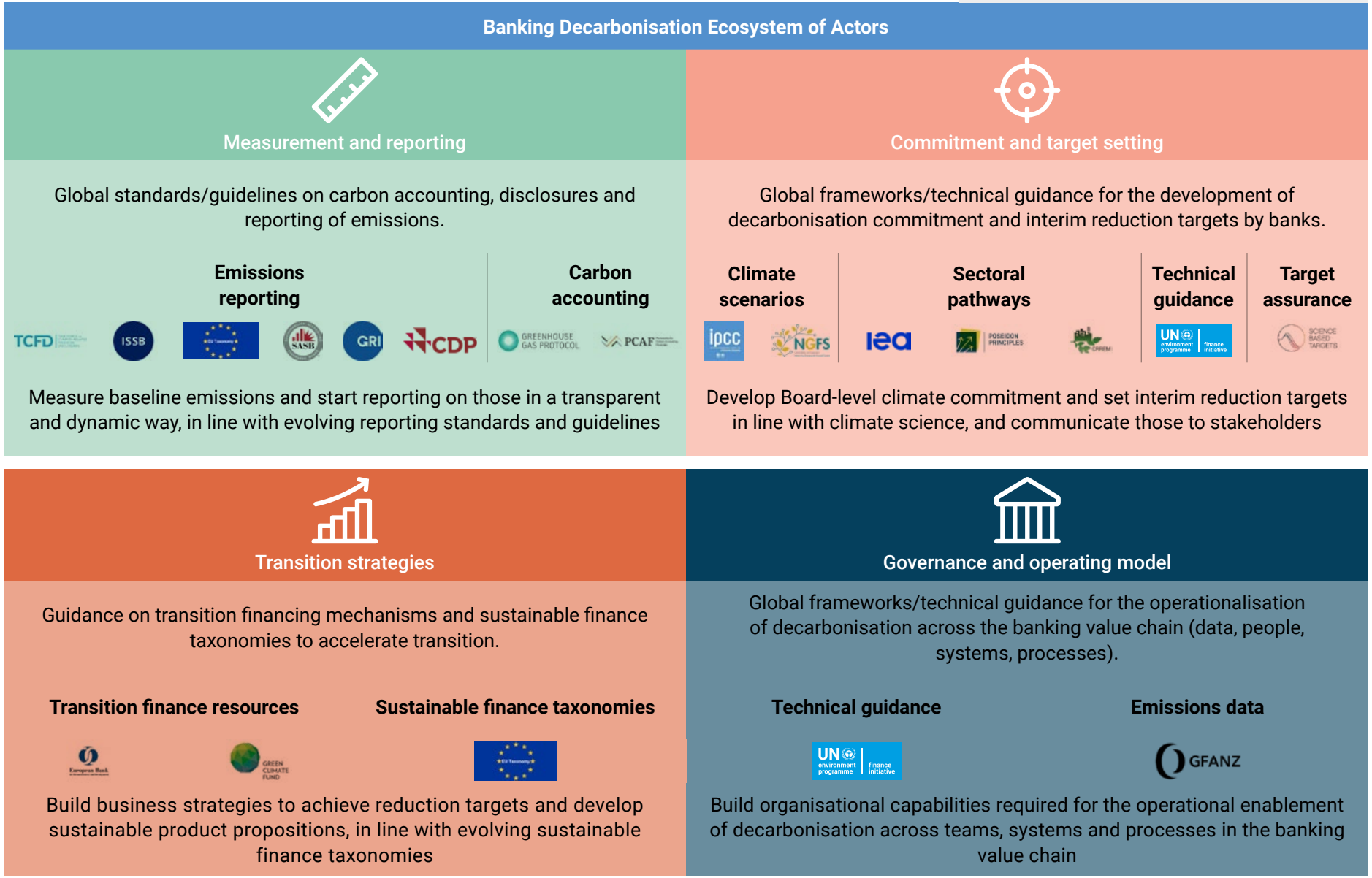


Figure 7: Banking decarbonistion—ecosystem of actors (UNEP FI, 2023)

References

ADGM, 2020. *Guiding Principles on Sustainable Finance in the UAE*. Abu Dhabi, Abu Dhabi Global Market. Available at: adgm.com/documents/fsra/sustainable-finance/20221109-sfwg-progress-report-final.pdf

ADGM, 2021. *2021 Public Statement on Collaboration on Sustainable Finance in the UAE*. Abu Dhabi, Abu Dhabi Global Market. Available at: adgm.com/documents/fsra/sustainable-finance/2021-public-statement-on-collaboration-on-sustainable-finance-in-the-UAE.pdf

ADGM, 2022. *Second Public Statement on Collaboration on Sustainable Finance in the UAE*. Abu Dhabi, Abu Dhabi Global Market. Available at: adgm.com/documents/fsra/sustainable-finance/20221109-sfwg-progress-report-final.pdf

Basirat, Soroush, 2022. *Green Steel Opportunity in the Middle East and North Africa*. Lakewood, Ohio, Institute for Energy Economics and Financial Analysis. Available at: ieefa.org/resources/green-steel-opportunity-middle-east-and-north-africa

Behrsin, Ingrid, Kasandra O'Malia, Shradhey Prasad, Amanda Hinh, Nagwa Abdallah, 2022. *A Race to the Top*. Briefing June 2022. Washington, DC, Global Energy Monitor. Available at: globalenergymonitor.org/wp-content/uploads/2022/06/A-Race-To-The-Top-final-English-version.pdf

Blankespoor, Brian, Susmita Dasgupta, Benoit Laplante, 2014. Sea-Level Rise and Coastal Wetlands. *Ambio.* 43 (8): 996–1005. Available at: ncbi.nlm.nih.gov/pmc/articles/PMC4235901/

Boudiaf, Jihane, Ralf Wiegert, Yasmine Ghozzi, 2021. Water: the dilemma MENA governments are facing. Blog, 31 January 2022. S&P Global. Available at: spglobal.com/marketintelligence/en/mi/research-analysis/water-the-dilemmas-mena-governments-are-facing.html

CBE, 2021. *Principles and Regulatory Framework*. Cairo, Central Bank of Egypt. Available at: cbe.org.eg/en/sustainability/principles-and-regulatory-framework

Crippa, M., G. Oreggioni, D. Guizzardi, M. Muntean, E. Schaaf, E. Lo Vullo, E. Solazzo, F. Monforti-Ferrario, J.G.J. Olivier, E. Vignati, 2019. *Fossil CO2 and GHG emissions of all world countries—2019 Report*. EUR 29849 EN, Luxembourg, Publications Office of the European Union. Available at: op.europa.eu/en/publication-detail/-/publication/9d09ccd1-e0dd-11e9-9c4e-01aa75ed71a1/language-en

Dasgupta, Susmita; Benoit Laplante, Craig Meisner, David Wheeler, Jianping Yan, 2007. *The Impact of Sea Level Rise on Developing Countries : A Comparative Analysis*. Policy Research Working Paper; No. 4136. Washington, DC, World Bank. Available at: hdl.handle.net/10986/7174

El-Raey, Mohamed, 1997. Vulenrability Assessment of the Coastal Zone of the Nile Delta of Egypt, to the Impactsof Sea-Level Rise. *Ocean & Coastal Management*. 37. 29–40. Available at: researchgate.net/publication/223556432_Vulnerability_Assessment_of_the_Coastal_Zone_of_the_Nile_Delta_of_Egypt_to_the_Impacts_of_Sea_Level_Rise

Feingold, Spencer, 2023. *How can the Middle East and North Africa manage the region's water crisis?* 6 January 2023. Geneva, Worl Economic Forum. Available at: weforum.org/agenda/2023/01/middle-east-north-africa-mena-water-crisis-industry-leaders-solutions/

Giovanis, E., O. Ozdamar, 2022. The impact of climate change on budget balances and debt in the Middle East and North Africa (MENA) region. *Climatic Change* 172, 34. Available at: doi.org/10.1007/s10584-022-03388-x

Government of Egypt, 2022. *Egypt's First Updated Nationally Determined Contributions*. Available at: unfccc.int/

Gubert, Flore, Christophe Nordman, 2008. *The Future of International Migration to OECD Countries Regional Note North Africa.* Paris, Organisation for Economic Cooperation and Development. Available at: oecd.org/futures/43484256.pdf

Hajat, Shakoor, Yiannis Proestos, Jose-Luis Araya-Lopez, Theo Economou, Jos Lielevend, 2023. Current and future trends in heat-related mortality in the MENA region: a health impact assessment with bias-adjusted statistically downscaled CMIP6 (SSP-based) data and Bayesian inference. *The Lancet Planetary Health,* 2023; 7, 4: E282–E290. Available at: doi.org/10.1016/S2542-5196(23)00045-1

Heger, Martin Philipp, Lukas Vashold, Anabella Palacios, Mala Alahmadi, Marjory-Anne Bromhead, Marcelo Acerbi, Martin Philipp Heger, 2022. *Blue Skies, Blue Seas: Air Pollution, Marine Plastics, and Coastal Erosion in the Middle East and North Africa*. MENA Development Report. Washington, DC, World Bank. Available at: hdl.handle.net/10986/36912

IRENA, 2015. *Africa 2030: Roadmap for a Renewable Energy Future*. Abu Dhabi, International Renewable Energy Agency. Available at: irena.org/Publications/2015/Oct/Africa-2030-Roadmap-for-a-Renewable-Energy-Future

IRENA, 2022. *World Energy Transitions Outlook*. Abu Dhabi, International Renewable Energy Agency. Available at: irena.org/Publications/2022/Mar/World-Energy-Transitions-Outlook-2022

Met Office, 2021. Climate trends and risks in the Middle East and North Africa (MENA) region. Exeter, United Kingdom Meteorological Office Hadley Centre. Available at: metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/services/government/mena-poster-digital-version_compressed-002.pdf

Mirza, Nawazish, Ayesha Afzal, Muhammad Umar, Marinko Skare, 2023. The impact of green lending on banking performance: Evidence from SME credit portfolios in the BRIC. *Economic Analysis and Policy*, 77:843–850. Available at: doi.org/10.1016/j.eap.2022.12.024

MOCCAE, 2021. *UAE Sustainable Finance Framework*. Abu Dhabi, United Arab Emirates Ministry of Climate Change and Environment. Available at: moccae.gov.ae/assets/24b84d14/UAE_Sustainable_framework_21.pdf.aspx

Muddathir, Hanan E., 2022. *In the MENA Region, We Need New Strategies on Water Security*. 18 May 2022. New York, Sanitation and Water for All. Available at: sanitationandwaterforall.org/news/mena-region-we-need-new-strategies-water-security

Péridy, Nicolas, Marc Brunetto, Ahmed Ghoneim, 2012. *The Economic Costs of Climate Change in MENA countries: A Micro-Spatial Quantitative Assessment and a Survey of Policies*. Toulon, Université du Sud Toulou-Var. Available at: semide.net/media_server/files/semide/thematicdirs/news/2012/07/rising-temperatures-and-falling-gdps-mediterranean-countries/FEM34-03.pdf

Roudi-Fahimi, Farzaneh, Liz Creel, Roger-Mark De Souza, 2000. *Finding the Balance: Population and Water Scarcity in the Middle East*. Washington DC, Population Reference Bureau. Available at: prb.org/resources/finding-the-balance-population-and-water-scarcity-in-the-middle-east-and-north-africa/

Sieghart, Lia Carol, Mahlette Betre, 2018. *Climate Change in MENA: Challenges and Opportunities for the World's Most Water Stressed Region*. MENA Knowledge and Learning Quick Notes, No. 164. Washington DC, World Bank. Available at: openknowledge.worldbank.org/entities/publication/b61c8d3e-376c-5217-ae51-0e3e942972ed

Torre Olmo, B., M. Cantero Saiz, S. Sanfilippo Azofra, 2021. Sustainable Banking, Market Power, and Efficiency: Effects on Banks' Profitability and Risk. *Sustainability* ***13***:1298. Available at: doi.org/10.3390/su13031298

Tsui, K., 2022. *The Middle East is warming up twice as fast as the rest of the world*. Washington Post, 7 September 2022. Available at: washingtonpost.com/world/2022/09/07/middle-east-mediterranean-climate-change/

Unicef, 2021. *"Running Dry": Unprecedented Scale and Impact of Water Scarcity in the Middle East and north Africa*. Press Release, 23 Augusst 2021. New York, Unicef. Available at: unicef.org.uk/press-releases/running-dry-unprecedented-scale-and-impact-of-water-scarcity-in-the-middle-east-and-north-africa/

Vohra, Anchal, 2021. *The Middle East Is Becoming Literally Uninhabitable*. 24 August 2021. Foreign Policy. Available at: foreignpolicy.com/2021/08/24/the-middle-east-is-becoming-literally-uninhabitable/

Waha, Katharina, Linda Krummenauer, Sophie Adams, Valentin Aich, Florent Baarsch, Dim Coumou, Marianela Fader, Holger Hoff, Guy Jobbins, Rachel Marcus, Matthias Mengel, Ilona M. Otto, Mahé Perrette, Marcia Rocha, Alexander Robinson, Carl-Friedrich Schleussner. 2017. 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). Available at: doi.org/10.1007/s10113-017-1144-2

Wehrey, Frederic, Ninar Fawal, 2022. *Cascading Climate Effects in the Middle East and North Africa: Adapting Through Inclusive Governance*. 24 February 2022. Washington DC, Carnegie Endowment for International Peace. Available at: carnegieendowment.org/2022/02/24/cascading-climate-effects-in-middle-east-and-north-africa-adapting-through-inclusive-governance-pub-86510

Zittis, George, Panos Hadjinicolaou, Mansour Almazroui, Edoardo Bucchignani, Fatima Driouech, Khalid Elrhaz, Levent Kurnaz, Grigory Nikulin, Athanasios Ntoumos, Tugba Ozturk, Yiannis Proestos, Georgiy Stenchikov, Zaaboul Rashyd, Jos Lelieveld, 2021. Business-as-usual will lead to super and ultra-extreme heatwaves in the Middle East and North Africa. npj *Climate and Atmospheric Science* 4:20. Available at: nature.com/articles/s41612-021-00178-7

UN environment programme

finance initiative

UNEP Finance Initiative brings together a large network of banks, insurers and investors that collectively catalyses action across the financial system to deliver more sustainable global economies. For more than 30 years the initiative has been connecting the UN with financial institutions from around the world to shape the sustainable finance agenda. We've established the world's foremost sustainability frameworks that help the finance industry address global environmental, social and governance (ESG) challenges.

unepfi.org

unepfi.org

info@unepfi.org

/UNEPFinanceInitiative

UN Environment Programme Finance Initiative

@UNEP_FI