

THE WORLD BANK GROUP

MIDDLE EAST & NORTH AFRICA CLIMATE ROADMAP (2021-2025)

Driving transformational climate action and
green recovery in MENA

”

The Middle East & North Africa Climate Roadmap will bring climate and development together by adopting an economy-wide, whole of government approach to strengthen institutions, overcome barriers to private sector engagement, foster regional integration – while ensuring that no one is left behind.”

Ayat Soliman,
Sustainable Development Regional Director, World Bank (WB)

Countries in the Middle East & North Africa (MENA) must **accelerate system-wide transformations** and develop long-term pathways to build low-carbon, resilient societies, promote inclusive development, peace and stability in the region.



FOOD SYSTEMS, WATER
SECURITY AND RESILIENT
NATURAL CAPITAL



ENERGY TRANSITION AND
LOW-CARBON MOBILITY



CLIMATE-SMART CITIES AND
RESILIENT COASTAL
ECONOMIES



SUSTAINABLE FINANCE
FOR CLIMATE ACTION

A Green, Resilient and Inclusive COVID Recovery must reinforce Climate Action

COVID-19 temporarily stalled national climate action pledges in MENA and across the world. The WBG will work to align short term recovery needs with climate-smart development through the Green, Resilient and Inclusive Recovery (GRID) framework. This approach will yield triple dividends – recovery programs focusing on short term jobs, while enhancing stronger sustainability and inclusion and laying the foundations for a greener MENA economy.

GREEN

Promote green and low carbon development across sectors: food and land use systems, transport and urban infrastructure, energy



INCLUSIVE

Placing inclusion and participation at the center of recovery strategies is critical for peace and stability in MENA by ensuring contribution of the recovery to reducing inequalities (including territorial disparities) and protect the most



RESILIENT

Enhance risk preparedness and response to address the possible future confluence of multiple risks (climate change, pandemics, natural hazards, socio economic and financial shocks)



The World Bank Group (WBG) MENA Climate Roadmap is fully aligned with the WBG Corporate Climate Change Action Plan (2021-2025).

The Roadmap articulates regional and country specific transformational pathways to build low-carbon, resilient societies while promoting socially inclusive economic growth, that account for:



PEOPLE



NATURE



PARTNER
S

Outline

- 1 Climate change context in MENA
- 2 Four transformation areas for a climate-smart future in MENA
- 3 Building on a strong foundation and principles for climate-smart development
- 4 Implementation, partnerships and summary of key actions

1. Climate Change Context in MENA

"Economic growth and shared prosperity in MENA will be severely compromised in the absence of bold climate action."

Ferid Belhaj,

Regional Vice President
Middle East and North Africa, WB

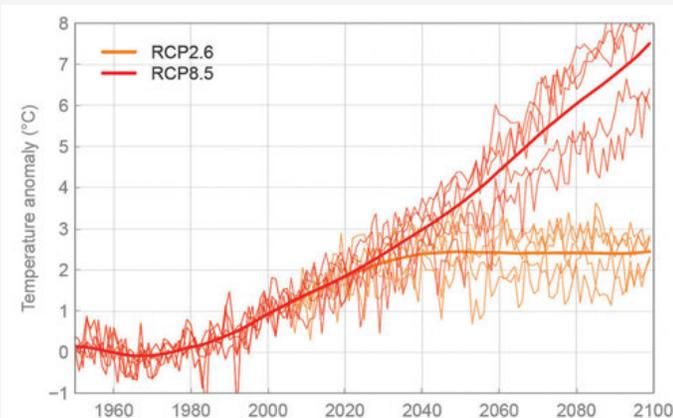


MENA is one of the most climate-vulnerable regions

TEMPERATURE RISE

Extreme high temperatures of up to 56°C could become the norm in MENA in a world where global average warming reaches 4°C above pre-industrial levels. Summer temperatures are expected to be up to 8°C warmer in parts of Algeria, Saudi Arabia and Iraq by the end of the century.

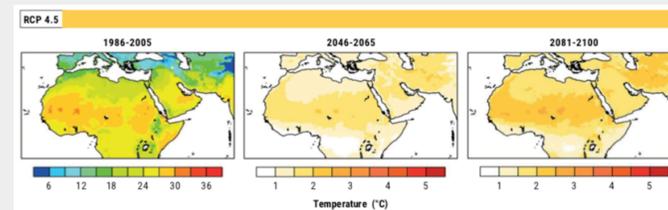
TEMPERATURE PROJECTIONS FOR MENA COMPARED TO THE BASELINE (1951–1980). WORLD BANK



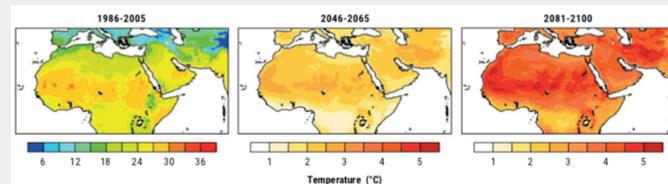
PRECIPITATION VARIABILITY

Both droughts and floods will worsen due to climate change. Mediterranean coasts will receive about 10-20% less rain in a 2°C world and up to 50% less rain in a 4°C world. Southern parts of the Arabian Peninsula are projected to become wetter (up to 50% more rain in a 2°C world).

RCP 4.5: 1.2 °C–1.9 °C AT MID-CENTURY AND 1.5 °C– 2.3 °C BY END-CENTURY.



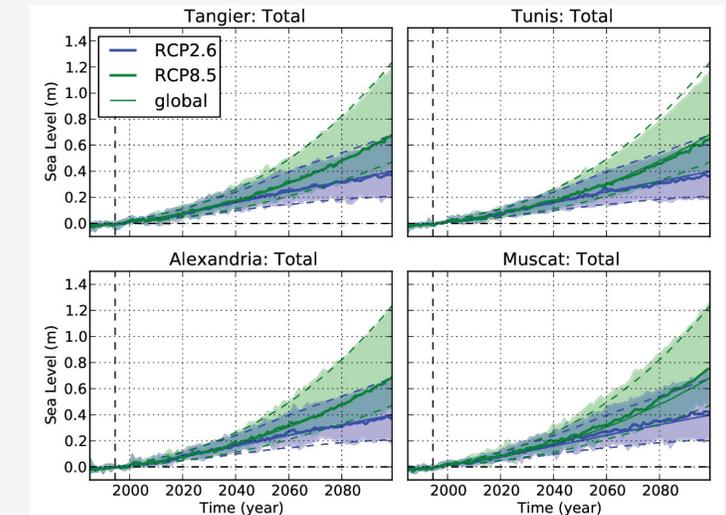
RCP 8.5: 1.7 °C–2.6 °C FOR MID-CENTURY AND 3.2 °C–4.8 °C BY END-CENTURY



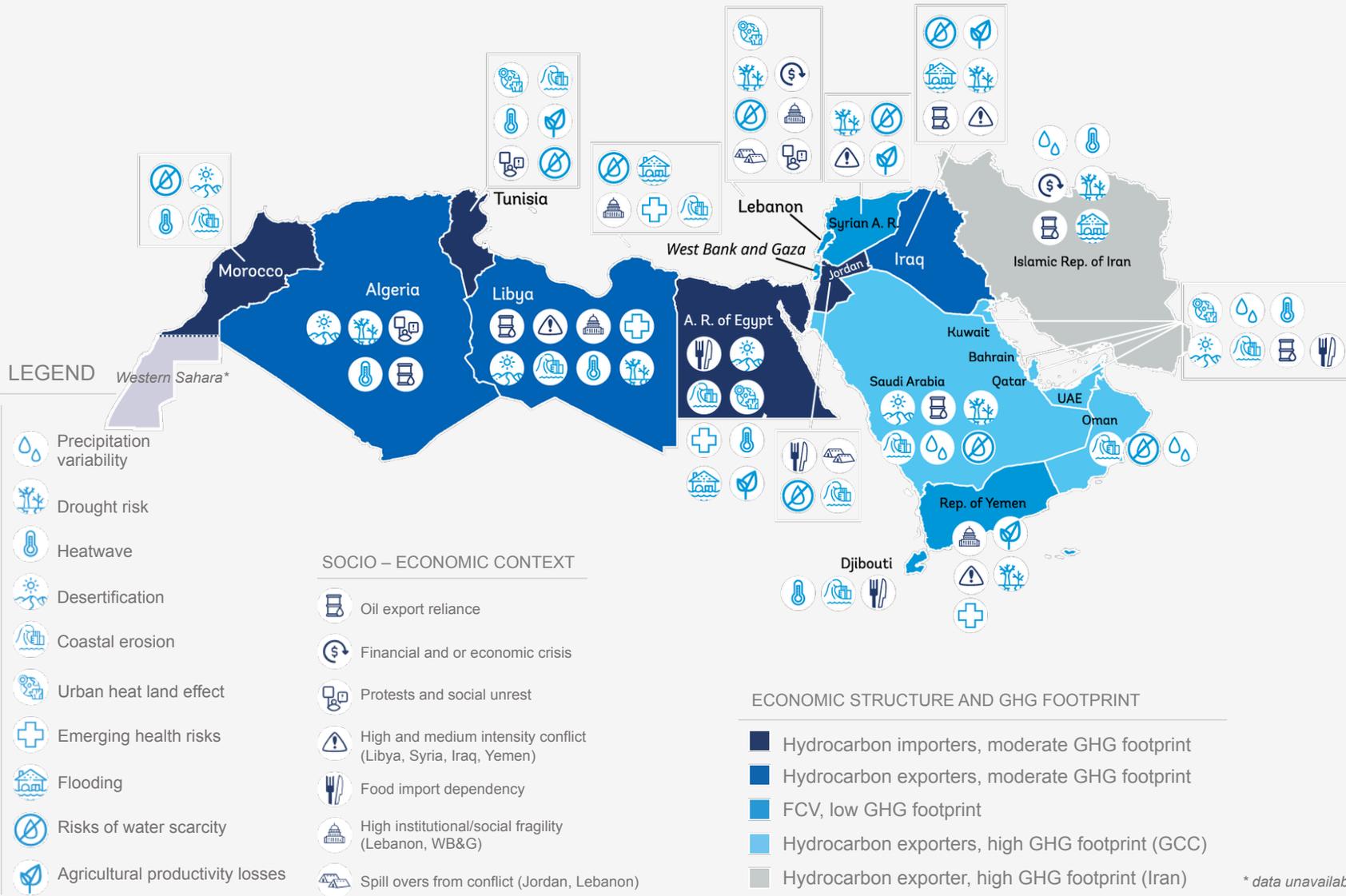
SEA LEVEL RISE

Maghreb is the fastest eroding region in the world after South Asia and Tunis could experience a 1.2 m sea-level rise by 2080 (Fig 2). Sea level could rise by an average of 0.36m in a 1.5°C world and 0.6m in a 4°C world. GCC's coasts accreted substantially, owing in parts to coastal reclamation and development projects.

SEA-LEVEL PROJECTIONS FOR TANGIER, TUNIS, ALEXANDRIA AND MUSCAT. WORLD BANK



Climate change is a threat multiplier in the MENA region



- 1 As the world rapidly decarbonizes, high dependency on fossil fuels, low energy efficiency and limited renewable energy uptake pose **substantial economic and transition risks**.
- 2 MENA's **renewable resources present significant opportunities** for economic growth, employment, and social inclusion.
- 3 **Climate change and depletion of natural resources is a threat multiplier** in the context of high socio-political instability, driving forced displacement, exacerbating risks of violent conflict and posing a significant threat to vital ecosystems.
- 4 MENA is the **world's most water-scarce region**. Climate change is severely compromising water security, sustainability of lands, food security and ecosystems.
- 5 MENA is highly urbanized, and **cities are at the epicenter of various climate stresses**. Carbon-neutral and resilient urban infrastructure can significantly contribute to mitigation goals and prevent untold damage to critical infrastructure and livelihoods

* data unavailable

Hydrocarbon dependency and raising emissions call for urgent decarbonization

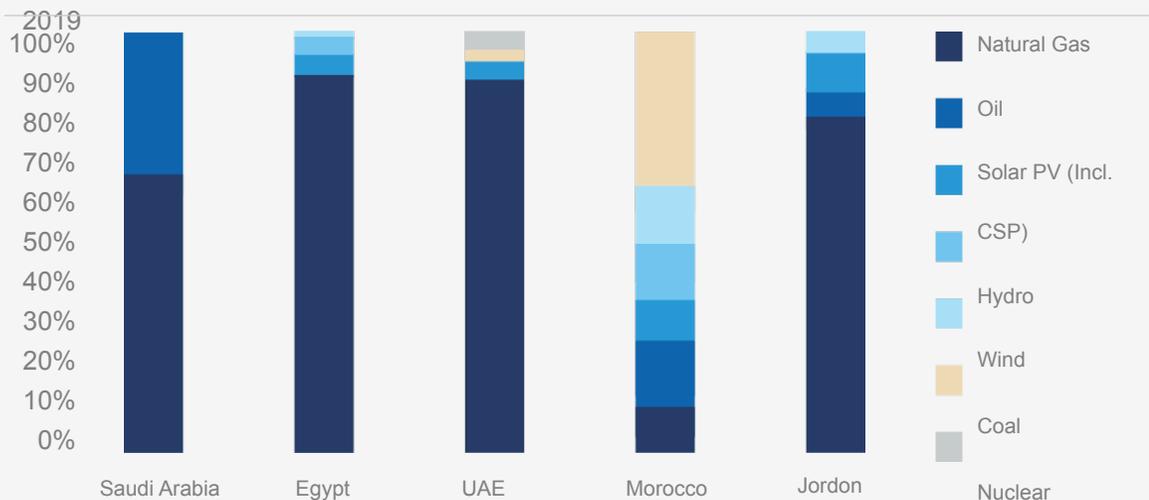
FOSSIL FUEL DEPENDENCY

- MENA's major resource-rich countries are economically dependent on the oil and gas trade. Fossil fuels average 50% of exports for the GCC, Iraq, Libya, Iran.
- Primary energy demand is expected to double by 2030 and the region's share in global oil production is expected to increase from 35% to 44% in 2030 due to population and economic growth (EIA).
- Both oil and gas exporter and importer countries face increasing fuel insecurity and vulnerability, as climate change and decarbonization efforts will pose significant transition risks.

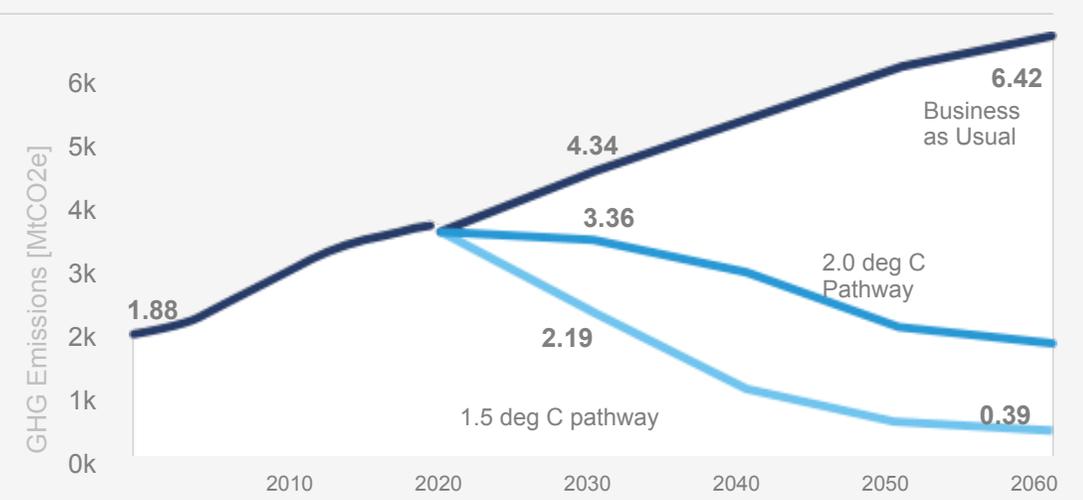
REGIONAL GHG TRENDS

- MENA's GHG footprint is low when compared to other regions (8.7% of global emissions (CAIT 2020) but the region is also home to the world's top 10-per capita carbon emitters in the world (Qatar, Kuwait, UAE, Bahrain and Saudi Arabia)
- MENA is the only region in which growth of CO2e emissions per capita has outpaced the growth of average incomes.
- GHG emissions would more than triple by 2060 (from 2000 baseline) under a BAU scenario.

THE POWER GENERATION MIX IN SELECTED MENA COUNTRIES IN 2020 VS. 2019



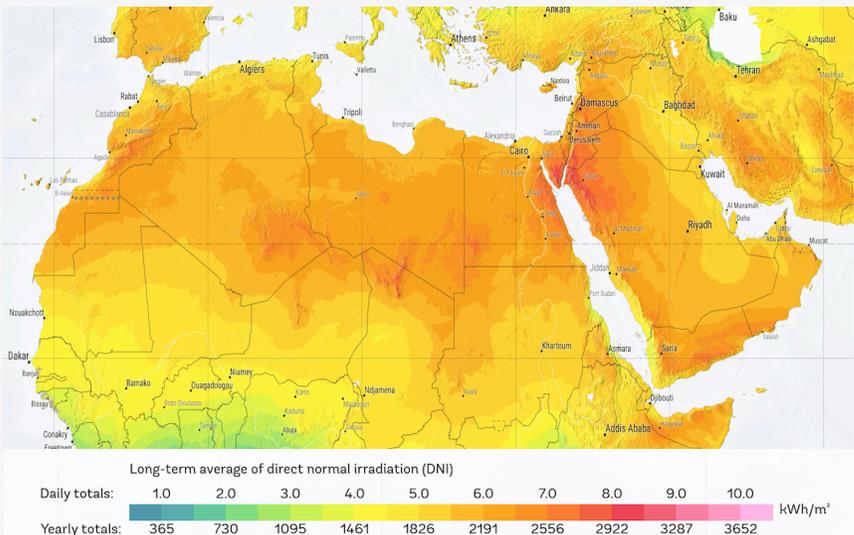
GHG EMISSIONS IN MENA UNDER BUSINESS AS USUAL, 2C OF 1.5C PATHWAYS



Renewable energy presents a major economic and social opportunity

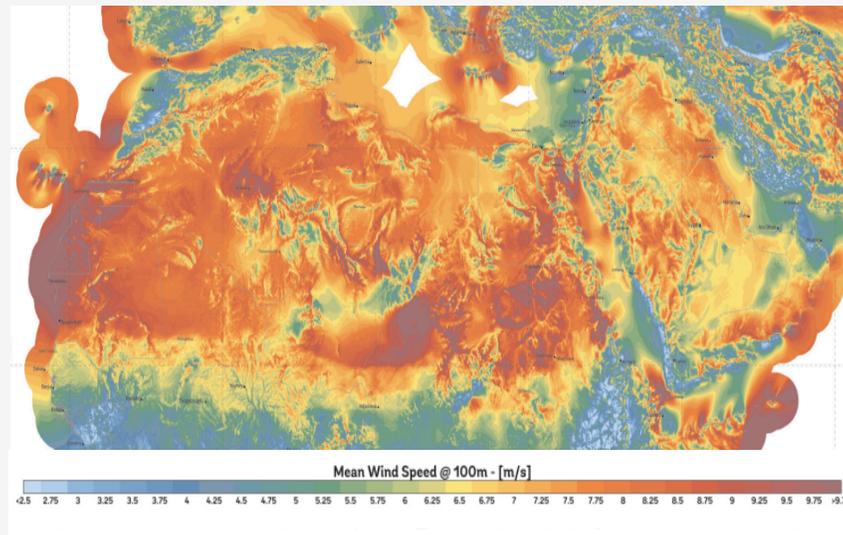
Renewable energy (not including hydropower) is responsible for less than 1.5% of all electricity generation in the region (vs 10% global average). Thanks to high potential in renewable energy resources. MENA can decarbonize its energy systems with significant socio-economic and environmental benefits.

MENA receives 22-26% of all solar energy striking the earth. Solar energy potential in MENA per square kilometer is equivalent to energy produced by 1-2 million barrels of oil annually and could meet at least 50% of global electricity demand.



Direct Normal Irradiation in MENA. Source: [Global Solar Atlas](#)

75% of MENA has average wind speeds that exceed the minimum threshold for utility-scale wind farms. Wind speeds in countries such as Morocco, Egypt and Tunisia are amongst the highest in the world.



Average Wind Mean Speed in MENA. Source: [Global Wind Atlas](#)

A transition to low carbon energy systems could drive economic growth through industrial diversification, new value-chain activities, strengthened regional trade and economic cooperation.

The development, management and maintenance of renewable installation can create sustainable jobs with a just transition approach, as the workforce shifts in locality and skillsets. In Morocco only, the cumulative net job creation in the next 30 years could amount to 761,914.

Energy transition presents an opportunity for increased female labor, as globally women represent 32% of fulltime employees in renewable energy, compared to 22% in average in the global oil and gas industry.

Without bold action, climate change will deepen existing vulnerabilities



INCREASE POVERTY

Unchecked, climate change will push 132M people into poverty by 2030 (World Bank). Increasing frequency of natural disasters will jeopardize lives and livelihoods of the poorest first. Smallholder farmers and women are hit hard by loss of agricultural productivity.



DISPROPORTIONAL IMPLICATIONS OF ENERGY TRANSITION

Energy transition can potentially lead to great social risks in MENA. Some locations will experience a loss of jobs, decline of taxes and revenues, potentially affecting essential public services.



PUBLIC HEALTH AND LABOR CONDITIONS

Climate change poses significant public health risks, due to water/air-borne diseases and increasing heat extremes, affecting vulnerable groups. 40% of lost working hours due to heat stress in 2030 are in the construction sector, disproportionately vulnerable and migrant workers.



HUNGER MULTIPLIER

Change will weaken countries' agri-food systems. Nearly 55 million people were already food insecure in Arab States before COVID-19 (2019). Climate change will reduce domestic agricultural productivity and affect food-importing countries facing international food price shocks.



FRAGILITY, CONFLICT AND VIOLENCE

Climate risks, notably water scarcity, can amplify root causes of fragility in a highly vulnerable region. Indeed, one in five people in MENA already live within 60 km of conflict and the region is home to a quarter of forcibly displaced people in the world (16.3 million in 2016). Increasing exposure of women and girls to climate-related hazards drives further gender-based violence (GBV).



CLIMATE MIGRATION

Climate change can serve as 'push' factor in migration. Sea level rise alone could displace millions of people along MENA's densely populated coasts. In North Africa, there could be up to 19.3 million internal "climate migrants" by 2050, accounting for 9% of the subregion's total projected population.

Climate change will severely exacerbate existing water scarcity with disastrous socio-economic consequences

MENA is the world's most water scarce region. 60% of people live in high or extremely high water stressed areas, generating 70% of the region's GDP.

In a 2°C world, there would be a 15–45% drop in freshwater availability. Climate-related water scarcity is estimated to reduce GDP by 6-14% by 2050, compromising economic development. In a 4°C world, MENA would experience a 75% drop in freshwater availability.

Lack of water in MENA is a crisis waiting to happen. The lack of access to water can lead to social unrest, already unfolding in contexts of instability such as Jordan or Iraq.

COUNTRIES THAT ARE MOST AT RISK FROM WATER CRISIS

Countries facing high water stress

17 Countries, mostly in the Middle East, are at risk

- 1 Qatar
- 2 Israel
- 3 Lebanon
- 4 I. R. of Iran
- 5 Jordan
- 6 Libya
- 7 Kuwait
- 8 Saudi Arabia
- 9 Eritrea
- 10 UAE

Western Sahara*

LOW TO HIGH

* data unavailable

Note: Water-scarce countries (shaded above) are those with less than 1,000 cubic meters of renewable fresh water per person per year.

Source: Peter Gleick, The World's Water 2000-2001, The Biennial Report on Freshwater Resources: Table 1; and Carl Haub and Diana Cornelius, 2001 World Population Data Sheet.

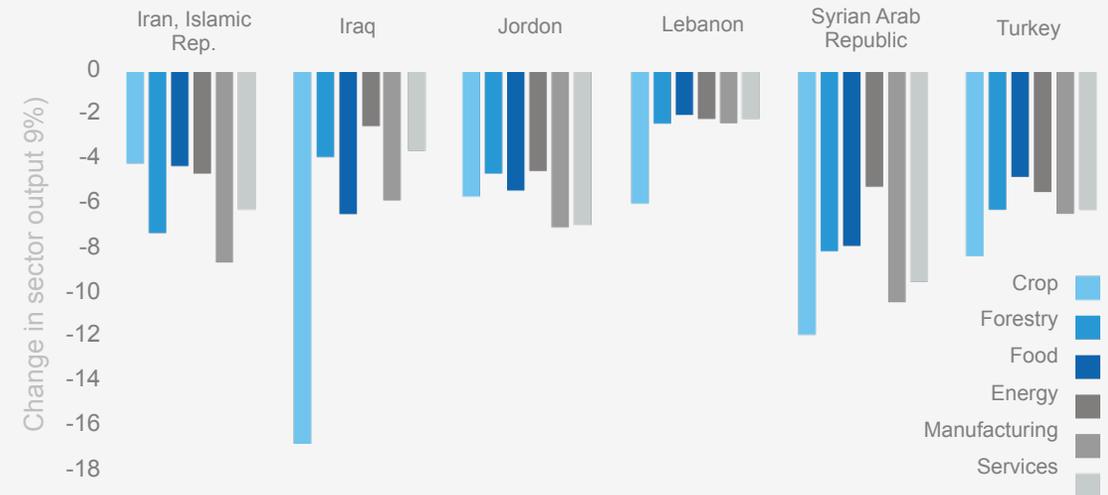
Climate-driven impacts on food, agriculture and land degradation

Climate change is a fundamental threat to food systems and a significant “hunger-risk multiplier” in MENA. Nearly 55 million people were already food insecure in the region before COVID-19 (2019). The situation is particularly worrying in countries affected by conflicts and violence: Iraq, Syria and Yemen. Moreover, countries which are highly dependent on food imports will face fluctuating food prices.

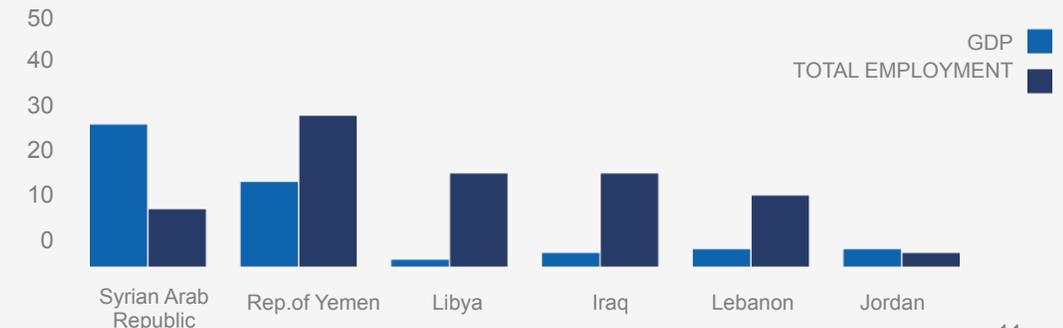
The agriculture sector is 70% rainfed and highly exposed to climate change. Agriculture is the largest employer in many countries and contributes significantly to national economies. Heat extremes and drought already affect about one-third of land areas, with consequences for food production. In a 2°C world, agricultural losses could reduce household incomes by billions. Losses of US \$2billion in Syria and Tunisia alone, and up to US \$9 billion in Yemen.

Desertification endangers almost half the land area in the Mashreq, 28.6% in the Nile Valley and the Horn of Africa, 16.5% in North Africa and 9% in the Arabian Peninsula.

THE IMPACTS OF CLIMATE CHANGE-INDUCED WATER SCARCITY AND CROP YIELDS CHANGE ON SECTORAL OUTPUTS, BY COUNTRY



SHARE OF AGRICULTURE (CROPS, FORESTRY AND FISHING) IN TOTAL EMPLOYMENT AND GDP, 2017



Source: ESCWA calculations from FAO and ILO data.

MENA cities are at the forefront of climate action

Sea level rise, the urban heat island effect and flooding can directly lead to substantial infrastructure and asset loss, undermining liveability of cities. (fig 1)

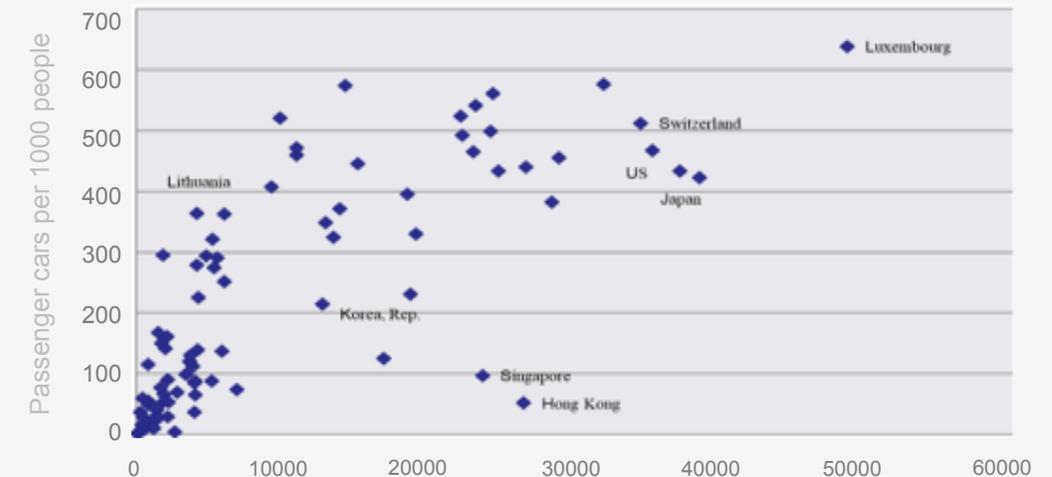
Population growth and rapid urbanization have strained water resources, exacerbated pollution problems, stretched basic services, and amplified the exposure of urban residents to natural hazards. MENA's population is expected to nearly double by 2050 (UNICEF), adding significant challenges to employment and livability of densely populated areas.

Decarbonizing road transport in cities is a major challenge in MENA. Public transport is under-developed and private cars have become the dominant mode of travel in cities. (fig 2)

Cities are drivers of change and must accelerate economic, social and environmental resilience in addition to finding solutions to recover from current shocks. The physical and economic density of cities can provide the impetus for technological change and infrastructure investments that support low carbon economic development and resilience of the MENA societies.



GDP PER CAPITA (2000 US\$)



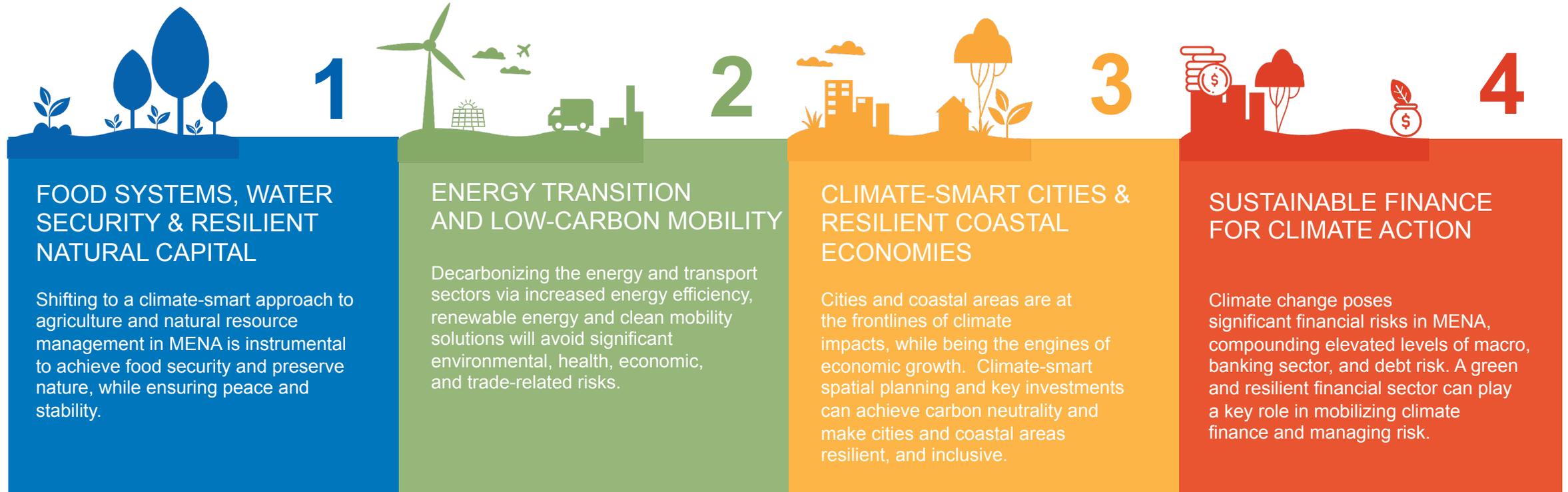
Car shares defined as passenger trips by personal car as percentage of all motorized trips. WB staff based on Fountas et al.

■

2. Four Transformation areas for a Climate-Smart Future in MENA



Prioritizing Key Transformation Areas



CROSS-CUTTING CONSIDERATIONS

Whole of Government Approach, Social & Spatial Inclusion, Citizen Engagement, Just Transition, Fragility, Conflict & Violence, Private Sector Mobilization, Climate Data & Digital Innovation, Regional Integration

Food Systems, Water Security & Resilient Natural Capital



PROMOTE CLIMATE-SMART AGRI-FOOD SYSTEMS

Building climate-resilient food systems will reduce growing food insecurity in a region of high import dependency and 70% rain-fed agriculture.



ENHANCE CLIMATE-SENSITIVE WATER RESOURCE MANAGEMENT

Climate-smart water resource management will increase adaptive capacity to cope with increasing water scarcity, in the most arid and semi-arid region in the world.



BUILD RESILIENT NATURAL CAPITAL

Incorporating climate into natural capital management will yield vast mitigation and adaptation benefits, whilst preserving biodiversity and vital ecosystems.

PRIORITY INTERVENTIONS

- **Climate-smart agriculture action plans**, modern irrigation and cropping practices
- Reforms to **reduce food loss and waste** along agricultural value chains
- Technologies to **strengthen farmers' adaptive capacity**
- **Sustainable fisheries and aquaculture management**, including livelihood diversification for vulnerable fishery communities

- **Integrated water resource management strategies**, balancing freshwater withdrawals and replenishments
- Systematic reforms to **remove inefficiencies in water sector**
- **Effective treatment of wastewater** for discharge and reuse
- Clean technologies for **water treatment systems**
- **Transboundary water cooperation** and conflict prevention

- **Analysis of biodiversity loss** linked to adaptation and carbon sinks
- Further enhance **understanding of Nature-Based Solutions (NBS) potential** and improve natural capital accounting
- **Increasing investments in NBS** (regeneration of vegetation, integrated landscape management approaches, blue carbon, nature-based tourism)

Energy Transition and Low-Carbon Mobility



PROMOTE LONG-TERM EMISSIONS REDUCTION AND ECONOMIC DIVERSIFICATION STRATEGIES

Readiness and capacity building to underpin policies and investments for long term, deep decarbonization strategies for a clean and resilient energy system.



SCALE UP RENEWABLES AND ENERGY EFFICIENCY

Policies and programs to drastically increase share of renewables in the energy mix and achieve energy efficiency goals.



SHIFT TO LOW-CARBON AND RESILIENT TRANSPORT SYSTEMS

Low carbon transportation will significantly improve air quality and livability of densely populated areas while reducing GHG emissions.

PRIORITY INTERVENTIONS

- **Upstream engagement and analytics** (e.g. Low emission power sector strategies)
- Support to **distribution sector reforms**, including energy subsidy reforms, reduction/ utilization of gas flaring
- Policies for **industrial decarbonization**, green competitiveness, and circular carbon economy
- Support to country or sector-specific demand-side **energy efficiency**

- Enhance **grid integration (including through pan-regional trade)** and enabling infrastructure to deploy intermittent renewable energy
- Inform Renewable Energy (RE) and storage policy and **develop nascent RE and storage technologies**
- Enhance **resilience of critical power grids**, and improving **access to affordable clean electricity** for the most vulnerable

- **Climate-smart transport policies**, integrated planning and capacity building
- Investments in **public transport** infrastructure and services
- Improve enabling environment for **e-mobility solutions**
- Mainstream **resilience in infrastructure investments** throughout asset life cycle (transport, energy, digital)
- Activities encouraging **non-motorized transport options**

Climate-Smart Cities & Resilient Coastal Economies



PROMOTE CLIMATE-SMART URBAN DEVELOPMENT AND PLANNING

Climate-smart urban development, with a focus on coastal cities is critical to improve livability of cities, promote economic growth.

- **Climate-smart urban strategies**, in hotspots including guidelines for Disaster Risk Management, green growth, low-carbon transit
- **Green buildings**: innovation, green retrofitting, reforms for planning and building codes, green technologies
- Spatial planning for urban interventions with a focus on **liveability, green space, use of data and digital technology**



ENSURE CLIMATE-SMART PUBLIC SERVICES

With the appropriate institutional frameworks and master plans, MENA can build readiness to ensure the continuity of critical public services, especially in water, sanitation and waste management.

- Clean energy and energy efficient systems for **water treatment and wastewater reuse**
- **Solid waste management plans** for waste recovery, landfills and recycling centers.
- **Leverage private finance** and build-operate-transfer to expand non-conventional water resources and develop technologies for providing clean water.
- Measures to **reduce air pollution** via technologies and new indicators that are useful for protecting health

PRIORITY INTERVENTIONS



DEVELOP RESILIENT COASTAL ECONOMIES

Integrated coastal management and climate adaptive coastal economies will mitigate significant risks in the face of increasing climate hazards and reduce livelihoods.

- **Blue economy, blue carbon sequestration** and climate adaptation of coastal cities
- Support to **improve climate data** to measure sea level rise and coastal erosion
- **Marine and coastal ecosystem restoration and conservation**
- Strategies for increased **resilience of the tourism sector**

Sustainable Finance for Climate Action



GREENING FINANCIAL SYSTEMS

Greening the financial institutions, systems and instruments will be the cornerstone of climate-smart transitions. The WB, IFC and MIGA will jointly support this transition working closely with national and private sector institutions.

- **Climate stress tests identifying climate - related risks** in the financial system and supervisory response.
- **Climate risk management guidelines,** standards and regulation for financial institutions such as supervisory guidance in climate risk monitoring
- **Support to regulators on climate risk financing**
- Develop **green financial tools and instruments**



IDENTIFY AND ADDRESS TRANSITION RISKS

Identifying climate-related physical and transition risks to the economy will be essential to formulate policies for resilient financial institutions and governance in MENA.

PRIORITY INTERVENTIONS

- Assessments of **financial exposure of assets and investments** to climate risks and disasters
- Support in **estimation and management of disaster-related contingent liabilities** to manage fiscal burden from climate hazards
- Develop **national risk financing** and support domestic and international **insurance products and instruments.**
- Assessments of **trade risks** (e.g. from CBAM, EU Green Deal) and strategies for sectoral transitions to **cope with contingent liabilities, avoid stranded assets and economic losses**



UNLOCK GREEN FINANCING FOR CLIMATE SMART INVESTMENTS

Supporting national budgets and expenditures to align with green financing needs; unlocking private capital flows for green investments.

- **Green taxonomies, and national expenditure reviews** in alignment with climate goals
- Developing **green financing frameworks,** guidelines aligned with climate goals and long-term reforms
- Support to increase **treasury markets/private banks** for green and climate resilient investments
- Identify **innovative business models,** technologies for private sector investments in climate action

Cross-cutting priorities



WHOLE OF GOVERNMENT APPROACH

The Roadmap will provide support to mainstream climate action in core government functions and institutions by facilitating sectoral and vertical integration of climate change through well-coordinated government strategies and policies.



PRIVATE SECTOR PARTICIPATION

Private sector participation in climate action is particularly low in MENA, due to several regulatory barriers and the business environment. The Roadmap will prioritize reforms and investments to green industries, create new markets, manage supply chain risks, foster green innovation and technology adoption and protect cultural and natural assets.



CLIMATE DATA AND DIGITAL INNOVATION

To promote digital innovation and bridge the gap in access to climate data, the Roadmap will support digitally-enabled, climate smart service delivery, scale up use of satellite imagery to map and manage risks, predict and provide predict weather patterns and provide early warning systems.



REGIONAL INTEGRATION

The Roadmap will enhance cooperation and collaboration across borders to support efficiency bring solutions that can be scaled-up. Examples include coordinated management of transboundary waters and other natural resources, energy production and trade, and transport corridors.



CLIMATE-FCV NEXUS

The Roadmap will address climate and fragility nexus by reducing knowledge gaps between environmental degradation and FCV risks as well as pragmatic, select interventions to disrupt any vicious cycles.



SOCIAL AND SPATIAL INCLUSION

The Roadmap will promote social and spatial inclusion, by preparing vulnerability maps to assess future distributional impacts and opportunity gaps - disaggregated by vulnerable groups; and supporting climate-adaptive social protection systems, effectively targeting the most vulnerable.



GREEN SKILLS AND JOBS

To contribute to unlocking MENA's potential of job multipliers of the low-carbon and resilient transitions, the Roadmap will focus on targeted investments in reskilling and upskilling to leverage job multipliers of the low carbon transition and support strategy development for carbon-intensive sectors, with a focus on vulnerable groups.



CITIZEN ENGAGEMENT

To ensure meaningful citizen engagement and social cohesion, the Roadmap will support the necessary plans, strategies and communication plans to improve climate risk management and solutions, including to avoid a myriad of stressors on essential services.

Highlights of country specific actions

POTENTIAL OPPORTUNITIES	MOROCCO	TUNISIA	ALGERIA	EGYPT	DJIBOUTI	JORDAN	LEBANON	IRAQ
Climate smart and digital food systems transformations	●	●	●	●	●	●	●	●
Climate-smart water resource management	●	●	●	●		●	●	●
Increased energy efficiency and renewables	●	●		●	●	●	●	●
Long-term Strategies and support to decouple growth from emissions	●			●				●
Industrial decarbonization, circular carbon economy and green competitiveness	●							●
Climate-smart urban planning	●	●		●		●	●	
Blue economy programs	●	●		●	●	●		
Integrated coastal zone management	●	●		●			●	
Climate-smart public financial management, climate-proofing budgets and expenditure	●				●		●	●
Unlocking finance for green investment, greening financial institutions	●			●		●	●	

* Colors align with the transformation area slides for representation purposes only

Ambition and Targets

The WBG MENA Climate Roadmap will deliver on key targets by 2025



INVEST

\$10B of WB and IFC financing in climate smart projects and policy reforms in MENA.

Leveraging another \$2B in private sector financing towards climate smart investments.*



DEVELOP

Country Climate and Development Reports (CCDRs) for all MNA countries. All core analytics (SCDs, CPFs) and country products integrate climate risk management and opportunities for low carbon growth.



BALANCE

Adaptation and Mitigation. Invest 50% of climate finance in building resilience, reflecting regional heterogeneity and country-specific demand.



ALIGN

All financial flows align with the goals of the Paris Agreement by FY23. This includes climate-proofing all investments (especially infrastructure and other physical assets) to avoid stranded assets

These commitments will be guided by client demand and delivered through the collective strength of the World Bank Group (World Bank, IFC, MIGA)

*Calculated for the full period of the CCAP (FY22-25), using the assumption of 35% (as our target for climate finance).

3. Building on a strong foundation and principles for climate-smart development in MENA

“Our region is at a pivotal moment in its development trajectory. We must address multiple shocks and stresses in an integrated manner. Climate-smart development focused on building green, resilient and inclusive economies is the only path forward.”

Ferid Belhaj,

Regional Vice President
Middle East and North Africa, WB



The Roadmap builds on a strong foundation for climate action supported by WBG

The WBG support in the last five years served as an important driver for regional climate mitigation activities while paving the way for increased focus on adaptation, including disaster risk management and investments in resilience building across sectors.



MENA's overall climate-related financing reached \$6.4B from FY16–FY20, exceeding the 21% climate co-benefits target set in 2015.

WBG PROJECT EXAMPLES INCLUDE:



GREEN AND RESILIENT DEVELOPMENT

The Morocco Green Generation Program for Results seeks to increase the economic inclusion of youth in rural areas, and the efficiency and sustainability of agri-food value chains through increased job opportunities and income generation; efficiency of agri-food marketing systems; and climate-smart agriculture.



AIR POLLUTION AND ENVIRONMENTAL PROTECTION

The Lebanon Environmental Pollution Abatement Project (LEPAP) enabled substantial reduction of GHG emissions, improves water and air quality, facilitates sustainable economic development, and reduces risk of vulnerability to respiratory diseases such as asthma.



RENEWABLE ENERGY

Egypt Benban Solar Energy Project. Joint IBRD, IFC and MIGA project to support 32 solar power plants generating up to 752MW of power, serving more than 350,000 residential customers. The foundation was laid for expanding the model for private participation in renewable energy integrated with key sectors such as transportation and agriculture.



LOW-CARBON TRANSPORT

Casa Tramway. IFC is backing a new tramway in Casablanca that will cut travel times by 35% during working hours and will help the Casablanca-Settat region upgrade several hundred kilometers of rural roads in remote rural communities, connecting some 400,000 people to schools, hospitals, and other services.

Guiding principles of the WBG MENA Climate Roadmap 2021-2025

Bringing the collective strength of all WBG institutions (WB, IFC and MIGA) to accelerate climate action

The Roadmap is based on WBG's strong commitment for sustainable post-COVID recovery aligned with the GRID framework



Deliver climate action at scale. The Roadmap's climate finance target of 35% (average in FY21-25) will support green, resilient and inclusive development while deepening policy dialogue, and aligning investment pipeline for climate action.



Align climate action with development challenges: Country Climate and Development Reports (CCDRs) - a new set of core analytical and country diagnostic tools informed by countries' Nationally Determined Contributions (NDCs) and Long-Term Strategies (LTSS), will be essential to help align climate change and development in MENA. The WBG will develop CCDRs in all countries over the next 5 years.



Increase climate ambition through transformational interventions in four key pillars. The Roadmap seeks to go beyond achieving corporate commitments, scaling up successes to help countries increase their climate ambition and leadership.



Ensure a whole of government approach while engaging all stakeholders, taking distributional impacts into account. The Roadmap is committed to mainstreaming climate action in institutions, increasing private sector engagement, ensure a just transition with social and spatial inclusion.



Follow a differentiated approach to account for country context and client demand. The Roadmap is tailored to respond to country context, considering different development needs and challenges pertaining to Fragility, Conflict and Violence (FCV).

MENA is committed to climate action

Increased focus and bold action is needed to meet growing commitments

Many countries in MENA have announced bold climate goals, but overall progress on implementation remains slow. Climate finance needs are estimated at **\$186 billion** in Nationally Determined Contributions (NDCs).



SNAPSHOT OF CLIMATE TARGETS AND COMMITMENTS

Nationally Determined Contributions (NDC):

All MENA countries have submitted their first NDCs* and 10 countries have recently submitted updated NDCs. Morocco, Tunisia, Oman and UAE have submitted their second NDCs.

Carbon neutrality commitments:

UAE (2050); Saudi Arabia (2060); Bahrain (2060)

Cities committed to Race to Zero:

Amman (Jordan); Dubai (UAE); Chefchafouen; Rabat, Benslimane (Morocco), Mashhad (Iran) Arta Region (Djibouti)

Net Zero Banking Alliance:

Commercial International Bank (CIB) Egypt; First Abu Dhabi Bank (FAB) UAE; Bank Al-Maghrib (Morocco)

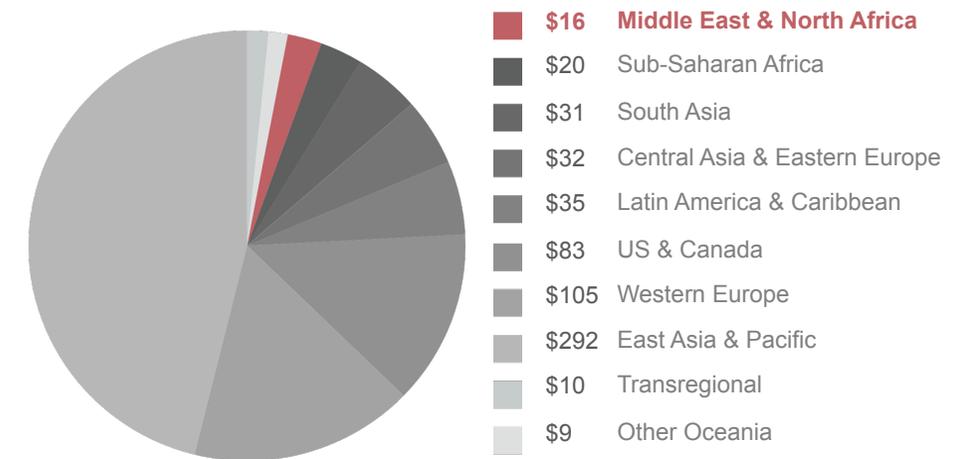
Landmark COP26 announcements:

- **The Global Methane Pledge:** Endorsed by Djibouti, Iraq, Morocco, Saudi Arabia, Tunisia, UAE.
- **Green Grids Initiative: One Sun One World One Grid: One Sun Declaration.** Endorsed by: Algeria, Djibouti, Egypt, Oman, Saudi Arabia, UAE
- **Glasgow Leaders' Declaration on Forests and Land Use:** Signed by Jordan, Lebanon, Syria, Morocco, UAE
- **Low-Carbon, Climate-Resilient Health Systems:** Joined by: Bahrain, Egypt, Morocco, Oman, Tunisia, UAE, Yemen



MENA IS THE SMALLEST RECIPIENT OF CLIMATE FINANCE IN THE WORLD

DOMESTIC AND INTERNATIONAL CLIMATE FINANCE FLOWS BY REGIONS (USD BILLIONS)



Source: Climate Policy Initiative

*Libya has not ratified the Paris Agreement



4. Implementation, partnerships and summary of key actions



Building Strong Partnerships

The WBG will facilitate and convene global, regional and subnational partnerships for collective action through:



Thematic partnerships with regional organizations to act collectively on issues such as climate finance for resilience building and management of shared natural resources (e.g., Mashreq Transboundary Water Platform).



Strengthening capacity of national and sub-national actors and institutions for alignment of climate action at all levels. For examples between national ministries, cities and local public institutions.



Collaboration with Financial Institutions: to foster multi-actor partnerships between development banks and national financial institutions to align financial flows national climate and development priorities.



Knowledge partnerships with academia, think tanks, civil society organizations and youth networks to provide a platform for knowledge sharing and exchange of ideas for bold climate actions.

Collective climate action presents a strong collaboration opportunity. Enhanced regional integration on these transformation areas and strong multi-stakeholder partnerships will be key to smooth transitions to a low-carbon future and resilient future.

Enabling environment for private sector engagement

The role of the private sector is critical in all four of the proposed transformations to bridge the financing gap, provide latest technologies and bring innovative approaches for a low-carbon and resilient future. Private sector participation can be accelerated by addressing regulatory barriers, perceived risks on returns, political instability, and data paucity.



REDUCING BARRIERS TO PRIVATE SECTOR ENGAGEMENT

- Simplifying environmental regulations for industries, making them transparent and predictable, and introducing risk-based approaches.
- Enabling entrepreneurial innovation in climate-smart solutions by providing conducive regulatory frameworks and enabling access to appropriate financial products and firm-level capability initiatives.
- Enhancing competition and removing barriers to entry in service sectors such as desalination, wastewater treatment, renewable energy, recycling.
- Strengthening building regulation and enforcement to mitigate climate change/disaster risks.



LEVERAGING GOOD PRACTICES TO INCREASE PRIVATE SECTOR PARTICIPATION

- **Green bonds.** IFC and PROPARCO supported the first green bond issuance to Banque Centrale Populaire (BCP) in Morocco to promote sustainable, environment-friendly projects. The 10-year maturity bond will be used to provide long-term funding for BCP, one of Morocco's largest banking groups.
- **Greening healthcare facilities.** IFC is supporting healthcare holding companies develop a network of high-quality hospitals and healthcare assets in North Africa, by mobilizing \$125M in debt and \$108.5m in equity – with IFC's green building standard and certification system (EDGE).
- **Climate finance for MSMEs.** In Tunisia, IFC and the Clean Technology Fund facilitated access to climate finance for MSMEs for climate smart agriculture, waste recycling and solar PV via the creation of a Sustainable Energy Financing business line.

Implementation support and monitoring



OPERATIONALIZING CLIMATE ACTION THROUGH WBG POLICY AND INVESTMENT PROGRAMS

Bringing the collective strength of the World Bank Group (WB, IFC, MIGA) to accelerate climate action in MENA.

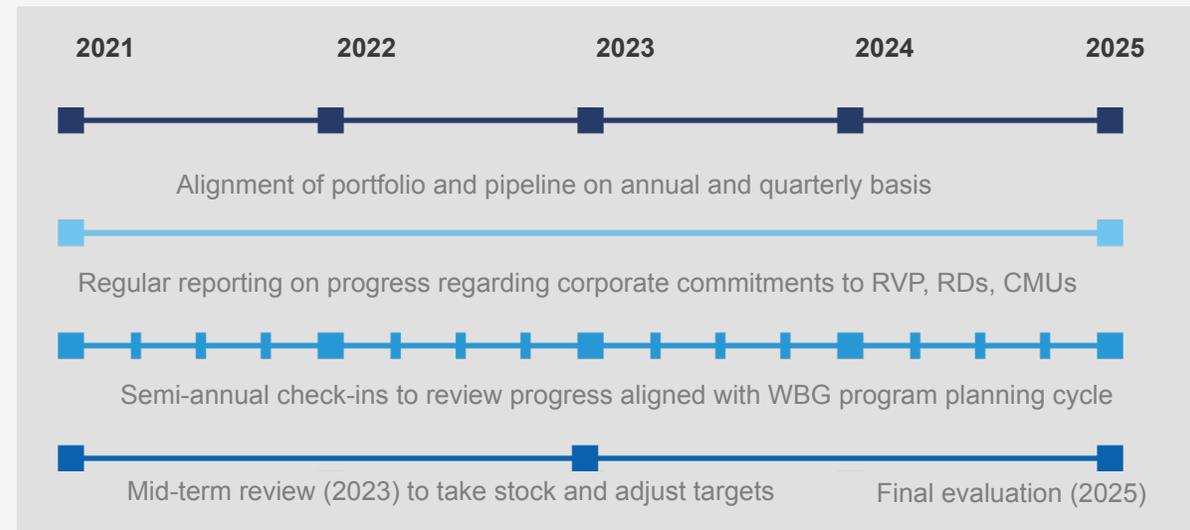
- Align knowledge and analytical agenda to include climate risks and opportunities.
- Integrate climate considerations in strategic country dialogue and key engagement instruments (SCDs, CPFs), including through Country Climate and Development Reports (CCDRs)
- Enhance technical support for project preparation by connecting sector teams and CMUs with resources to advance climate action.
- Crowd-in Trust Funds to foster analytical evidence to shape country dialogues and future pipelines.
- Leverage innovative products for enhanced private sector participation and manage political and financial risks for more ambitious climate action.



IMPLEMENTATION AND TRACKING

The roadmap is a live document allowing for course correction to reflect lessons during implementation and tracking.

- Support delivery of corporate commitments on climate change
- Periodic sector and country team discussions on implementation progress



Summing Up



Shape transformative programs and policies, along with cutting edge analytics and technical assistance.



Produce Country Climate and Development Reports (CCDRs) to fully integrate climate change and development



Support countries as they define, update and implement their NDCs and LTSs and inform our country engagement products



Develop stronger global, regional and country-level partnerships with key stakeholders and the private sector to promote regional collaboration



Deepen engagement with local organizations, civil society, youth networks and academia to create and support the sustained momentum for change.



Conduct regular monitoring and course correction to reflect lessons from implementation.



Regularly update the Roadmap to account for changing political contexts and development needs



The World Bank Group
Middle East & North Africa Climate Roadmap

Driving transformational climate action
and green recovery in MENA

FY 2021-2025
