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CLIMATE FINANCE READINESS INDEX 2023

MIDDLE EAST, NORTH AFRICA & TÜRKIYE REGION



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All queries should be addressed to Green For South Inc. and the Co-authors (Dr. Ahmed TAHIRI JOUTI and Dr. Wael Mohamed AAMINOU) at :

a.tahiri@greenforsouth.com
wa@greenforsouth.com

The Climate Finance Readiness Index Report 2023

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FOREWARD

The Great industrial acceleration that started in the 1950s contributed significantly to the Economic prosperity of the developed countries but at the same time caused climate change with all its negative effective and expected impacts on the whole planet and people everywhere .

Developing countries have not taken advantage of this acceleration and are emitting very few quantities of GHG but found themselves in front of complicated natural, economic and social issues requiring large capabilities of funding.

In this context, the developed country parties undertake the commitment to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly 100 b USD annually by 2020 from all sources to address the needs to developing countries in the context of meaningful mitigation actions and transparency on implementation.

In this dynamic, financial systems in developing countries can play an important role in mobilizing international and national financial

resources and allocate them to different projects while implementing efficient adaptive and mitigation measures.

This report focuses on MENAT (Middle East, North Africa and Türkiye) where all the countries are facing the same challenges. It aims at assessing the readiness of the financial systems in the region to support climate action efforts.

Indeed, 14 financial systems are evaluated based on a variety of criteria to determine the progress made by each country to implement climate finance mechanisms and instruments.

The report takes into account the differences between the subregions such as North Africa, Middle East, GCC and Türkiye to reflect a fair view of each country depending on its local challenges and constraints.

The methodology of the Climate Finance Readiness Index would be improved in the next releases by capturing more significant data and identifying the paths of improvement.

The Authors,

Dr. Ahmed TAHIRI JOUTI

Dr. Wael Mohamed AAMINOU



With a focus on Climate finance, we build ecosystems to empower Global South countries in their transition to greener and more resilient economies.

ADVISORY

We provide strategic and operational advisory services centered around climate finance in the Global South.

INITIATIVES

We undertake initiatives that shape the future of climate finance in the Global South.

CAPACITY BUILDING

We offer a complete array of capacity building programs in relation to climate finance.

PHILANTHROPIC FUNDS

We set-up philanthropic funds that address climate change adaptation needs in the Global South.

AUTHORS



Dr. Wael Mohamed AAMINOU

Co-Founder and Managing Partner
Green For South Inc.



Dr. Ahmed TAHIRI JOUTI

Co-Founder and Managing Partner
Green For South Inc.

REVIEWERS



Saad EL HARIM

Co-Founder and Managing Partner
Green For South Inc.



Houssam AYAOU

Senior Researcher and Consultant

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EXECUTIVE SUMMARY

The Middle East, North Africa, and Turkey (MENAT) region (1) is particularly vulnerable to climate change and suffers from significant socio-economic and environmental challenges. Countries in this region have varying adaptive capacities to address the repercussions of climate change with increasing temperatures, severe water scarcity and increasing frequency and intensity of extreme events such as floods, droughts, and heat waves.

Financing climate action in the region requires large investments in mitigation and adaptation projects.

While climate change adaptation is a priority, costs are significant and available resources are stretched. MENAT governments are pressured to mobilize significant resources to lessen the impact of climate change. Domestic public resources are constrained and burdened by increasing fiscal deficits and by the ongoing global geopolitical instability. Moreover, private sector involvement in adaptation and mitigation is also still limited and access to public international climate finance remains not only insufficient but also not aligned with the priorities of the MENAT region. Therefore, climate financial

resources have to be significantly restructured and scaled up to meet the pressing needs of these countries to respond to climate change challenges.

The CRFI report assesses the readiness of the financial systems in the MENAT region to tackle the climate risks and to leverage the opportunities presented by the green economic transition. CFRI ranks each country individually to highlight not only climate finance's achievements but also the gaps as well as the paths of improvement.

The assessment is conducted through a scoring methodology with three main pillars:

- **Regulation & enabling environment:** The first pillar covers climate finance regulations in Banking, insurance, and capital markets as well as cross cutting enabling factors such as taxation and the submission of Nationally Determined Contributions.
- **Volume of climate finance activity:** The second pillar tracks the flows of climate finance in the country sourced both from Multilateral Climate Funds and locally.
- **Awareness:** The third pillar assesses climate finance's awareness in the country through

proxy indicators such as the volume of published academic papers, the number of professional training programs and general interest in the topic through search engines.

Based on its scoring, each country is assigned to a specific cluster. The CFRI report identifies three main clusters:

- **'Initiators':** comprises countries at the first stage of initiation of the climate finance system such as no regulation or a regulation with no binding requirements, small amounts sourced from the international funds to tackle climate change risks and issues.
- **'Implementers':** comprises countries at a more advanced stage of implementation of the climate finance system such as regulation with binding requirements, important amounts sourced from international funds and financial institutions launching their own products to support climate action.
- **'Impactors':** includes countries at a very advanced stage of implementation including regulations, important funding at both internationally and locally with a high level of awareness.

The global CRFI Score for 2022 is 26,90%. The global CRFI Score represents the sum of all the CRFI

scores per country according to the GDP weight of each country compared to the MENAT region GDP. While this score indicates that, on average, climate finance is at an early stage of implementation throughout the region, there are considerable variations between Initiators and Implementers countries.

Finally, the CFRI report proposes a set of policy recommendations to stakeholders including regulators and financial institutions to implement or reinforce the initiatives needed to contribute to the climate risks mitigation and adaptation endeavors.

The proposed CRFI's climate finance recommendations are grouped into five topics:

- The first relates to regulations and guides
- The second aims at increasing the supply of climate finance funding through the establishment of public climate finance funds/mechanisms
- The third deals with market incentives to stimulate the climate finance offer
- The fourth covers market incentives to stimulate demand by encouraging the creation of bankable green investments
- The last one relates to the development of competence and awareness



CLIMATE FINANCE READINESS INDEX INITIATIVE - CONTEXT, PURPOSE AND OBJECTIVES

During the last decades, the world has been experiencing deep changes in terms of climate patterns at regional and global scales. Indeed, the world as we have known it during the last ten millennia will change dramatically in

the next few decades with an increasingly turbulent climate (Warmer temperatures, increasing occurrence of flood and drought events, more intense hurricanes, etc.), a significant rise of sea levels (due both to the thermal expansion but also to the melting of ice sheets and glaciers) and many other phenomena that would have serious consequences on people, animals and our entire balance. Scholars declared that the planet entered into a new era called anthropocene (Ruddiman, 2013) that started during the great acceleration in the 1950s with more production and wealth creation, more energy use but also more harm to the planet.

Climate change is not limited to environmental challenges but its impact is extended to demographic, economic, social and political aspects in a way that would worsen poverty and famine levels, health issues, inequalities, access to clean water and the fair distribution of wealth among societies (Sachs, 2015).

In this context, the international community identified mitigation and adaptation efforts (Fankhauser, 2017) to handle climate change issues. First, mitigation efforts aims at reaching the Net zero emissions by 2050 as per the Paris Agreement (COP 21) by reducing the GHG emissions through decarbonization, electrification and energy efficiency policies and technologies, among others, while limiting the temperature increase to 2°C as compared to pre-industrial levels.

Secondly, adaptive pathways consist of adapting our food production processes, water management technologies, healthcare systems, education methods and priorities, reducing inequalities mechanisms, cities and communities' sustainability principles to adapt to the new climate patterns. Indeed, mitigation pathways would decrease climate change harm without restoring it and therefore, adaptive pathways are necessary to adapt the behavior of people to the

patterns of the new context for the wellbeing of the next generations.

In this context, all the stakeholders shall work together to achieve the international community commitments towards climate action. Financial institutions are also expected to reduce their own carbon footprint but also to allocate their resources to energy transition and low carbon footprint projects. Indeed, the financial systems' contribution can be decisive if they are efficient and effective (Giglio et al, 2021).

The MENAT region (Middle East, North Africa and Türkiye) is exposed to many impacts such as droughts and water scarcity, food security, desertification, new diseases, migration, social and political instability, coastal deterioration with indirect impact on coastal tourism, etc (The World Bank, 2013) . Despite the similarity of climate change patterns, the MENAT is composed of four main sub-regions that are North Africa, Middle East, GCC and Türkiye where Each sub-region has its own approach towards climate change and challenges.

The Climate Finance Readiness Index measures and tracks the readiness of the financial systems in the MENAT region to support climate action and tackle the climate risks. Each financial system would have its own score that would show the achievements but

also the gaps and paths of improvement.

The Climate Finance Readiness Index proposes a set of policy recommendations to stakeholders including financial authorities and financial institutions to implement or reinforce the infrastructure (in terms of regulations, initiatives, etc.) needed to contribute to the climate risks mitigation and adaptation efforts.

It is worth noting that the initiative covers climate action but also all the cross-cutting sustainable development goals intertwined with climate change while taking into account the specificities of the MENAT region.

CLIMATE CHANGE : CONCEPTS, IMPACTS AND SPECIFICITIES IN THE MENAT REGION

What is climate change ?

Climate change refers to long term shifts in temperatures and weather patterns. Since 1950, human activities have been the main driver of climate change due to burning fossil fuels like coal, oil and gas. Burning fossil fuels generates greenhouse gas emissions that trap the sun's heat in the atmosphere and lead to global warming. (www.un.org)

Indeed, human activities are responsible for 1,0°C of global warming above pre-industrial levels and are expected to reach 1,5°C between 2030 and 2052 if GHG emissions continue to increase at the same pace (IPCC- special report 'global warming of 1,5°C).

Scholars declared that earth entered into a new era called anthropocene with long term impacts on the whole climate system including sea level rise and extreme natural events such as floods, fires, droughts, etc. The anthropogenic emissions will persist for centuries to millennia impacting life on land and below water. They are also expected to worsen or at least decelerate the improvement rate of some of the indicators when it comes to ending poverty and hunger, to enhance education and health.

From another perspective, climate models predict major differences in regional climate characteristics when global warming would reach 1.5°C or 2°C. Therefore, according to scientists, climate change would push the weather patterns in each region to their extremity. For instance, dry regions would experience more droughts while humid regions would have more precipitation. Nevertheless, in both cases, there would be deep impacts on human kind and on the entire balance of the planet.

What are the impacts of climate change on the MENAT region ?

The MENAT region is known as the 'cradle of civilization' and is one of the most vulnerable regions to climate change (The World Bank Group, 2013). Most of the MENAT countries are sharing the same climate risks and issues with some minor gaps between the sub-regions (North Africa, Middle East, GCC, Türkiye).

Figure 1 summarizes the main climate risks and issues in the MENAT region.

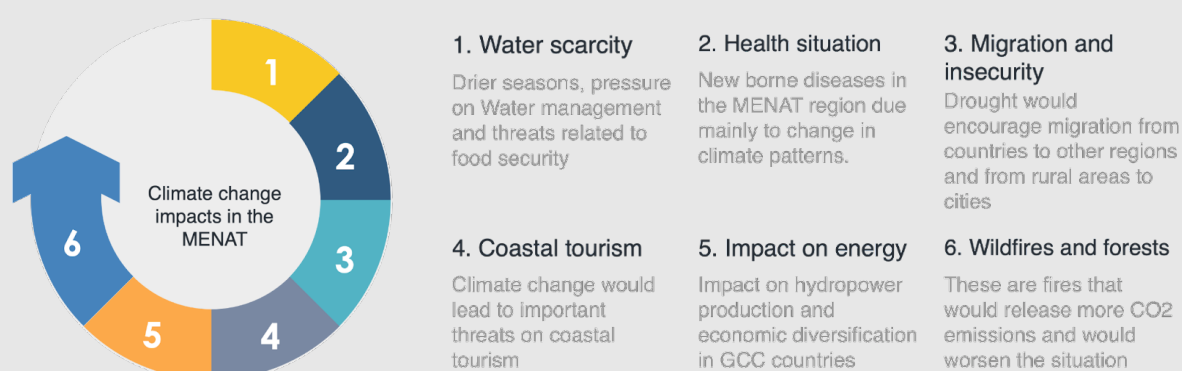


Figure 1: The Major climate change impacts on the MENAT region.

Source : Authors' own

- Water scarcity and food security

Most of the MENAT countries have a critical situation in terms of water and land scarcity. With climate risks projection, the situation would worsen by the end of the century and would impact the food security and

the agricultural productivity especially that agriculture is the largest user of water in the region (The World Bank Group, 2013).

From another perspective, the region would shift from exporting food to ensuring its own food security only. Nevertheless, even the major food exporting countries would have to deal with climate change risks and this would lead to higher food prices on international markets.

Indeed, the water scarcity in the region would threaten agricultural activity, the food security and the

purchasing power of the population that would need to pay more for their food. In the rural areas, agriculture workers would have to abandon their lands for other productive activities which would add more pressure to the economic and social development of the region.

- Health situation

Many studies have shown that with climate change, certain diseases can

appear in the region such as Malaria (2), cholera (3), lymphatic filariasis (4), leishmaniasis (5) and bilharzia (6). If the relationship between climate change and some of these diseases is still the subject of debate in the scientific community, Evidence has shown that changes in climatic factors (high temperatures, contaminated water supply) can affect the incidence of the disease in the MENAT region.

- Migration and insecurity

As explained earlier, a drier climate would put pressure on agriculture and on land productivity due to water scarcity. Therefore, people from rural areas would be forced to migrate to more resilient countries or regions escaping from droughts, poverty and diseases.

Such migration would put pressure on governments to provide new migrants with the necessary services such as education, healthcare and decent work opportunities. If governments fail to do so, there would be threats on social but also political security and stability of host countries. For instance, the Arab spring demonstrated that climate change conditions and the failure of institutions to build high levels of resilience together can lead to serious implications in terms of food security, social and political stability.

- Impacts on coastal regions

The economies of many countries in the MENAT region rely strongly on tourism such as Morocco, Tunisia, Egypt, UAE, Türkiye, etc. Climate change would deteriorate biodiversity and lead to ocean acidification. The increase of ocean acidification and warming would have serious consequences on coral reefs that are valuable to tourism in different MENAT countries.

In addition to this, MENAT countries can have serious issues with food prices and political instability which would have a negative impact on tourism. Therefore, another pillar of MENAT economies can be threatened due to climate change risks and impacts.

- Impacts on energy

Climate action requires a deep transition from fossil fuels to renewable and clean energies. From one side, this transition would require huge investments to contribute to the global efforts. On the other hand, many MENAT countries are producers of oil and gas and their economies are highly dependent on these natural resources. Therefore, another challenge is to diversify the economy of these countries.

Moreover, some MENAT countries are using hydroelectric power to generate electricity (8.3% in Egypt,

7.5% in Morocco, 8% in Syria according to the World Bank Data, 2013). With water scarcity issues, the share of hydroelectric power would decrease substantially in the next decades putting more pressure on countries that should find other clean energy sources.

- Wildfires and forests

Forests constitute a stabilizing factor of the natural ecosystems' balance and the life on land. 80% of the terrestrial biodiversity is maintained thanks to forests. They regulate water cycles, maintain soil quality and reduce the risks of natural disasters including floods. Indeed, preserving forests and encouraging forestation, among other actions and measures, can contribute to climate action.

From another perspective, the MENAT (Middle East, North Africa and Türkiye) region has emitted in 2019 approximately 3 Gt CO₂e in 2019 while having one of the weakest forest areas compared to other regions in the world. Excluding Türkiye (with 28,9% of its land covered by forests), Lebanon (14%), Morocco (12,9%) (7), the MENAT region has only 2% of its land as forests.

Wildfires can happen naturally, but with extreme drought due to climate change, they are happening much easier. Such wildfires would release

all the CO₂ emissions sequestered for decades and centuries in the forests and increase the Greenhouse gas effects.

During the last years, the MENAT region experienced many wildfires during summers. Such wildfires reduce the size of forests, threaten human life and contribute to the acceleration of climate change effects.

CLIMATE ACTION : CONCEPTS AND SOLUTIONS FOR THE MENAT REGION

What is climate action ?

Based on the United Nations Sustainable Development Goal n° 13, Climate action consists of taking urgent measures to combat climate change and its impacts. According to the Sustainable Development Goals Report 2022, the humanity window to avoid climate catastrophe is closing rapidly. Indeed, energy related CO₂ emissions increased by 6% in 2021 reaching the highest level ever recorded. Moreover, temperatures are still rising leading to more extreme weather.

Climate action aims at avoiding or at least reducing the climate change impacts in terms of droughts, natural disasters (floods, wildfires, etc.) and

rise of sea levels (expected to be between 30-60 cm by 2100).

From another perspective, climate finance falls short of 100 billion USD as per the yearly commitment. The United Nations Sustainable Development Goal n° 13 identified 5 targets (The United Nations official website):

Targets & Indicators
<p>13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries</p> <p>13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population</p> <p>13.1.2 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030</p> <p>13.1.3 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies</p>
<p>13.2 Integrate climate change measures into national policies, strategies and planning</p> <p>13.2.1 Number of countries with nationally determined contributions, long-term strategies, national adaptation plans and adaptation communications, as reported to the secretariat of the United Nations Framework Convention on Climate Change</p> <p>13.2.2 Total greenhouse gas emissions per year</p>

13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

13.3.1

Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment

13.A Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible

13.a.1

Amounts provided and mobilized in United States dollars per year in relation to the continued existing collective mobilization goal of the 100\$ billion commitment through to 2025.

13.B Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities

13.b.1

Number of least developed countries and small island developing states with nationally determined contributions, long-term strategies, national adaptation plans and adaptation communications, as reported to the secretariat of the United Nations framework convention on Climate change.

As defined by the United Nations, climate action is organized in a way that integrates restorative measures to limit the effects of climate change through targets such as 13.2 (integrate climate change measures into national policies and strategies) and 13.a (mobilize the necessary funds from developed countries to implement climate action measures at a global scale). In parallel to that, climate action integrates adaptive measures to prepare the different components of human societies to the new mode of life and to reduce the physical risks and damages.

What climate action measures for the MENAT region ?

The MENAT region is facing two main challenges in terms of climate action. First, some countries of the region are relying on oil and gas as the main resources for their economies, therefore, they have to diversify their economic activities to ensure their resilience. Secondly, water scarcity would threaten food security, health situation with new borne diseases, social and political stability.

In terms of availability of financial resources and means, the MENAT region is divided into two groups. The first group is composed of the oil rich gulf Arab countries and the second group includes all the other countries excluding Türkiye.

If the first group has the necessary resources for adaptation, the second group needs more assistance and international funding to face climate change risks. The MENAT region needs to undertake the following measures to contribute to the climate action efforts and reduce its vulnerability:

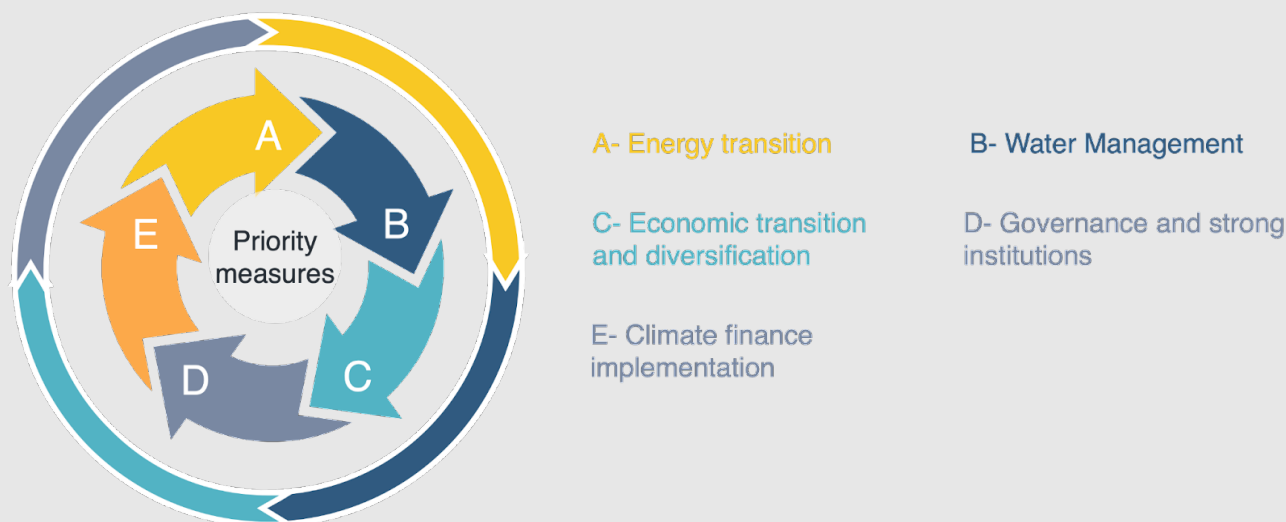


Figure 2: Priority measures for climate action in the MENAT region, Source : Authors' Own

- Energy transition

In 2019, according to the world bank data, the MENAT countries have emitted not less than 3 Gt CO₂e (approximately 9% of the global annual CO₂ emissions). The CO₂ emissions per capita reached 5,6 t for the MENA region including the high income countries (mainly GCC), 3,8 t (excluding high income countries) and 4,8 t for Türkiye. It is worth noting that the CO₂e emissions per capita globally reached 4,5 t.

It goes without saying that MENAT middle and lower income countries have less CO₂e emissions per capita compared to the global average while GCC and Türkiye are considered as important pollutants.

The MENAT countries are expected to contribute to the energy transition

efforts to reduce the CO₂ emissions. These efforts include decarbonization, electrification and energy efficiency.

In terms of decarbonization, the region is blessed with renewable energy resources such as wind and solar. Nevertheless, knowledge and technology transfer as well as investments across the region are necessary to reach this objective. GCC countries can rely on their own financial resources to overcome this challenge and assist other MENAT countries in doing so.

In terms of electrification and energy efficiency, countries are expected to implement the necessary policies to encourage the transition to electric cars and machines requiring less energy in terms of consumption.

- Water management

In the next decades, water is going to be the most precious resource in the MENAT region not only because of its

scarcity but also because it is going to be the key factor of stability. Therefore, governments have to invest in desalination stations to cover the increasing needs of cities, elaborate policies to optimize the use of water and protect its sources. Moreover, governments have to oversee the agricultural strategies and its impact on water reserves especially in the rural world. Finally, governments should promote research and development in the technological field for better water management.

- Economic transition and diversification

If MENAT higher income countries have enough resources to achieve the necessary transition when it comes to energy and water management, they have to gradually renounce their major source of revenue (oil and gas). Indeed, unlike middle and lower income countries who need international funding and assistance to tackle the climate change issues, higher income countries have the necessary financial resources but need to elaborate and implement a deep economic diversification where oil and gas revenues have the least share possible in their Gross Domestic Products (GDPs).

- Reinforcement of institutions and governance in the region

As presented earlier, water scarcity would threaten food security, encourage migration from rural areas to cities and from poor countries to more stable regions and would impact the social and political stability of each country.

In this context, MENAT countries are required to reinforce the credibility of their institutions and governance systems as per the sustainable development goal 16 that promotes peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

- Climate finance implementation

As discussed earlier, the MENAT region is composed of two categories of countries (1-High income countries) and (2- middle and low income countries). Therefore, challenges in terms of providing the necessary funds to climate action differ between the two categories of countries.

As per the target 13.a developed countries are committed to provide 100 billion USD on an annual basis to developing countries. Hence, while MENAT High income countries (excluding Türkiye) cannot take

advantage of this commitment and shall rely on their own resources and institutions, middle and lower income countries shall implement the necessary measures and frameworks to benefit from the international financial support including stronger financial systems.

MENAT high income countries are also required to implement the necessary policies and frameworks to upgrade their financial systems to be able to support climate action.

In both cases, climate action measures (mitigation and adaptation measures) require large amounts of investments. For instance, the Morocco Nationally Determined Contributions (as published in June 2022) require approximately 78 billion USD (38 for mitigation measures and 40 billion USD for adaptive measures). Moreover, a country like Egypt would require 196 billion USD for mitigation interventions and 50 billion USD for adaptive measures (as published in June 2022) (8).

CLIMATE FINANCE : DEFINITIONS AND PRINCIPLES

What is climate finance ?

According to the UNFCCC (United Nations Framework Convention for

Climate change), Climate finance refers to local, national and transnational financing drawn from public, private and alternative sources of financing that seeks to support mitigation and adaptation actions that will address climate change.

Based on the principles governing the UNFCCC, developed countries are committed to provide financial resources to assist developing countries in implementing the objectives of the UNFCCC. To do so, financial mechanisms are implemented at the global scale but shall be also integrated in both developed and developing countries.

There are UNFCCC financial mechanisms (JI, CDM when it is private and non-market financial mechanisms such as GCF, AF, GEF, LDCF, SCCF) and non-UNFCCC financial mechanisms (through Multilateral Development Banks such as World Bank, Asian Development Bank, African Development Bank, EBRD, EIB and other dedicated climate finance funds and initiatives)

What is the financial mechanism at global scale ?

In this part, the focus would be on UNFCCC financial mechanisms such as:

- The Global Environment facility (GEF)

The Global Environment facility (GEF) has served as an operating entity of the financial mechanism since the convention's entry into force in 1994. It has a unique governing structure organized around an assembly, the council, the secretariat, 18 agencies, a scientific and technical advisory panel, and the evaluation office. The GEF plays several key roles under the Paris Agreement. For instance, the GEF's climate change mitigation strategy supports developing countries in lowering greenhouse gas emissions through the GEF Trust fund.

- The Special Climate Change fund

The Special Climate Change Fund (SCCF) was established under the convention in 2001 to finance projects relating to: adaptation, technology transfer and capacity building; energy, transport, industry, agriculture, forestry and waste management; and economic diversification. This fund should complement other financing mechanisms for the implementation of the convention. The Global Environment facility was entrusted to operate the SCCF in 2004.

- The Least developed countries fund (LDCF)

The Least developed countries fund (LDCF) was established to support a work program to assist least developed countries carry out the preparation and implementation of national adaptation programs of action. The Global Environment facility was entrusted to operate the LDCF.

- The adaptation fund (AF)

The adaptation fund finances projects and programs that help vulnerable communities in developing countries adapt to climate change. Since 2010, the fund has allocated 850 million USD to more than 120 projects in nearly 100 countries serving about 28 million people.

The adaptation fund is financed mainly by governments and private donors but also from a two percent share of proceeds of Certified Emission Reductions (CERs) issued under the protocol's Clean development mechanism projects.

- The Green Climate fund (GCF)

The Green Climate Fund is the world's largest climate fund, mandated to support developing countries raise and realize their Nationally Determined Contributions (NDCs)

ambitions towards low emissions and climate resilient pathways.

The Green climate fund operates through a large network of international and national commercial banks, multilateral, regional and national development finance institutions, equity funds institutions, United nations agencies and civil society organizations.

What are the climate finance requirements at national scale ?

Governments and financial authorities need to prepare their financial systems to support climate action efforts and initiatives. In MENAT middle and low income countries, the financial systems' upgrade is necessary to mobilize resources at the international level and allocate them to climate action initiatives and projects with a clear impact. In MENAT high income countries, the financial systems' upgrade is necessary to lead the way towards climate action.

In this context, financial authorities have to implement the necessary regulatory frameworks and policies to provide the necessary financing and assistance to climate action initiatives and projects.

- Climate finance regulatory frameworks

The climate finance regulatory framework covers at least the climate risks management framework, the Carbon footprint accounting financials, and the reporting frameworks to assess the impact of financial institutions.

Moreover, financial authorities can support financial institutions willing to mobilize international funds to allocate to climate finance projects in order to bring more impact and achieve the national objectives and goals.

- Climate finance policies

In parallel with the financial institutions' efforts, governments shall elaborate policies per sector to encourage the creation of climate finance ecosystems. For instance, governments can encourage hybrid and electric cars by exempting them from taxes or updating the building standards in terms of thermal insulation. Such actions can create more economic opportunities for financial institutions and vice versa, the existence of climate financial institutions can encourage climate action and governmental policies and strategies.

THE CLIMATE FINANCE READINESS INDEX INITIATIVE

What is the Climate finance readiness index ?

The Climate finance readiness index initiative measures and tracks the readiness of the financial systems in the MENAT region to tackle the climate risks and support the climate action. Each financial system would have its own score that would show the achievements but also the gaps and the paths of improvement.

The initiative also proposes a set of policy recommendations to stakeholders including financial authorities and financial institutions to implement or reinforce the infrastructure (in terms of regulations, initiatives, etc.) needed to contribute to the climate risks mitigation and adaptation efforts.

It is worth noting that the initiative covers the Climate action but also all the cross cutting sustainable development goals intertwined with Climate change while taking into account the specificities of the MENAT region.

Why create the climate finance readiness index ?

Climate finance is one of the main pillars of climate action as defined by the United Nations sustainable development goals. Indeed, mobilizing financial resources to allocate to local projects and initiatives constitutes a prerequisite to achieve the global climate action targets and objectives.

The climate finance readiness index would assess the efficiency and the effectiveness of the financial systems in reaching these targets and objectives, identify the gaps and the necessary aspects to implement to contribute in the global efforts of climate action.

In the next chapter, the climate finance readiness index would be detailed.

CONCLUSIONS AND TAKEAWAYS

- In terms of climate change risks, the MENAT (excluding Türkiye) countries are facing the same challenges in terms of droughts, water scarcity, food insecurity, health threats, migration, social and political instability.

- The MENAT region is constituted of two categories of countries : the high income countries (mainly GCC and Türkiye) and the middle and lower income countries. High income countries average emissions per capita are above the global average while middle and low income countries are below this average.
- If the high income countries have the necessary resources to conduct effective climate action, they have the duty to diversify their economies dominated by oil and natural gas activities.
- MENAT Middle and low income countries are required to contribute to the global efforts of climate action and to face the instability challenges internally. For this purpose, these countries can mobilize international funding and financial assistance to tackle the climate change issues.
- For both categories of countries, upgrading the financial systems to support climate action becomes a necessity. Indeed, financial authorities and governments shall contribute to the issuance of the right policies and elaborate the most appropriate

strategies to allocate the necessary funding to solve and tackle the climate change issues as defined in this chapter.



CLIMATE FINANCE READINESS INDEX INITIATIVE - SCOPE AND METHODOLOGY

The Climate finance readiness index (CRFI) aims at assessing on an annual basis the readiness of the financial systems in the Middle East, North Africa, GCC region and Türkiye region to support the climate action, tackle the climate risks and leverage the opportunities presented

by the green economic transition. The initiative covers fourteen countries belonging to four different regions. Such classification is intended to take into account all the specificities of each sub-region in the scoring and the clustering approach.

The Climate finance readiness index (CRFI) ranks each country individually to highlight not only climate finance's achievements but also the gaps as well as the paths of improvement.

This chapter defines the scope of the study in terms of countries to include and sub-regions to cover. Moreover, it identifies the specificities of each

region and its impact on the data to collect and the scoring approach.

The chapter also identifies the scoring criteria, the data sources for each criterion and the scoring methodology. The index does not define a ranking for each country or sub-region but identifies clusters based on their progress in terms of climate finance implementation.

Moreover, the study is conceived in a way that identifies the best practices, schemes and initiatives to duplicate in other countries and subregions when relevant.

Finally, the index methodology is called to evolve from one year to another. In this case, each change would be explained and justified while the scoring would be published in both methodologies (old and new ones).

CLIMATE FINANCE READINESS INDEX : THE GEOGRAPHIC SCOPE AND COVERAGE

Sub-regions in the MENAT

The MENAT region extends from the Atlantic Ocean in the west to Iran in the East. Some maps include Pakistan and Afghanistan while others exclude Iran. In our report, the MENAT covers all the countries from the Atlantic

Ocean in the west to GCC in the East.

From the South, the region lies from Sudan, Yemen and Mauritania in the South to the Mediterranean sea in the north. In this survey, the MENAT region excludes Sudan, Yemen and Mauritania and includes Türkiye in the North. (T in MENAT refers to Türkiye)

The Climate Finance Readiness Index identifies four main sub-regions based on their climate patterns, economic growth and level of income and their geographic position.

The Four sub-regions are :

- North Africa

Northern Africa is the northern part of the African Continent. it constitutes a homogeneous region in terms of religion, language, culture and income level. Some sources identify the region as the one stretching from the Atlantic shores to Egypt included while other sources limit the region to Algeria, Libya, Morocco and Tunisia. In this report, North Africa comprises Morocco, Algeria, Tunisia and Libya and excludes Sudan and Mauritania.

- Middle East

The Middle East is a geopolitical region that comprises Arabia (the peninsula), Egypt, Iran, Iraq, Jordan, Palestine, Lebanon, Syria and Turkey.

In this report, the Middle East includes Egypt, Jordan, Palestine, Iraq, Lebanon and Syria. The Arabian peninsula is considered as a separate region called GCC.

- GCC

Gulf countries council refers to the Arab states of the Persian Gulf which border the Persian Gulf. There are six member states: Bahrain, Kuwait, Oman, Saudi Arabia, the United Arab Emirates and Qatar.

Technically, being part of the Middle East, the six states were classified as a separate region called the GCC because of the following reasons:

These states are part of the Gulf Cooperation Council organization.

These states are part of the High income countries and their economies are relying mainly on gas and oil (apart from the UAE).

These states have common geographical patterns with desert dominance.

- Türkiye

Türkiye is considered as a mono-state region because it is a high income country not relying on gas and oil and having a different economic structure compared to Middle Eastern countries.

Countries in the MENAT CRFI

The Climate finance readiness index, in its first release, covers the following countries: (per sub-region)

Sub-region	Countries included	Countries excluded
North Africa	Morocco Algeria Tunisia	Libya
Middle East	Egypt Jordan Lebanon Iraq	Palestine Syria
GCC	Bahrain Kuwait Saudi Arabia Qatar Oman UAE	Yemen
Türkiye	Türkiye	-

The MENAT region as defined in this report is composed of 18 countries. The report covers 14 and excludes 4 countries. It is worth noting that the four excluded countries are not stable politically and economically. Therefore, the data may not be reliable or available and may not reflect the real situation in the state of peace. Nevertheless, in the next versions of the CRFI, they can be included if their political and economic situation is improved.

CLIMATE FINANCE READINESS INDEX : THE SCORING CRITERIA

The General scheme of the scoring criteria

In order to assess the readiness of financial systems to support climate action efforts, the scoring methodology relies on three main pillars and seventeen criteria.

The three main pillars of the scoring methodology are:

- **Regulation & enabling environment:** The first pillar covers climate finance regulations in Banking, insurance and capital markets as well as cross cutting enabling factors such as taxation and the submission of Nationally Determined Contributions.

This pillar is intended to assess the willingness of the government and financial authorities to implement climate finance. In this context, there are three types of profiles:

(1- Highly committed) Governments and financial authorities who are committed to implement climate finance with the necessary regulation being mandatory to financial institutions and their own contributions to climate action. Indeed, if climate finance aims at

mobilizing the necessary resources, there should be an enabling environment to encourage climate action projects and initiatives from both the public and private sectors.

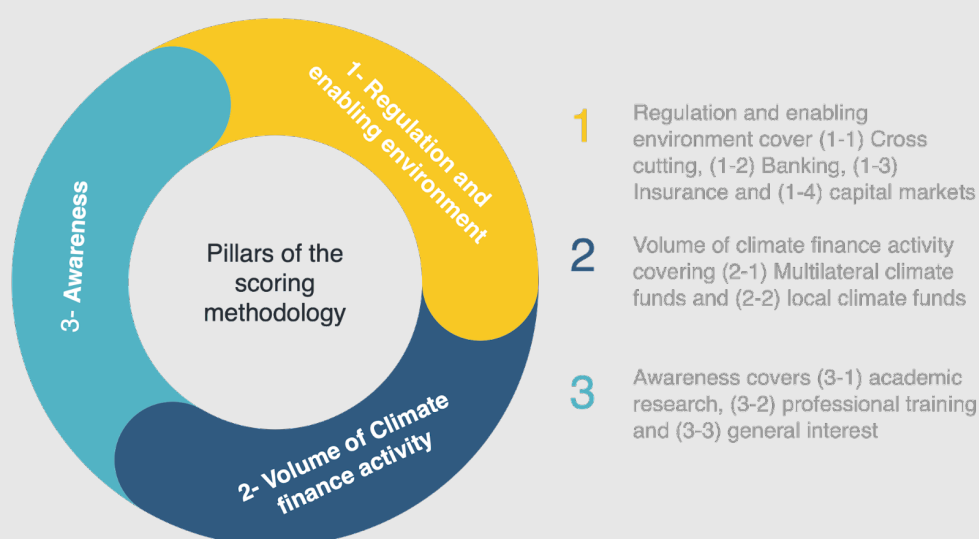
(2- Midway implementers) Governments and financial authorities who have the necessary regulation but not being mandatory to financial institutions. Moreover, initiatives and projects related to climate action are not regular.

(3- Low commitment) Governments and financial authorities who are lagging behind with no regulation to promote climate finance but are limited to basic initiatives at the international level.

- **Volume of climate finance activity:** The second pillar tracks the flows of climate finance in the country sourced both from Multilateral Climate Funds and locally.

This pillar aims at measuring the effectiveness of the climate finance ecosystem as initiated by regulation and the enabling environment. In this report, there are two types of metrics. Those who are adapted to middle and low income countries and those adapted to high income countries.

It is worth mentioning that sourcing important amounts from global funds and initiatives is a clear sign of the



trust of international bodies in the local ecosystem capabilities and action.

- **Awareness: The third pillar assesses climate finance's awareness in the country** through proxy indicators such as the volume of published academic papers, the number of professional training programs and general interest in the topic through search engines.

This third pillar consists of measuring the level of awareness towards climate action. Indeed, rising awareness would facilitate the mobilization of resources at a national scale and would promote innovation in climate action.

The following figure gives an overview of the scoring criteria as adopted in this report.

Figure 3: Pillars of scoring criteria in the CRFI; Source : Authors own

The scoring criteria in the CRFI

Each pillar comprises a number of criteria to assess the achieved progress of a financial system in a specific area of climate finance. The following table defines the scoring criteria per pillar:

(1)- Regulation and enabling environment

Section	1-1 Cross cutting
Criterion	1-1-1 Number of NDC submissions
Data nature	Number of submissions

Section	1-1 Cross cutting
Relevance	The higher the number of NDC submissions, the higher is the commitment of the Government towards climate finance

Section	1-2 Banking
Criterion	1-2-1 Reporting Climate risks
Data nature	None / Mandatory / Optional
Relevance	The existence of mandatory reporting frameworks related to climate risks would lead to the implementation of climate Risk management in Banks

Section	1-2 Banking
Criterion	1-2-2 ESG reporting for Banks
Data nature	None / Mandatory / Optional
Relevance	Idem

Section	1-3 Insurance
Criterion	1-3-1 Reporting Climate risks for insurers
Data nature	None / Mandatory / Optional
Relevance	Idem

Section	1-3 Insurance
Criterion	1-3-2 ESG reporting for Insurers
Data nature	None / Mandatory / Optional
Relevance	Idem

Section	1-4 Capital Markets
Criterion	1-4-1 Green Sukuk / Bonds Guidelines
Data nature	None / Mandatory / Optional
Relevance	Idem

Section	1-4 Capital Markets
Criterion	1-4-2 ESG Reporting for capital markets
Data nature	None / Mandatory / Optional
Relevance	Idem

(2)- Volume of Climate finance activity

Section	2-1 Multilateral Climate funds (Only for Middle and Low income countries)
Criterion	2-1-1 Funds sourced from Green Climate Fund (M USD)
Data nature	Yes / No Answer Amount in M USD

Section	2-1 Multilateral Climate funds (Only for Middle and Low income countries)
Relevance	This criterion reflects the trust that global climate funds have in a specific market to support climate action

Section	2-1 Multilateral Climate funds (Only for Middle and Low income countries)
Criterion	2-1-2 Funds sourced from Climate Investment Fund (M USD)
Data nature	Yes / No Answer Amount in M USD
Relevance	Idem

Section	2-1 Multilateral Climate funds (Only for Middle and Low income countries)
Criterion	2-1-3 Funds sourced from Global Environment Facility (M USD)
Data nature	Yes / No Answer Amount in M USD
Relevance	Idem

Section	2-1 Multilateral Climate funds (Only for Middle and Low income countries)
Criterion	2-1-4 Funds sourced from Adaptation Fund (M USD)
Data nature	Yes / No Answer Amount in M USD
Relevance	Idem

Section	2-1 Multilateral Climate funds (Only for Middle and Low income countries)
Criterion	2-1-5 Sum of Sourced Funds / GDP
Data nature	Yes / No Answer Amount in M USD
Relevance	This criterion measures the volume of the sourced funds while taking into account the size of the economy

Section	2-1 Multilateral Climate funds (Only for Middle and Low income countries)
Criterion	2-2-1 Green Bond & Sukuk issuances / GDP (Million USD)
Data nature	Percentage
Relevance	This criterion measures the volume of the issuances in the capital markets while taking into account the size of the economy

Section	3-2 Professional training
Criterion	3-2-1 Professional training programs on green finance & climate finance
Data nature	Number of professional trainings
Relevance	This criterion measures the capacity of the economy to improve skills and local capabilities to contribute to the implementation of climate finance.

(3)- Awareness

Section	3-1 Academic
Criterion	3-1-1 Articles on Green Finance & Climate finance in Google Scholar
Data nature	Number of articles
Relevance	This criterion measures the attention given by the scientific community to the subject. This criterion shows the capacity of the country to identify the issues.

Section	3-3 General Interest
Criterion	3-3-1 Google News search results on green finance & climate finance during the year (web pages during the past 12 months)
Data nature	Number of news search results during the past 12 months
Relevance	This criterion measures the attention given to the subject by the press. It gives an overview on how this subject is explored by the public

CLIMATE FINANCE READINESS INDEX : THE SCORING METHODOLOGY

Criteria scoring methodology

Each criterion has its own scoring methodology depending on the nature of the data required. The following tables describe the formulas used to calculate the score for every criterion.

(1)- Regulation and enabling environment

Section	1-1 Cross cutting
Criterion	1-1-1 Number of NDC submissions
Data nature	Number of submissions
Scoring Formula	number of NDC submissions of the country /number of NDC submissions - MENAT leader

Section	1-2 Banking
Criterion	1-2-1 ESG reporting for banks
Data nature	None / Mandatory / Optional
Scoring Formula	Score (if none) = 0 Score (if optional) = 0,5 Score (if Mandatory) = 1

Section	1-3 Insurance
Criterion	1-3-1 Reporting Climate risks for insurers
Data nature	None / Mandatory / Optional
Scoring Formula	Score (if none) = 0 Score (if optional) = 0,5 Score (if Mandatory) = 1

Section	1-4 Capital Markets
Criterion	1-4-1 Green Sukuk / bonds guidelines
Data nature	None / Mandatory / Optional
Scoring Formula	Score (if none) = 0 Score (if optional) = 0,5 Score (if Mandatory) = 1

Section	1-4 Capital Markets
Criterion	1-4-2 ESG reporting for capital markets
Data nature	None / Mandatory / Optional
Scoring Formula	Score (if none) = 0 Score (if optional) = 0,5 Score (if Mandatory) = 1

(2)- Volume of Climate finance activity

Section	2-1 Multilateral Climate funds (Only for Middle and Low income countries)
Criterion	2-1-1 Funds sourced from Green climate fund (M USD)
Data nature	Yes / No Amount in MUSD
Scoring Formula	<p>For the Yes/No criterion</p> <p>Score (if Yes) = 1</p> <p>Score (if no) = 0</p> <p>For the amount in Million USD</p> <p>Amount sourced by the countryAmount sourced by the MENAT leader</p> <p>Criterion score = 30% x score (yes/no score) + 70% x score(amount)</p>

Section	2-1 Multilateral Climate funds (Only for Middle and Low income countries)
Criterion	2-1-2 Funds sourced from Climate Investment fund (M USD)
Data nature	Yes / No Amount in MUSD

Scoring Formula	<p>For the Yes/No criterion</p> <p>Score (if Yes) = 1</p> <p>Score (if no) = 0</p> <p>For the amount in Million USD</p> <p>Amount sourced by the countryAmount sourced by the MENAT leader</p> <p>Criterion score = 30% x score (yes/no score) + 70% x score(amount)</p>
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Section	2-1 Multilateral Climate funds (Only for Middle and Low income countries)
Criterion	2-1-3 Funds sourced from Global Environment Facility (M USD)
Data nature	Yes / No Amount in MUSD
Scoring Formula	<p>For the Yes/No criterion</p> <p>Score (if Yes) = 1</p> <p>Score (if no) = 0</p> <p>For the amount in Million USD</p> <p>Amount sourced by the countryAmount sourced by the MENAT leader</p> <p>Criterion score = 30% x score (yes/no score) + 70% x score(amount)</p>

Section	2-1 Multilateral Climate funds (Only for Middle and Low income countries)
Criterion	2-1-4 Funds sourced from Adaptation Fund (M USD)
Data nature	Yes / No Amount in MUSD
Scoring Formula	<p>For the Yes/No criterion</p> <p>Score (if Yes) = 1 Score (if no) = 0</p> <p>For the amount in Million USD</p> <p>Amount sourced by the country / Amount sourced by the MENAT leader</p> <p>Criterion score = 30% x score (yes/no score) + 70% x score(amount)</p>

Section	2-1 Multilateral Climate funds (Only for Middle and Low income countries)
Criterion	2-2-1 Green Bonds & Sukuk issuances / GDP
Data nature	Yes / No answer Amount in Million USD
Scoring Formula	<p>For the Yes/No criterion</p> <p>Score (if Yes) = 1 Score (if no) = 0</p> <p>For the amount in Million USD</p> <p>Amount of issuances by the country / Amount of issuances by the MENAT leader</p> <p>Criterion score = 30% x score (yes/no score) + 70% x score(amount)</p>

Section	2-1 Multilateral Climate funds (Only for Middle and Low income countries)
Criterion	2-1-5 Sum of Sourced Funds / GDP
Data nature	% Percentage of GDP
Scoring Formula	<p>For the percentage of GDP</p> <p>percentage sourced by the country / percentage sourced by the MENAT leader</p>

(3)- Awareness

Section	3-1 Academic
Criterion	3-1-1 Articles on Green finance & Climate finance in Google Scholar
Data nature	Number of articles
Scoring Formula	Number of articles published by the country / Number of articles published by MENAT leader

Section	3-2 Professional training
Criterion	3-2-1 Professional training programs on green finance & climate finance
Data nature	Number of professional trainings
Scoring Formula	<p>Number of PT in the country / Number of PT in MENAT leader</p> <p>PT = Professional training</p>

Section	3-3 General Interest
Criterion	3-3-1 Google News search results on green finance & climate finance during the year (web pages during the past 12 months)
Data nature	Number of news search results during the past 12 months
Relevance	Number of News in the Country Google News pages / Number of News in MENAT Leader

Section scoring methodology

The section scoring methodology relies on the following principles :

- Each criterion has its own score and weight

- The weighted score of each criterion = criteria x weight
- The score of each section is equal to the sum of weighted scores of the different criteria

(1)- Regulation and enabling environment

Section	Criterion	weight
1-1 Cross cutting	1-1-1 Number of NDC submissions	20%
1-2 Banking	1-2-1 Reporting Climate finance risks	20%
1-2 Banking	1-2-2 ESG reporting for banks	20%
1-3 Insurance	1-3-1 Reporting Climate finance risks for insurers	10%
1-3 Insurance	1-3-2 ESG reporting for Insurance companies	10%
1-4 Capital Markets	1-4-1 Green Sukuk / Bonds guidelines	10%
1-4 Capital Markets	1-4-2 ESG reporting for capital markets	10%

The criterion (1-1) has a weight of 20% because it shows the commitment of each country in the climate action. The banking sector has a weight of 40% because most of MENAT financial systems are dominated by the banking sector.

Score (Regulation and enabling environment) = 20% x score (1-1-1) + 20% x score (1-2-1) + 20% x score (1-2-2) + 10% x score (1-3-1) + 10% x score (1-3-2) + 10% x score (1-4-1) + 10% x score (1-4-2)

(2)- Volume of Climate finance activity

Section	Criterion	weight
2-1 Multilateral Climate funds (Only for Middle and Low income countries)	2-1-1 Funds sourced from Green climate fund (Million USD)	10,5%
2-1 Multilateral Climate funds (Only for Middle and Low income countries)	2-1-2 Funds sourced from Climate Investment Fund (Million USD)	10,5%

2-1 Multilateral Climate funds (Only for Middle and Low income countries)	2-1-3 Funds sourced from Global Environment Facility (Million USD)	10,5%
2-1 Multilateral Climate funds (Only for Middle and Low income countries)	2-1-4 Funds sourced from Adaptation Fund (Million USD)	10,5%
2-1 Multilateral Climate funds	2-1-5 Sum of sourced Funds / GDP	28%
2-2 Local climate finance	2-2-1 Green Bond & Sukuk issuances / GDP (Million USD)	30% 100% (for high income countries)

Score (Volume of climate finance activity) = 10,5% x score (2-1-1) + 10,5% x score (2-1-2) + 10,5% x score (2-1-3) + 10,5% x score (2-1-4) + 28% x score (2-1-5) + 30% x score (2-2)

(3)- Awareness

Section	Criterion	weight
3-1 Academic	3-1-1 Articles on green finance & climate finance in Google Scholar	30%
3-2 Professional training	3 - 2 - 1 Professional training programs on green finance & climate finance	40%
3-3 General Interest	3-3-1 Google News search results on green finance & climate finance during the year (Moroccan pages during the past 12 months)	30%

Score (awareness) = 30% x score (3-1-1) + 40% x score (3-2-1) + 30% x score (3-3-1)

Country scoring methodology

To calculate the score per country, the following principles need to be respected:

- Every section has a score
- Every section has a weight in the country score
- The score calculated per country is equal to the sum of weighted scores per section.

The following table shows the global score calculated:

Section	weight	relevance
1- regulation and enabling environment	50%	At that step, implementing appropriate regulations and frameworks is very important. Years later, this weight can decrease gradually once the climate finance systems reach their maturity
2- volume of green and climate finance activity	35%	the volume of the activity shows the trust and capabilities developed by the financial system and other organisms to mobilize resources at the international level

3- awareness	15%	awareness is as important as the other sections. Nevertheless, in today's context, it cannot have more than 15% of the whole score
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The country score = 50% x score (section 1) + 35% x score (section 2) + 15% x score (section 3)

CLIMATE FINANCE READINESS INDEX : THE CLUSTERING CRITERIA

Clustering and clusters

For more relevant information about the progress achieved in the region, the climate finance readiness index identifies clusters of countries with the same level of advancement in terms of climate finance implementation.

Based on its scoring, each country would be assigned to a specific cluster. In this report, there are three main clusters:

- The cluster of 'Initiators': comprises countries at the first stage of initiation of the climate finance system such as no regulation or a regulation with no binding requirements, small amounts sourced from the international funds to tackle

climate change risks and issues.

- The cluster of 'Implementers': comprises countries at a more advanced stage of implementation of the climate finance system such as regulation with binding requirements, important amounts sourced from international funds and financial institutions launching their own products to support climate action.
- The cluster of 'Impactors': includes countries at a very advanced stage of implementation including regulations, important funding at both internationally and locally with a high level of awareness.

Correspondence between scores and clusters

The Climate Finance Readiness Index scores are ranging from 0% to 100%. The scoring methodology was conceived in order to ensure a reasonable differentiation between countries at different stages of maturity in terms of climate finance implementation.

Indeed, belonging to a specific cluster requires a score within the cluster range. The limits between the different clusters is as follows:

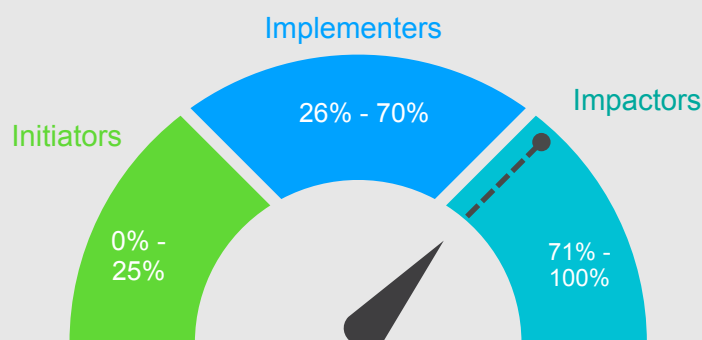


Figure 4: correspondence between scores and clusters, Source: authors own

After calculating the scores per country, using this correspondence would show the position of each country in the climate finance implementation journey.

CONCLUSIONS AND TAKEAWAYS

- The Climate Finance Readiness Index aims at calculating scores per country based on predefined criteria. Each criterion has its own scoring formula and weight.
- The country score depends on the inputs collected, the scoring formula per criterion and the weight of each criterion.
- Some countries were excluded from the Climate Finance Readiness Index while being part of the MENAT for instability reasons. If the situation improves in the next releases, they would be

included.

- Some criteria can be removed or added in the next CRFI releases depending on the evolution of the context. In this case, the scoring methodology would change and the part of the change in the score would be identified and justified accordingly.
- Based on the scores obtained, the members of each cluster would be identified and the recommendations would be issued per cluster but also per country while taking into account its specificities.



CLIMATE FINANCE READINESS INDEX - RESULTS

Based on the Data collected and the methodology presented in the previous chapter, scores per country are calculated. On the basis of the different scores, countries were classified into clusters and the global score of the region was also calculated (The Global CRFI). The data used in the scoring was collected during the period starting from August 2022 and September 2022. Therefore, events occurring

later are not taken into account in the scoring and the clustering processes.

This chapter is divided into two main parts. The first part is related to the presentation of the results for the whole MENAT region while identifying the main clusters and their features, the identified gaps and the paths of improvement.

The second part is presenting the results per country and per scoring pillar, the main gaps and the paths of improvement to enhance the readiness of the financial systems to support the climate action efforts at the national level.

It is worth noting that the financial systems constitute the main channel to mobilize resources and allocate them efficiently and effectively to projects achieving climate action objectives. Therefore, implementing the right measures, processes and mechanisms to strengthen the capabilities of the financial institutions and authorities would be a prerequisite to provide the necessary funding to different areas such as the energy transition, the energy efficiency and all the other adaptive measures.

Finally, based on the findings shared in this chapter, there would be a number of recommendations to improve the situation in each cluster. The aim of the CRFI is to accompany the financial systems in the MENAT Region from initiators to become impactors.

THE CLIMATE FINANCE READINESS INDEX - SCORES AND CLUSTERS

The MENAT region CRFI Score

The global CRFI Score for 2022 is 26,90%. The global CRFI Score is the sum of all the CRFI scores per country according to the GDP weight of each country compared to the GDP of the MENAT region countries (only those included in this report).

The score obtained shows that the region is at an early stage of implementation. Nevertheless, since the MENAT Region CRFI score is an average of the scores obtained per country, there are indeed two distinguished clusters of countries (Initiators and Implementers).

The figure below shows the MENAT region CRFI Score and the average position of the region.

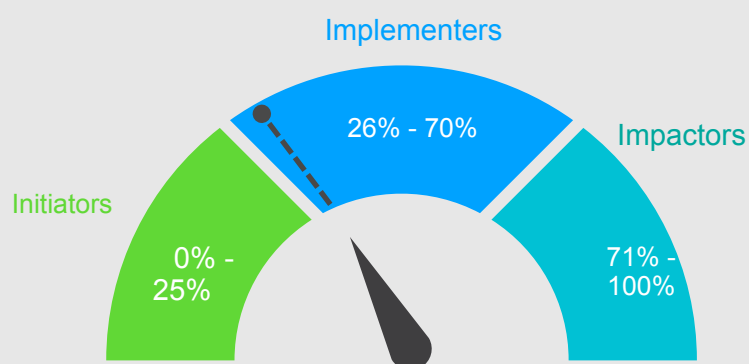


Figure 5 : The MENAT region CRFI Score; Score : Author's own

The Clustering results

The scores obtained by country show that there are two groups of financial systems:

- **Implementers** : these are countries that are at an early stage of implementation with mandatory or voluntary regulations covering Climate finance reporting and ESG reporting in the different financial sectors (Banking, Insurance and Capital Markets). Moreover,

governments are involved in the Global climate action efforts. These countries are also mobilizing funds globally or locally to provide the necessary financial assistance to adaptive and mitigation measures.

- **Initiators** : these are countries that do not have any regulations in relationship with Climate finance or sustainability. The governments may or not be involved significantly in the global climate action efforts. These countries are mobilizing little amounts to fight against climate change.

Initiators	Implementers
Algeria	Bahrain
Iraq	Egypt
Kingdom of Saudi Arabia	Jordan
Kuwait	Morocco
Lebanon	Tunisia
Oman	Türkiye
Qatar	UAE

N.B: The scoring methodology is focusing on the readiness of the financial system to support climate action. The score obtained does not mean that governments do not have appropriate initiatives to support global climate action efforts.

THE CLIMATE FINANCE READINESS INDEX PER SUB-REGION

As defined earlier, the MENAT region is composed of four different subregions (Middle East, North Africa, GCC and Türkiye). The Scores obtained per subregion are as follow:

North Africa

Sub-region	North Africa
Countries	Morocco, Algeria, Tunisia
Sub-region score	31%

In this sub-region, Morocco is leading the way with appropriate regulations and guidelines (mainly voluntary at this stage), an interesting volume of the climate finance activity (dealing with international funds and issuing green bonds) and effective awareness dispositions.

From its side, Tunisia has also appropriate regulations (on a voluntary basis), an interesting volume of the climate finance activity but there were not any green bonds or Sukuk issuance and the awareness dispositions are still limited.

Finally, Algeria does not have any regulation in the financial sector to support climate action and the climate finance activity is still limited.

All in all, the North African region is at an early stage of implementation. Morocco and Tunisia need to reinforce their regulation (and make it obligatory), encourage green issuances and launch more awareness initiatives and training.

Middle East

Sub-region	Middle East
Countries	Egypt, Iraq, Jordan, Lebanon
Sub-region score	31%

In this sub-region, Egypt is leading the way. It made all the regulations related to ESG and climate risks reporting obligatory in the different financial sectors. Moreover, Egypt is the country that has mobilized the most resources from the international green funds and through green bonds' issuances. Indeed, Egypt is one of the leading countries in the MENAT region in Green and Climate Finance.

Jordan is the number two country in the Middle East sub-region with voluntary regulations in terms of Climate and Green finance and more than half a billion of USD of funds mobilized from the Global Green funds. Nevertheless, no green bonds have been issued as of today.

Lebanon and Iraq have no regulations related to climate and green finance but have already mobilized together more than 350 Million USD from global green funds.

GCC

Sub-region	GCC
Countries	Kuwait, Bahrain, Kingdom of Saudi Arabia, Qatar, United Arab Emirates, Oman
Sub-region score	17,53%

As explained previously in the scoring methodology, the GCC sub-region has a particular status compared to other sub-regions. First, the Gulf countries are higher income countries and are not eligible to mobilize funds from global green funds. They would rely on their own resources to support climate action. The low score obtained according to our methodology does not mean these countries are lagging behind in terms of climate action initiatives but it means that the financial system contribution to support these efforts is still limited.

In most GCC countries, ESG reporting for public companies is voluntary (Qatar, Bahrain, Kuwait) or mandatory (UAE and KSA). Other regulations are not available or are made voluntary.

Apart from Bahrain and KSA, the other GCC countries have not issued green bonds. It is worth noting that GCC governments have launched many initiatives but the contribution of the financial systems and institutions needs to be improved.

Türkiye

Sub-region	Türkiye
Countries	Mono-country sub-region
Sub-region score	46,84%

Türkiye has a comprehensive set of regulations covering reporting requirements in terms of climate risks and ESG. Moreover, the Green bonds guidelines are made mandatory.

Moreover, Türkiye has already issued Green bonds and mobilized more than 1 billion USD from global Green funds.

It is worth mentioning that the financial authorities' approach in Türkiye is based on the principle of 'Comply or justify'. Indeed, financial institutions have to comply with the regulations or to justify why they didn't. In the scoring process, the regulations were deemed voluntary. If they were considered mandatory, Türkiye would have had the highest score in all the MENAT region.

THE MENAT REGION CLIMATE FINANCE READINESS INDEX - REGULATION AND ENABLING ENVIRONMENT SCORE

The MENAT Region Regulation and enabling environment score

The MENAT region regulation and enabling environment score for 2022 is 31,54%. It is calculated based on the GDP weight of each country compared to the GDP of the MENAT region countries as defined in this report.

The score obtained shows that the regulation to support climate action in the region is still in its infancy. Most of the countries do not have appropriate frameworks or are only voluntary. Indeed, apart from Egypt that has most of the reporting requirements mandatory, countries like Jordan, Morocco, Tunisia and Türkiye have voluntary reporting requirements.

GCC countries have voluntary / mandatory ESG reporting requirements for public companies and Green bonds / Sukuk guidelines only. Countries such as Iraq, Algeria and Lebanon have no requirements in terms of reporting (ESG or Climate risks for instance)

The sub-clusters

In the Regulation and enabling environment, there are four sub-clusters:

Sub-cluster 1 - regroups countries with mandatory ESG and Climate risks reporting requirements in the banking, the insurance and the capital markets sectors. This cluster includes Egypt.

Sub-cluster 2 - regroups countries with voluntary ESG and climate risks reporting requirements at least in the banking sector and capital markets such as Morocco, Tunisia, Türkiye and Jordan.

Sub-cluster 3 - regroups GCC countries (excluding Oman) with ESG reporting requirements for public companies and Green bonds / Sukuk guidelines.

Sub-cluster 4 - regroups countries with no requirements in terms of ESG and Climate risks reporting. This cluster includes Iraq, Algeria, Oman and Lebanon.

The following figure presents the features of each sub-cluster.

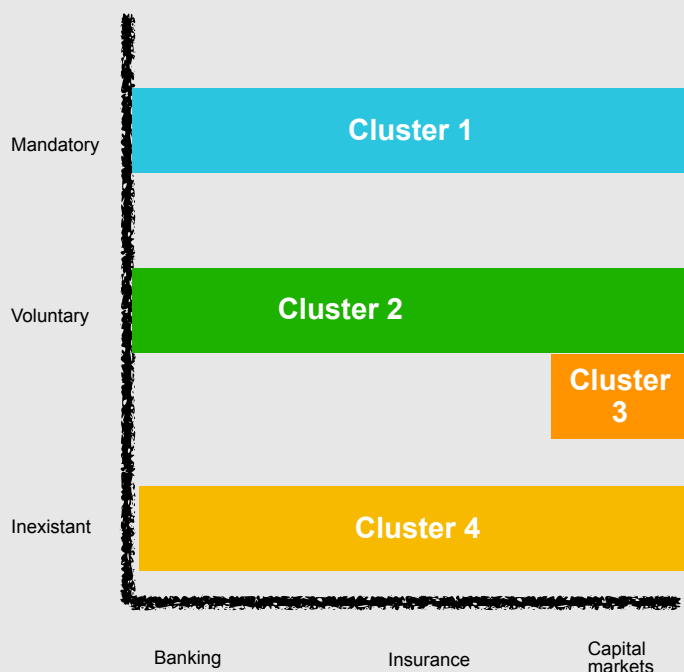


Figure 6 : Features of sub-clusters;
Source : Author's own

The Challenges in terms of regulation and enabling environment

The challenges of regulation and enabling the environment vary from a cluster to another. For instance, sub-cluster 1 has to ensure the application of the regulation in an effective manner and introduce the necessary updates to upgrade the regulation and the practices in terms of ESG and climate risks reporting.

Sub-cluster 2 countries need to take into account their local specificities, accompany the players to implement the impact measurement and management processes as well as reporting frameworks to upgrade the regulations to become mandatory in a second time. Moreover, the cluster

2 countries are expected to implement the necessary regulations in the three financial sectors (banking, insurance and capital markets).

Sub-cluster 3 countries need to involve the banking and insurance sectors in the climate finance efforts and initiatives and to make all the requirements mandatory for all financial institutions.

Sub-cluster 4 countries need to start implementing the regulations gradually in the three financial sectors and to make them mandatory.

THE MENAT REGION CLIMATE FINANCE READINESS INDEX - VOLUME OF GREEN FINANCE ACTIVITY

The MENAT Region Volume of green finance activity score

The MENAT region Volume of Green finance activity score for 2022 is 21,11%. It is calculated based on the GDP weight of each country compared to the GDP of the MENAT region countries as defined in this report.

The score obtained shows that the Green finance activity is still low. North African and Middle Eastern

countries are all relying on Global Green funds and accessory on Green bonds / Sukuk issuances. In GCC countries, Greening initiatives are all undertaken by the states and governments while financial institutions and capital markets are playing a very limited role in providing the necessary resources.

The sub-clusters

In terms of green finance activity, there are 4 sub-clusters:

Sub-cluster 1 - regroups countries mobilizing resources from both Global green funds and green bond/ Sukuk issuances such as Egypt, Morocco, Lebanon and Türkiye.

Sub-cluster 2 - regroups countries mobilizing resources only from Global green funds such as Tunisia, Algeria, Iraq and Jordan.

Sub-cluster 3 - regroups countries mobilizing resources only from green bonds / Sukuk issuances. These are GCC countries that are not eligible for Global Green funds such as KSA, Bahrain and UAE.

Sub-cluster 4 - regroups countries with no green resources mobilized such as Oman, Qatar and Kuwait.

The Challenges in terms of Green finance activity

The MENAT region would need large funding to face the climate change challenges. For Sub-cluster 1, countries need to mobilize more resources from the Global Green funds through financing products and services that support climate action initiatives and investments. Moreover, it is necessary to multiply the green bonds' issuances. To do so, Sub-cluster 1 countries have to pay attention to the demand side by encouraging small and medium businesses with innovative solutions in the field of energy or any other field related to climate change.

Sub-cluster 2 countries would need to develop appropriate frameworks and guidelines for Green bonds and Sukuk to diversify the sources of funding when it comes to climate action initiatives. Governments can take the lead and issue bonds / Sukuk with proceeds that are allocated exclusively to Green projects.

Sub-clusters 3 and 4 countries are generally not eligible to receive funding from Global green funds. In this case, these countries have to encourage local banks and financial institutions to implement green financing products and mobilize more funds through bonds and Sukuk issuances.

THE MENAT REGION CLIMATE FINANCE READINESS INDEX - AWARENESS

The MENAT Region Awareness score

The MENAT region Awareness score for 2022 is 25,91%. It is calculated based on the GDP weight of each country compared to the GDP of the MENAT region countries as defined in this report.

The score obtained shows that Awareness is still low with very few or no training programs available for people working in the financial sectors, very few research papers related to climate and green finance are published in the region and the subject is not commonly addressed in the press and media.

The sub-clusters

In terms of Awareness, there are 3 sub-clusters:

Sub-cluster 1 - regroups countries with special training programs in the field of Green and Climate finance, with some few articles and research papers focused on Climate finance. Moreover, climate finance topics are addressed regularly in the press and in the different media. Sub-cluster 1 countries are Morocco, Türkiye and Jordan.

Sub-cluster 2 - regroups countries with fewer training programs and research papers dedicated to climate finance. Moreover, the media and the press are not paying much attention to climate finance topics.

Sub-cluster 3 - regroups countries without any training programs or research efforts dedicated to climate finance.

The Challenges in terms of awareness

Tackling climate change effects requires a war effort and the mobilization of all the resources and capabilities. The governments should work on raising awareness of the population towards climate change effects and the adaptive measures to adapt. Moreover, they should involve research centers and brilliant minds in finding solutions for local issues related to climate change.

All the sub-clusters are concerned with these challenges. Some countries have already started to

implement and promote these awareness measures and mechanisms on a wide range.

CONCLUSIONS AND TAKEAWAYS

The MENAT Climate Finance Readiness Index score shows that the region is at an early stage of implementation.

Based on their scores, MENAT countries can be divided into two distinct clusters : Initiators and Implementers.

In terms of regulation and enabling environment, there are four sub-clusters : 1) countries with mandatory regulation covering all the financial sectors, 2) countries with voluntary regulation covering all or the majority of the financial sectors, 3) countries with voluntary or mandatory regulation covering exclusively the capital markets and 4) countries without no regulations.

In terms of the volume of Green finance activity, there are also four clusters of countries : 1) countries with funds mobilized through global green funds and green bonds / Sukuk issuances, 2) countries with mobilized resources from the global green funds, 3) countries with green Sukuk issuances and 4) countries with no

funds mobilized in this area.

In terms of Awareness, there are three clusters : 1) countries with few training programs, some research papers and the press and the media focusing on this area, 2) countries with fewer training programs and few research papers and 3) countries with no training programs and no research outputs related to this area.

The final chapter will present in a precise and concise manner the recommendations of the report to improve the global score as well as each country score.



CLIMATE FINANCE READINESS INDEX - POLICY RECOMMENDATIONS

The structure of CRFI's green financial public policy recommendations was elaborated based on the Framework developed by Gallagher and Xuan (2018). We have adapted and simplified it according to the realities of southern Mediterranean countries, which gives the following 5 pillars.

- **The first pillar** relates to regulations and guides
- **The second pillar** relates to increasing the supply of climate finance funding through the establishment of public climate finance funds/mechanisms
- **The third pillar** deals with market incentives to stimulate the climate finance offer

- **The fourth pillar** deals with market incentives to stimulate demand by encouraging the creation of bankable green investments
- **The last pillar** relates to the development of competence and awareness

The following figure summarizes the five pillars of the CRFI policy recommendations' approach:

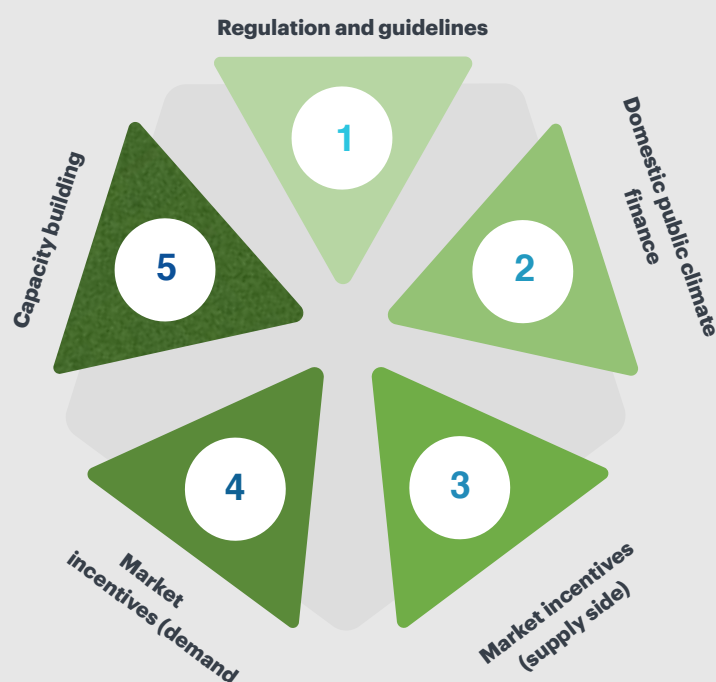


Figure 7 : Pillars of the Green Financial Public Policy, Source : Authors' own

ABOUT PROPOSED CLIMATE FINANCE POLICIES:

Climate finance policies are defined as interventions that aim to mobilize finance for climate-related objectives including mitigation of greenhouse gases, adaptation to climate change impacts, and creation of longer-term resiliency to climate disruption.

While climate finance and green finance are overlapping concepts, climate finance can be considered a subset of green finance. The latter might include finance for environmental technologies that are not necessarily aimed at climate mitigation or adaptation such as hazardous waste management.

In this section, we present the policies that we believe have the potential to stimulate the development of climate finance in the MENAT region. Every policy is detailed through the perspectives described in the following table:

Policy perspective	Details
Policy scope	Presents the policy intervention scope
Policy rationale	Highlights the rationale behind adopting the proposed policy
Adapting the policies to the MENAT countries context	Proposes recommendations to adapt the policies to the MENAT countries context

PILLAR 1: REGULATIONS & GUIDELINES

The regulations and guidelines pillar comprises three policies: climate related disclosures, green taxonomies, and green instruments.

Climate related disclosures

- Policy scope

While the literature primarily uses climate disclosure as an umbrella term to include transition and regulatory risks in addition to physical climate risks, the focus of existing work is largely on the former. In banking, there is a growing awareness of the need to integrate climate considerations into credit risk management frameworks. Participation by banks remains voluntary and partnership-driven (such as Partnership for Carbon Accounting Financials). There is international guidance available via

the Task Force on Climate-related Financial Disclosures, but regulatory frameworks are nascent.

At a time when investors need reliable, financially relevant, material corporate disclosures on sustainability, companies are leaving gaps between what investors demand and what they provide.

- Policy rationale

With the effects of climate change becoming increasingly pronounced, disclosure of climate risks is critical for businesses including financial institutions. Failure to make a disclosure can facilitate poor investment decisions, asset losses, and the continuation of trade practices that lead to climate change.

- Adapting the policies to the MENAT countries context

As mentioned earlier in this report, some countries already have already published voluntary climate disclosures guidance. These countries shall consider moving to mandatory guidelines. Countries with no climate disclosures guidance should adopt voluntary guidelines as a first step.

Green taxonomies

- Policies' scope

At the global level, both financial authorities and international entities have developed green taxonomies or related guidelines regarding the definition of green activities. A green taxonomy is a classification of economic activities which supports environmental protection and management efforts, as well as mitigation and adaptation to climate change. The strategic objective of Green Taxonomy is to encourage innovation in developing green products/projects/initiatives, in accordance with the government's thresholds.

- Policies' rationale:

One of the objectives of sustainable finance policies is to ensure that all financial institutions and stakeholders are using a common vocabulary regarding sustainable finance. Green taxonomy serves as a contribution to other ongoing efforts within the financial sector in developing key terms and definitions in sustainable finance. As such, green Taxonomy is important because it can provide a better understanding for financial institutions on the classification of green activities within the development of their financial product and/or services portfolio.

What is more, green Taxonomy is expected to help the periodic monitoring process in the implementation of credit/financing/investment into the green sector and prevent the potential reporting of green activities (greenwashing).

- Adapting the policies to the MENAT countries context

Most surveyed MENAT countries have not established green taxonomies yet. Therefore, these countries should consider developing green taxonomies built upon international experiences especially in the Global South and adapt this benchmark with the local specifics.

Green instruments

- Policies' scope:

Financial products such as green labelled bonds, sukuk and other financing instruments have become globally recognized as an effective means of directing investment capital towards climate change mitigation as well as climate change resilience and adaptation projects.

Green financing instruments are structured as their vanilla counterparts, except that proceeds are earmarked to fund low-carbon assets and projects. Initiated in 2007 with a climate-awareness bond by the European Investment Bank, the green bond market has grown rapidly, with

over USD 500bn green bonds issued in 2021.

- Policies' rationale

Because green financial instruments are relatively new, government regulation is largely missing, and governance is instead decentralized and primarily self-regulated by private or non-governmental actors. Government regulation could help improve accountability, legitimacy, standardization, and the involvement of the private sector in green investments. To illustrate, it is estimated that around USD 78,8 b will be required by 2030 to fund climate adaptation and mitigation investment in Morocco according to the country's latest NDC. Therefore, the involvement of both national and international private investors will be essential to meet these investment targets.

From the issuer standpoint, the key motivations to issue green instruments is to attract new investors and to benefit from competitive yields and while highlighting the sustainability ambitions of the issuer.

- Adapting the policies to the MENAT countries context

When pursuing green Sukuk, bonds and loans, the Green Bond Principles (GBP) developed by the International Capital Markets Association (ICMA),

the Climate Bonds Standard developed by the Climate Bonds Initiative and the Green Loan Principles (GLP) published by the Loan Market Association (LMA) provide useful guidance on 1) setting eligibility criteria, 2) asset / project screening, 3) management of proceeds and 4) post-issuance reporting. In addition, emerging countries' specific guidelines and frameworks should also be considered like the case of the Sustainable and Responsible Investment Sukuk Framework introduced by the Securities Commission Malaysia.

PILLAR 2: DOMESTIC PUBLIC CLIMATE FINANCE

The domestic public climate finance pillar comprises three policies: National climate funds, Climate guarantee funds and National Development Banks interventions.

National climate funds

- Policy scope

National climate funds are funding vehicles designed by governments to mobilize, access, and channel climate finance. National climate funds display diversity in their design features, including their legal forms, areas of focus, governance arrangements, and the financial instruments at their disposal. For

funds desiring to attract external finance, these design features play an important role in shaping the ability of the fund to win the confidence of fund contributors. These funds seek to access and mobilize finance from various sources, domestic and international. Most of these funds have broad mandates to tackle climate change, while a smaller share has a more targeted, sectoral focus.

- Policy rationale

The advantages of setting up a dedicated climate fund can be manyfold. First, national climate funds can be important precursors to policy instruments. Many emerging countries may not be in a situation to formulate and implement comprehensive climate mitigation or adaptation policies. National climate funds can help to fill that gap in capacity and enable countries to eventually formulate specialized policy instruments. Second, a national climate fund can also positively impact distributional aspects of addressing climate change. Indeed, a dedicated climate fund may be better suited to make targeted interventions such as reaching marginalized communities in ways that regular government entities may not be able to do so. Third, there has been a growing push for decentralizing decision-making from the boards of multilateral funds and agencies down to national and

local levels. National climate funds are better positioned to reflect local priorities and engage with a range of stakeholders.

- Adapting the policies to the MENAT countries context

The successful implementation of climate funds in the MENAT region requires firstly, putting in place the adequate policy and regulatory frameworks that clarify specific roles and responsibilities across sectors and ministries and align the climate fund strategy with national priorities. Secondly, establishing a strategy to use of national funds to leverage donor and private climate financing. Finally, working with international stakeholders to mobilize climate finance, including accreditation, capitalization, development assistance and blended finance.

Climate guarantee funds

- Policy scope

Climate guarantee funds are employed to induce funders to extend financings to individuals and firms they would otherwise not be accepted as counter-parties. Under this policy, there is a contractual obligation among the government, private funders (commercial banks, funds...), and a client that the government will cover the client's

debt obligation if the client defaults. The government therefore reduces the high risk (or perceived high risk) to alter the funder behavior. Guarantee mechanisms have also been used to support clean energy projects either by national governments or multilateral financial institutions including the IFC and World Bank (Multilateral Investment Guarantee Association).

- Policy rationale

Guarantee funds provide access to low-cost capital for green projects that might otherwise be considered high risk by the commercial banking and investment community. As a result, the funding allocated to guarantee mechanisms act as a multiplier effect by leveraging private sector investment.

- Adapting the policy to the MENAT countries context

Climate guarantee funds can support green projects, but depending on policy design, these funds can involve high transaction costs for the fund manager and the targeted firms. Therefore, it is important to make sure that the application process is transparent and not time consuming for firms. It is also critical to avoid supporting large-scale projects only by designing risks policies that do not exclude SMEs. In MENAT region, countries with existing guarantees

fund can easily integrate climate related projects into existing interventions.

National Development Banks interventions

- Policy scope

National development banks (NDBs) are government-backed, sponsored, or supported financial institutions that have a specific public policy mandate. NDBs can both complement and catalyze private sector players as NDBs are driven by strategic mandates rather than short-term commercial considerations. NDBs can provide an important policy coordinator function for finance mobilization in the context of climate action.

- Policy rationale

NDBs have experience in bridging the gap between governments and private sector. NDBs can sometimes provide cheaper finance as they often have high credit ratings and subsidies from governments. State-owned banks have also demonstrated other capacities to shape green finance, such as de-risking low-carbon projects, enabling financial sector learning, establishing trust for projects, and taking a first or early mover role to help projects gain a track record. For MENAT countries, NDBs can also be an effective tool to

leverage intermediate international financial resources.

- Adapting the policy to the MENAT countries context

The effectiveness of NDBs in mobilizing climate finance in the MENAT region will depend on the existence of complementary policies to support climate-friendly technologies and industries.

PILLAR 3: MARKET INCENTIVES (SUPPLY SIDE)

The Market incentives (supply side) pillar focuses on priority sector financing and preferred rates policies.

Priority sector financing and preferred rates

- Policy scope

Priority sector financing policies, also referred to as targeted lending practices, are those that require banks to finance a certain portion of their balance sheet towards certain policy priorities, such as agriculture or clean energy.

In India, the Reserve Bank of India has a priority sector lending policy that requires 40% of adjusted net bank credit (or credit equivalent amount of off-balance sheet exposure) to fall in priority sectors, including agriculture

(18%), micro-enterprises (7.5%), weaker sections (10%), and other priority sectors (4.5%). Renewable energy products are included in the “other” priority sectors. The People’s Bank of China (PBoC) has also launched a carbon emission reduction facility (CERF) to offer low interest loans to financial institutions that help firms cut carbon emissions. The targeted green lending program will provide 60% of loan principals made by financial institutions for carbon emission cuts at a one-year lending rate of 1.75%.

- Policy rationale

The primary rationale for a priority sector financing approach is to address the undersupply of credit to certain sectors due to high risk, information asymmetries, or the environmental externalities of green projects. This policy is designed to enhance financial institutions’ awareness of the importance of green transition, encourage more social capital to support the green and low-carbon industries, and to advocate the philosophy of green living, green production and a circular economy, which will help achieve the carbon peaking and carbon neutrality goals.”

- Adapting the policy to the MENAT countries context

One of the key concerns expressed by critics of targeted financing programs is that it forces banks that do not have expertise in a sector to finance it, thereby undermining performance. Consequently, it is important for MENAT countries regulators to provide technical assistance for banks to ensure a successful implementation. To do so, regulators can mobilize the expertise of development finance institutions in designing and funding the technical assistance intervention.

PILLAR 4: MARKET INCENTIVES (DEMAND SIDE)

The Market incentives (demand side) pillar comprises two policies: Tax credit and incentives as well as feed-in tariffs

Tax credits and incentives

- Policy scope

Tax credits and incentives are fiscal policies that can compensate investors or consumers for production or use of renewable energy. We distinguish tax credits from tax incentives. The latter can refer to a broad range of government policies such as import duty exemptions for renewable energy, reduced corporate income tax rates,

or corporate tax holidays. Tax incentives seek to encourage green behavior and green technology while tax costs aim at discouraging behaviors and technologies that add to GHG emissions.

- Policy rationale

Tax measures have the potential to improve environmental outcomes in a cost-effective way, while also raising government revenues and funding important policy objectives. In addition, businesses can use tax credits and other incentives to help lower their overall cost of going green. Such incentives can be targeted to specific sectors, technologies or directed towards R&D overall.

- Adapting the policy to the MENAT countries context

Tax credits and incentives programs in the MENAT region are still emerging. Some governments are actively working to introduce more measures to protect the environment and increase resource productivity. In Türkiye for instance, there are currently national sustainability incentives that take the form of grants, rebates, or loans. Türkiye's most prominent green tax measures are the Environment Contribution Fee and the Recycling Contribution Fee, there is no carbon tax.

However, poorly timed or communicated reform proposals could generate public resistance and stall efforts to reform carbon prices. There is a risk that price increases are poorly received by the public or that push-back. To some degree, this happened in France, Mexico, and Indonesia prior to the COVID-19 pandemic. As the pandemic and resulting crisis has disproportionately affected vulnerable households, distributional concerns over potential price increases merit particular attention by policy makers.

Feed-in tariffs

- Policy scope

A feed-in-tariff (FiT) is a policy instrument designed to accelerate investment in renewable energy technologies by providing either a fixed total electricity price per kWh or a fixed premium on top of the wholesale rates of electricity for fixed periods. Given the low financial risk and long-term price security that a FiT provides, FiTs are recognized as an effective policy option to incentivize specific types of capacity additions and generation. The U.S. was a pioneer in feed-in tariffs. It was first implemented by the Carter administration in 1978 in response to the energy crisis of the 1970s.

- Policy rationale

Feed-in tariffs usually involve long-term agreements (typically from 15 to

20 years) and prices tied to the cost of production of the energy in question. The long-term contracts and guaranteed prices shelter producers from some of the risks inherent in renewable energy production, encouraging investment and development that otherwise might not take place.

- Adapting the policy to the MENAT countries context

Since policy priorities will vary from jurisdiction to jurisdiction, so will FiT design. Every program must be tailored to the specific location and cannot simply be replicated. The design decisions are the policymaker's most important tools to develop a locally tailored and effective FiT. The objectives of FiT interventions can be assessed through three dimensions: inclusiveness, cost-effectiveness, and economic development. Inclusiveness is the degree to which the program facilitates participation from diverse market segments, primarily small and noncommercial producers. It also relates to the diversification of the electricity supply with respect to geography, technology, project size, or other factors. Cost-effectiveness relates to the net economic impact of the program relative to its feasible alternatives over an appropriate investment time horizon. Economic development is the ability of the

program to create localized direct, indirect, and induced economic benefits, including employment, increased regional output, growth of the industrial base, and positive fiscal impacts.

PILLAR 5: CAPACITY BUILDING AND AWARENESS

The capacity building and awareness pillar comprises two policies: Capacity building and awareness raising.

Capacity building

- Policy scope

The recommendation seeks to build the capacity of financial practitioners to allow them to broaden their pool of talents in green finance capable of supporting the initiation and implementation of climate related projects. Capacity building is carried out through training programs, seminars, technical meetings, and participation in international working groups.

- Policy rationale

Climate finance suffers from a lack of skills that limits the development of transactions at scale. For example, several financial institutions in the countries of the MENAT region have noted difficulties in accessing climate

finance and in measuring the impact once the funding has been granted. Thus, if financial institutions benefited from training or capacity building activities in blended finance, they would be better able to extend their services to underserved sectors or customer segments.

- Adapting the policy to the MENAT countries context

Depending on the target populations and learning objectives, skills development initiatives can be deployed through several channels (face-to-face, remote or hybrid) and formats (training, workshops, or asynchronous content).

Given the significant overlap between climate finance and other themes such as financial inclusion and sustainable finance, such training programs could also address these themes. In this context, training institutes attached to central banks, capital market authorities and sectoral financial associations would be able to deploy training programs with the technical and financial support of international partners such as the Islamic Development bank, the World bank, and the African Development Bank.

Awareness-raising

- Policy scope

Awareness-raising is a process that seeks to inform and educate people about climate change and climate finance with the intention of influencing their attitudes, behaviors, and beliefs towards the achievement of a defined purpose or goal. It can mobilize the power of public opinion in support of the climate issue and thereby influence the political will of decision makers. There are multiple awareness-raising strategies, methods and tools that can be used to convey and spread messages, and to gather the support necessary to influence public opinion. Depending on the topic, awareness-raising efforts may include the following activities: issuing press releases, briefings and commentaries; disseminating reports, studies and publications; making written or oral submissions to parliamentary committees and inquiries; working with the media; holding public meetings and events; convening conferences and workshops; and creating and contributing to educational materials.

- Policy rationale

The policies and measures proposed in this document can encounter inertia, passive resistance, or active

opposition, particularly from those concerned about the imposition of a new cost. Providing information and explanations is therefore vital for generating public and stakeholder support for government policies and regulations. Public outreach can also encourage voluntary changes in habits, address the arguments of those who oppose specific actions and help to prepare the younger generation for living in the climate-change world that they will soon inherit.

- Adapting the policy to the MENAT countries context

Many governments and non-governmental organizations in the MENAT region are already working actively to raise awareness. The scale of the change required, however, and the vast number of people and interests that must be influenced, calls for outreach activities of a much greater magnitude. National governments will want to encourage local authorities, nongovernmental organizations (NGOs), educators, the media, the entertainment industry, and individuals to play a role. They may also consider building partnerships with many of these diverse actors.

Endnotes

- (1) The MENAT region as defined in this report is composed of 18 countries. The report covers 14 and excludes 4 countries because of political and economic instability
- (2) **Malaria** is a disease caused by a parasite. The parasite is spread to humans through the bites of infected mosquitoes.
- (3) **Cholera** is a bacterial disease usually spread through contaminated water
- (4) **Lymphatic filariasis** is caused by infection with parasites classified as nematodes (roundworms) of the family Filarioidea
- (5) **Leishmaniasis** is a parasitic disease that is found in parts of the tropics, subtropics, and southern Europe
- (6) **Schistosomiasis (Bilharzia)** **Schistosomiasis**, also known as bilharzia or snail fever, is an acute and chronic disease caused by parasitic flatworms called schistosomes or blood flukes
- (7) The World Bank Group Data
- (8) For more details, visit <https://unfccc.int/NDCREG>

References

- Fankhauser, S. (2017), 'Adaptation to climate change', Annual Review of Resource Economics, Vol. 9, Issue 1, pp. 209-230.
- Gallagher, Kelly Sims, and Xiaowei Xuan. 2018. Titans of the Climate: Explaining Policy Process in the United States and China. American and Comparative Environmental Policy. Cambridge, Massachusetts: The MIT Press.
- Giglio, S., Kelly, B., Stroebel, J. (2021), 'Climate Finance', Annual Review of Financial Economics', Vol.13, Issue 1, pp. 15-36
- Ruddiman, W.F. (2013), 'The Anthropocene', Annual Review of Earth and Planetary sciences, Vol. 41, Issue 1, pp. 45-68
- Sachs, J. D. (2015), 'The Age of Sustainable Development', New York Chichester, West Sussex: Columbia University Press, <https://doi.org/10.7312/sach17314>
- The World Bank Group (2013), 'Turn down the heat : Climate extremes, Regional impacts, and the case for resilience', p.252

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