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Climate Finance in the Arab Region

Technical Report

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Abbreviations

AAAA	Addis Ababa Action Agenda
ADA	Agence pour le Développement
ADB	Asian Development Bank
AF	Adaptation Fund
AfDB	African Development Bank
BA	Biennial assessment and overview of climate finance flows
BRs	Biennial Reports
CBD	Convention on Biological Diversity
CDG	Caisse de Dépôt et de Gestion
CDM	Clean Development Mechanism
CERs	Certified Emission Reductions
CIF	Climate Investment Funds
CMA	Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
CO_2	Carbon dioxide
COP	Conference of the Parties
CPI	Country Performance Index
CRF	Caribbean Resilience Fund
CTF	Clean Technology Fund
DAC	Development Assistance Committee
DfC	Debt for Climate
EBRD	European Bank for Reconstruction and Development
EGO	Amundi Planet Emerging Green One
EIB	European Investment Bank
ELD	Economics of Land Degradation Initiative
ERUs	Emissions Reductions Units
ESCWA	Economic and Social Commission for Western Asia
ETS	Emissions Trading Systems
FDI	Foreign Direct Investment
GBI	GEF Benefits Indicator
GCF	Green Climate Fund
GDP	Gross Domestic Product
GDPI	GDP-based index
GEF	Global Environment Facility
GHG	Greenhouse Gas
GNI	Gross National Income
IDBG	Inter-American Development Bank Group
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
INDCs	Intended Nationally Determined Contributions
INGO	International nongovernmental organisation
IUCN	International Union for the Conservation of Nature
IsDB	Islamic Development Bank Group
JI	Joint Implementation
JOD	Jordanian Dinar
LCU	Local Currency Units
LDCs	Least Developed Countries
LDCF	Least Developed Countries Fund
LULUCF	Land Use, Land Use Change and Forestry

MDBs	Multilateral Development Banks
MDGs	Millennium Development Goals
MENA	Middle East and North Africa
MIGA	Multilateral Investment Guarantee Agency
MOPIC	Ministry of Planning and International Cooperation
NAP	National Adaptation Plan
NAPAs	National Adaptation Programmes of Action
NDA	National Designated Authorities
NDCs	Nationally Determined Contributions
NGOs	Non-Governmental Organizations
ODA	Official Development Assistance
OECD	Organization for Economic Co-operation and Development
OOF	Other Official Flows
PES	Payments for Ecosystem Services
POPs	Persistent Organic Pollutants
PPPs	Public-Private Partnerships
RAF	Resource Allocation Framework
REDD+	Reduce Emissions from Deforestation and Forest Degradation in Developing Countries
RMUs	Removal Units
SCCF	Special Climate Change Fund
SCF	Standing Committee on Finance
SDGs	Sustainable Development Goals
SIDS	Small Island Developing States
STAR	System for Transparent Allocation of Resources
UNCCD	United Nations Convention to Combat Desertification
UNCDF	United Nations Capital Development Fund
UNCITRAL	United Nations Commission for International Trade Law
UNDESA	United Nations Department for Economic and Social Affairs
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollars
WBG	World Bank Group
WFP	World Food Programme

Executive Summary

The United Nations Framework Convention on Climate Change (UNFCCC) represents the global umbrella for undertaking negotiations on climate change. The adoption of the Paris Agreement in 2015 is considered a historic turning point in the negotiations, and significant progress has been made since then to operationalize the agreement. Key negotiated items include the nature of nationally determined commitments for pursuing climate action, and the responsibility for developed countries to provide financial and non-financial resources to support climate action by developing countries.

The most recent global data published by the UNFCCC identified USD 681 billion in climate finance flows in 2016. Private finance accounts for two-thirds of flows identified by the UNFCCC. Of the global total, just USD 55.7 billion were public international flows from developed to developing countries in 2016. Bilateral, regional and other flows from one source country to another country or group of countries were the largest source of public international climate finance flows from developed to developing countries in 2016, and represented USD 33.6 billion of this total.

Five multilateral climate finance funds serve as the financial mechanisms of the UNFCCC and its Paris Agreement, namely the Green Climate Fund (GCF), the Global Environment Facility (GEF), the Adaptation Fund (AF), the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF). The GEF manages the LDCF and SCCF. In practice these funds have been complex and slow to access. In 2016, these five funds collectively accounted for USD 1.6 billion of the USD 55.7 billion in public international climate finance flows to developing countries that was attributable to developed countries.

Specifically, a regional dataset accounting for USD 31.3 billion of the USD 33.6 billion in bilateral, regional and other flows found that Arab States received USD 4.6 billion bilateral flows in 2016, including USD 3.7 billion for mitigation, 0.7 for adaptation, and 0.3 billion for cross-cutting actions. This includes USD 1.4 billion in non-concessional loans, USD 2.3 billion in concessional loans, and just USD 0.7 billion in grants, with the remaining USD 0.35 classified as “other.”

The distribution of climate finance among countries within the Arab region was also very uneven, with 94% of reported bilateral flows in 2016 going to just five countries: Egypt, Qatar, Morocco, Tunisia and Jordan. Distribution was also uneven over time both regionally and by recipient state, with total bilateral, regional and other flows reported to the region increasing 162% in one year from USD 1.8 billion in 2015 to USD 4.6 billion in 2016. Limited improvements were also witnessed in 2018 and 2019 with Bahrain and the State of Palestine, respectively, awarded GCF projects in those years.

However, there are important **accounting weaknesses** underlying these totals, which are self-reported by developed country donors, multilateral development banks and multilateral climate funds.

- There is no way to measure the additionality of climate finance, because it is not differentiated from official development assistance (ODA), humanitarian aid, and other official flows, creating a risk that existing flows will be double counted as climate finance without mobilizing separate and additional finance flows;
- Most developed countries report committed finance, not disbursed finance, inflating reported totals as climate finance ramps up, and creating risks of double counting;
- Non-concessional finance is counted on par with concessional finance, despite fundamental differences in their value added to climate action; and
- Reported totals are not verified, despite potential for double counting and smoothing.

These accounting weaknesses mean that the quantity of finance flowing to the Arab region, and to other global regions, may be lower than is apparent from reported totals. This exacerbates the existing shortage of finance repeatedly reported by many Arab states and other developing countries.

There are also important **substantive gaps** found at both the global and regional level, and across bilateral and multilateral channels. The Paris Agreement calls for "*a balance between adaptation and mitigation, taking into account country-driven strategies, and the priorities and needs of developing country Parties"*. The Arab region needs more adaptation and grant finance, yet UNFCCC data on developed country support to Arab States through bilateral, regional, and other channels shows:

- Finance for mitigation exceeds finance for adaptation by a factor of 5 to 1 even though the Paris Agreement seeks a balance between finance for adaptation and mitigation;
- Loans exceed grants by 5 to 1, despite the need for grant support in many Arab States, particularly Arab LDCs, which received just 2% of these flows to the Arab region despite their need; and
- From a sector perspective, just 14% of these flows are for water and sanitation projects, compared to 76% for energy, transport, and infrastructure.

Globally, developed countries provide 20 times more support bilaterally than through the multilateral financial mechanisms of the UNFCCC by a factor of 20 to 1. This creates a risk that the supply is contingent on the priorities of the parties providing the finance, which may not be fully consistent with the nationally determined priorities of recipient states.

Financial resources need to be significantly scaled up to meet the pressing needs of developing countries to respond to climate change challenges. Accessing international public climate finance flows is a priority for Arab States and other developing countries. Yet, developing countries, including Arab States, are taking action. They are piloting and adopting locally or globally innovative financing mechanisms to mobilize additional climate finance resources for nationally determined climate actions. Many of these financing instruments are not new but may represent new approaches to climate finance for a given country or sector. For example, de-risking tools for investors, like political risk insurance or investment guarantees, can help unlock new sources of investment. The use of green bonds and sharia compliance green sukuk is growing quickly, providing an option to quickly raise debt for projects that will generate a cashflow to repay investors. Other non-traditional sources with proven ability to unlock new sources of funding include ecosystem services, results-based financing, and debt for climate swaps, among others.

In sum, the type of finance provided to Arab States is not consistent with national priorities. This mismatch of climate finance supply and demand is a quality problem. Additionally, while global climate finance flows remain challenging to measure, available data suggests that total amount of international climate finance flows do not yet meet the total financing need of the region. Accordingly, it is both the **quantity** and **quality** of flows to Arab States that is not yet sufficient. It will also likely remain insufficient as Parties to the Convention continue to negotiate an annual collective quantified goal for increasing the Paris Agreement climate finance target from a floor of USD 100 billion in 2020. Many critical details of the transparency mechanism for reporting on climate finance formats has also yet to be elaborated, with underlying unresolved questions about how to define climate finance.

I. Introduction

This technical report examines existing and potential flows of climate finance to Arab States. The introduction provides an overview of international negotiations related to climate finance. Chapter II reviews existing climate finance flows as reported under the United Nations Framework Convention on Climate Change, including the most recently reported data on financial flows from developed countries to Arab States, as well as data on flows via multilateral development banks and private sector flows. Chapter III reviews other climate financial instruments that may help to attract and mobilize additional finance to support the achievement of nationally determined climate actions and priorities. Key findings and conclusions are then provided in the final chapters. Redistributive and national budgeting policies are beyond the scope of this report.

A. Evolution of International Negotiations related to Climate Finance

1. *Climate change negotiations*

Negotiations to develop a climate change agreement were first initiated in 1988 during the World Conference of the Changing Atmosphere: Implications for Global Security in Toronto, Canada, where discussions focused on the need to develop a global pact to protect the atmosphere and take immediate actions to reverse climate change. The Conference called for cutting global carbon dioxide (CO_2) emissions by 20% by 2005 and establishing a world atmosphere fund financed in part by a tax on fossil fuels.

In 1992, the United Nations Conference on Environment and Development (Earth Summit) was held in Rio de Janeiro and concluded with the signature of the United Nations Framework Convention on Climate Change (UNFCCC), which entered into force in 1994. The Convention serves as the global umbrella for climate change negotiations. The Conference of the Parties (COP) to the Convention meets each year to make decisions on the implementation of the Convention. The first COP meeting (COP 1) was held in 1995 in Berlin. Preparatory meetings are undertaken prior to each COP to support the negotiations.

In 1997 at COP 3, the Kyoto Protocol was adopted. The Protocol focuses on climate change mitigation and includes binding commitments for developed countries, which are recognized as the main emitters of greenhouse gases that contribute to man-made climate change. The Protocol entered into force in 2005 and covered commitments for emission reductions between 2008 and 2012.

In 2007 at COP 13, the Bali Action Plan was adopted as a new plan for climate change mitigation involving both developed and developing countries. In 2009, during COP 15, the Copenhagen Accord was prepared, which endorsed the continuation of the Kyoto Protocol and stated that "developed countries shall provide adequate, predictable and sustainable financial resources, technology and capacity-building to support the implementation of adaptation action in developing countries." However, while the Parties agreed to "take note of" the accord, it was not endorsed and is not legally binding.

In 2010 at COP 16, the Cancun Agreements were adopted. Parties through these agreements committed to a maximum temperature rise of 2 degrees Celsius above pre-industrial levels, and to consider lowering that maximum to 1.5 degrees in the near future. Furthermore, "Parties affirmed that adaptation must be addressed with the same level of priority as mitigation" and adopted the Cancun Adaptation Framework, which established the national adaptation plan (NAP) process as a voluntary process.[1] COP 16 also decided to establish the Green Climate Fund.

In 2011, at COP 17, preparations for a new climate change agreement were initiated with the establishment of the Ad Hoc Working Group on the Durban Platform for Enhanced Action.

[1] UNFCCC, 2011. FCCC/CP/2010/7/Add.1.

In 2012, at COP 18 in Doha, the Doha Amendment to the Kyoto Protocol was introduced to cover emission reductions between 2013 and 2020, but the amendment did not enter into force as it was not been ratified by at least three-fourths of the Parties to the Kyoto Protocol.

In 2013, at COP 19 in Warsaw, Parties agreed to draft a new negotiating text for a climate change agreement. Parties also agreed to convene biennial high-level ministerial dialogues on climate finance starting in 2014 and ending in 2020.

In 2014, COP 20 adopted the draft negotiating text and requested Parties of the Convention to submit their Intended Nationally Determined Contributions (INDCs) before COP 21, also referred to as the Lima Call for Climate Action. In 2015, 187 Parties (including 19 Arab countries) out of 196 Parties to the Convention submitted their INDCs, listing their conditional and unconditional contributions to limit emissions by 2030. Many country submissions also include commitments on adaptation.

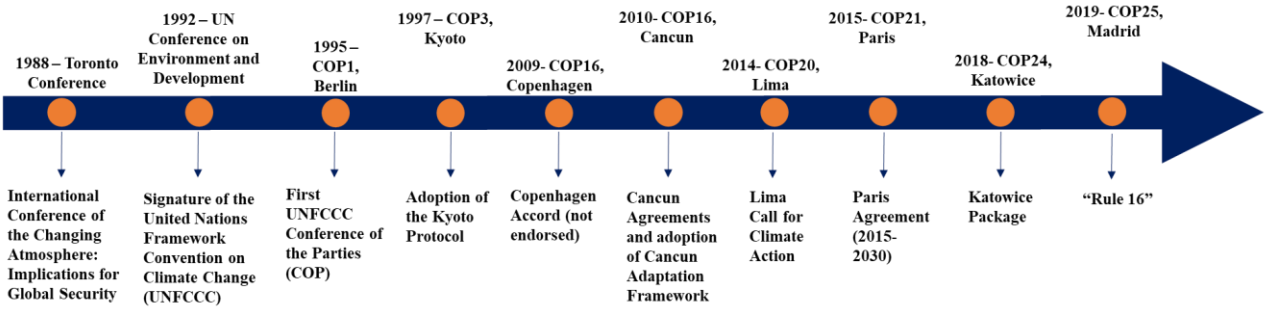
In 2015, COP 21 saw what was called a historic turning point in the negotiations with the adoption of the Paris Agreement on 12 December 2015, less than three months after global consensus on the 2030 Agenda for Sustainable Development. The Agreement aims to combat climate change by adopting policies and actions that would reverse its implications. It includes both binding and non-binding clauses for developed and developing countries, in addition to guiding means to implement the Agreement. The Paris Agreement also formalized the requirement for Parties to submit an adaptation communication (Articles 7.9 and 7.10), which may be in the form of a NAP, as established under the Cancun Adaptation Framework. Under the Agreement, a national adaptation communication should be submitted in addition to a Nationally Determined Contribution (NDC). By December 2019, 187 Parties to the Convention had ratified the Paris Agreement.

In 2018, COP 24 agreed on rules to implement the Paris Agreement that will enter into force in 2020. These rules are sometime referred to as the Katowice Package and define modalities, procedures and guidelines to implement the enhanced transparency framework, in accordance with Article 13 of the Paris Agreement. This include rules on how to measure and report on efforts to cut carbon emissions, with biennial reporting required beginning in 2024 to track progress on NDC implementation. The rules also define how to measure and report on financing, technology transfer and capacity building support provided, mobilized and received, in accordance with Articles 9, 10, and 11 of the Paris Agreement.

In 2019 at COP 25, further focus was placed on means for operationalizing the Paris Agreement, with specific focus placed on Article 6 related to partnerships and cooperative mechanisms for assisting countries meet and raise the climate ambition. This included negotiations on possible market and non-market mechanisms for carbon trading; however, no substantive agreement was reached. Similarly, negotiations on reporting requirements and timelines for transparency were not concluded, with many decisions delayed for further negotiation at COP26 in 2020, under rule 16 of the UNFCCC process.

This progression is illustrated in figure 1.

Figure 1 Evolution of Climate Change Negotiations



Source: Modified based on ESCWA, *ESCWA Water Development Report 7: Climate Change Adaptation and Disaster Risk Reduction*, E/ESCWA/SDPD/2017/3.

2. *Climate finance*

The evolution of climate finance followed a parallel track to that of climate change negotiations. Financial resources are needed for climate change adaptation and mitigation, and to address loss and damages caused by climate change. The issue of climate financing was first discussed in 1992 with the adoption of the UNFCCC. The Convention acknowledged the historical responsibility of developed countries for the majority of emissions, and "the common but differentiated responsibilities and respective capabilities" of developed and developing countries, explicitly establishing that developed countries are responsible for securing financial resources to help developing countries cope with climate change (see box). This issue was reiterated in the Kyoto Protocol – in which references to particular articles from the Convention were made. The Global Environment Facility was established in 1992 by the World Bank, ahead of the Rio de Janeiro Earth Summit that adopted the UNFCCC.

> *"The developed country Parties and other developed Parties included in Annex II shall provide* ***new and additional*** *financial resources to meet the agreed full costs incurred by developing country Parties in complying with their obligations under Article 12, paragraph 1."*
>
> (UNFCCC, Article 4, paragraph 3)

The issue of climate financing was again addressed in the Copenhagen Accord in 2009 (COP 15) and, for the first time, developed countries listed under Annex II of the UNFCCC (Annex II parties) pledged to mobilize USD 100 billion climate finance per year to developing countries not listed in Annex I (non-Annex I parties) by 2020 from public and private sources.[2] While the Copenhagen Accord was not endorsed, the same pledge was reiterated in Cancun during COP16 in 2010 and in the ensuing Cancun Agreements which recognized that, "developed country Parties commit, in the context of meaningful mitigation actions and transparency on implementation, to a goal of mobilizing jointly USD100 billion per year by 2020 to address the needs of developing countries."[3] Parties also decided to establish the Green Climate Fund in 2010 at COP 16, but it did not begin operations until 2015.

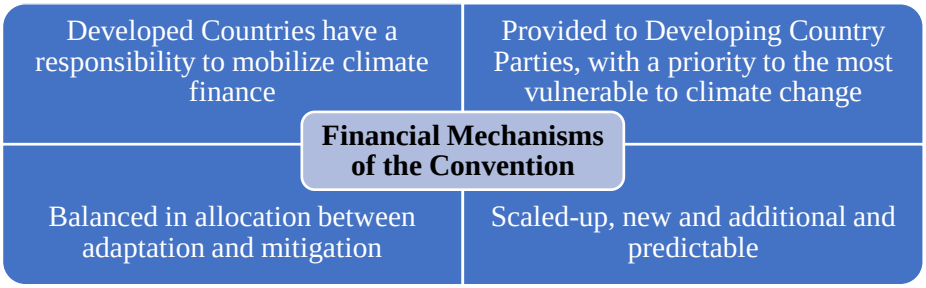
In 2015, the Paris Agreement adopted the financial mechanisms of the UNFCCC and its operating entities as the Financial Mechanism of the Agreement. The Paris Agreement text does not quantify developed countries' financial commitment, but COP decision 1.CP/21 that adopts the Paris Agreement "strongly urges" developed countries to mobilize USD 100 billion annually by 2020[4] and to scale-up this amount beyond 2025. Furthermore, developing countries have argued that funds mobilized for climate change under this goal should be separate and additional to development aid and should not be counted towards developed countries' commitment to allocate 0.7% of their gross national income for official development assistance under the Addis Ababa Action Agenda.[5] The Paris Agreement recognized the responsibility of developed countries to mobilize climate finance and welcomed voluntarily contributions from developing countries. Article 2.1c of the Paris Agreement also establishes a goal of "making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development." This scope is broader than the goal of mobilizing USD 100 billion in finance annually by 2020, with different policy implications.

While long term finance has been on the agenda all COPs since Paris (22, 23, 24 and 25), Parties have been unable to reach an agreement on a higher long-term target beyond 2020 for climate finance mobilization. In 2016, at COP 22 in Marrakesh, the 2nd High-level Ministerial Dialogue on Climate Finance noted the need to increase climate finance, particularly adaptation finance.[6] While long term climate finance was on the agenda, this potentially included targets above USD 100 billion in financing per year by Annex I parties after 2020; however, no specific agreement on targets past 2020 was reached. In 2017 at COP 23 in Bonn, long term climate finance was again on the agenda, and again no specific agreement on targets for mobilizing finance past 2020 was reached by the Parties. In 2018, at COP 24 in Katowice, the 3rd High-level Ministerial Dialogue

[2] UNFCCC 2010. FCCC/CP/2009/11/Add.1.
[3] UNFCCC, 2011. FCCC/CP/2010/7/Add.1. p. 17.
[4] UNFCCC, 2016. FCCC/CP/2015/10/Add.1.
[5] UNGA, 2015. The Addis Ababa Action Agenda of the Third International Conference on Financing for Development was adopted in July 2015.
[6] UNFCCC, 2018b.

on Climate Finance[7] discussed long term climate finance, and, as with the previous two high-level ministerial dialogues, once again did not agree on any specific targets. The parties also did not agree to a definition of how to measure whether climate finance flows are *additional* to existing development aid flows. The features for defining climate finance also remained vague, although figure 2 outlines a general understanding of the characteristics of climate finance.

Figure 2 Climate Finance Characteristics



At COP 24 in Katowice, however, progress was made on transparency mechanisms. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) agreed to require developed countries to biennially communicate information on financial support provided and mobilized, including inter alia the type of support (e.g., concessional or non-concessional), recipient countries, funding channels, recipient sectors and subsectors, purpose (e.g., adaptation or mitigation) and funding commitments versus disbursements. This improved transparency framework will make it easier to comparably track and measure global, regional and national climate finance flows and gaps. Information will be posted on a dedicated online portal managed by the UNFCCC Secretariat. Furthermore, the Parties agreed to provide "underlying assumptions, definitions and methodologies, as applicable, used to identify financial support provided and mobilized," including methods for calculating concessionality.

Parties also agreed in 13/CMA.1 "that the Adaptation Fund shall exclusively serve the Paris Agreement and shall no longer serve the Kyoto Protocol once the share of proceeds under Article 6, paragraph 4, of the Paris Agreement becomes available."[8] As of 1 January 2019, the Adaptation Fund formally serves the Paris Agreement instead of the Kyoto Protocol. The Parties, in decisions 3/CP.24 also urged "developed country Parties to continue to scale up mobilized climate finance" and to achieve more balance between adaptation and mitigation finance[9] and agreed in 14/CMA.1 to "initiate…deliberations on setting a new collective quantified goal from a floor of USD 100 billion per year…" in 2020.[10] This decision on negotiating resource mobilization from a floor of USD 100 billion per year did not differentiate between the responsibilities developed and developing countries.

The transparency rules agreed to at Katowice in 2018 under Decision 18/CMA.1, enter into force in 2020 and require parties to provide "Information on … how a Party has determined finance to be concessional and/or ODA, including by using information such as grant equivalency, institution and/or instruments-based approaches."[11] It is not clear if this will be sufficient to ensure comparability, as the Parties have not yet finalized the specifics of the methodology agreed to at Katowice.

3. *International development finance negotiations*

Climate change negotiations related to climate finance have occurred in parallel with the international development finance negotiations. While these are separate processes, they provide important context to understanding positioning of climate finance flows under the Paris Agreement in relation to other global

[7] UNFCCC, 2018b.
[8] UNFCCC CMA 1-3, 2018.
[9] UNFCCC COP 24. 2018.
[10] UNFCCC CMA 1-3, 2018.
[11] UNFCCC CMA 1-3, 2018.

sustainable development finance flows. The evaluation of development finance negotiations is thus elaborated below.

In 2002, the Monterrey Consensus on Financing for Development was adopted at the first International Conference on Financing for Development. It recognized the importance of increasing international aid to meet the Millennium Development Goals (MDGs) and established a target for donor countries to allocate at least 0.7% of their gross national income (GNI) to Official Development Assistance (ODA).

In 2008, developed countries reaffirmed their commitment to mobilize ODA at the Second International Conference on Financing for Development. Resulting consensus in the Doha Declaration affirmed the importance of nationally defined development strategies, and the mobilization of international, domestic and private sources of finance to achieve development objectives.

In 2015, the Third International Conference on Financing for Development led to the adoption of the Addis Ababa Action Agenda (AAAA), which committed strong international support for public services "building on country-led experiences" (Article 12). The AAAA notes that developed countries need to step up efforts to meet ODA targets of 0.7% of GNI overall, including 0.15% of GNI allocations to Least Developed Countries (LDCs).[12] However, while recognizing the special challenges faced by LDCs and Small Island Developing States, (SIDS), it does not commit new financial resources to them.

As of 2016, ODA allocation by five European countries reached or exceeded the target of 0.7% GNI, but on average remains below this target at an average of 0.31% of GNI among the 29 members of the Development Assistance Committee (DAC) of the Organization for Economic Co-operation and Development (OECD).[13] Turkey and the United Arab Emirates, which are not members of the DAC, allocated over 0.7% of their GNI to ODA in 2017.[14]

Beginning in 2019, the OECD will only measure the grant component of concessional loans when calculating ODA. The OECD-DAC agreed to this change in 2014 to "guarantee a fairer picture of provider effort." Previously, concessional loans (loans with at least a 25% grant element) were counted as ODA, rendering it difficult to evaluate the true amount of grant finance within ODA compared to loan finance. The OECD reports this approach was adopted because it "provides a more realistic comparison of loans and grants, and encourages the use of grants and highly concessional loans as these will continue to play a key role in mobilising resources to support the Sustainable Development Goals (SDGs)."[15] For comparability over time, the OECD will also continue to calculate ODA using the pre-2019 method as a reference statistic.[16]

The exclusion of the loan component of ODA through this updated method of accounting will likely result in a significant downward revision of OECD estimates of ODA. By comparison, the UNFCCC Biennial Assessment of Climate Finance flows does not yet disaggregate the grant component of concessional loans. Furthermore, non-standard reporting formats used by parties in biennial reports make it difficult to disaggregate grant equivalents across the board.

B. Climate Change in the Arab Region

The Arab region is particularly vulnerable to climate change and suffers from significant socio-economic and environmental challenges. Countries in the region have varying adaptive capacities to address the repercussions of climate change. The region suffers from increasing temperatures, severe water scarcity, increasing frequency and intensity of extreme events such as floods, droughts, heat waves.[17] Water scarcity and the decrease in annual rainfall make most of the region arid or semi-arid.[18] The region also suffers from

[12] UNSG, 2015. Addis Ababa Action Agenda, para. 51.
[13] OECD, 2018d.
[14] OECD, 2018a.
[15] OECD, 2018c.
[16] OECD, 2018c.
[17] ESCWA et al., 2017a. E/ESCWA/SDPD/2017/RICCAR/Report.
[18] ESCWA et al., 2017a. E/ESCWA/SDPD/2017/RICCAR/Report.

acute poverty, a significant sustainable development challenge that burdens governments and hinders their capacities to address climate change implications. This is manifested in both urban and rural areas, where over 50% of the region's population live in cities, but 67% of the region's poor live in rural areas with the rural population account for 48% of the region's population.[19]

The repercussions of climate change on national and local development exercise significant pressure on governments to achieve water, energy and food security for current and future generations. These impacts exacerbate the development challenges posed by persistent conflicts and occupation, which are exerting significant pressures on the several governments to meet basic needs in a region that hosts more than 53% of all refugees and 37% of displaced populations in the world.[20] Furthermore, the most vulnerable communities are among the most affected by climate change, including the Arab region's Least Developed Countries (LDCs).[21]

Continuing with the current business-as-usual practices, average temperatures in the Arab region are likely increase by up to 5^{o} Celsius by the end of this century compared to the start of the 21st century, threatening the health and livelihoods of urban and rural communities alike. This is despite the fact that the Arab region emits around 5% of global greenhouse gas emissions, although its carbon footprint is increasing rapidly.[22] Adaptation is thus a priority for the Arab region, which was a key message at the 2019 Arab Forum for Sustainable Development (Beirut, April 2019). Furthermore, precipitation levels are expected to decrease in most of the region, heat extremes are expected to increase, drought and flood occurrences are expected to increase in some areas.[23] These repercussions extend beyond the realm of climate change and affect many sectors. For instance, the negative impact of climate change on water availability, increasing droughts and desertification have a direct impact on agriculture and livestock; the increasing temperature is even causing wider transmission of some neglected tropical diseases.[24]

Financing climate change requires large investments in mitigation and adaptation projects in the Arab region. While climate change adaptation is a priority, costs are significant (particularly up-front investment costs) and available resources are stretched. Arab 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 (consolidated fiscal deficit stood at 9.9% of GDP in 2016)[25] and geopolitical instability in many countries. Private sector involvement in adaptation and mitigation projects may be able to supplement, but not replace public sector expenditure, but is also still limited. Access to public international climate finance is insufficient in terms of both **quantity and quality**, as the type of finance supplied is not consistent with the priorities of the Arab region (a **quality** problem), and the scale of support remains insufficient (a **quantity** problem).

[19] ESCWA, 2017c. E/ESCWA/EDID/2017/1.
[20] ESCWA, 2017c. E/ESCWA/EDID/2017/1.
[21] ESCWA et al., 2017a. E/ESCWA/SDPD/2017/RICCAR/Report.
[22] ESCWA, 2019, E/ESCWA/SDPD/2019/1.
[23] ESCWA, 2017a. E/ESCWA/SDPD/2017/RICCAR/Report
[24] ESCWA, 2017a. E/ESCWA/SDPD/2017/RICCAR/Report.
[25] ESCWA, 2017c. E/ESCWA/EDID/2017/1.

II. International Climate Finance Flows

The text of both the UNFCCC itself and of the Paris Agreement recognize the responsibility of developed countries to mobilize public resources to finance climate change projects in developing countries. This is based on the historical responsibility of developed countries for greenhouse gas emissions. To date, the target to mobilize USD 100 billion international public climate finance flows from developed (Annex II) to developing (non-Annex I) countries has not been met, and current flows do not meet the estimated financial need.

The UNFCCC *2018 biennial assessment and overview of climate finance flows* (BA) estimates total 2016 flows of international public climate finance from developed countries to developing countries, including both grants and concessional loans, to be USD 55.7 billion (grey background in figure 3). This includes USD 33.6 billion through bilateral, regional, and other channels from Annex II to non-Annex I countries, USD 19.7 billion through multilateral development banks from OECD-DAC members (minus the Republic of Korea) to OECD-DAC eligible recipients, and USD 2.4 billion through Multilateral Climate Funds from Annex II to non-Annex-I countries, including 1.6 billion through the funds of the UNFCCC Financial Mechanism.[26]

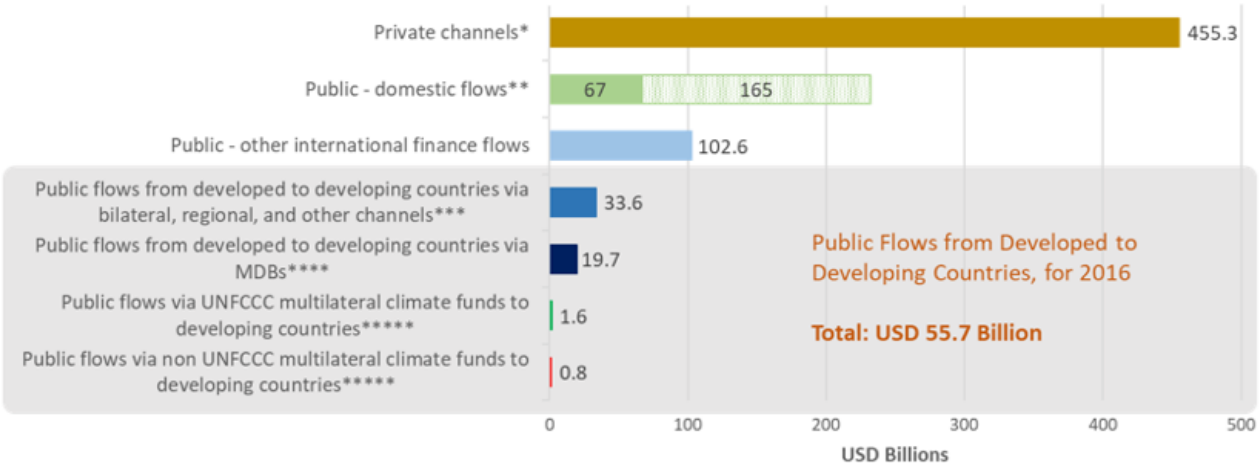
More broadly, the 2018 BA estimates total international public and private climate finance flows to have been USD 681 billion in 2016, including USD 455.3 billion in private finance, or two thirds of total flows, and nearly 9 times more than the USD 55.7 billion in public international finance from developed countries to developing countries.[27] While public and private finance are distinct, and have different roles in an efficient scenario, this scale clearly shows that private financing plays a critical role in climate finance.

A large majority of global climate finance flows have been committed to renewable energy and energy efficiency investments, estimated at USD 526.8 billion in 2016, primarily through private finance. This represents 77% of total climate finance flows reported by the UNFCCC that year.[28]Furthermore, for all financing channels, more finance flows to mitigation projects than to adaptation projects. Flows to adaptation only account for 29% of bilateral flows from Annex II parties to the UNFCCC, 25% of flows from multilateral climate funds and just 21% of finance provided by multilateral development banks (MDBs).[29]

> *"Acknowledging that the largest share of historical global emissions of greenhouse gases originated in developed countries and that, owing to this historical responsibility, developed country Parties must take the lead in combating climate change and the adverse effects thereof"*
>
> (UNFCCC, 2010, FCCC/CP/2010/7/Add.1)
>
> *"Developed country Parties should continue to take the lead in mobilizing climate finance from a wide variety of sources, instruments and channels, noting the significant role of public funds, through a variety of actions, including supporting country-driven strategies, and taking into account the needs and priorities of developing country Parties. Such mobilization of climate finance should represent a progression beyond previous efforts."*
>
> (Paris Agreement, Article 9, paragraph 3)
>
> *"International public finance plays an important role in complementing the efforts of countries to mobilize public resources domestically, especially in the poorest and most vulnerable countries with limited domestic resources. Our ambitious agenda puts significant demands on public budgets and capacities, which requires scaled-up and more effective international support, including both concessional and non-concessional financing."*
>
> (Addis Ababa Action Agenda, Annex II, paragraph 50)

[26] UNFCCC SCF, 2018, p. 56.
[27] UNFCCC SCF, 2018, p. 56.
[28] UNFCCC SCF, 2018, p. 57.
[29] UNFCCC SCF, 2018, p. 80.

Figure 3 Global Climate Finance Flows Reported by the UNFCCC, by Source, 2016



Notes: Data on public international flows reported by the UNFCCC includes risk capital as well as grant finance. While reporting formats are not standard, many biennial reports submitted by the parties include Official Development Assistance (ODA) as well as Other Official Flows (OOF).

[a] The UNFCCC notes "High-quality data on private investments in mitigation and finance in sectors such as agriculture, forests, water and waste management are particularly lacking."

[b] USD 67 billion is officially reported by the UNFCCC Standing Committee on Finance, based on a 32-country dataset. While comprehensive data is not available for all countries, the UNFCCC Standing Committee on Finance *estimates* USD 157 billion in domestic public expenditure by developing countries and USD 75 billion by developed countries, giving a global total of USD 232 billion.

[c] Developed countries are defined as OECD-DAC members, except the Republic of Korea. Developing countries are defined as countries that are not members of the OECD-DAC. MDBs are multilateral development banks. Flows are attributed to developed countries based on their ownership share in MDBs, and only include the own resources of MDBs; funds from other sources channelled through MDBs are not counted.

[d] Developed countries are defined as those listed in UNFCCC Annex II. Developing countries are those not listed in UNFCCC Annex I.

[e] Developing countries are defined as those countries not listed in UNFCCC Annex I

Source: Elaborated by ESCWA based on UNFCCC Standing Committee on Finance *2018 Biennial Assessment and Overview of Climate Finance Flows Technical Report.*

However, at existing levels of climate finance flows, the need for both adaptation and mitigation finance across all sectors remains unmet. For example, the IPCC estimated in 2018 that annual energy-related investments of USD 830 billion (in 2010 USD values) will be required as part of efforts to limit warming to 1.5°C, but does not provide an estimate of other mitigation costs.[30] The Fifth Assessment Report of the IPCC (2014) estimated annual adaptation costs in developing countries of at least USD 70 to 100 billion, while noting that adaptation costs are likely to increase if mitigation targets are not met.[31] In 2016, the United Nations Environment Programme (UNEP) estimated the annual, global adaption finance need to be between USD 140 and 300 billion, with a projected increase to USD 280 to 500 billion by 2050.[32] In 2018, UNEP emphasized that these projections likely underestimate the need.[33]

Data on regional finance flows is also incomplete. This is complicated by the fact that different regional segmentations are used by different institutions and sources of information. However, available data shows that global trends on the distribution between adaptation and mitigation, as well as the type of financing (grants, concessional, or non-concessional) appear to be applicable to climate finance flows to Arab States. The following sections review climate finance flows from the following sources in more detail:

- International public finance from developed to developing countries
- International private finance flows
- Dedicated climate funds

[30] IPCC, 2018.
[31] As referenced in UNDESA, 2016.
[32] UNFCCC SCF, 2018, p. 96.
[33] UNEP, 2018.

The sections provide an overview of current trends globally and in Arab countries, including the degree to which Annex II parties are fulfilling their commitment to non-Annex I parties. International public flows are examined in the greatest detail, particularly flows through UNFCCC Financial Mechanism and progress towards the target of USD 100 billion in annual climate finance flows from developed to developing countries by 2020.

A. International Public Climate Finance Flows from Developed to Developing Countries

The UNFCCC reports[34] that international public climate finance flows totalled USD 158.2 billion in 2016, the most recent comprehensive reporting year. This includes 55.7 billion in public flows from developed to developing countries, plus 102.6 billion in other public flows (e.g., developing to developing, and developed to developed country flows).

The high bound estimate of USD 55.7 billion in public international flows from developed countries to developing countries represents an increase of 14% from the estimated USD 48.7 billion in international public climate finance flows in 2015. This section focuses on the USD 55.7 billion in international public finance flows from developed countries to developed countries.

The majority of the USD 55.7 billion in public international climate finance flows from developed to developing countries in 2016 flowed through multilateral, bilateral, regional, and other channels. Flows through the dedicated climate funds that are the financial mechanisms of the UNFCCC only accounted for USD 1.6 billion in 2016, or less than 3% of public international flows that year, and less than 0.2% of the USD 681 billion in global climate finance flows reported in 2016, drawing upon the totals presented in figure 3. The amount flowing through the dedicated UNFCCC climate funds increased through 2018, with over USD 2 billion committed by the Green Climate Fund (GCF) alone, roughly double 2017 GCF commitments. Nevertheless, flows through dedicated UNFCCC climate funds continue to be a fraction of global flows.

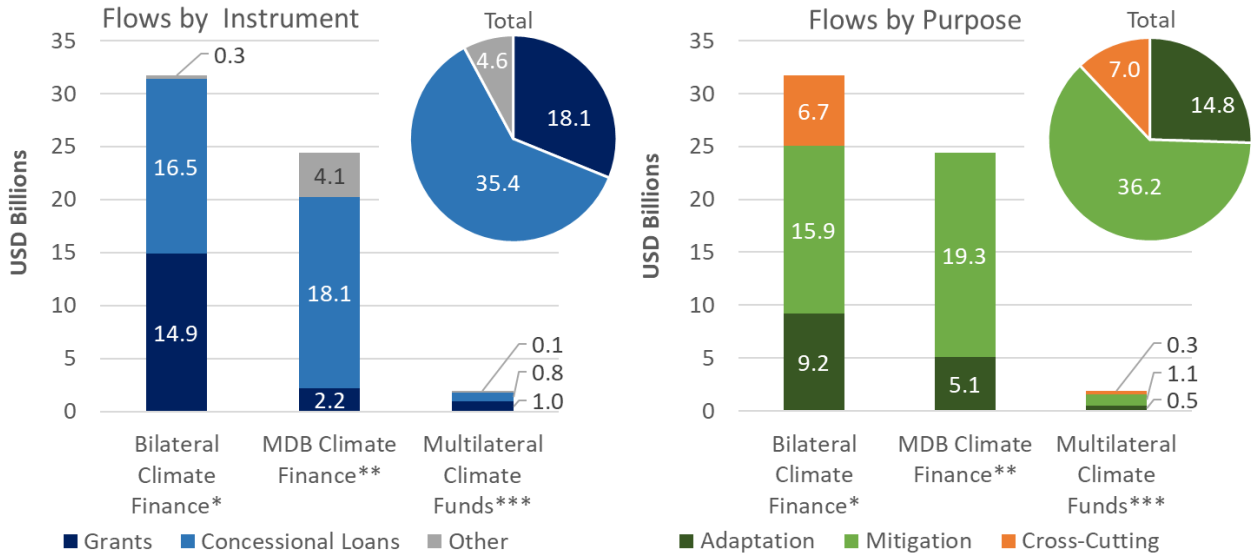
The Paris Agreement seeks a balance between finance for adaptation and mitigation, but across all international public financing channels, the majority of funds are committed to mitigation projects (figure 4). This is particularly the case among MDBs, which commit 79% of finance to mitigation projects. While additional research is necessary, this may reflect that there is a higher share of bankable projects in the mitigation sector than the adaptation sector.

While loans account for the majority of mitigation finance, adaptation finance typically has higher concessionality. According to the UNFCCC, grants accounting for 62% of adaptation finance provided through bilateral channels and multilateral climate funds in 2015, increasing to 94% in 2016. In comparison, grants, accounted for just 9% of MDB adaptation finance in 2016, highlighting a different approach to adaptation by these banks.[35] Conversely, grants accounted for just "25 per cent of bilateral flows, 31 per cent of multilateral climate fund approvals and 4 per cent of MDB investments."[36]

The distribution of global climate funds is also uneven across sectors. Most global climate finance flows were committed to renewable energy and energy efficiency investments, estimated at USD 526.8 billion in 2016, primarily through private finance. This represents 77% of total climate finance flows that year.[37]

[34] UNFCCC SCF, 2018.
[35] UNFCCC SCF, 2018, p. 80.
[36] UNFCCC SCF, 2018, p. 80.
[37] UNFCCC SCF, 2018, p. 57.

Figure 4 Segmentation of International Public Finance Flows from Developed to Developing Countries: Annual Average for 2015-2016



* The UNFCCC SCF 2018 reports this includes only concessional flows from Annex II countries to developing countries
** Data on MDB Finance includes all MDB finance flows to developing countries, not just flows attributable to developed countries. USD 19.3 of the total USD 24.4 billion in flows via MDBs are attributed to developed countries by the UNFCCC.
***Data on flows via multilateral climate funds includes funds that serve the UNFCCC as well as other funds (for full list, see UNFCCC SCF, 2018. Page 10).
Source: Elaborated by ESCWA based on UNFCCC Standing Committee on Finance 2018 Biennial Assessment and Overview of Climate Finance Flows Technical Report, table 3.1

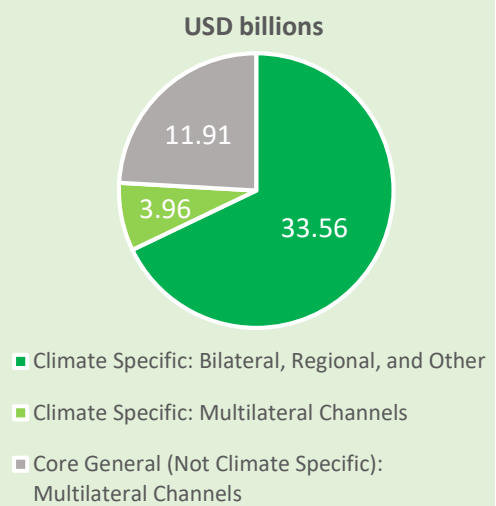
1. *Bilateral and regional finance flows from developed to developing countries*

Developed countries listed in Annex II of the UNFCCC provided USD 49.4 billion to non-Annex I developing countries in 2016, including USD 37.5 billion in climate-specific finance and USD 11.9 billion of "'core general' public financial support to multilateral institutions that Annex II parties are unable to confirm as climate-specific."[38]

USD 33.56 billion of the USD 49.4 billion was provided through bilateral, regional, and other parties (figure 5). The remaining USD 15.87 billion of the USD 49.4 billion is attributed to financing channelled by Annex II countries to developing countries through multilateral institutions, of which only USD 3.96 billion is climate specific.[39] The USD 37.5 billion climate-specific flows in 2016 represented a 14% increase from USD 33 billion in climate-specific finance reported for 2015.[40] Similarly, finance during the period 2015-2016 represented a 17% annual increase from the period 2013-2014.[41]

Accounting practices in Biennial Reports (BRs) submitted by Annex II countries to the UNFCCC vary. Of parties that reported financing sources, some include only ODA in their

Figure 5 Climate Finance Flows from Developed[a] to Developing[b] Countries



[a] Refers to UNFCCC Annex II Parties
[b] Refers to UNFCCC non-Annex I Parties
Source: Developed by ESCWA based on UNFCCC SCF, 2018.

[38] UNFCCC SCF, 2018, pp. 63-64.
[39] UNFCCC SCF, 2018, p. 64.
[40] UNFCCC SCF, 2018, p. 63.
[41] UNFCCC SCF, 2018, p. 63.

BRs,[42] while others also included non-concessional finance.[43,44] Reported totals provide a useful indication of financial flows, although the UNFCCC notes that there are outstanding challenges with transparency, comparability, and consistency of data, particularly with regard to private sector mobilization, but also including public finance flows. The transparency mechanisms adopted by the Katowice package are designed to improve transparency, comparability, and consistency of bilateral climate finance reports once they are implemented. The specific methodology, including whether to disaggregate OOF from ODA, has not yet been finalized.

Given that there is an existing target for developed countries to provide 0.7% of GNI to ODA flows, reiterated by the Addis Ababa Action Agenda, stakeholders from developing countries have often argued that the goal for Annex II countries to provide USD 100 billion in new and additional climate finance per year to developing countries by 2020 should not include ODA flows under the 0.7% target. However, it is also important to note that the Katowice Package and refers to a "collective quantified goal" for future negotiations, without reference to differentiated responsibilities.[45]

a) Bilateral, regional, and other public international climate finance flows to Arab States

The UNFCCC maintains an online database of bilateral, regional and other climate finance flows based on the Biennial Reports (BRs) submitted by developed countries that are members of Annex II, as well as BRs optionally submitted by other countries. "Bilateral, regional, and other" refer to flows from one Annex II country to a state, a region, or other grouping of multiple countries. Flows in this category are self-reported by each Annex II party, and do not include finance flows through multilateral channels (multilateral climate funds or multilateral development banks).

Annex II parties report that they provided USD 33.6 billion in climate specific finance globally through bilateral, regional, and other channels in 2016, and USD 29.9 billion in 2015. Details on the recipient countries or regions, type of finance, and type of activity is provided for USD 31.3 billion of this amount in 2016. Data for USD 1.9 billion in flows from the United States in 2016 is not available. An analysis of bilateral, regional, and other climate finance flows reported to Arab States, as well as flows reported to the Middle East and North Africa region, is presented below based on this partial dataset. Box 1 presents a summary of the data source and limitations, and a detailed methodology is presented in Appendix A.

Bilateral, Regional, and Other Climate Finance Flows Data Set: Source and Limitations

The data analyzed by ESCWA is self-reported information provided by UNFCCC Annex II parties in their Third Biennial Reports. ESCWA has not attempted to verify the reported data or definitions and has noted the data limitations defined below. The information presented herein does not necessarily reflect the views of ESCWA, the United Nations, nor the authors, who make no judgement as to the completeness, accuracy, or correctness of the underlying data. Rather, ESCWA presents this analysis to disseminate the information reported by the UNFCCC parties in a more accessible format and with a regional focus, for review by any relevant stakeholders. Furthermore, neither the data presented herein, nor the underlying definitions and assumptions used by the Annex II parties in preparing the Biennial Reports, have been validated by the recipient states. As such, the data, definitions, and assumptions may not reflect the recipient state's nationally determined definitions nor their national estimates of climate finance flows.

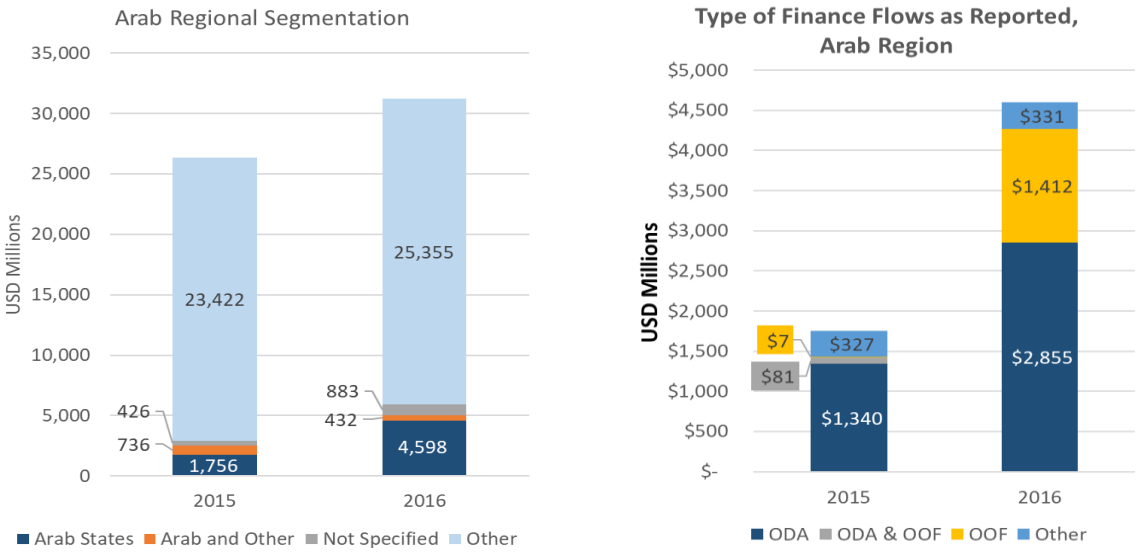
This chapter analyzes the self-reported information submitted by parties to the UNFCCC in their third biennial reports. Annex I parties were "requested" to submit the Third Biennial Report by 2018, covering the 2015-2016 reporting period. This information has been compiled into a single database by the UNFCCC and published on the Biennial Reports Data Interface (BR-DI) under the *Bilateral, Regional and Other Channels* page of the *Financial Support* section. This is based on the information reported by each Annex II party in table 7(b) of the common tabular format. The UNFCCC SCF notes that it has not verified or validated this self-reported information.

[42] Under OECD definitions through 2018, ODA includes grants and concessional loans (at least 25% grant element).
[43] UNFCCC SCF, 2018, p. 64.
[44] OECD, 2018b.
[45] UNFCCC CMA 1-3, 2018.

Based on the data set, the region received USD 4.6 billion in climate specific bilateral, regional, and other flows in 2016, which is roughly 15% of the USD 31.3 billion included in the overall dataset. This was a marked increase from 2015, in which there were USD 1.7 billion in flows to Arab States within the dataset, with the increase in the absolute amount of mitigation finance of particular note. A major driver of the increase in 2016 were a small number of large projects, including USD 1.2 billion in mitigation finance provided by Japan to Qatar (26% of all flows to the region in 2016), and USD 800 million in finance from Japan to Egypt (cumulatively, these two line items from Japan's Third Biennial Report account for nearly half of all flows to the region in 2016). Figure 6 Figure 6presents bilateral, regional, and other flows from Annex II countries to Arab States in 2015 and 2016.

Finance flows to the Arab region reported by Annex II developed country parties include official development assistance (ODA) as well as other official flows (OOF) and "other" flows, or some mix of these categories. ODA was the most common source, but OOF or a mix of ODA and OOF were also common (figure 6), which is consistent global trends.

Figure 6 Public Financial Support from Developed to Arab Countries through Bilateral, Regional and other Channels, 2016



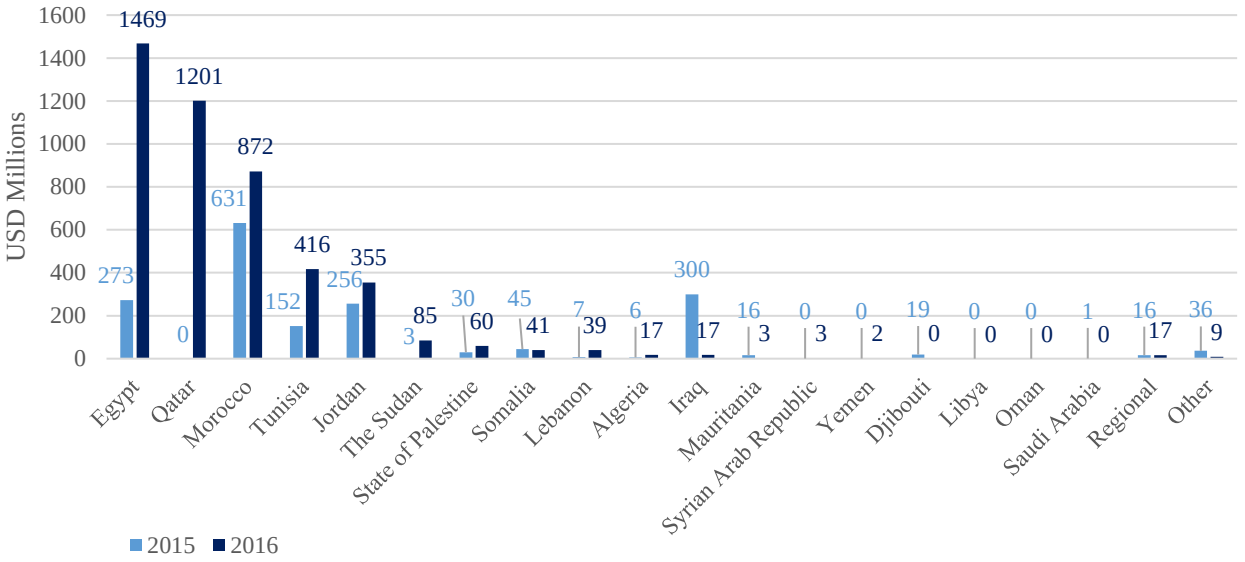
Note: Data presented in this chart corresponds to public international flows from Annex II parties to the UNFCCC to Arab States, through bilateral, regional, and other channels, based on data reported by Annex II states to the UNFCCC in their third biennial reports. While reporting formats are not standard, many biennial reports submitted by the parties include Official Development Assistance (ODA) as well as Other Official Flows (OOF). This chart does not include domestic public flows, multilateral flows, or private flows. Of the 33.6 billion in flows reported by the UNFCCC from developed to developing countries through bilateral, regional, and other channels in 2016, a total of USD 31.3 billion are included in the dataset presented above. United States was not available and is not included. Data from the United Kingdom is based on the official PDF submission of the 3rd Biennial Report.

Source: Elaborated by ESCWA based on data downloaded from the UNFCCC Biennial Reports Data Interface

In the Arab region, total public international financial flows in 2015 and 2016 were largely concentrated in five Arab countries, with improvements demonstrated in 2016. As presented in figure 7, bilateral, regional, and other finance from UNFCCC Annex II parties to Egypt increased by over 500% from 2015 to 2016, while Qatar received no bilateral, regional, or other climate finance from Annex II parties in 2015.

Based on the most recent available data, mitigation received a much higher share of finance through bilateral, regional, and other non-multilateral channels than adaptation (figure 8). Grants account for less than half of flows across all channels, although they represent a much higher share of total adaptation flows. By absolute value, grants are committed almost equally to adaptation and mitigation.

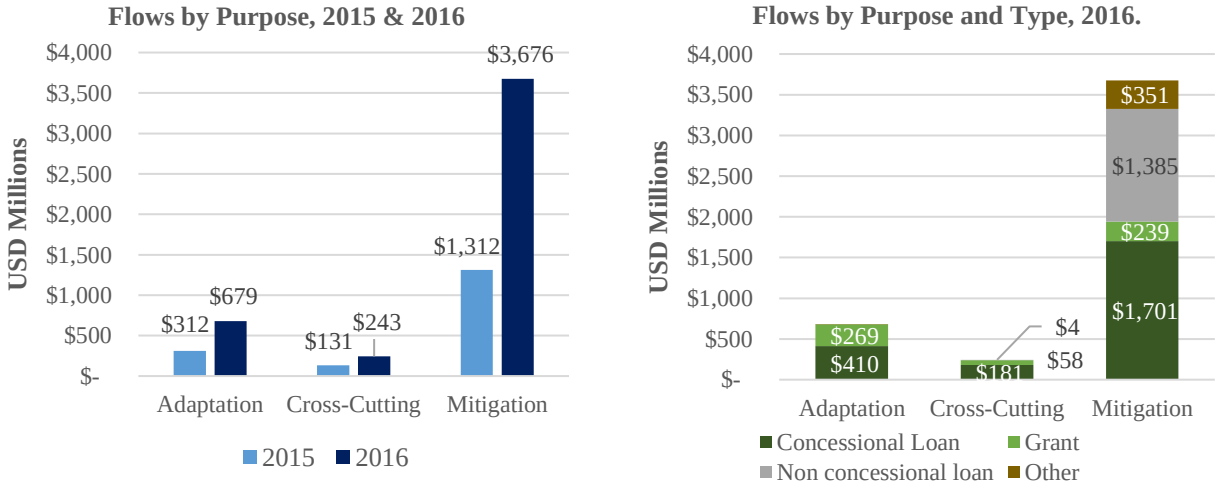
Figure 7 Total Public International Finance Flows from Developed Countries to Arab States through Bilateral, Regional, and Other Channels, 2015 and 2016



Note: Data presented in this chart corresponds to public international flows from Annex II parties to the UNFCCC to Arab States, through bilateral, regional, and other channels, based on data reported by Annex II states to the UNFCCC in their third biennial reports. While reporting formats are not standard, many biennial reports submitted by the parties include Official Development Assistance (ODA) as well as Other Official Flows (OOF). This chart does not include domestic public flows, multilateral flows, or private flows. Of the 33.6 billion in flows reported by the UNFCCC from developed to developing countries through bilateral, regional, and other channels in 2016, a total of USD 31.3 billion are included in the dataset presented above. United States was not available and is not included. Data from the United Kingdom is based on the official PDF submission of the 3rd Biennial Report.

Source: Elaborated by ESCWA based on data downloaded from the UNFCCC Biennial Reports Data Interface.

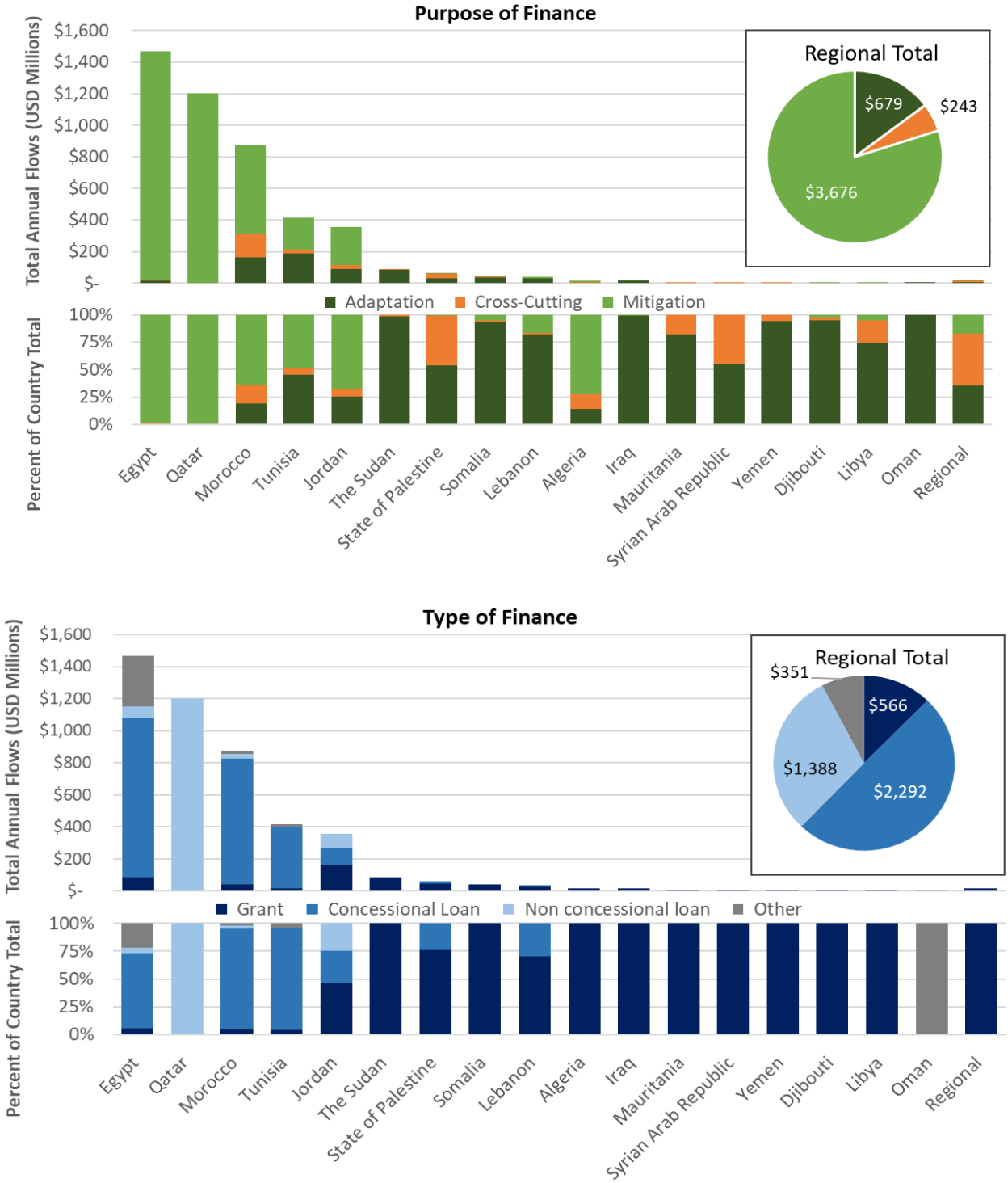
Figure 8 Type and Purpose of Public International Bilateral, Regional, and Other Climate Finance from Annex II Parties to the Arab Region



Note: Data presented in this chart corresponds to public international flows from Annex II parties to the UNFCCC to Arab States, through bilateral, regional, and other channels, based on data reported by Annex II states to the UNFCCC in their third biennial reports. While reporting formats are not standard, many biennial reports submitted by the parties include Official Development Assistance (ODA) as well as Other Official Flows (OOF). This chart does not include domestic public flows, multilateral flows, or private flows. Of the 33.6 billion in flows reported by the UNFCCC from developed to developing countries through bilateral, regional, and other channels in 2016, a total of USD 31.3 billion are included in the dataset presented above. United States was not available and is not included. Data from the United Kingdom is based on the official PDF submission of the 3rd Biennial Report.

Source: Elaborated by ESCWA based on data downloaded from the UNFCCC Biennial Reports Data Interface

Figure 9 Public Financial Support from Developed Countries to Arab States through Bilateral, Regional, and Other Channels, 2016



Note: Data presented in this chart corresponds to public international flows from Annex II parties to the UNFCCC to Arab States, through bilateral, regional, and other channels, based on data reported by Annex II states to the UNFCCC in their third biennial reports. While reporting formats are not standard, many biennial reports submitted by the parties include Official Development Assistance (ODA) as well as Other Official Flows (OOF). Regional flows are not reported to a specific state or are reported to multiple states. This chart does not include domestic public flows, multilateral flows, or private flows. Of the 33.6 billion in flows reported by the UNFCCC from developed to developing countries through bilateral, regional, and other channels in 2016, a total of USD 31.3 billion are included in the dataset presented above. United States was not available and is not included. Data from the United Kingdom is based on the official PDF submission of the Third Biennial Report.

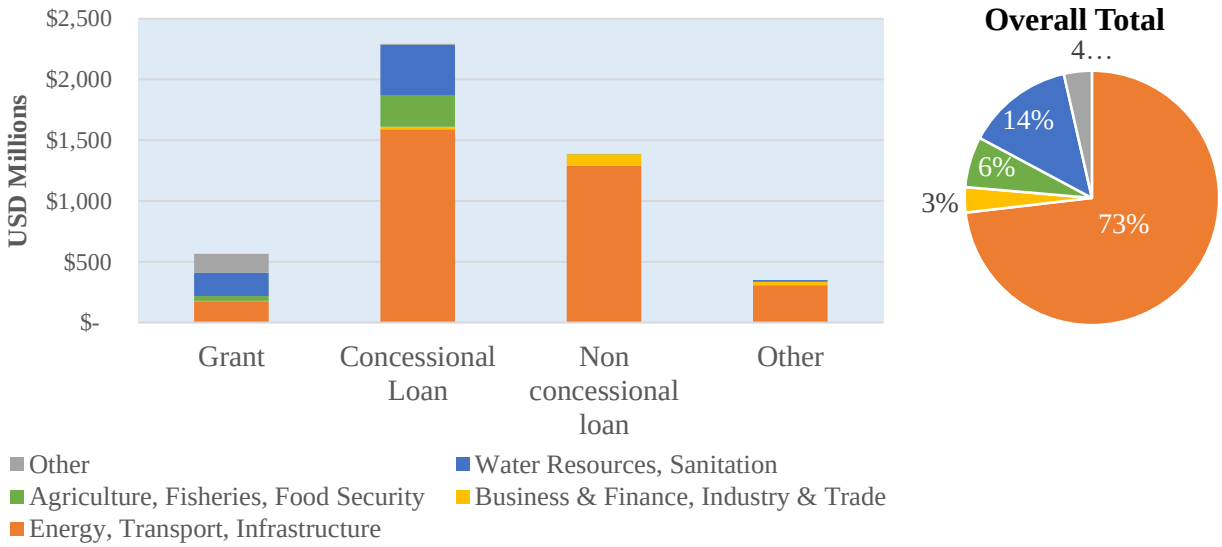
Source: Elaborated by ESCWA based on data downloaded from the UNFCCC Biennial Reports Data Interface.

Not all flows to the region are predictable on a year to year basis. Climate finance flows at the national level are uneven across Arab States over time (figure 7 and figure 9), and also by purpose and type (figure 8). While some countries have had success accessing public international bilateral, regional, and other finance, many countries still receive limited total finance. States reported to have received higher absolute climate finance flows have principally received mitigation finance, primarily through debt finance. States that received a higher share of grant finance received low total amounts of climate finance, suggesting that opportunities to access finance at scale are more prevalent for mitigation actions that can be debt financed.

Roughly three quarters of climate finance to Arab States through bilateral, regional, and other channels in 2016 went to the energy, transport, and built infrastructure sector, compared with just 14% to water and sanitation (figure 10). Specifically, the energy, transport, and built infrastructure sectors received 92.9% of non-concessional finance, 69.3% of concessional loans, and 31.1% of grant finance. Grant finance supported the most diverse array of sectors, proportionally, although nearly two thirds of grant finance went to water resources (33.9%) and the energy, transport, and built infrastructure (31.1%). Other sectors in Arab States received a total of just USD 198 million of climate finance as grants through these channels in 2018, as well as 284 million in concessional loans and 99 million in non-concessional loans.

The non-concessional loan component of climate finance flows to the region represents nearly one third of all flows in 2016 but is comprised primarily of 1.2 billion in non-concessional finance provided by the Japan Bank for International Cooperation to Qatar. This project finance loan was made to support Japanese companies' participation in a natural gas power generation and desalination project that is expected to play important role in supply of electricity and water in Qatar. This loan was included by Japan in its Third Biennial Report to the UNFCCC. Non-concessional finance is not considered to be ODA; rather, it is part of OOF.[46]

Figure 10 Public International Finance Flows from Developed Countries to Arab States through Bilateral, Regional, and Other Channels, by Sector and Type of Finance Instrument, 2016



Note: Data presented in this chart corresponds to public international flows from Annex II parties to the UNFCCC to Arab States, through bilateral, regional, and other channels, based on data reported by Annex II states to the UNFCCC in their third biennial reports. While reporting formats are not standard, many biennial reports submitted by the parties include Official Development Assistance (ODA) as well as Other Official Flows (OOF). This chart does not include domestic public flows, multilateral flows, or private flows. Of the 33.6 billion in flows reported by the UNFCCC from developed to developing countries through bilateral, regional, and other channels in 2016, a total of USD 31.3 billion are included in the dataset presented above. United States was not available and is not included. Data from the United Kingdom is based on the official PDF submission of the 3rd Biennial Report.

Source: Elaborated by ESCWA based on data downloaded from the UNFCCC Biennial Reports Data Interface.

[46] JBIC, 2016.

The distribution of bilateral, regional, and other financial flows from Annex II parties to Arab States between adaptation and mitigation appears to match global trends, based on the available dataset, as does the higher share of grants reported for adaptation finance. Energy, transport and built infrastructure capture 73.2% of all funding in the region, or USD 3.4 billion. However, concessional and non-concessional loans remain the primary source of bilateral, regional, and other climate finance flows in the region, for both adaptation and mitigation projects.

2. *Multilateral development bank climate finance*

In a 2018 joint report, seven leading multilateral development banks (MDBs)[47] reported committing USD 43.1 billion of their own funds[48] to climate finance in 2017, 70% of which was committed to mitigation projects.[49] MDBs reported mobilizing a further USD 68.1 billion in co-finance committee by external resources alongside MDB climate finance," of which just 11% was committed to adaptation projects.[50] "The Islamic Development Bank Group (IsDB) joined the MDBs' climate finance tracking groups in 2017;[51] however, to date, flows from the IsDB have not been included in the disaggregated results presented in the annual Joint Monitoring Reports issued by the banks.

It is important to note, however, that co-mobilized funds may refer in part to the bilateral, regional, and other flows reported by Annex II parties in their third biennial reports, as well as flows reported by multilateral climate funds, and reported private sector flows, and therefore cannot be counted on a 1:1 basis as additional climate finance mobilization. What the data does clearly show is that, total private finance mobilization remains below the amount of public finance mobilized by the banks. In particular, of the USD 28.8 billion in private finance mobilization in 2018 (figure 12), 22.6 billion (80%) was private indirect mobilization, which is investment that *cannot* be *attributed* to the participation of the respective bank in financing the project (e.g. it was not directly mobilized as a result of the finance provided by the respective bank and may have occurred even without the participation of the respective banks).[52]

Since the Paris Agreement in 2015, MDBs have consistently increased climate finance flows from their own resources (figure 11) and from co-finance (figure 12), with a 72% increase MDB finance from USD 25.1 billion to USD 43.2 billion in in 2018. Co-finance has increased, although in a less linear manner, with a sharp decreased from 2015 to 2016, but net increase from 2015 to 2018. Of note, adaptation finance is reported as the incremental cost of adaptation (e.g. the full project amount is not counted, just the incremental cost). Conversely, for mitigation projects, the full project amount is calculated. As a result, the 2018 report concludes "These fundamental differences between the two methodologies result in figures for mitigation finance and adaptation finance that are not directly comparable."[53]

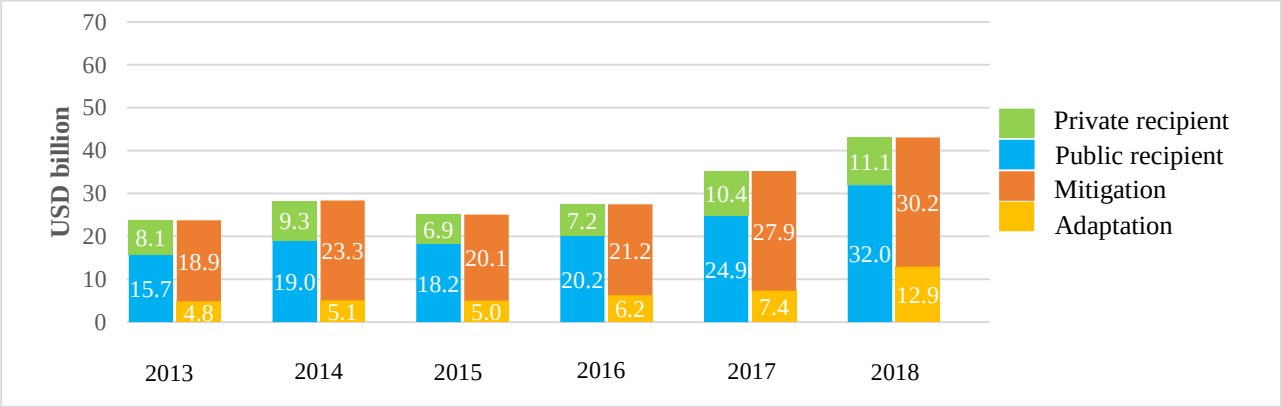
Total MDB and co-finance allocation to climate adaptation has been around 20% per year since 2015. However, the 30% allocation of MDB finance (not co-finance) to adaptation reported in 2018 is a marked increase compared to previous years, when it also hovered around 20% annually. Specifically, the banks increased the share of finance they provided to adaptation from their own funds from USD 7.4 billion (21% of flows) in 2017 to USD 12.9 billion (30% of flows) in 2018 (figure 11). Total MDB and co-finance allocation to adaptation remained close to 20% because there was a simultaneous decline in the *net amount* of co-finance mobilized for adaptation, from USD 9.6 billion (18% of flows) in 2017 to USD 7.5 billion (11% of flows) in 2018 figure 12. Thus, while the total resources mobilized for adaptation from MDB own funds and co-finance increased from USD 16.9 billion to USD 20.4 billion, the share of total adaptation finance mobilized declined

[47] The African Development Bank (AfDB), Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), Inter-American Development Bank Group (IDBG), Islamic Development Bank Group (IsDB) and the World Bank Group (WBG). These include most of the largest MDBs globally (by total loan portfolio outstanding) and therefore account for the vast majority of loans made by MDBs globally. See: ODI, 2018, p. 30.
[48] MDB-managed external resources are excluded to avoid double counting.
[49] AfDB and others, 2019.
[50] AfDB and others, 2019.
[51] AfDB and others, 2018.
[52] AfDB and others, 2019.
[53] AfDB and others, 2019.

from 19% to 18%. It remains to be seen if the MDBs will continue to finance a higher share of the cost of adaptation than their co-financiers.

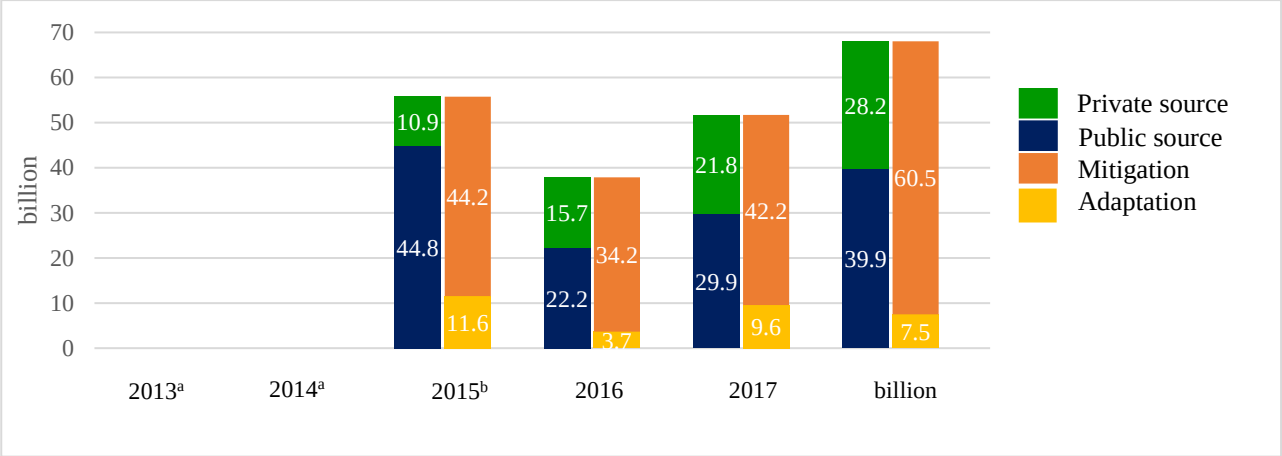
The figures are presented jointly below to facilitate comparison of flows from MBD's own funds (figure 11) with co-finance mobilized by MDBs (figure 12). It is immediately apparent that co-finance exceeds flows from the banks' own funds. Of note, a majority of finance "mobilized" by MDBs comes from public sources, such as co-finance provided by recipient governments, while a minority comes from private sources.

Figure 11 Recipient and Purpose of Climate Finance from MDB's Own Funds, 2013-2018



Source: Compiled by ESCWA from: AfDB and others, 2014; AfDB and others, 2015; AfDB and others, 2016; AfDB and others, 2017; AfDB and others, 2018; and AfDB and others, 2019.

Figure 12 Source and Purpose of Co-finance Mobilized by MDBs, 2013-2018



Notes:

[a] MDBs did not jointly report on climate co-finance until 2015; years 2013 and 2014 shown to facilitate comparison with Figure 11.

[b] 753 million in dual-benefit flows were reported in 2015. In this chart, 50% of these flows have been allocated to adaptation and 50% to mitigation. For dual benefit flows in all other years, the banks defined the per cent of dual benefit flows to report as adaptation and as mitigation. From 2016 onwards, reporting of dual benefit flows specified the exact percentage to allocate to adaptation and mitigation, respectively.

Source: Compiled by ESCWA from: AfDB and others, 2014; AfDB and others, 2015; AfDB and others, 2016; AfDB and others, 2017; AfDB and others, 2018; and AfDB and others, 2019.

The UNFCCC SCF estimates that MDBs provided USD 25 billion in climate finance to developing and emerging economies from their own funds in 2016, which is comparable with the bank's own 2016 estimate of USD 27.4 billion. Of note, the UNFCCC estimated that 17.3-19.7 billion of flows to OECD-DAC ODA eligible recipients, or 69-79% of the 2016 totals, was attributable to developed countries' (OECD-DAC minus Republic of Korea) ownership shares in the MDBs. Under the assumption that UNFCCC totals from 2016 are relatively comparable with the totals reported in the Joint MDB Report, and that ownership shares attributable

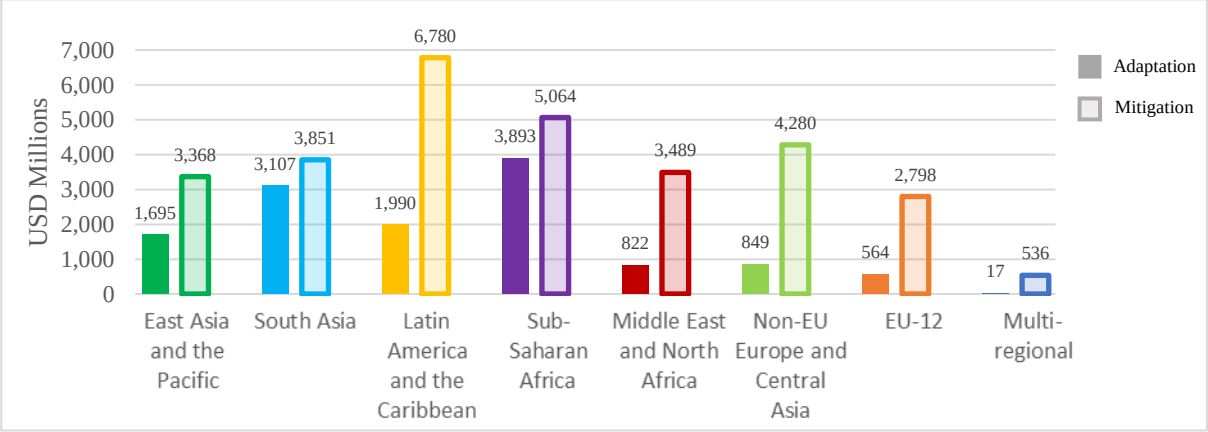
to developed countries remain unchanged, of the USD 43.1 billion reported by the banks in 2018, the UNFCCC methodology would likely consider an estimated USD 29.7-34.0 billion of the flows reported by MDBs in 2018 to be attributable to developed country ownership shares. Just 5% of MDB finance was provided as a grant in 2018, with over 80% provided as some form of loan; with other instruments including results-based finance, guarantees, and equity accounting for the remainder of flows.[54]

a) MDB finance in the Middle East and North Africa

The Joint Report on Multilateral Development Banks' Climate Finance is issued annually and provides the most comprehensive dataset on the regional distribution of MDB finance to the Middle East and North Africa (MENA) region. The composition of the MENA region used by the banks is similar, but is distinct from the composition of states that represent the Arab region used by ESCWA to evaluate bilateral public international flows to the region based on data reported to the UNFCCC.[55]

The joint report's global dataset does not yet include IsDB flows, which provides finance to projects in the 57 members states of the Organization of Islamic Cooperation, including all 22 Arab States. IsDB climate finance flows were estimated to be USD 644 million in 2017 across all types of financing instruments, of which 53% was committed to mitigation projects and 47% to adaptation projects.[56] The reported total declined sharply to USD 351 million in 2018, of which 65% was dedicated to mitigation, 22% to adaption, and the remaining 13% to dual-benefit projects.[57] The IsDB Board of Directors, however, approved the bank's first climate finance strategy in 2019, which is intended to help mainstream climate considerations across the bank's operations. The strategy also provides guidance for supporting the bank's member countries in a manner that may lead to significant changes in the volume and nature of future climate flows from the bank.[58]

Figure 13 MDB Adaptation and Mitigation Finance by Region, 2018



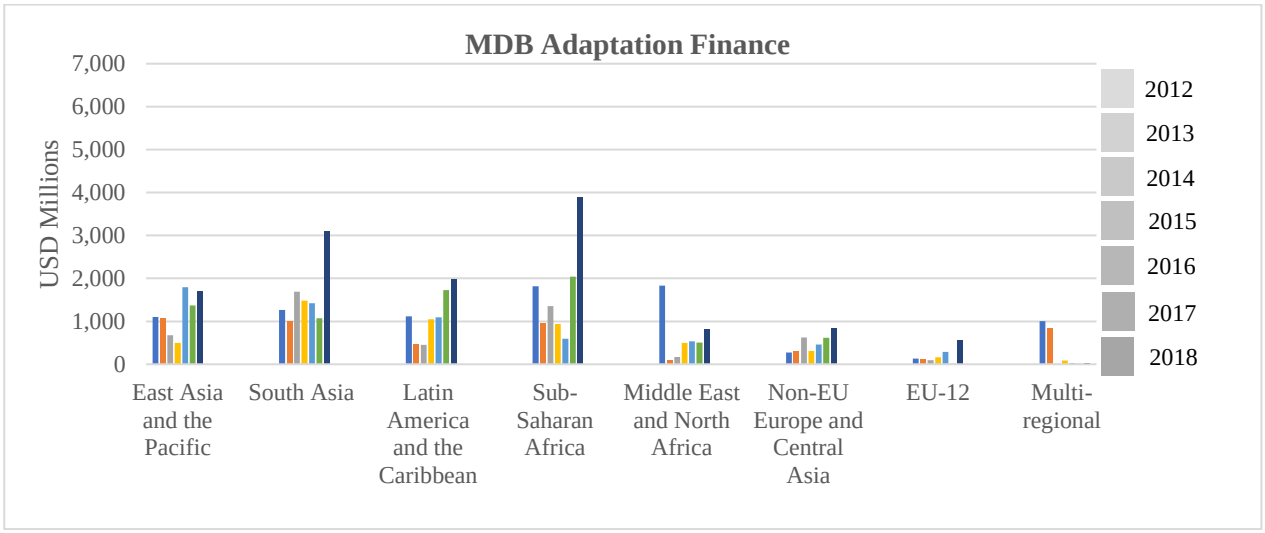
Source: Compiled by ESCWA from: AfDB and others, 2013; AfDB and others, 2014; AfDB and others, 2015; AfDB and others, 2016; AfDB and others, 2017; AfDB and others, 2018; and AfDB and others, 2019.

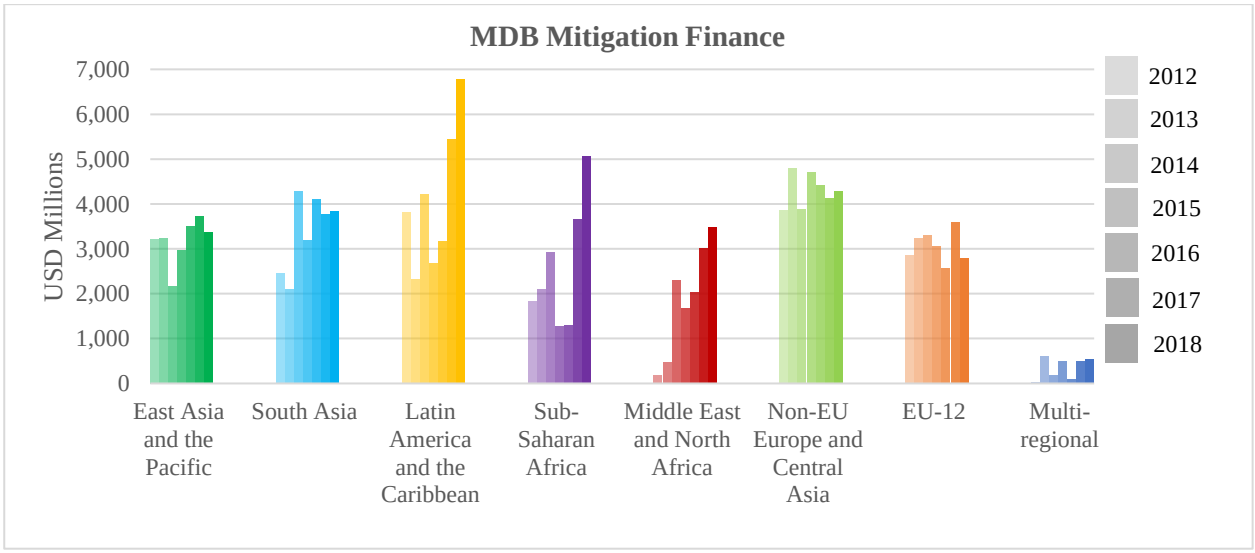
Compared to other developing regions, reported flows to the MENA region present a low proportion of adaptation finance to mitigation finance (figure 13). While mitigation finance flows to the MENA region are increasing and comparable with other global regions, adaptation flows to the region are comparatively low and not increasing nearly as much as adaptation finance in sub Saharan Africa and South Asia (figure 14). Of note, in South Asia and Sub-Saharan Africa, adaptation finance flows are nearly on par with mitigation

[54] AfDB and others, 2019.
[55] The definition of the Middle East and North Africa region used by the MDBs includes: "Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, Western Sahara, Yemen, West Bank and Gaza." (AfDB and others, 2019).
[56] AfDB and others, 2018.
[57] AfDB and others, 2019.
[58] IsDB, 2019.

flows, which in the Arab region, among MDBs, mitigation finance flows outnumber adaptation finance flows by more than a factor of four.

Figure 14 MDB Adaptation and Mitigation Finance by Region, Historical



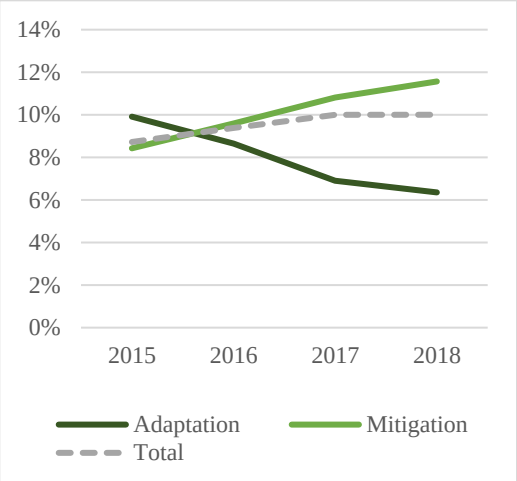


Source: Compiled by ESCWA from: AfDB and others, 2013; AfDB and others, 2014; AfDB and others, 2015; AfDB and others, 2016; AfDB and others, 2017; AfDB and others, 2018; and AfDB and others, 2019.

Furthermore, adaptation flows to the MENA region have been declining proportionally since 2015, from 10% of global flows in 2015 to just 6% in 2018, while mitigation has been increasing from 8% to 12%, respectively (figure 15). In absolute terms, total adaptation finance from MDBs to the MENA region has increased from USD 498 million in 2015 to USD 822 million in 2018, an increase of USD 324 million; over the same period, mitigation finance has increased by USD 1.8 billion, from USD 1.7 to USD 3.5 billion.

The banks have not published the underlying data on the sector of focus by region, although they do present the distribution graphically, which is copied below in figure 16 and figure 17.

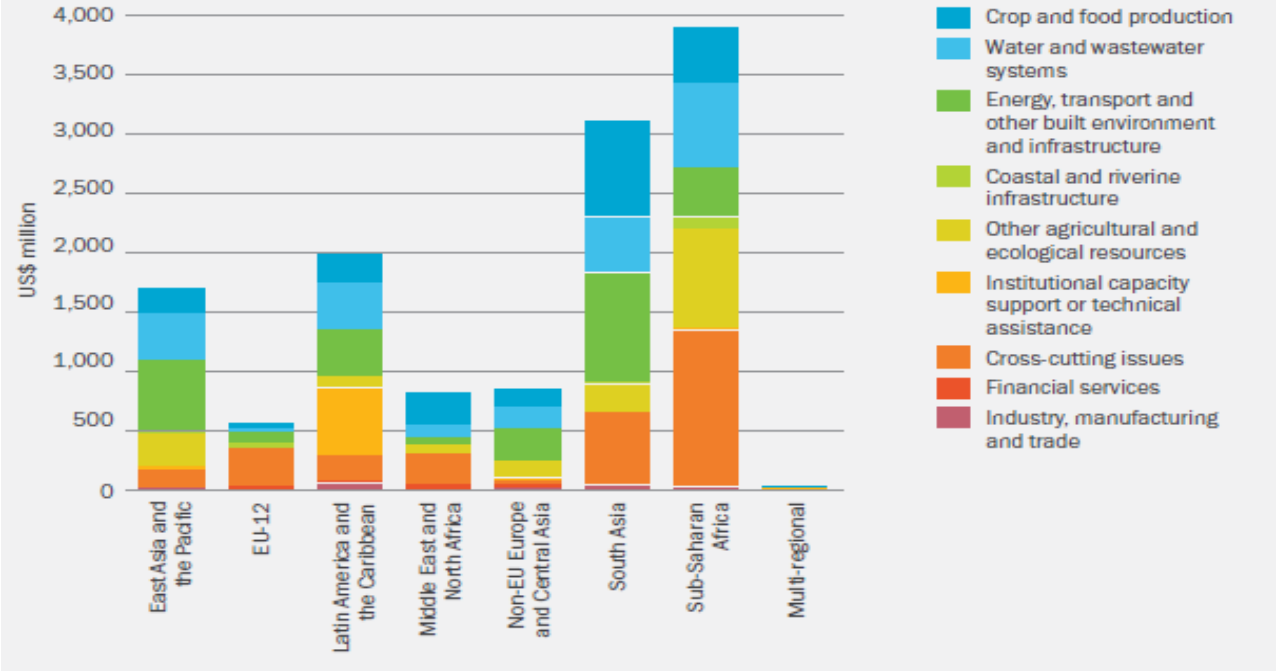
Figure 15 Share of MDB Finance Flows to MENA



* Excludes Co-Finance
Source: Compiled by ESCWA from: AfDB and others, 2016; AfDB and others, 2017; AfDB and others, 2018; and AfDB and others, 2019.

The sectoral distribution of MDB climate finance to the MENA region is varied, with roughly one third of flows reported to "cross-cutting issues." Most of the sector-specific flows span the water-energy-food nexus, specifically: crop and food production; water and wastewater systems; and energy, transport, and other built environment and infrastructure. Flows to "other agricultural and ecological resources" are very low, which may reflect the difficulty of identifying and structuring investments in nature-based solutions.

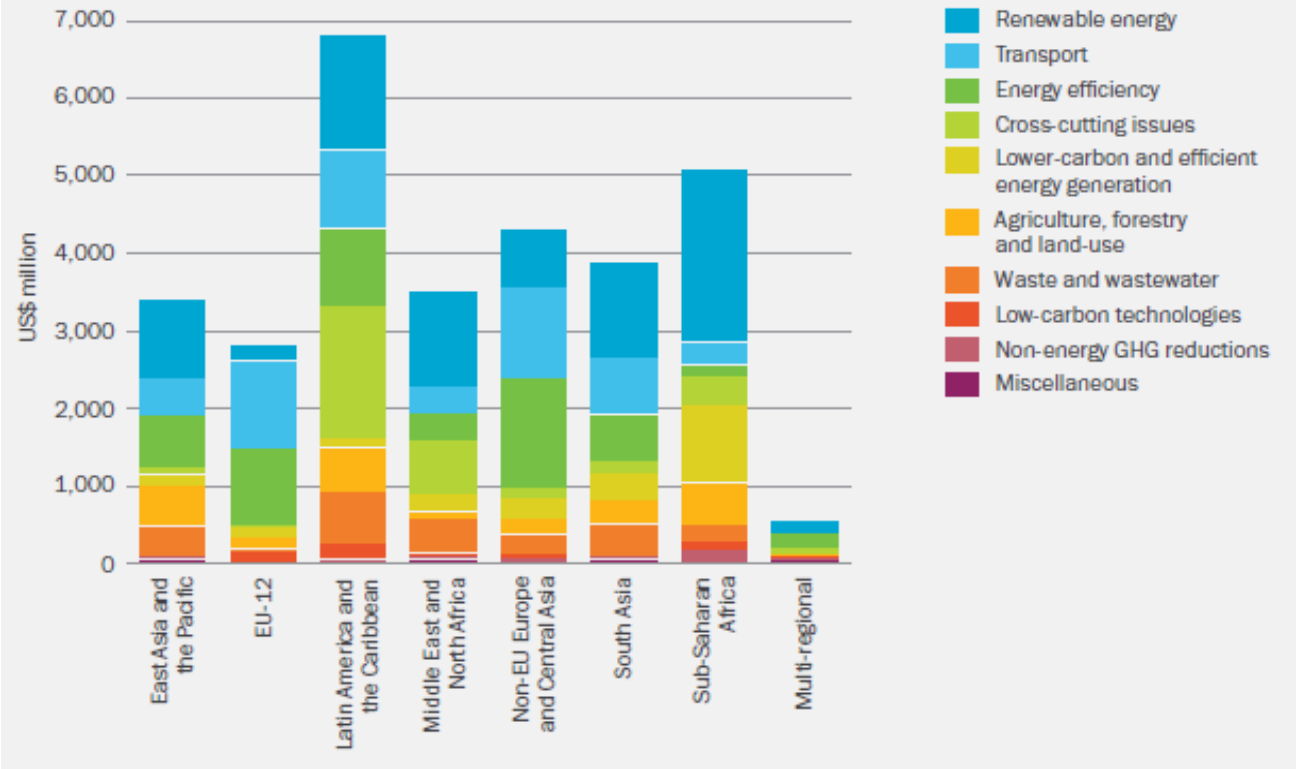
Figure 16 2018 MDB Adaptation Finance by Sector and Region (USD millions)



Source: AfDB and others, 2019.

The share of mitigation finance flowing from MDBs to the MENA region, is comparable with other global regions. It flows primarily to renewable energy, efficient/low carbon energy generation, and transport infrastructure; in contrast, agriculture, water, and other sectors remain largely unfunded by the MDBs.

Figure 17 2017 MDB Mitigation Finance by Sector and Region (USD millions)



Source: AfDB and others, 2019.

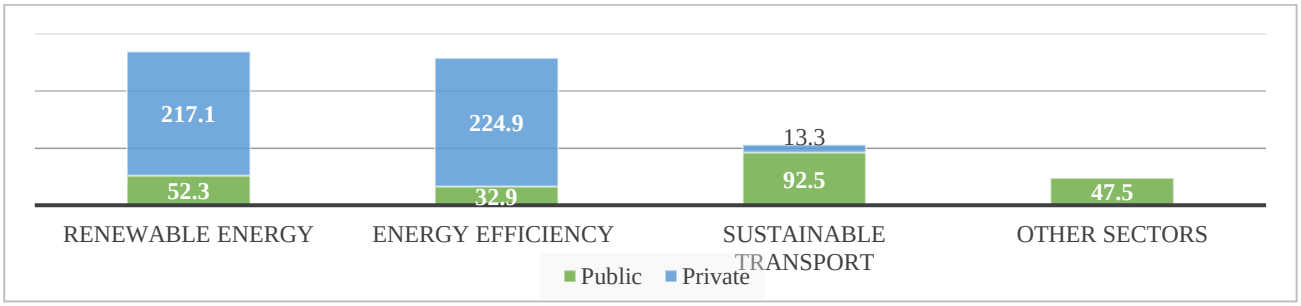
B. International Private Finance Flows

1. *Climate-dedicated private finance flows*

Private sector mobilization is an objective of both the Paris Agreement and the Addis Ababa Action Agenda. The UNFCCC 2018 Biennial Assessment of Climate Finance Flows estimates there were at least USD 455.3 billion in private climate-specific flows globally in 2016, double the public flows reported that year, although it notes significant data gap and data uncertainty underpinning these numbers. Estimating private sector climate finance flows is inherently more challenging than estimating public flows, due to the diversity of stakeholders, lack of a standard reporting format, lack of mandated reporting, and high risk of both gaps and double counting, and these methodological challenges are well detailed in the Biennial Assessment. Furthermore, when interpreting these numbers, it is important to remember that, on average, a dollar of private climate finance may not have the same climate action additionality as a dollar of public international finance, particularly when compared to public international grant finance.

Although important data gaps remain, the UNFCCC report clearly establishes that private finance accounts for the majority of global climate finance flows. Furthermore, while data gaps make it difficult to attribute the geographic origins and destinations of these private flows, the sectors are clear. Information is available on private financial flows in renewable energy, energy efficiency, and sustainable transport (figure 18). Flows to agriculture, ecological services, water resources, and other sectors are not reported, but the absence of data may be an indication that climate-specific flows to these sectors are more limited.

Figure 18 Private and Public Finance Flows in Three Sectors, 2016 (USD billions)



Source: Elaborated by ESCWA based on: UNFCCC SCF, 2018.

A very large unmet need for private climate finance remains, even though the scale of private finance mobilized is significantly higher than the scale of public finance mobilized. For example, the International Finance Corporation (IFC) evaluated opportunities for private investment in climate smart infrastructure in 21 emerging markets over the period 2016-2030, based on NDCs, and identified USD 23 trillion in opportunities, an average of USD 1.5 trillion per year, more than three times the total private flows reported by the UNFCCC in 2016.[59] While this excludes most emerging markets, and is based on NDCs that will soon be revised, very likely identifying higher financing needs, it gives an indication of the scale of the opportunity. The IFC analysis does not, define the extent to which these opportunities would require a higher total investment, compared to a business-as-usual scenario, but does provide a benchmark estimate that a total of USD 4 trillion are invested in building and maintaining infrastructure each year in emerging markets (not limited to the 21-country subset referenced above).[60]

Of note, it helps to differentiate private finance engagement in public climate action projects, through public private partnerships, from private finance flows that are purely private sector in nature. Public policymakers may seek to identify opportunities for private sector participation during the planning stages of public projects and can actively pursue this private sector engagement during subsequent planning and implementation stages. This requires distinct policy tools and approaches from the regulations and incentives that may be used to promote climate-specific private sector finance flows that are consistent with nationally determined climate action priorities.

Available data on private finance flows from multilateral development banks and industry tracking organizations suggests that the sectoral distribution of private climate finance is similar in both channels (public-private partnerships, and purely private finance flows). While there has been success attracting private investment to the energy sector, less private sector finance has been attracted in other sectors based on available data. For example, compared to the energy sector, private finance and investment has been much less engaged in the transportation sector. This may reflect that there is a proportionally higher share of investment in (*quasi*) *public goods* in the transportation sector than in the energy sector. Some private investment in transportation infrastructure may be possible, for example through concessions to build toll highways or airports, but Public-Private Partnerships often may not be feasible or appropriate, either due to poor alignment of private sector incentives and public sector climate objectives, or due to unattractive profitability. For example, while roads are an important public good, most are not suitable for charging tolls to generate investor liquidity, and therefore are unattractive to private investors. Looking beyond the transport and energy sectors, investments in adaptation are often public goods, although there are important opportunities to engage the private sector to ensure that infrastructure investments are made based on climate resilient designs, which may have an incremental cost of adaptation. Regulation may be a tool to require the private sector to ensure designs are climate resilient without requiring public expenditure.[61]

[59] IFC, 2016.
[60] IFC, 2016.
[61] UNDESA, 2016.

The absence of data on private climate finance for other sectors, such as agriculture and water, suggests fewer viable opportunities for private investment at scale have been identified these sectors. In many cases, this may because there is not a sufficient source of liquidity for investors to earn a sufficient return. However, in some cases this may also be due to other factors, such as the enabling environment. For example, the UNFCCC suggests that there may be a potential private sector role in adaptation for insurance companies that could provide crop insurance. This may require public expenditure to develop and maintain national meteorological services and climate risk assessments that are a necessary component of the enabling environment for crop insurance.[62]

Thus, while the scale of private finance climate flows is higher than public finance, private finance and investment is not always feasible or suited to climate financing needs, and in many instances cannot substitute public expenditure. This is likely to be particularly true for investment *public goods* with little or no opportunity to generate *liquidity* (to repay investors), but which can be critical to climate change adaptation and mitigation. For example, conservation of coastal wetlands may reduce the exposure of coastal populations and infrastructure to increasing storm surges and protect habitat for juvenile marine fisheries species that can be critical to long-term fisheries production but may offer few private investment opportunities. Furthermore, while in some cases public-private partnerships may unlock private investment in public projects when there is potential liquidity for private investors, such as the toll road example, they are technically complex to design and implement, and may be prone to governance challenges that could undermine public policy objectives. Due to the resulting transaction costs, while they may have valuable applications for some large projects, they may be less suitable to the high volume of smaller budget projects needed economy wide.

Private finance is more likely than public finance to be provided through non-concessional loan, hybrid, and equity investments, so adaptation or mitigation outcomes may be of secondary importance to investors when climate objectives conflict or are only partially aligned with economic incentives and other investor interests. If there is not a strong alignment between investors' incentives and adaptation or mitigation outcomes, private finance may in some cases result in lower overall impact than concessional or grant funded projects, despite mobilizing larger amounts of finance. In some cases, financial engineering or blended finance (see Chapter 0) may help to realign private sector incentives and interests to be better aligned with public sector objectives. A key public policy consideration when seeking private sector engagement will therefore likely be to ensure that climate adaptation and mitigation objectives remain the primary objective, that negative social externalities are not passed on to the public, and that any involvement of the private sector does not compromise the human rights, for example if water services are privatized.

Therefore, an evaluation of current and possible future private finance flows from a public policy perspective must consider the appropriate role of private finance and investment in meeting climate change adaptation and mitigation policy objectives, to ensure an equitable sharing of value and risk between the private sector and public sector. Private finance and investment can lead to innovative solutions, benefitting from the expertise of the private sector, and can help to transfer technology and/or scale existing solutions that cannot be scaled as quickly with public finance. However, the private investors may also capture much of the value add from investments as private financial return. Understanding when to harness and when to regulate the private sector, in accordance with nationally determined climate action and sustainable development objectives, to ensure appropriate degrees of value sharing between the public and private sector, will likely play a key role in meeting the objectives of the Paris Agreement. This depends on the enabling environment including, inter alia, competition policy, fiscal policy, financial policy and regulations, and related policy levers, and is only feasible when there is a viable investment opportunity. These topics are beyond the scope of this report but are of critical importance to policy makers in the region, given the scale of private finance.

The domestic private sector, including micro, small, and medium sized enterprises also have the potential to drive private investment in adaptation and mitigation at different scales, from local to national. Domestic policy levers and regulations may help to change market incentives for private sector, to increase the alignment of private investment and finance flows with nationally determined climate action priorities. However, domestic private investment is beyond the scope of this report.

[62] UNFCCC SCF, 2018, p. 96.

a) Private finance in the Middle East and North Africa

Economy-wide, foreign direct investment in the Arab region declined significantly from USD 88.5 billion in 2008 to USD 32.4 billion 2016.[63] Private climate finance flows to the region remain understudied, and it is not known to what extent climate flows are or are not correlated with FDI flows more broadly. However, the importance of the energy sector in the region likely means that the significant global private finance flows to renewable energy, energy efficiency, and sustainable transport may be relevant regionally.

Nationally determined contributions, technological needs assessments, and other climate change planning documents may provide a useful starting point to identify opportunities for private sector engagement in support of nationally determined public policy objectives. However, the structure, degree of detail, rigor, and date or preparation of these planning documents is varied in the region, and there is no systematic source for tracking private climate flows in the region.

2. *Aligning financial flows with nationally determined climate action priorities*

The Paris Agreement calls for parties to promote a low greenhouse gas emissions and climate-resilient development pathway. Similarly, the United Nations Secretary General's Strategy for Financing the 2030 Agenda for Sustainable Development (2018-2021) emphasises the importance of "aligning global financial and economic policies with the 2030 Agenda."[64]

Aligning all existing finance flows across sectors with low emissions climate-resilient development pathways, in accordance nationally determined climate action priorities, is distinct and broader in scope that actions to directly finance adaptation and mitigation through targeted public expenditures and private engagement. It may increase the costs of doing business in some sectors, particularly in the short term, although many estimates suggest that aligning flows proactively may significantly reduce the cost of *postponing* mitigation and adaptation to a later date. For example, a total of USD 90 trillion in new infrastructure investments are estimated to be needed over the 2016-2030 period and can be made compatible with climate goals for an incremental cost that would be significantly lower than if this infrastructure is not built based on climate goals, and must be fully replaced at a later date.[65] Two thirds of this investment is projected in the "global south," or USD 4 trillion per year. However, while there may be long term savings in some sectors, this may not be true for all sectors or all economies; there may be trade-offs between sustainable development objectives and climate action. Further, it is important to note that even in sectors with expected long-term savings, the short-term costs may be higher, driven by higher capital expenditure and other financial and economic costs of shifting development pathways.

What is clear is that some investors are already acting to align their investments with the Paris Agreement objectives. Investors controlling USD 30 trillion of the global total of USD 383 trillion in private finance have already called for aligning investment with the Paris Agreement.[66] However, many technical, policy, and regulatory gaps remain to align the majority of financial flows with low carbon, and the UNFCCC has highlighted that harmonized global standards may be needed "improve consistency and comparability of their climate and development projects, set a good-practice standard, and provide increased reliability for the assessment of the climate impact of their investments." The UNFCCC is currently coordinating the Technical Working Group of the International Financial Institutions, which has already harmonized standards for energy, energy efficiency, and transportation sector.[67]

[63] Saab and Sadik (eds.), 2018.
[64] United Nations Secretary General, 2018.
[65] The New Climate Economy, 2016.
[66] The Investor Agenda, 2018.
[67] UNFCCC, 2019d.

C. Dedicated Climate Funds

Climate-dedicated funds are funds that finance climate activities only and include multilateral funds, namely the Global Environment Facility (GEF), Green Climate Fund (GCF), Adaptation Fund (AF), Climate Investment Funds (CIF),[68] and bilateral funds like the International Climate Initiative (Germany)[69] and the International Climate Fund (United Kingdom).[70]

Climate-relevant funds are funds that finance an array of activities, including but not limited to climate-related activities. These include funds managed by development banks, including Arab regional development banks.

UNFCCC Climate Finance Entities

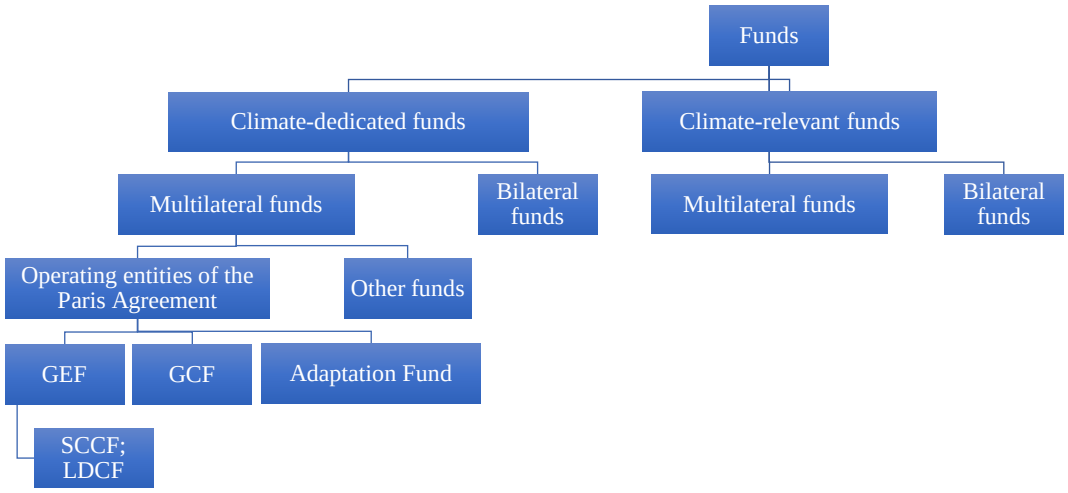
Global Environment Facility (GEF): Established in 1991. Administers Special Climate Change Fund (SCCF) and Least Developed Countries Fund (LDCF).

Adaptation Fund (AF): Established in 2001 under Kyoto Protocol of UNFCCC; serves Paris Agreement as of Jan 2019.

Green Climate Fund (GCF): Established in 2010 at COP16 in Cancun and made operational in 2015.

Five climate-dedicated funds serve the UNFCCC, although there are many more climate funds globally. The OECD estimated there were a total of 91 climate-dedicated public funds in 2015.[71] The number of climate-relevant funds is significantly larger. A detailed review of the multilateral climate-dedicated funds administered by the operating entities of the financial mechanisms of the UNFCCC is provided in this section (figure 19Figure 19). The GCF, AF, GEF Trust Fund, Least Developed Countries Fund (LDCF) and Special Climate Change Fund (SCCF) all serve the Paris Agreement.

Figure 19 Climate Funds



Source: Developed by ESCWA

[68] The CIF was established in 2008 from the donations of 14 countries to support the Bali Action Plan, as the first climate finance vehicle. Since then, CIF has pledged over USD 8 billion to support mitigation and adaptation actions in developing and middle-income countries. It consists of the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF). CIF is administered by the World Bank.

[69] Administered by German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU).

[70] A United Kingdom fund administered by the Department for International Development (DFID), Department of Energy and Climate Change (DECC) and Department for Environment, Food and Rural Affairs (DEFRA).

[71] OECD, 2015.

The Clean Technology Fund is one of the most historically relevant funds in the MENA region. It provided USD 865 million to ten projects in the region from 2003-2018 (average of USD 86.5 million per project), compared with USD 108.6 million provided to 47 projects by the GEF (average of USD 2.3 million per project).[72] An evaluation of 11 funds providing climate finance in the MENA region from 2003 to 2018 (table 1) found that USD 1,140 million (79%) of the funds went to 49 mitigation projects, with an average of over USD 23.3 million per project, while just 256 million (18%) went to 37 adaptation projects, an average of USD 6.9 million per project. The remaining USD 53.7 million (4%) went to 17 cross-cutting projects. Mitigation projects received a lower share of grant finance than adaptation projects.[73]

Table 1 Climate Fund Financing in the Middle East and North Africa, 2003-2018

Fund	Amount Approved (USD millions)	Projects Approved
Clean Technology Fund	864.8	10
Green Climate Fund	287.8	6
Global Environment Facility	108.6	47
Adaptation Fund	48.7	10
Special Climate Change Fund	43.6	8
Least Developed Countries Fund	35.1	8
Adaptation for Smallholder Agriculture Program	23.0	4
Global Energy Efficiency and Renewable Energy Fund	16.6	1
Partnerships for Market Readiness	11.0	6
MDG Achievement Fund	7.6	2
Global Climate Change Alliance	3.4	1

Source: Watson & Schalatek 2019

This report does not include a detailed review of climate-relevant funds, which includes a diverse array of potential funding sources that is constantly evolving. However, such funds may be important sources of finance for consideration by public and private stakeholders seeking climate finance. In particular, the diversity of funds means it may be possible to find investors who can meet specialized and niche needs.

1. *Overview of dedicated climate funds serving the UNFCCC*

a) Global Environment Facility

The GEF was established in 1991 and is the "financial mechanism" of five conventions, including the Convention on Biological Diversity (CBD), the United Nations Framework Convention on Climate Change (UNFCCC), the Stockholm Convention on Persistent Organic Pollutants (POPs), the United Nations Convention to Combat Desertification (UNCCD), and the Minamata Convention on Mercury.[74] The GEF Trust Fund is one of the primary sources of climate finance, with a share of its total resources earmarked for mitigation and adaptation through the Climate Change Focal Area. In addition to the Trust Fund, the GEF administers the Special Climate Change Fund (SCCF) and the Least Developed Countries Fund (LDCF), which are both dedicated climate finance funds focused on adaptation.

Since 1992, the GEF has provided over USD 16 billion in grants for more than 4,500 projects in 167 countries, on mitigation and adaption to climate change. LDCF and SCCF were both established in 2001 at UNFCCC COP 7 in Marrakesh to support the implementation of the Convention. Every four years, the GEF replenishes its financial contributions and identifies priority sectors. The sixth cycle, GEF-6, extended from 2014 to 2018. GEF endorsed its seventh replenishment (GEF-7) plan for the 2018-2022 cycle in June 2018, with 30 countries pledging a combined total of USD 4.1 billion to the fund over 4 years.[75]

[72] Watson & Schalatek 2019.
[73] Watson & Schalatek 2019.
[74] GEF, 2018b.
[75] GEF, 2018f.

b) GEF Trust Fund

GEF-7 was the first GEF replenishment after the Paris Agreement, yet the indicative total finance for the climate change focal area in the replenishment was USD 802 million,[76] a 36% decline compared to the USD 1,260 million[77] indicative total under GEF-6. By comparison, the total amount of the sixth replenishment was USD 4.4 billion, compared to USD 4.1 billion under the seventh replenishment, a 7% decline.

Indicative country allocation set-asides (earmarks) for the climate change focal area declined even more sharply, with a 46% decline from USD 941 million under GEF-6 to USD 511 million under GEF-7. This was an intentional, strategic decision to reduce the GEF climate change allocation as the GCF ramps up. As reported by the GEF, "[r]educed funding share for the Climate Change Focal Area, [reflects], in particular, the operationalization of the Green Climate Fund, which enables the GEF to more sharply focus on areas of its comparative advantage of promoting innovation and early adoption of low-carbon technologies and policies. It also reflects enhanced focus in GEF-7 on integrated programming whereby the GEF's climate impact would increasingly be derived from programming in other focal areas, for example Biodiversity and Land Degradation."[78]

c) Least Developed Countries Fund

The core focus of the LDCF is to support 48 Least Developed Countries (LDCs) develop and implement their National Adaptation Programmes of Action (NAPAs).[79,80]

d) Special Climate Change Fund

The focus area of the SCCF is adaptation and technology transfer, and the fund works across sectors including energy, transport, industry, agriculture, forestry, waste management, and economic diversification.[81] The SCCF had a USD 350 million portfolio in April 2018.[82]

e) Adaptation Fund

The Adaptation Fund was established in 2001 during COP7 but was launched in 2007 at COP13. It is governed by a board composed of 16 members, 69% of them representing developing countries. The Fund provides support for adaptation projects and capacity-building activities in developing countries. It is the first UNFCCC financial instrument that is not based solely on voluntary contributions from donor countries, but rather financed in part by government and private donors and a 2% share of proceeds of Certified Emission Reductions (CERs) issued under the Kyoto Protocol's Clean Development Mechanism projects.

[76] GEF, 2018c.
[77] GEF, 2014.
[78] GEF, 2018g.
[79] National Adaptation Programme of Action (NAPA) is a plan developed by LDCs and submitted to UNFCCC identifying adaptation priorities on a national level.
[80] GEF, 2018e.
[81] GEF, 2011b.
[82] GEF, 2018h.

Table 2 Dedicated Climate Funds

Fund	Established	Operative	Governing Body	Total climate funding (global)	Financing mechanism	Projects approved	Countries with projects approved	Field	Eligibility
GEF Trust Fund (GEF)	1991	1991	GEF Council composed of 32 members (16 developing countries, 14 developed countries and 2 economies in transition)	USD 3 billion (2010-2018 for GEF-5 and GEF-6)	Mainly grant, non-grant instruments available (concessional loans, equity and risk mitigation)	379	137	Mainly Mitigation	Developing countries parties to the Countries, or countries eligible to receive World Bank financing or UNDP technical assistance
Least Developed Countries Fund (LDCF)	2001	2002	GEF Council	USD 1.2 billion (2001-2017)	Grant	231	51	Mainly Adaptation	All LDC Parties to UNFCCC
Special Climate Change Fund (SCCF)	2001	2002	GEF Council	USD 350 million (2001-2018)	Grant	76	79	Mainly Adaptation	All developing country Parties to UNFCCC
Adaptation Fund (AF)	2001	2009	Board composed of 16 members (2 from each of the 5 UN regional groups, 1 SIDS, 1 LDC 2 developed and 2 developing countries)	USD 541 million (2009-2016)	Grant	105	68	Adaptation	Developing countries parties to the Kyoto Protocol
Green Climate Fund (GCF)	2010	2015	Board composed of 24 members: 12 developed and 12 developing countries (including SIDs and LDCs)	USD 10.3 billion pledged to GCF; USD 4.6 billion committed (2015-2018)	Grant; Concessional loans; Guarantees; Equity	76	55	Adaptation and Mitigation	All developing country parties to the UNFCCC

Source: Compiled by ESCWA from different sources. Data accessed in November 2018.

f) The Green Climate Fund

The Green Climate Fund (GCF) was established during COP16 in 2010 by UNFCCC as "the largest dedicated climate fund".[83] COP16 decisions reiterated that funds can come from variety of sources, and decided that a "a significant share of new multilateral funding for adaptation should flow through the Green Climate Fund".[84] The fund launched its first resource mobilization exercise in 2014 and accepts pledges on an ongoing basis, with USD 10.3 billion in pledges received through May 2018 from 43 countries, including nine developing countries, and one city (Paris).[85] This starting capital was raised to fund operations to 2020.

The GCF became fully operational in 2015 and gained more momentum with the adoption of the Paris Agreement and its ambitious goal. The withdrawal of the USA from the Paris Agreement and intention to cut climate financing in addition to the inability of the Fund to take any decision during the 20th meeting of the Board in July 2018, affected the confidence in GCF. However, this confidence was partially restored in October 2018 with the launch of the formal replenishment process during the Board's 21st meeting in Manama, Bahrain from 17 to 20 October 2018.[86]

A replenishment for the next four years of the fund's operation (beginning in 2020) was undertaken in 2019, and the fund announced USD 9.8 billion in pledges in October 2019, almost entirely as grants, although France and Canada also included local-currency-denominated loans in their pledges, totalling roughly USD 500 million.[87] Notably, 13 states doubled their pledges for the replenishment, and three quarters of donors increased their pledges.[88] The fund will continue to accept contributions for this four-year period through 2023, so the total amount raised may increase. However, the total amount of replenishment was lower than the USD 15 billion in pipeline projects identified by the fund in February 2019.[89] The United States of America, Australia and Russia did not make a pledge in this first replenishment, despite previously making pledges to the fund's starting capital for the first four years of the fund's operations.

2. *Types and distribution of funding*

Climate dedicated funds initially provided a large share of grant financing after they were established. Although the GEF had some non-grant instruments, the bulk of the funds was disbursed as grants. The Adaptation Fund, LDCF and SCCF disbursed their resources in the form of grants. However, the current financing mix includes significant levels of loans and other non-grant instruments. The more recently established GCF has followed an approach more similar to multilateral development banks since it began operations, and offers an increasingly diversified financing pool which include grants, concessional loans, equity, guarantees or a blend of several instruments.

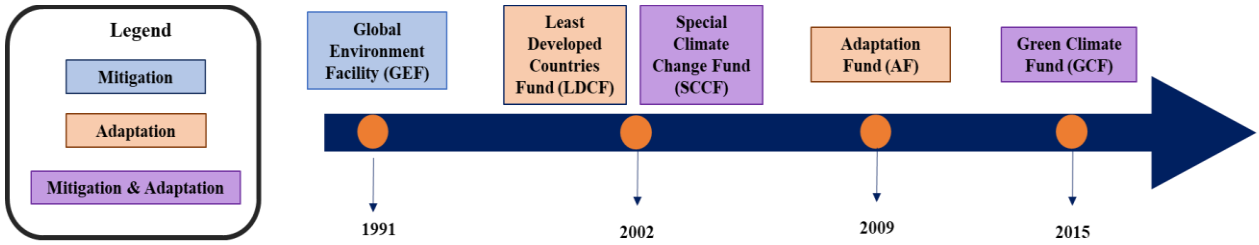
> *"The provision of scaled-up financial resources should aim to achieve a balance between adaptation and mitigation, taking into account country-driven strategies, and the priorities and needs of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change and have significant capacity constraints, such as the least developed countries and small island developing States, considering the need for public and grant-based resources for adaptation*."
>
> (Paris Agreement, Article 9, paragraph 4)

The Paris Agreement promotes balanced flows for adaptation and mitigation, although the dedicated UNFCCC funds each have different mandates, as presented in figure 20. To date the UNFCCC climate funds have not achieved a balanced distribution between mitigation and adaptation projects, and also have not effectively covered all countries vulnerable to climate change. Furthermore, existing flows have not been predictable or sustainable. In fact, the share of climate finance flowing from multilateral climate funds to the Middle East

[83] UNGA, 2015. Addis Ababa Action Agenda.
[84] UNFCCC, 2011, p. 17.
[85] GCF, 2019c.
[86] GCF, 2018c.
[87] GCF, 2019b.
[88] GCF, 2019a.
[89] GCF, 2019d.

and North Africa has fluctuated in recent years, from as high as 16% in 2014 to as low as 2% in 2016 (figure 21).

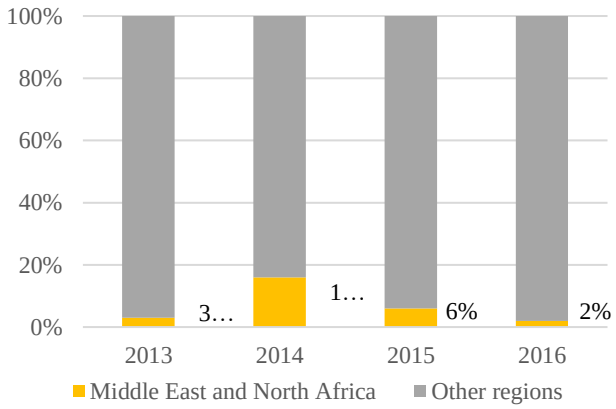
Figure 20 Climate Dedicated Funds



Source: Developed by ESCWA from different sources

While the AF and the LDCF focus on adaptation projects, their combined resources of USD 1.7 billion are dwarfed by the USD 10.3 billion pledged to the GCF and the USD 3 billion allocated by the GEF between 2010 and 2018. Both the GCF and the GEF invest more in mitigation than adaptation projects. Concentrated in a small number of large projects (figure 26), around half of the finance from the multilateral climate funds was delivered as concessional loans and half as grants.

Figure 21 Regional Share of Multilateral Climate Fund Commitments



Source: Elaborated by ESCWA, based on UNFCCC SCF, 2018.

Accessing the UNFCCC climate funds has proven to be challenging for Arab States. Complex accreditation processes that require strong national capacity can be particularly challenging for low-income countries. While fiduciary requirements exist for all types of finance, including grants, the burden tends to be higher for loan finance. Unsurprisingly, to increase the share of climate finance for low income countries, including mitigation but especially adaptation finance, it may be appropriate to increase the amount and share of grant finance provided through the mechanisms of the Paris Agreement and through other international public and private finance flows. For example, through December 2019, four Arab LDCs (Comoros, Djibouti, Mauritania and The Sudan) had accessed the Adaptation Fund once since it was established in 2001, with Sudan and Comoros only accessing finance through joint regional projects.[90] Yemen has not accessed funding through the AF.

Access to the funds needs to be facilitated for all countries to enable developing countries, and particularly LDCs and those emerging from conflict, to access adaptation finance.

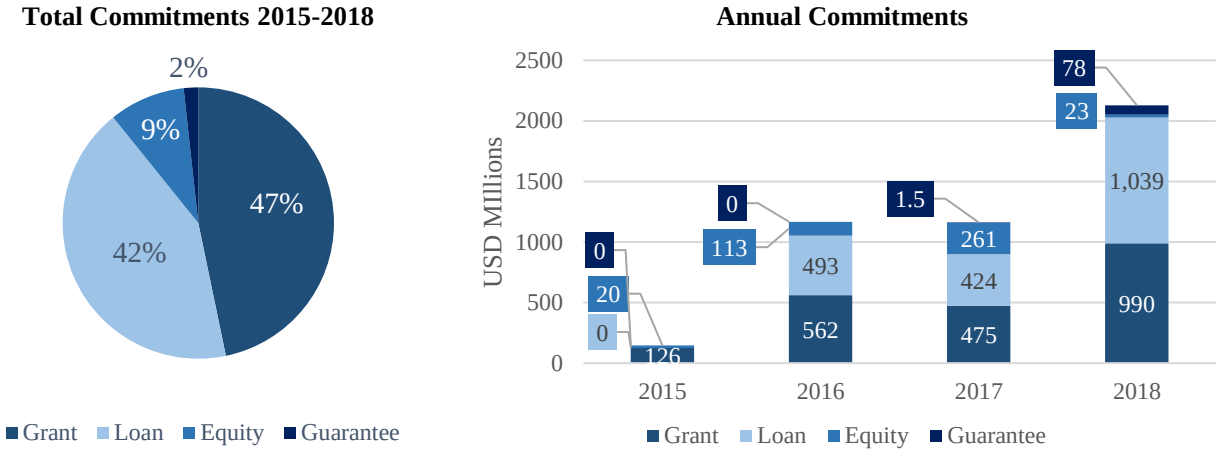
Types and distribution of funding by the UNFCCC climate funds is evaluated in further detail below.

a) Green Climate Fund

Through 2018, GCF raised USD 10.3 billion in pledged capital and committed around USD 4.6 billion, including 47% as grants and 42% via concessional loans (figure 22). Since the GCF began operations in 2015, it has been progressively increasing total annual commitments, as its project pipeline matures, with nearly half

[90] Adaptation Fund, 2019.

Figure 22 GCF Financing Commitments, 2015-2018



Source: Compiled by ESCWA from GCF, 2018g. Data Accessed in October 2018.

of all commitments to date made in 2018. The formal process for the first replenishment of the fund began in 2019 with USD 9.8 billion in pledges announced in October 2019. The fund will continue accepting contributions throughout the four-year implementation period of the first replenishment. Given that USD 10.3 billion were pledged to the fund's start-up capital, it is still too early to say whether the fund will raise additional finance for the first replenishment that would allow it to increase the average value of annual commitments and disbursements.

While the GCF was in its first full year of implementation in 2016, with approximately USD 1 billion in commitments that year, it has not significantly increased operations since, committing approximately USD 1 billion more in 2017, and just over USD 2 billion in 2018. Whether it can continue to scale operations depends not only on its fundraising activities but also on donor follow-through on pledges. Paid in capital to date remains well below the USD 10.3 billion that the fund has raised in pledges. For example, the United States pledged USD 3 billion, but has only paid in USD 1 billion and indicated that it does not plan to pay the remaining USD 2 billion.

The Paris Agreement calls for a geographical balance with higher relative financing targets for countries most vulnerable to climate change, including LDCs, SIDS and African States. Balance across adaptation and mitigation, and providing at least 50% of funds to LDCs, SIDS and African States is one of the key features of the GCF, and this was reiterated at the sixth board meeting. However, allocation of financial resources by the GCF does not meet the fund's defined targets. Although, GCF states that funds need to reach most vulnerable to climate change including LDCs, SIDS and African States, the actual geographic distribution is uneven (figure 25 and figure 26).

Furthermore, although GCF aims to maintain a balance between mitigation and adaptation investments, mitigation projects are attracting around 38% of the fund's committed resources to date, while adaptation projects attracted only 25% (figure 23). The remaining balance was received by adaptation-mitigation projects.

Figure 23 Distribution of GCF Financing, 2015-2018

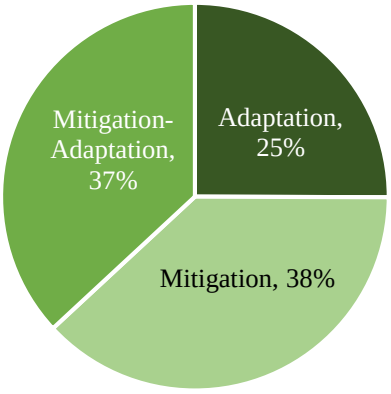
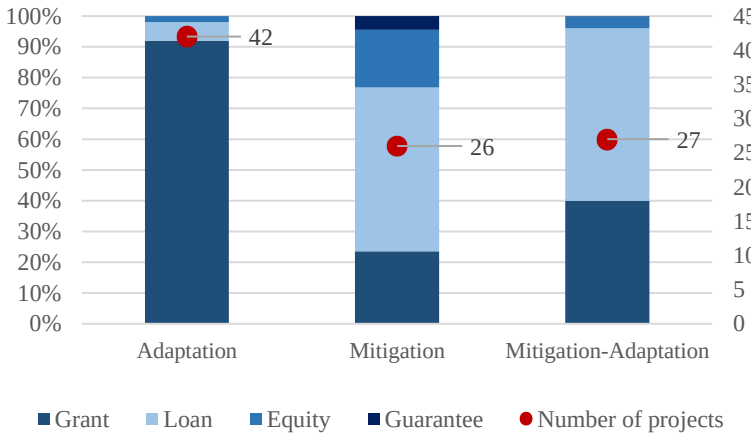


Figure 24 GCF Financing by Instrument, 2015-2018



Source: Compiled by ESCWA from GCF, 2018g. Data Accessed in October 2018.

In the Arab region, five countries have accessed the GCF funds through national projects, including: Bahrain (1 project), Comoros (1 project), Egypt (2 projects), Morocco (3 projects) and the State of Palestine (1). This includes a USD 26.1 million GCF Grant to the State of Palestine, approved in October 2019. Co-finance from AFD and Irish Aid increasing the total grant amount to Palestine to USD 49.2 million. Due to the date of review of this report, this loan is not included in the figures or analysis below.

Total commitments by the GCF to the seven projects awarded to four Arab countries through September 2019 was USD 340 million, or 7% of global GCF financing to date; 55% was provided as grant financing, while the remaining 45% was provided through loans (figure 25). Around 47% of the funds were allocated to mitigation projects, 41% for adaptation and 12% for joint mitigation-adaptation projects (figure 26). In addition to these national projects, the GCF funded five multi-country projects: one project included Djibouti, Egypt and Tunisia were each part of two projects, and Jordan and Morocco were each part of three projects.

Figure 25 GCF Financing to Arab Countries, 2016-2018

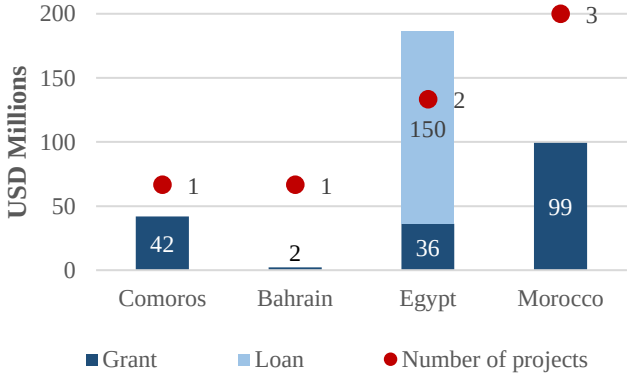
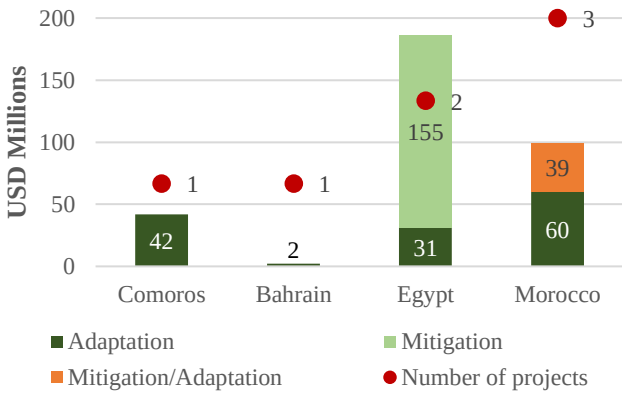


Figure 26 GCF Financing to Arab Countries by Type, 2016-2017



Source: Compiled by ESCWA from GCF, 2018g. Data Accessed in October 2018.

There are 10 national projects from eight Arab countries[91] in the pipeline of GCF, including a project from The Sudan that has been in the pipeline since April 2016.[92] These projects were received by GCF, as eligible projects, but have not yet been submitted to the Board for consideration. Another multi-country project

[91] Countries: Algeria, Djibouti, Egypt, Jordan, Mauritania, Morocco, Somalia and The Sudan.
[92] GCF, 2018b.

involving several developing countries including some Arab countries[93] has been in the pipeline since March 2016, as has one multi-country project including Mauritania.[94] The reasons for the delay in presenting these to the Board for consideration are unspecified.

b) Global Environment Facility

The GEF uses the System for Transparent Allocation of Resources (STAR) to guide the allocation of resources among countries. STAR has been used since the fifth replenishment of the fund (GEF-5), when it replaced the Resource Allocation Framework (RAF). STAR is a system that establishes the total amount of financing that can be disbursed to projects in a given country over the four years for each replenishment of the fund. The seventh replenishment, GEF-7 will provide financing over the 2019-2022 period. To establish the amount of funding that a given country may receive, STAR allocates funds across developing countries for a given period and for each of the three focal areas: climate change, biodiversity and land degradation (table 3). Floors on allocation per country are established for each focal area, although country allocation may be higher based on other criteria.

Table 3 Resource Allocation Floors: GEF-6 and GEF-7

GEF Focal Area	Non-LDCs			LDCs		
	GEF-6	GEF-7	Change	GEF-6	GEF-7	Change
Biodiversity	1.5	2	**+0.5**	2	3	**+1**
Climate Change	2	1	**-1**	3	1.5	**-1.5**
Land Degradation	0.5	1	**+0.5**	1	1.5	**+0.5**
Aggregate Floor	**4**	**4**	**0**	**6**	**6**	**0**

Source: Compiled with adaptations by ESWCA from GEF, 2017b.

The STAR system is intended to enhance transparency across countries and to increase predictability. However, the system allocates funds based on the country's ability to manage them and based on the global environmental benefits from using the funds rather than on the need and vulnerability of the country: "The GEF RAF is built on two key pillars. The first pillar, a country's potential to generate global environmental benefits, reflects the mandate of the GEF to provide incremental cost financing to generate global environmental benefits. The second pillar, country performance, reflects the national policies and enabling environment that facilitate successful implementation of GEF projects."[95]

The indicator used for the first pillar is the GEF benefits for biodiversity indicator (GBI), which uses a methodology by which larger countries tend to score highly, whereas ESCWA member states tend to receive low scores. The GBI is the primary driver of country allocations through STAR, after accounting for focal area floors.[96]Evaluation of country performance under the second pillar is based on the Country Performance Index (CPI) and a per capita GDP-based index (GDPI), which do not have as significant an effect on STAR allocations as the GBI.

Thus, allocation per country for climate change area for amounts higher than the STAR floors for the three focal areas depends on "the potential global benefits that can be realized from climate change mitigation activities in a country," a "country's capacity to successfully implement GEF programs and projects based on its current and past performance," and a weakly weighted GDP index.[97] The ceiling on STAR allocations per country per focal area are equal to 10% of total GEF for the given focal area.
Under GEF-6, actual allocation to many Arab States was significantly below the STAR allocation floors, including within the climate change focus area. While these gaps highlight challenges committing capital to

[93] Arab countries covered in this project are: Egypt, Jordan, Lebanon, Morocco and Tunisia.
[94] GCF, 2018b.
[95] GEF, 2005.
[96] GEF, 2017a.
[97] GEF, 2005.

ESCWA member states, the lower climate finance floors for LDCs and non-LDCs under GEF-7 may further decrease the total funds available to ESCWA member states under the climate finance earmark.

Table 4 Indicative GEF Resource Allocation Floors among Arab Countries, USD millions

	GEF-5 (2010-2014)		GEF-6 (2014-2018)		GEF-7 (2018-2022)	
Country	**Climate Change**	**Total**	**Climate Change**	**Total**	**Climate Change**	**Total**
Algeria	9.17	15.03	6.51	12.5	4.18	9.71
Comoros	2	4.78	3	6.62	1.5	6
Djibouti	2	6.64	3	7.83	1.5	7.2
Egypt	14.48	20.55	10.07	15.96	5.93	11.8
Iraq	2.58	4.08	2.5	7.55	3.55	8.69
Jordan	2.06	7	2	7.2	1.18	6.63
Lebanon	2	6.25	2	6.26	1	5.5
Libya	2.09	4.49	2	4.41	1.78	4.89
Mauritania	2	6.92	3	7.55	1.5	7.43
Morocco	5.81	15.75	4.85	14.53	2.49	10.4
Somalia	-	-	-	-	1.68	13.7
The Sudan	8.88	15.23	5.73	12.83	1.5	7.37
Syrian Arab Republic	5.39	11.19	2.34	6.78	1.15	6.24
Tunisia	4	10.86	2.67	9.21	1.29	7.61
Yemen	2.66	9.04	3	9.22	1.5	9.33

Source: Compiled by ESCWA from GEF, 2010; GEF, 2014; and GEF, 2018c.

While resource allocation to climate change activities decreased between 2010 and 2018 for some Arab countries, vulnerability to climate change continued to increase, as reported in the Regional Initiative for the Assessment of Climate Change Impacts on Water Resources and Socio-Economic Vulnerability in the Arab Region (RICCAR).[98] Furthermore, any unused allocation during a given period is not carried over to the next period for the country's allocation, but rather will be carried over as part of total funds available for another global allocation exercise. Thus, Arab countries facing conflict during GEF-6 (2014-2018), like the Syrian Arab Republic and Yemen, could not use their allocation and missed this opportunity to scale-up their national climate change investments. Funds were also not allocated to the six countries of the Gulf Cooperation Council, despite their being listed under the eligible countries for climate change assistance from GEF.[99]

In June 2018, the GEF Council approved[100] a modification to the STAR allocation criteria for GEF-7. This increased the floor for country allocation to biodiversity and reduced the floor for allocation to climate change and land degradation, as presented in the table below. Of note, however, countries with STAR allocations up to USD 7 million "retain full flexibility to program their allocations across the three focal areas."[101]

c) Adaptation Fund

The Adaptation Fund financed 76 projects in 57 countries between 2010 and 2018, with a total financing of USD 505 million (56% disbursed). In the Arab region, seven countries (Djibouti, Egypt, Iraq, Jordan, Lebanon, Mauritania and Morocco) accessed the fund for national projects covering food security, rural development or agriculture, totalling USD 56 million (31% disbursed) (table 5).[102] Other countries (Comoros and The Sudan) were part of multi-country projects.

[98] ESCWA et al., 2017a. E/ESCWA/SDPD/2017/RICCAR/Report.
[99] GEF, 2005.
[100] GEF, 2018d.
[101] GEF, 2018c.
[102] AF, 2018b.

Table 5 Adaptation Fund Country Cap and Project Implementation, in USD millions

Country	Implementing entity	Year of approval	Amount approved	Amount disbursed	Sector
Iraq	IFAD	2018	10	No amount yet disbursed	Agriculture
Morocco	Agence pour le Développement (ADA)	2015	10	2.9	Agriculture
Jordan	Ministry of Planning and International Cooperation (MOPIC)	2015	9.2	1.9	Multisector Projects
Mauritania	World Food Programme (WFP)	2012	7.8	7.7	Food Security
Lebanon	IFAD	2012	7.8	1.6	Agriculture
Egypt	WFP	2012	6.9	6.8	Food Security
Djibouti	UNDP	2012	4.7	4.7	Rural Development

Source: Adaptation Fund, 2019.

d) LDCF

The LDCF follows the principle of Equitable Access by Least Developed Country Parties. This approach seeks to ensure that funding for the implementation of National Adaptation Programs of Action (NAPA) is available for all LDCs at all times. A ceiling (USD 40 million as of 2016)[103] is imposed on each country to ensure that available resources are not depleted. Any unused balance will be added to the country's allocation.[104] All Arab LDCs have accessed LDCF, however this support is limited both in scope and in resources – given the limited financial resources available for this fund.[105]

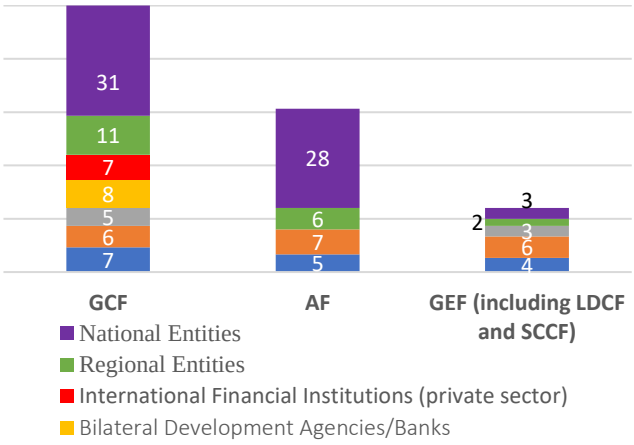
3. *Accessing climate dedicated funds serving as the Financial Mechanism of the UNFCCC*

In practice, developing countries, public, private or non-governmental entities, can access these international funds only if they submit a proposal through an accredited entity. The accreditation process is intended to ensure that the entity has sufficient capacity, based on an assessment of fiduciary standards, social and environmental safeguards, and gender policy. Entities are eligible to submit a program or project funding proposal only after they have been accredited. The GCF has the most accredited entities to date, with most of those accredited entities being national entities, as seen in figure 27. However, the allocation of funds among accredited entities clearly indicates a bias towards multilateral, intergovernmental accredited entities (figure 28), while national entities generally receive a small percentage of total funds.

[103] GEF, 2018c.
[104] GEF, 2011a.
[105] Calculated by ESCWA from Projects database of Global Environment Facility, accessible on https://www.thegef.org/projects.

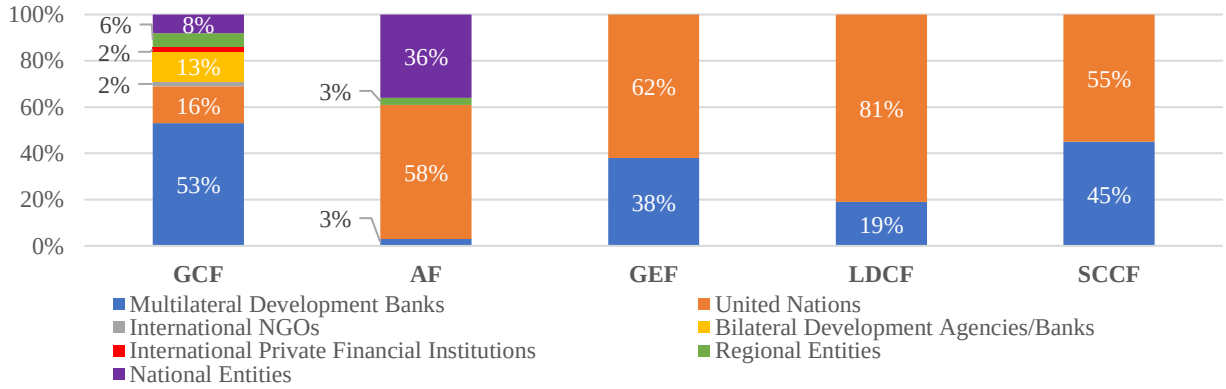
While multilateral climate funds have emphasized the importance of increasing the number of accredited entities, and successfully done so, the distribution of financing remains skewed. As the number of accredited entities has increased significantly, newly accredited private sector implementing entities represent a small share of accredited entities, but private entities received a large share of financing in 2016, the most recently reported year (figure 29). Conversely, the number of national public sector accredited entities has been growing more quickly, but the share of resources captured by national entities remains very limited. The Adaptation Fund displays a slightly less skewed distribution compared to the other multilateral climate funds: 61% of funds were allocated through multilateral institutions and 36% though national entities (figure 28).

Figure 27 Number of Accredited Entities



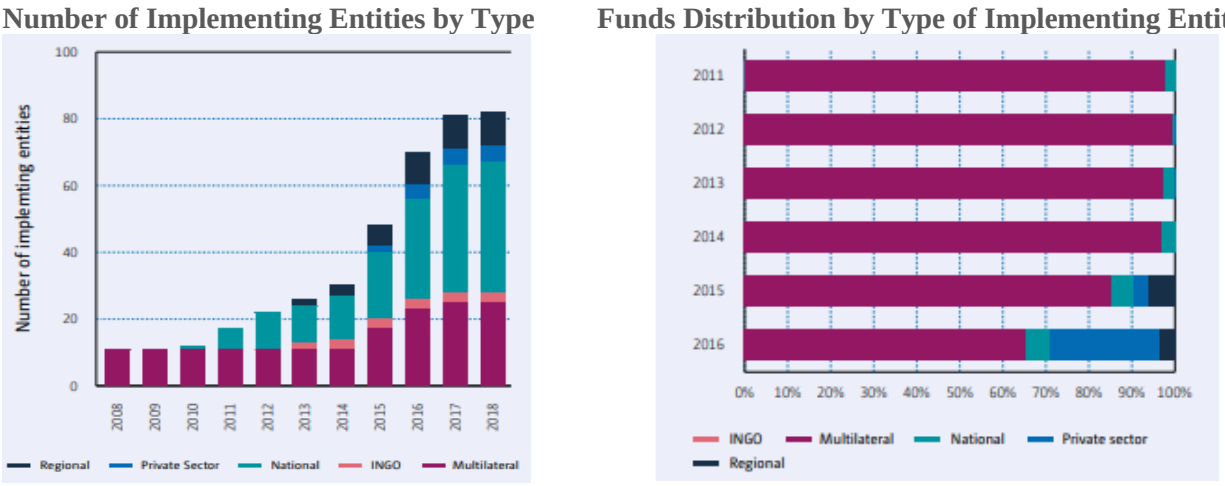
Source: Compiled by ESCWA from the database of the Adaptation Fund, the Green Climate Fund and the World Resources Institute.

Figure 28 Allocation of Funds by Accredited entity



Source: Compiled by ESCWA from the database of the Adaptation Fund, the Green Climate Fund and the World Resources Institute.

Figure 29 Number of Implementing Entities of Dedicated Multilateral Climate Funds compared with Funds Distribution by Type of Implementing Entity



Source: UNFCCC SCF, 2018

Nevertheless, on average, the apparent disconnect between accreditation and actual receipt of funds may serve as caution to entities seeking accreditation with the expectation that this will unlock access to funding. The evidence suggests that competition among accredited entities for scarce resources is increasing significantly over time.

Furthermore, a study of several dedicated climate funds by "Amerasinghe et al. (2017) noted that accreditation of the implementing entity and endorsement of investment plans may take between 10 and 28 months, while the project approval stage may require between 12 and 22 months."[106] In fact, the length and complexity of the accreditation process of GCF was on the agenda of the last GCF Board Meeting (Manama, October 2018), but this agenda item was not opened by the board.[107] The same description can be extended to accreditation with other climate funds. To be accredited entities must fulfil rigorous criteria including fiduciary standards, environmental practices, monitoring and evaluation processes, and gender considerations.

a) Accreditation with the GCF

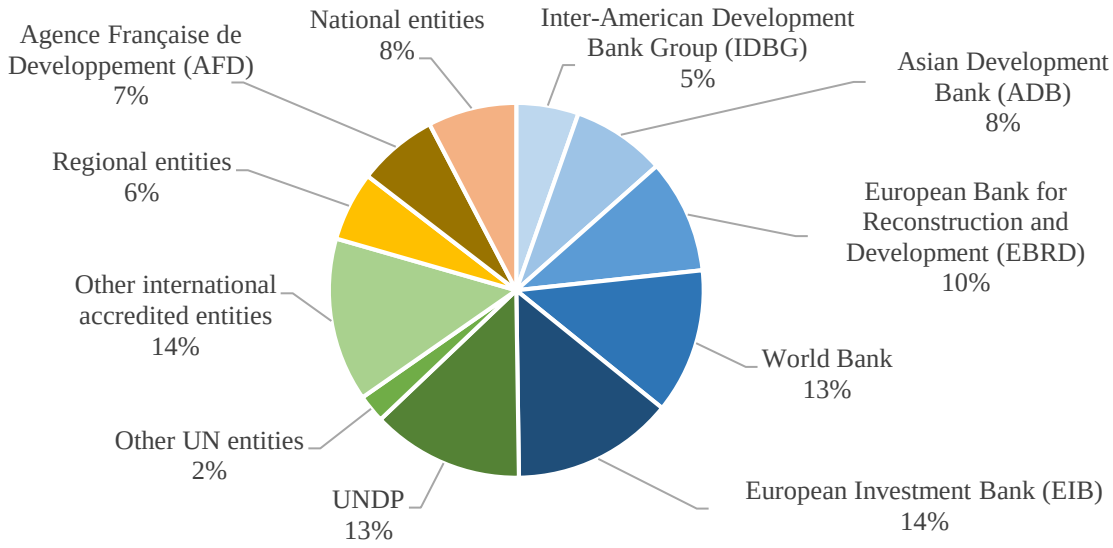
The GCF offers direct financing to projects implemented by an accredited entity. Project proposals need to be submitted through a National Designated Authority[108] and be approved by an accredited entity. This practice was developed by GCF to enhance national ownership of projects and to respond to national priorities rather than to impose the priorities of donor entities, hoping to increase the impact of their efforts. Funding projects is approved by the GCF Board. By October 2018, there were 75 accredited entities[109] (figure 27) among which 31 direct national entities, 11 direct regional entities, and 33 international entities (including 7 multilateral development banks, 6 United Nations agencies, 5 international non-governmental organizations, 7 international private financial institutions and 8 bilateral development agencies).

Entities at the global, regional, national, and sub-national level, including public, private, and non-governmental organizations, are eligible to seek accreditation, and the accreditation process is intended to be "fit for purpose" whereby the rigor of the accreditation requirements depends on the size and social and environmental risk of projects that would be managed by the entity.[110,111] To be eligible to apply for accreditation, most entities must be nominated by a national focal point or National Designated Authority. Non-accredited entities may partner with an accredited agency to submit a proposal.

[106] UNFCCC SCF, 2018, p. 90.
[107] GCF, 2018d and GCF, 2018e.
[108] National Designated Authority is a governmental entity selected by the country to act as a focal point with GCF.
[109] GCF, 2018a.
[110] UNEP/UNDP/WRI GCF Readiness Program, 2016.
[111] UNFCCC SCF, 2018, p. 91.

Also, while accreditation process takes on average 9.9 months,[112] funds disbursement has been described as "terrible".[113] It was noted that by the end of December 2017, around USD 150 million of the USD 3 billion committed were released. Disbursements were delayed as a result of legal documentation and other requirements imposed on projects after the approval.[114] Efforts have been exerted by the GCF to improve this track record and facilitate processes leading to project approval and disbursement.

Figure 30 Distribution of GCF Funds by Accredited Entities (% of total funds), 2015-2018



Source: Compiled by ESCWA from the Green Climate Fund database.

The GCF institutional mission emphasizes country ownership of projects, but the allocation of funds among accredited institutions does not reflect this statement. At the global level, only 8% of funds are disbursed through national entities and 6% through regional entities, whereas 86% are disbursed through international institutions (figure 30). A closer examination of these international institutions shows that seven international accredited entities managed 75% of funds allocated by the GCF's through 2018, including the European Investment Bank (EIB), World Bank, United Nations Development Programme (UNDP), European Bank for Reconstruction and Development (EBRD), Asian Development Bank (ADB), Agence Française de Developpement (AFD) and the Inter-American Development Bank Group (IDBG).

The GCF has significantly increased the number of accredited entities in recent years, as it seeks to fulfil its mission to engage a broader set of stakeholders. Furthermore, it has developed a readiness programme to support National Designated Authorities (NDA) in project proposals and in accreditation process. This programme allocates up to USD 1 million per country per year as grants or technical assistance.[115] However, some reports have noted that disbursing readiness grant support has been very slow and discouraging,[116] although the length of the project approval pipeline may mean that results will not be immediately apparent, as more than one year is often required for project approval once a project has been submitted to the GCF by an accredited entity. In total, GCF has approved 200 readiness requests in 114 countries with a total commitment of USD 114 million, around 35% only were disbursed by end of October 2018 (only USD 40 million). Fifteen readiness support requests from 12 Arab countries were approved for projects covering NDA Strengthening and Country Programming,[117] namely Algeria, Comoros, Djibouti, Egypt, Iraq, Jordan, Libya, Mauritania, Morocco, Oman, Sudan and Tunisia. In parallel, GCF allocated USD 1.5 million as grants or

[112] Amerasinghe et al, 2017.
[113] Arkin, 2018.
[114] Arkin, 2018.
[115] GCF, 2018h.
[116] Amerasinghe et al, 2018.
[117] GCF, 2018b.

repayable grants per country for Project Preparation Facility to support accredited entities in preparing projects and programmes.[118]

b) Accreditation with the GEF

The GEF launched with only 10 accredited entities, including 4 multilateral development banks and 6 United Nations agencies. In 2012, the board decided to expand its accreditation and to include 11 national, regional and civil society organizations.[119] The process was completed in 2015 and only 8 new entities were accredited (2 regional entities, 3 national and 3 international non-governmental organizations),[120] increasing the total number of accredited entities to 18 (figure 5), none of which are from the Arab region. GEF's decision to accredit more national entities was put on hold in 2015 until the end of 2018 and no information is available on future steps.

Projects proposed for financing need to fall within the GEF priorities, be in line with the priorities of one of its partners, be eligible for assistance from the GEF, the World Bank or UNDP, to respond to national priorities, and be endorsed by GEF focal point in the recipient country. The GEF provides financing to the only for incremental costs to transform a project that has national environmental benefits into a project that has international environmental benefits. The country must cover the remaining cost of the project (e.g. what it would have cost if it did not promote global environmental benefits).

Funds disbursed by GEF have been received almost exclusively by multilateral entities. Given that accreditation of national and regional entities was concluded between 2012 and 2015, it is still early to assess the distribution of funds among them. The World Bank Group, as trustee of the GEF, and UNDP received more than 70% of the funds (World Bank 38% and UNDP 35%).[121] Similarly, 52% of LDCF's funds were disbursed through UNDP, while 28% and 24% of SCCF were handled by the World Bank and UNDP, respectively.[122]

Eligible countries can access the GEF-managed LDCF and SCCF after securing the endorsement of one of the 10 multinational accredited entities with GEF. Any LDC, party to the UNFCCC, can access the LDCFs after completing and submitting its NAPA to UNFCCC Secretariat. The time to access the GEF ranges between 18 to 22 months, extending from the submission of the proposal to receiving the approval on the project, all depending on the size of the latter.[123]

c) Accreditation with the Adaptation Fund

The Adaptation Fund followed a different approach and accrediting national entities was considered an innovative feature of the fund, to facilitate direct access for developing countries. Projects may be endorsed by national and regional entities and do not require the endorsement of a multilateral implementing entity. As of August 2018, the Adaptation Fund had 46 accredited entities (figure 27Figure 27), including 12 multinational, intergovernmental entities (5 multilateral development banks and 7 United Nations agencies), 6 regional entities (including one proposed by Tunisia), and 28 national entities (including one from Jordan and one from Morocco). The accreditation process was taking on average between 17 and 27 months, while funding a project took on average between 8 and 12 months.[124] Thus, for countries without an accredited entity, it is estimated to take a minimum of between 25 and 39 months to access finance from the AF for the first time.

The Adaptation Fund also has a cap of USD 10 million per country. Increasing the country cap set by the Adaptation Fund has been under discussion since 2012, but these discussions have not yet reached the decision

[118] GCF, 2018f.
[119] GEF, 2012.
[120] GEF, 2018a.
[121] Amerasinghe et al, 2017.
[122] Amerasinghe et al, 2017.
[123] Amerasinghe et al, 2017.
[124] Amerasinghe et al, 2017.

phase.[125] Three Arab countries (Iraq, Jordan and Morocco) have already reached the AF funding limit despite implementing only one project, and they may thus not undertake any new projects unless the cap limit is revised, even though both Jordan and Morocco have accredited national entities with the fund, as previously shown in table 5.

d) Evaluating accreditation options

A key question to answer when considering applying for accreditation by one of the financial mechanisms of the UNFCCC is whether another option to access finance may be more easily accessible and fit-for-purpose, noting the length of the accreditation process, and increasingly large number of accredited entities seeking the same scarce resources. That said, undergoing an accreditation process may also be a useful review of fiduciary and other management practices, which may help entities prepare to more successfully approach other funding sources as well. For example, while the accreditation process is lengthy and complex, an Adaptation Fund accredited institution can more easily become accredited with the GCF.

If it makes sense to seek accreditation, deciding which fund to approach for financing depends on several factors, but the most determining of these factors are the type and size of the project and the accessibility of resources. The Adaptation Fund cap of USD 10 million per country and so suits projects of a relatively small size, in contrast with the GCF which is the only fund that considers large-scale projects.

Direct access modalities offered by the GCF and Adaptation Fund allow developing countries to access the funds without partnering with a multilateral accredited entity. While the accreditation process is meant to "fit-for-purpose," with a level of rigor determined based on project characteristics, the GCF and Adaptation Fund both offer some form of capacity building support to potential accredited entities to meet fiduciary standards and social and environmental safeguards. For example, the GCF direct access readiness program "had approved 165 requests, across 109 countries, amounting to USD 99.7 million by May 2018."[126]

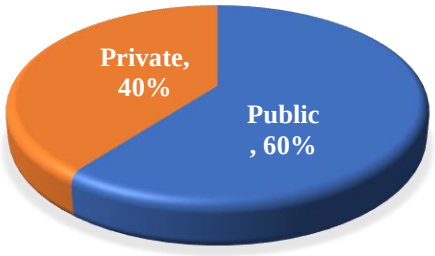
The UNFCCC 2018 Biennial Assessment concludes that "Institutions in beneficiary countries are increasingly able to meet fiduciary and environmental and social safeguard requirements for accessing funds…" based on the "notable increase in the number of regional and national implementing entities" receiving funding.[127] The Biennial Assessment does recognize, however, that "some of the most vulnerable countries … have their access to climate finance hindered by institutional capacity barriers, weak policy and fiscal frameworks and/or fragility."[128]

[125] Adaptation Fund, 2016.
[126] UNFCCC SCF, 2018, p. 94.
[127] UNFCCC SCF, 2018, p. 11.
[128] UNFCCC SCF, 2018, p 86.

4. *Private sector engagement: Green Climate Fund*

The private sector is invited to contribute to climate change adaptation and mitigation projects and to make use of the financing instruments from climate funds aimed at making these investments more attractive and more secure. Private sector entities can access GCF resources as an accredited or an implementing entity. Through October 2018, the GCF accredited seven international financial institutions from the private sector and some national private sector entities from developing countries, including the Moroccan investment bank CDG Capital S.A.. These accredited entities can submit projects for consideration by GCF after receiving the "no objection" clearance from the nationally designated authority of the country hosting the project. One private sector project on renewable energy in Egypt was approved in April 2017.[129]

Figure 31 Distribution of GCF Financing by Sector, 2015-2018



Source: Compiled by ESCWA from Green Climate Fund database.

Private investors are eligible to receive concessional loans, equity financing, guarantees, and even grants from the GCF. Between 2015 and 2018, private investors captured around 40% of GCF funds, of which 61% went to mitigation projects. Comparatively, of the 60% of GCF funds captured by public sector entities, only 39% were committed to mitigation (figure 32Figure 32). Private entities are accessing financial resources via a blend of instruments with a significantly higher share of loans and equity, while public entities receive a higher share of grants (figure 33Figure 33).

Of particular note, there is a marked difference in the way mitigation and adaptation are being financed. First, the private sector plays a much bigger role in mitigation projects than in adaptation projects. While 53.3% of GCF funds distributed to private stakeholders from 2012-2015 went to projects that had a pure mitigation focus, just 2.2% went to projects with a pure adaptation focus. Conversely, a full 40% of GCF funds distributed to public stakeholders over the period went to projects with a pure adaptation focus (figure 32). This suggests that far fewer commercially viable investment opportunities have been identified for adaptation projects than mitigation projects.

Figure 32 Distribution of GCF Financing, 2015-2018

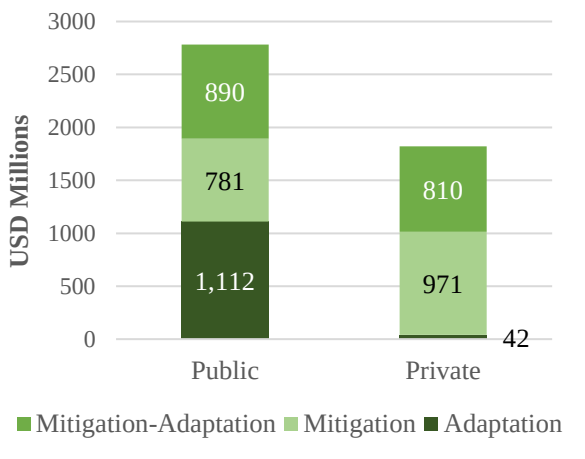
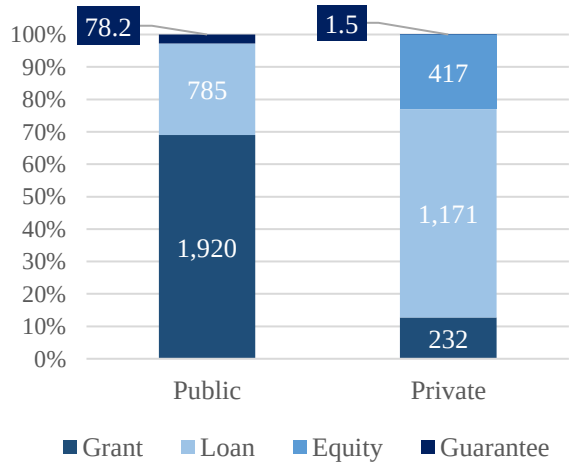


Figure 33 Distribution of GCF Financing Instruments, 2015-2018

(values in USD millions)



Source: Compiled by ESCWA from Green Climate Fund

[129] GCF, 2018g. Project FP039.

Public sector projects are also attracting private investors. For instance, some public sector projects received partial financing from GCF and were partially complemented by equity investments from private entities, mainly mitigation or mitigation-adaptation projects. For example, Indonesia received USD 100 million in GCF financing (USD 92.5 million as grant and USD 7.5 million as loan) and managed to attract equity investments from the private sector worth USD 60 million.[130] One multi-country adaptation project that will provide USD26 million financing (USD 23 million as equity and USD 3 million as grant) has attracted private investors, led by Acumen Fund, that will invest an additional USD 27 million in equity.[131] Blended finance instruments of this type are reviewed in more detail below in Chapter II.C, along with other instruments that can be drawn upon to garner additional climate finance.

GCF has also developed a "private-sector facility" aimed to support private entities' investments in climate change mitigation and adaptation in developing countries. The main objective of this facility is to offer seed financing that would allow for crowding-in of additional resources from private investors or other international entities, like other development banks. In an effort to scale-up private sector's participation in climate projects, GCF held a conference targeting private investors from 10 to 11 October 2018 in Korea, to inform private investors about financing instruments and investment opportunities available globally.

[130] GCF, 2018g. Project FP08.
[131] GCF, 2018g. Project FP078.

III. Climate Finance Instruments to Attract Additional Finance

Total international climate finance flows do not yet meet the total financing need. Financial resources need to be significantly scaled up to meet the pressing needs of developing countries to respond to climate change challenges. Accessing international public climate finance flows is a priority for developing countries. However, many countries are also piloting and adopting locally or globally innovative financing instruments to mobilize additional climate finance resources for nationally determined climate actions. Many of these financing instruments are not new but may represent new approaches to mobilize climate finance for a given country or sector. These sources can complement public international climate finance flows to developing countries but are not a substitute for existing commitments by developed countries to provide climate finance to developing countries, which typically are a source of resources for public expenditure, rather than innovative instruments to attract complementary financing sources.

The categories of instruments discussed below do not include redistributive instruments, such as carbon taxes or fiscal incentives, but rather focus on financial instruments that can be implemented without significantly affecting domestic expenditure, policy, and the broader national economy. Furthermore, this Chapter does not evaluate carbon credits, which are a potential source of external climate finance, as the negotiations regarding Article 6 of the Paris Agreement on market mechanisms are very nuanced and require a dedicated and detailed analysis. Currently, carbon prices are very low and residual funds through the Clean Development Mechanism represent an opportunity that is limited in scale; however, if negotiators reach an outcome on carbon markets under Article 6, and if prices for carbon credits recover, policymakers may wish to explore carbon credits in more detail.

A. Risk Mitigation Instruments

Risk mitigation instruments include investment guarantees, insurance and risk-sharing mechanisms. A common example is political risk insurance for commercial investment in foreign markets. These instruments are designed to attract private investment (or in some cases public investment seeking a target risk-adjusted financial return) by mitigating investor's financial exposure to risks that would otherwise discourage investment.

The Multilateral Investment Guarantee Agency (MIGA), a member of the World Bank Group, is the most prominent public multilateral risk mitigation entity. MIGA provides political risk insurance and guarantees to investors and lenders to facilitate investments in emerging economies. Guarantees protect investors against risks including expropriation, war, breach of contract, counterpart failure to honour financial obligations, currency inconvertibility, and transfer restriction.[132]

This instrument is gaining more interest in climate investment projects. In 2015, MIGA introduced climate change as one of its core priorities. Since then, funds allocated to guarantee climate change-related projects increased from USD 3.7 billion in 2015 to USD 4.2 billion in 2017 (in 2017, MIGA issued total guarantees worth USD 4.8 billion).[133] For example, in Jordan in 2017, MIGA provided a 19 year guarantee, covering up to USD 216 million in commercial debt for a gas-fired power plant[134] and extended USD 16 million in investment guarantees over 20 years to cover equity investments in solar power generation by a private-equity fund.[135] Also in 2017, MIGA provided a USD 1.5 million guarantee for a biogas plant in West Bank and Gaza.[136] Investment guarantees are one of the financial instruments used by the GCF.

The World Bank and the IDBG have also used risk mitigation instruments in climate finance, often combining guarantees with grant finance. For example, the World Bank extended USD 75 million in guarantees to a USD

[132] MIGA, 2018a.
[133] MIGA. 2017.
[134] MIGA. 2017.
[135] MIGA, 2015.
[136] MIGA, 2018b.

88 million public sector mitigation project in Vietnam, while the IDBG extended guarantees to two private sector entities, including a USD 1.5 million mitigation-adaptation project in Guatemala and a USD 200 million mitigation project in Mexico.[137]

Guarantees are financial instruments that can make adaptation and mitigation projects with a high-risk factor attractive to private sector. By scaling-up investment guarantees, GCF and other climate investment funds may be able to mobilise increased private sector investment in countries with low adaptive capacities to climate change, especially least developed countries and countries in conflict.

B. Blended Finance: Joint Private and Concessional Public Finance

Blended finance "combines concessional public finance with non-concessional private finance and expertise from the public and private sector" under clear accountability mechanisms.[138] This includes many (but not all) public-private partnerships (PPPs), among other structures. When public climate finance is committed to blended finance, the blended instrument should help to achieve better adaptation or mitigation outcomes than could be achieved, dollar-for-dollar, through direct public expenditure. This can leverage public resources to catalyse (crowd-in) *additional* private or commercial investment that furthers public policy objectives, including adaptation and mitigation. Blended finance is potentially valuable as a climate finance tool if it leads to additional climate action per dollar of public expenditure and is consistent with nationally determined climate action priorities.

The role for joint public and private sector action is clearly established in the Paris Agreement and AAAA. The Paris Agreement calls for enhancing "public and private sector participation in the implementation of nationally determined contributions,"[139] while the AAAA specifically recognizes the "potential" of blended finance and notes that "an important use of international public finance, including ODA, is to catalyse additional resource mobilization from other sources, public and private."[140]

While the term blended finance and use of this type of financing structure has come to prominence in recent years, the underlying financial concepts and instruments have been around much longer. To attract private investment, public finance can be used to reduce the risk or costs faced by private investors, making projects investable for private investors by changing the risk/return profile (figure 34). This may correct market failures preventing private investment. Depending on how public funds are used within the blended structure, it may also be possible to change market incentives to better align private sector economic incentives with public policy objectives. Just as more private finance flows to mitigation, there may be more opportunities for blended finance to finance mitigation than adaptation.

The Ouarzazate Solar Power Project in Morocco is an example of a project that received blended climate finance in 2011, some of which was provided through a PPP. This included concessional funding from the Clean Technology Fund (CTF),[141] a climate-dedicated fund that does not fall under UNFCCC operating entities, among other donors. The CTF provided concessional finance after concluded that the concessionality was "the key factor for the success of the program, making the cost per kWh of wind competitive." and that "Morocco's ability to implement its ambitious Wind Plan through Public Private Partnerships [would] be substantially strengthened through the access to CTF concessional resources which will help mitigate its costs, risks and increase its credibility."[142] A 2013 project case study concluded that blended finance was key to the project's success, noting: "Without high levels of international support, the project would not [have been] viable. International donors and lenders provided around USD 1 billion of early concessional financing … driving down levelized costs by an estimated 25-30%."[143] The project was inaugurated in 2016 with an installed

[137] GCF, 2018g.
[138] UNGA, 2015. Addis Ababa Action Agenda. Annex II (C), para. 48.
[139] UNFCCC 2015. Paris Agreement. Article 6, para. 8(b).
[140] UNGA, 2015. Addis Ababa Action Agenda. Annex II (C), para. 54.
[141] Climate Investment Funds, 2018.
[142] Climate Investment Funds, 2011.
[143] Falconer and Frisar, 2013.

capacity of 160 megawatts. and which an independent evaluation concluded was necessary to make the project attractive to private investors.

Blended finance has many demonstrated applications that unlock significant financial and development additionalities, but it can also be complex and often is not feasible, appropriate, or efficient.[144] In some cases, concessional public resources may not be sufficient to achieve an attractive risk and return profile for private investors. There may be more blended financing opportunities for mitigation projects than for adaptation projects, as it may be easier to adjust risk and return incentives for mitigation projects to achieve attractive risk-adjusted returns for private investors. In other cases, it may not be possible to ensure that concessional public financing efficiently contributes to better public policy outcomes.

It is particularly important to ensure that concessional public resources are truly needed to catalyse private investment, as blended finance may provide some level of direct or indirect subsidy to private investors (figure 34). Figure 34presents scenarios B, C, and D, under which blended finance may lead to financial additionality by unlocking new private investment that would not occur under scenario A, but also highlights that under scenario E the public sector bears more risk and higher cost than is necessary to attract investment, resulting in an unnecessarily and uncompetitive level of return to the private sector partner. This would represent an inefficient use of public resources and may reduce the adaptation or mitigation additionality per dollar of public expenditure, compared with the alternative of direct public implementation of a project.

Recognizing risks such as the one presented in scenario E, which can result from both poor financial engineering of the blended finance instrument, or simply from poor governance, the AAAA cautions that "projects involving blended finance, including public-private partnerships, should share risks and reward fairly, include clear accountability mechanisms and meet social and environmental standards."[145]

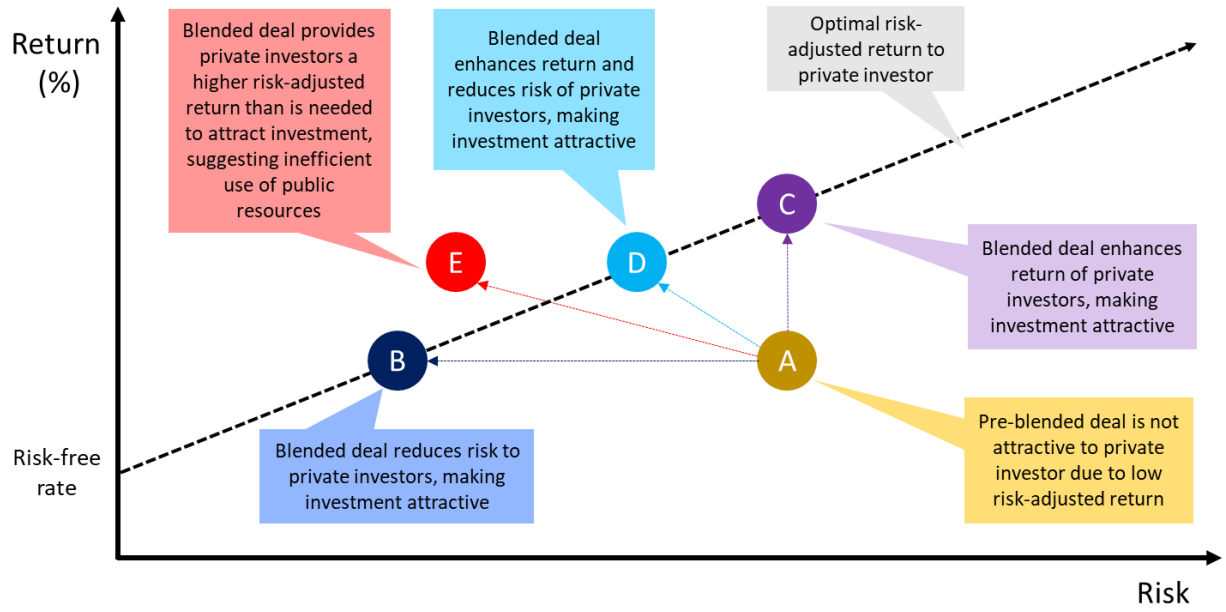
To ensure that concessional public resources are directed towards public policy objectives, the UN Capital Development Fund (UNCDF) proposes[146] two guiding principles for blended finance:

- **Sustainable Development Additionality:** the project is **(**a) aligned with the SDGs; and (b) achieves better impact outcomes than could be achieved without the blended instrument.
- **Financial Additionality**: blended finance may be appropriate if "the project would not be funded by commercial sources alone without concessional support."[147]

In the case of climate action, recognizing that in some cases there may be economic or financial trade-offs between sustainable development actions and climate actions, and important third principle for use of blended finance for climate action would be that it should achieve **climate additionality**, in addition to sustainable development and financial additionality.

[144] UNCDF and others, 2018 reviews the advantages and challenges of using blended finance in more detail.
[145] UNGA, 2015. Addis Ababa Action Agenda. Annex II (C), para. 48.
[146] UNCDF, 2018.
[147] UNCDF, 2018.

Figure 34 Blended Finance can Adjust the Risk/return Profile to Attract Private Investors



Source: Developed by ESCWA building on: UNCDF and others (2018).

For example, an investment in no regrets measures[148] that target jobs creation and poverty eradication, but which have an unattractive rate of return for private investors in the absence of blended finance, may unlock both sustainable development additionality, climate additionality, and financial additionality.

Per the above definitions, not all projects with public and private investment are blended instruments, nor do they necessarily achieve financial additionality and/or sustainable development and climate action additionality. Policy makers will need to carefully evaluate each potential blended finance opportunity to evaluate the degree of additionality and degree to which it complies with the standards identified above. A key concern is that concessional finance should not provide levels of risk mitigation or return subsidy that exceed the minimum threshold to create a commercially viable investment opportunity that can attract (unlock) private finance or investment. There is an important time dimension to this analysis, and under conditions of weak capacity or governance there is a risk that the public sector will reduce short term costs without sufficiently understanding or considering long term costs and risks. This could increase the long-term burden on the public sector rather than unlocking additionality.

The IFC and a large group of leading regional development banks[149] formed a DFI Working Group of Blended Concessional Finance for Private Sector Projects, which published a summary report in 2017[150] that establishes a more comprehensive set of principles and guidance for effective engagement that efficiently uses public resources to achieve public policy objectives. The five principles advocated by the DFI working group echo the UNCDF principles and include:

- Principle 1. Additionality/Rationale for Using Blended Concessional Finance
- Principle 2. Crowding-in and Minimum Concessionality
- Principle 3. Commercial Sustainability
- Principle 4. Reinforcing Markets
- Principle 5. Promoting High Standards

[148] No regret measures preventively advance adaptation and mitigation despite uncertainty about long term climate change impacts, while contributing to positive short-term outcomes.
[149] EBRD, IFC, AsDB, IDBG, AfDB, EIB, ICD, AIIB and EDFI.
[150] DFI Working Group, 2017.

These five principles, particularly Principle 1, reflect the fact that blended finance will not always be appropriate. Indeed, not all finance needs will have a commercially viable investment opportunity, even with a blended instrument, particularly when adaptation or mitigation projects require investments in public goods and illiquid projects. In other cases, private sector stakeholders may seek to shift excessive risk to the public sector, or request excessive subsidy, over the time horizon of the project. Principle 2, minimum concessionality, highlights the risk demonstrated by deal "E" in figure 34Figure 34, whereby the public sector bears excessive risk and/or provides excessive return subsidy to private investors.

Given the technical complexity of blended finance, strong institutional capacity and a suitable enabling environment are critically needed to ensure that blended instruments serve policy objectives. This is noted in the Addis Ababa Action Agenda. Good governance and a strong regulatory framework are also essential to ensure that public resources follow principles 1 and 2 on additionality and minimum concessionality to ensure good stewardship of public resources. Of note, ODA has been less effective in catalysing private investment in LDCs through blended instruments, likely due in part to more challenging investment climates and weaker enabling environments for blended finance, suggesting that a higher share of grant finance may be needed to complement public expenditure.[151]

While not directly tailored to blended finance, PPP governance frameworks may support good governance of blended finance instruments in some cases.[152] There are international, national, and sub-national dimensions to governance for PPPs, due to the participation of private international finance and investors in many partnerships. At the international level, the United Nations Commission for International Trade Law (UNCITRAL) has developed legislative guidance and model law for PPPs. A number of Arab States have adopted a legal framework for PPP, but many have not. Egypt enacted a public-private partnership (PPP) law in 2010 and also established a Public Private Partnership Central Unit at the Ministry of Finance to encourage and mobilize private sector participation. Similarly, Morocco has recently enacted the PPP law in 2014, which was followed-up with the establishment of the Department of Public Enterprises and Privatization at the Ministry of Economy and Finance to oversee the implementation of the PPP arrangements.[153] Tunisia is in a transitional phase whereby government is currently developing a PPP law that provides a set of simplified procedures for small-scale private sector involvement. In the meantime, the existing concession law has been amended by a decree in November 2013 to broaden the scope of private sector involvement to cover a wide variety of PPP arrangements.[154]

The GCF administers a private sector facility that seeks to engage private finance, including through blended instruments that can include. The GCF can provide grants, loan, equity, and guarantee finance and uses these different types of capital to attract private sector finance in different ways, including:

- "De-risking investments, including foreign exchange and investors' default;
- Bundling small projects into portfolios, providing scale and making them attractive to institutional investors;
- Supporting capacity building amongst different groups and local institutions;
- Helping develop public-private partnerships for infrastructure resilience projects;
- Encouraging innovation, for example by overcoming scale problems and fragmentation within the supply chain;
- Being active in the clean energy, climate resilience and sustainability communities."[155]

One project supported by the GCF with blended finance is the Egypt Renewable Energy Financing Framework, which seeks to "support Egypt in meeting its target of 20% renewable energy generation by 2022."[156] The GCF will provide USD 150 million in loans intended to attract private investors and USD 4.7 million in grants to

[151] UNCDF, 2018.
[152] PPPs are not always blended finance instruments, and many blended finance instruments are not PPPs.
[153] Kingdom of Morocco, Ministry of Economy and Finance, 2013.
[154] OECD, 2014.
[155] Green Climate Fund, 2019b.
[156] Green Climate Fund, 2018g. Project 039.

support complementary policy development, as part of this USD 1 billion renewable energy project led by the EBRD.[157] The blended component of this deal is the USD 4.7 million in grant finance, as the loan finance is not concessional.

The ratio of concessional public finance to private finance will inevitably vary on a case to case basis, with a higher share of concessional finance expected for adaptation projects than mitigation projects, on average. The USD 4.7 billion in grants represent a small percentage of total project financing for the Egypt Renewable Energy Financing Framework, yet this type of grant finance for policy interventions can help to better achieve adaptation and/or mitigation outcomes. In other cases, it may be appropriate for concessional or grant finance to represent a larger share of overall project finance, such as was the case for the Ouarzazate Solar Power Project in Morocco.

Yet while different ratios of blended finance can sometimes unlock private investment for climate mitigation and adaptation projects, blended finance is complex. It requires strong capacity and rigorous transparency and accountability mechanisms, typically with complex compliance procedures for resource constrained developing countries. Due to the significant technical and governance risks in structuring a blended finance instrument, care is needed when evaluating whether blended finance would equitably create value for the public and private sector partners. Otherwise there is a risk that scare public resources will be used inefficiently, which could undermine public policy objectives and lead to worse outcomes than would be achieved through direct public expenditure and policy action. The costs and resources required for structuring and evaluating such an instrument may only be available for large and/or replicable projects, such as the large infrastructure projects examples presented above.

C. Green Bonds, Green Sukuk

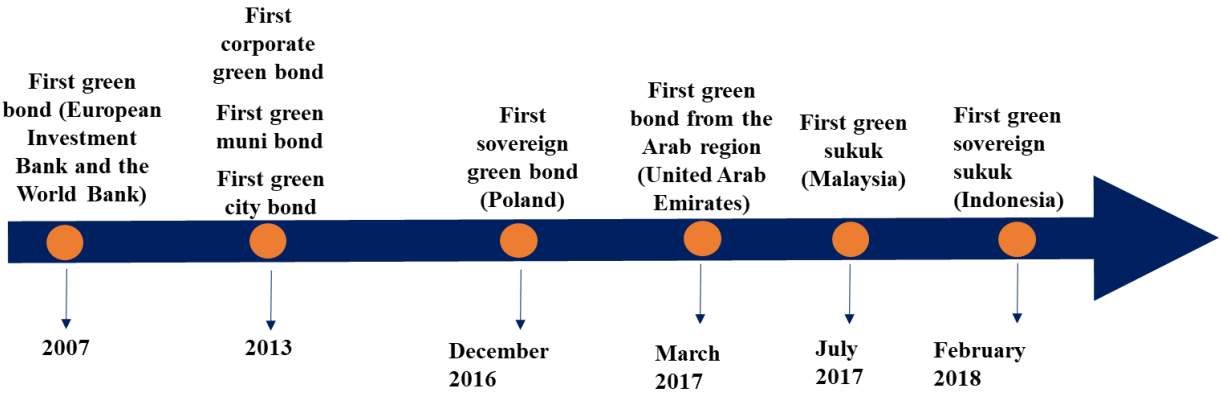
1. *Green bonds*

Green bonds are financial debt instruments whose proceeds are allocated to finance "green" projects, in accordance with a definition established as part of the bond issue. "Green" bonds may be issued for any project considered by the issuers to have positive impact on the environment, which can—and often does—include climate change adaptation and/or mitigation projects. Financially, they are comparable with other types of bonds, and require the issuer to pay a return to the investors, who may be public or private. For this reason, green bonds are usually suited to finance projects that will generate a positive financial return over the life of the bond.

Green bonds, like other types of bonds, can be issued by multinational, regional, national, and subnational public entities, as well as private companies and corporations. The ability to successfully issue a bond and attract investment depends, however, on the credit profile of the issuer. The first green bonds were issued in 2007 by the World Bank and the European Investment Bank (EIB). Until 2013, green bonds were exclusively issued by multilateral development banks, particularly the World Bank, EIB, International Finance Corporation (IFC) and the European Bank for Reconstruction and Development (EBRD). Interest in green bonds surged in 2013, which witnessed the first green bond with over USD 1 billion in proceeds, and the issuance of the first corporate green bonds and the first green municipal bond.[158] The timeline of this evolution is illustrated in figure 35.

[157] Green Climate Fund, 2018g, Project 039.
[158] CBI, 2019a.

Figure 35 Evolution of the Green Bonds Market



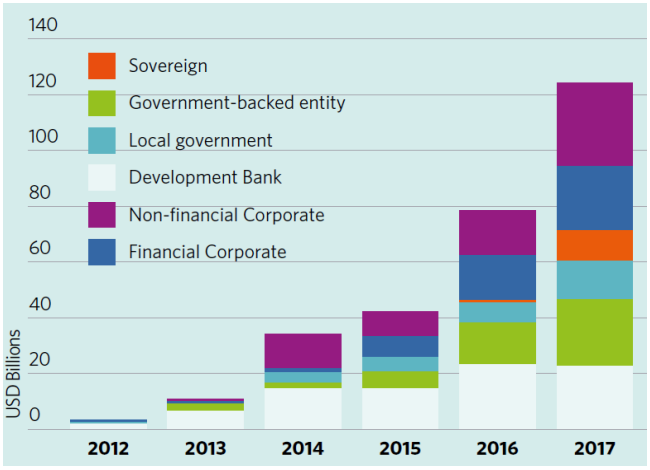
Source: Compiled by ESCWA.

Development banks and the corporate sector are responsible for most green bond issuances to date. However, the share of local government (municipalities and cities) and government-backed entities (public utilities and national development banks) is increasing significantly, while sovereign bonds are gaining a momentum. In December 2016, Poland issued the first green sovereign bond worth USD 850 million, followed by France in January 2017 with the largest single issuance of green bond to date, worth USD 10.7 billion.[159] Fiji followed and became the first developing country to issue green sovereign bonds worth USD 50 million.[160] Green sovereign bonds offer an incentive for private sector to invest in climate change mitigation and adaptation projects that can generate a suitable risk-adjusted financial return. In 2018, Morocco expressed its intention to issue green sovereign bonds.[161]

The green bond market is expanding rapidly, moving from USD 37 billion in issuances 2014 to USD 170 Billion in 2018. As a result, by end 2018 the market had reached over USD 500 billion in green bonds outstanding..[162] As shown in figure 36Figure 36, both public and private issuances are playing a major role in the growth green bond market.

Furthermore, the growth of the green bonds market is expected to speed-up significantly with the Climate Bond's Initiative highlighting a target of USD 1 trillion in bonds by 2020, as one of the key instruments used by countries to implement theirs NDCs.[163] To December 2019, the Climate Bonds Initiative (CBI) reports USD 231.2 billion in 2019 green bond issuances, with a year-end estimate of SD 250 billion.[164]

Figure 36 Green Bonds Issuers



Source: CBI, 2018b.

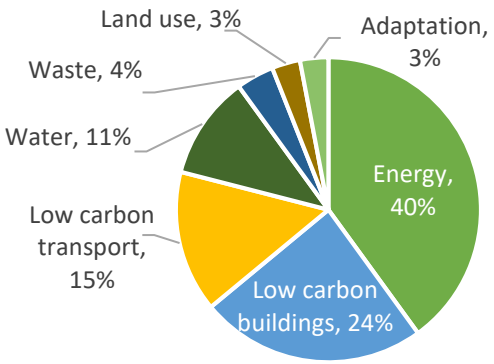
Recognizing the fast growth of green bonds, the Luxembourg Stock Exchange launched in 2016 the Luxembourg Green Exchange as the first "dedicated platform for green, social and sustainable securities."[165] This growth was also marked by the launch of the first green bond investment fund in March 2018, the Amundi

[159] CBI, 2018c.
[160] CBI, 2018c.
[161] CBI, 2018b
[162] CBI, 2019a.
[163] CBI, 2018b.
[164] CBI, 2019b.
[165] Luxembourg Green Exchange, 2018.

Planet Emerging Green One (EGO). EGO is a USD 1.42 billion investment fund launched jointly by the IFC and Amundi, a European asset manager. It is listed on the Luxembourg Stock Exchange. EGO "aims to increase the capacity of emerging market banks to fund climate-smart investments" and plans to invest in green bonds issued by banks from emerging markets.[166] The creation of a dedicated investment fund reflects the growth in the size and maturity of the green bond market globally.

Green bond issuances benefit mainly mitigation rather than adaptation projects. Proceeds from green bonds issued to date have been used for energy, low carbon buildings and transportation projects, while only 21% of proceeds have been used to finance clean water and sanitation (water, 11%), sustainable forestry and agriculture (land use, 3%), waste management (waste, 4%), and other adaptation projects (adaptation, 3%) (figure 37Figure 37).[167] Given risk-adjusted return requirements, this is not particularly surprising and suggests that green bonds are often better suited to finance mitigation projects.

Figure 37 Use of Green Bond Proceeds



Source: CBI, 2018a.

In the Arab region the green bond market has not yet matured. In terms of legislation, only one country, Morocco, has developed national green bond guidance, while in June 2018 Egypt initiated the process of reviewing the draft green bond guidelines developed with the assistance of IFC,[168] and has since issued is first green bond. In March 2017, the National Bank of Abu Dhabi in the United Arab Emirates issued the first green bond from the region worth USD 587 million with five-year maturity.[169] The bonds were listed on the London Stock Exchange and the proceeds will be used to finance three projects, including a concentrated solar power plant with 100MW of installed capacity located in the UAE, energy efficient buildings with LEED Silver certification located in the USA, and a heavy rail network project located in UAE.[170] The central bank of Qatar also expressed its intention to partner with Qatar Development Bank to issue green bonds.[171]

Green bonds are one option for the financial mechanisms of the UNFCCC to increase access to debt finance. The GCF has already approved two green bond issuances with a climate focus. The first is a mitigation project in Mexico, with the proceeds channelled for energy efficiency projects.[172] The second is mitigation-adaptation project in Madagascar, with the proceeds used to support smallholder farmers.[173] These two projects provide an example of how resources available at GCF can be used to develop new financial tools to mobilize additional financial resources.

2. *Green sukuk*

Green sukuk are shariah-compliant green bonds, whereby proceeds are used to finance assets and investors are granted partial ownership commensurate with their investment.[174] Green sukuk can mobilize private capital to finance climate adaptation and mitigation projects in a manner very similar to green bonds, but in compliance with Islamic laws. One difference is that, as Islamic finance instruments, green sukuk may share risk with investors in different ways than non-sharia green bonds.

[166] Amundi, 2018.
[167] CBI, 2018a.
[168] CBI, 2018b.
[169] National Bank of Abu Dhabi, 2017.
[170] Whiley, 2017.
[171] CBI, 2018b.
[172] GCF, 2018f, Project FP006.
[173] GCF, 2018f, Project FP026.
[174] Sharia compliant investment products cannot charge interest. Sukuk grant investors a share of ownership in an asset that can be sold later, such that investor returns are financially similar to a non-sharia compliant green bond.

Green sukuk have been issued in some countries, although none have been issued by Arab States. Malaysia issued the first green sukuk in July 2017 to finance a renewable energy project worth USD 58.5 million,[175] while Indonesia issued the first green sovereign sukuk in February 2018 worth USD 1.25 billion to finance renewable energy projects, sustainable land use, green tourism, and waste management.[176] Qatar and the United Arab Emirates have expressed interest in issuing a green sukuk, recognizing the increasing demand and interest for green sukuk in the Muslim countries and the shortage of supply. The Islamic Development Bank Group issued a green sukuk in November 2019 (see box below).

IsDB Green Sukuk Issuance

The Islamic Development Bank Group (IsDB) announced the issuance of its first Green Sukuk during the second annual Sukuk Summit in Luxemburg on 11 November 2019. The Debut Green Sukuk is worth EUR 1 billion, and it is the first AAA-rated Green Sukuk in the global capital markets with the lowest profit rate for Euro issuance by the IsDB.

This Green Sukuk was issued under the IsDB's Sustainable Finance Framework to leverage innovative financing instruments in the pursuit of the SDGs. The Green Sukuk will be deployed towards a range of climate-change and green projects in IsDB's Member Countries. These include projects related to renewable energy, energy efficiency, clean transport, sustainable management of natural resources, land use, sustainable water and wastewater management and other environment-related projects within the scope of SDGs.

Source: IsDB News, 11 November 2019; IsDB News, 28 November 2019.

D. Payment for Ecosystem Services

Payment for Ecosystem Services (PES) is defined by UNDP as payment that "occur when a beneficiary or user of an ecosystem service makes a direct or indirect payment to the provider of that service. The idea is that whoever preserves or maintains an ecosystem service should be paid for doing so."[177] This can create a financial incentive for one public administrative entity to preserve a resource that has value for users in another administrative entity that is usually located downstream. This can resolve principle-agent problems in natural resources conservation. For example, a downstream municipality may pay an upstream municipality to protect the catchment of a river located in the upstream municipality that provides water needed for agricultural irrigation in the downstream municipality. This can be effective when the political realities and costs of preserving the resource mean the upstream administrative unit is unlikely to do so on its own.

PES can be used by public sector entities from the local to the international levels, often including agreements between or among municipalities, regional governments, and/or nation states with shared resources. Communities and private sector entities may also choose to participate in PES. In some cases, incentive payments may be made directly to individuals by a public sector or private entity. PES may be an option for managing transboundary resources, including international transboundary resources. For example, 14 of the 22 Arab States are riparian states to shared surface water basins, and the groundwater in 21 out of the 22 Arab states is contained in shared water aquifers and which represent the primary source for water of the arid to semi-arid countries of the region.[178] Conservation of these resources will be critical to support climate change adaptation.

A suitable enabling environment is a prerequisite for PES and will depend to some extent based on the context. Market forces alone are usually not sufficient. Strong property rights, good governance including local customs, and strong technical capacity to design, implement, measure and verify the program are typically essential. Often, detailed technical studies are a prerequisite to determine the value of the upstream service. It is also critical to ensure that the rights of all individuals in upstream communities are respected when designing PES agreements, so that they are not negatively affected by project externalities.

[175] Bank Negara Malaysia, 2017.
[176] UNDP and Baznas, 2018.
[177] UNDP, 2019b.
[178] ESCWA and BGR, 2013.

For example, the International Union for the Conservation of Nature (IUCN) Economics of Land Degradation Initiative (ELD) conducted a detailed economic valuation study of rangelands in Jordan and concluded that well managed rangelands could save the country JOD 10 to 12 million (approximately USD 7 to 8.5 million). Based on this the study concluded that direct investment in rangeland management and conservation through payments for ecosystem services would provide important benefits to society.[179] Such an intervention would need to be implemented in a way that respects the rights of existing pastoralists and other stakeholders that depend on rangeland ecosystem services.

To be effective, it is important that the value of payments or other benefits received by the upstream ecosystem "managers" is greater than the opportunity cost of conservation. When this is not the case, these managers may choose not to participate. In the watershed conservation example above, landowners could decide that they earn a higher pay off by converting natural vegetation to farmland than they do through the PES agreement. This often also means that payments must be recurring over time.

E. Results-based finance

Results-based finance (RBF) is a tool that is less common that grants, debt, and equity, but which has been successfully used in climate finance in the past. "The defining element of RBF is that payments are made upon the delivery of pre-defined, verified results." RBF may be attractive to donors and concessional investors who want to support public sector projects, but only want to incur concessional expenditure if desired results are achieved. When RBF is used to finance the private sector, investor returns can be tied to the performance of the project, potentially aligning profit incentives with non-financial outcomes, including adaptation and/or mitigation objectives.

RBF has been used successfully in in the region. In Egypt, RBF has been used by the work bank to promote industrial compliance with environmental legislation.[180] The green climate fund can provide RBF and 2% of total committed funds to date have been for RBF. In February 2019, the GCF provided Brazil USD 96 million for results achieved under REDD+ in 2014 and 2015.[181] The Clean Development Mechanism (CDM) under the Kyoto Protocol is another mechanism allowing for results-based payments through carbon credits that helped channel significant investment in mitigation. However, following the crash of carbon prices in 2013, projects registered or submitted for registration with the CDM fell drastically after 2013 and have no recovered to date.[182]

F. Debt for Climate Swaps

Debt for climate (DfC) swaps are proposed as an approach modelled on debt for nature or debt for development swaps. They offer an opportunity to redirect external debt payments to finance climate change adaptation and mitigation public expenditure. This is may be appropriate in countries with a high debt burden that constrains public expenditure.[183] Four countries in the Arab region have used debt for development swaps in the past, including Egypt, Morocco, Jordan and Yemen, indicating that this model can be applied in the region.[184]

For example, the Commonwealth Secretariat proposed a swap for Caribbean SIDS, whereby "Pledged Green Climate Funds (GCF) would be used to finance a gradual write down of 100% of the Caribbean SIDS' multilateral debt stock held at various multilateral institutions, as well as their bilateral debt. This would be contingent on debtors agreeing to make annual payments into a Caribbean Resilience Fund (CRF) in an amount equal to the discounted debt service payments (a haircut)."[185] No examples of debt for climate swaps were identified among Arab States.

[179] ESCWA, 2017b. E/ESCWA/SDPD/2017/Module.1.
[180] Saab and Sadik (eds.), 2018.
[181] UNDP, 2019a.
[182] UNFCCC, 2019c
[183] ECLAC, 2018.
[184] Saab and Sadik (eds.), 2018.
[185] ECLAC, 2017.

The value of DfC swaps requires careful further consideration, and there are important potential pitfalls. A critically important point is that such swaps would likely not be appropriate for climate action if they are used by creditors to access funds earmarked for climate change to recover risky, outstanding debt. This would allow creditors to recover risky debt and from a source of finance intended for climate action, at best leading to no net change in the resources available for climate change, and in all practical terms, likely decreasing the cash and equivalents available for climate action. However, if funds earmarked for debt relief are swapped for climate action, freeing up additional national resources for climate action, this could increase the total amount of resources available for climate action, and would be positive.

G. Carbon Credits

Carbon credits are credits for reducing greenhouse gas emissions by a measured amount, usually defined as one ton of carbon dioxide, or an equivalent reduction of another GHG. The holder of the certificate, such as a country or an organization can discount the carbon credits from the calculation of its total carbon footprint. Individuals can also purchase carbon credits through many channels. Credits are tradeable, and their financial value comes when a country or organization earns and then sells a credit to a third party. Some nationally determined climate actions may be eligible to obtain carbon credits if they are measurably reducing greenhouse gas emissions. This requires third party verification and there may be costs associated with obtaining these credits. However, when the value of the credits exceeds the incremental cost of verification, carbon credits may be an alternative source of climate finance.

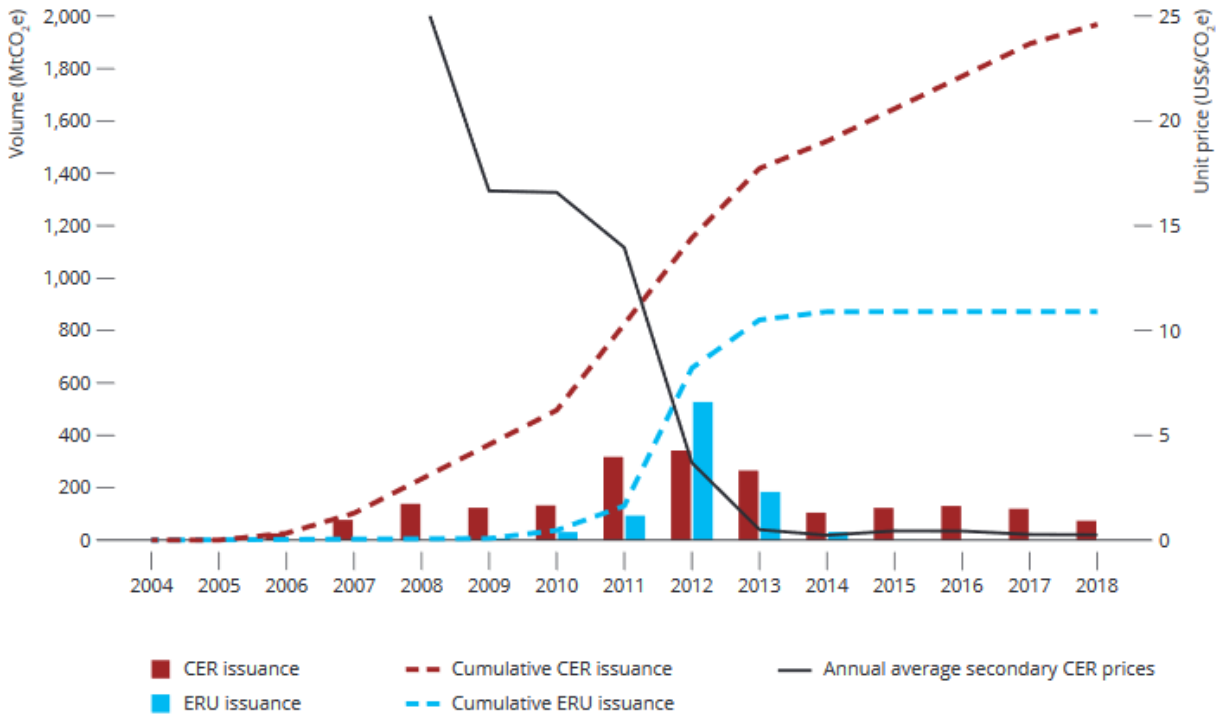
Conceptually, carbon credits are envisioned as a market mechanism to promote the lowest cost approaches to mitigating emissions, rather than requiring direct carbon emissions reductions in every case, even at very high cost. For example, a factory may find it cheaper to purchase carbon credits than the cost of changing production practices to achieve an equivalent sequestration of greenhouse gases. Some of the criticisms of carbon credits revolve around whether they truly measure additionality of emissions reductions, or whether credits may be issued for activities that would have occurred without the market incentive of carbon credits. Carbon markets are one proposed approach to carbon credits whereby emissions are capped, creating mandatory (as opposed to voluntary) requirement to reduce carbon emissions, which ostensibly would increase demand and lead to a higher price per ton of emissions, than purely voluntary carbon credits.

The Kyoto Protocol established three carbon credit mechanisms, including the Clean Development Mechanism (CDM), Joint implementation (JI), and Land Use, Land Use Change, and Forestry (LULUCF) removal units (RMUs). Of these, the CDM and, in theory, the JI remain potential sources of finance or investment. The only LULUCF activities eligible for tradable removal units (RMUs) are those that were implemented during the first Kyoto commitment period (2008-2012).

The CDM allows developing countries to earn one certified emissions reduction (CER) credit for each ton of CO_2 equivalent emissions reductions. However, global prices for CER credits crashed in 2012 (coinciding with the failure to agree on a second Kyoto) and have yet to recover, with prices hovering below USD 1 dollar since 2013, compared with initial prices close to USD 25 dollars in 2008, as reflected by the black line in figure 38. Furthermore, there is a massive oversupply of CER credits on the market under the existing clean development mechanism and it is not clear under what circumstances there could be a price recovery. In comparison, the High-Level Commission on Carbon Prices estimates that "carbon prices of policies that put an explicit price on GHG emissions need to be at least in the range of USD 40–80/tCO_2 by 2020 and USD 50–100/tCO_2 by 2030 to deliver on the Paris Agreement."[186]

[186] CPLC, "Report of the High-Level Commission on Carbon Prices," 29 May 2017, in World Bank Group, 2019.

Figure 38 Historic Clean Development Mechanism and Joint Implementation Issuances and CER prices



Source: World Bank Group, 2019

The JI mechanism allows countries with a Kyoto emissions reduction target to earn emissions reductions units (ERUs) as credits for emissions reduction projects funded in another country. However, new JI project implementation has been almost non-existent since 2014, with just 34 "track 1" projects reported from 2014 to 2018, including no projects in 2017 and just three projects in 2018; this compares with 195 projects submitted in 2013 alone.[187] The may be related to the fact that the second Kyoto commitment period has not come into force, following the conclusion of the first commitment period in 2012. Since 2016, JI accreditation is managed by the CDM.[188]

Accordingly, the sale of carbon credits under the CDM, or requests for external finance to implement projects for ERUs, is not likely to be a significant source of additional climate finance at present. The potential for a new international agreement on carbon markets is subject to intensive negotiation under Article 6 of the Paris Agreement and was a significant point of contention during the COP 25 negotiations in Madrid. Accordingly, while this may offer an alternative source of funding for mitigation actions that are consistent with nationally determined priorities, negotiations need to advance if such tool are to be made available for use. A total of 96 parties to the UNFCCC reference international carbon pricing in their UNFCCC NDCs, although only eight indicate they intend to use international mechanisms to meet their Paris Agreement targets.[189]

No agreement was reached at COP25 to define how to implement these provisions under Article 6. Among the points for negotiation is whether existing carbon credits issued under the CDM should be "carried over" and counted under a Paris Agreement mechanism. Many stakeholders consider that there is already an oversupply of CERs, and that carrying them over would undermine the viability of a new mechanism to set an appropriate price for carbon. However, if there is a future breakthrough and prices in this carbon market recover, the sale of carbon credits may once again become a potential source of additional climate finance. If an agreement is

[187] UNFCCC, 2019f.
[188] UNFCCC, 2019a.
[189] World Bank Group, 2019.

reached under which CERs are not carried over, these prices may well not recover, but a new market under different rules may emerge.

In the meantime, there are many national and subnational carbon pricing systems, many of which are based on carbon taxes. Carbon taxes are redistributive policies beyond the scope of the current assessment and require a separate dedicated, detailed analysis. However, it is important to note the increasing scale carbon taxes, which are predominantly used in developed countries. Of note, the World bank reports that governments raised USD 44 billion worth of revenues in 2018 from carbon pricing mechanisms, an increase from USD 33 billion in 2017; however, application is very uneven, with nearly one third of the 2018 total coming from France alone.[190] Nevertheless, global revenue from carbon taxes is on the same order of magnitude as the USD 55.7 billion in public international climate finance support from developing to developed countries in 2016.

A total of 57 national and subnational carbon pricing mechanisms have been or are being implemented across 46 national and 28 subnational jurisdictions; of these, 28 are based carbon taxes and 29 use emissions trading systems (ETS), which are often called "cap-and-trade" systems.[191] Under more than half of these mechanisms, the price of carbon per ton of CO_2 equivalent was over USD 10 dollars, which remains well below the High-Level Commission on Carbon Prices estimate that a price of USD 40-80 is needed by 2020 to deliver the Paris Agreement. Of existing carbon pricing systems, the country with highest carbon price is Sweden at USD 127 dollars per ton of CO_2 equivalent, although few other countries have carbon pricing systems with comparably high prices.[192] The World Bank did not identify any carbon pricing mechanisms that have been implemented by Arab States or subnational units.

Results-based climate finance may be implemented in a manner similar to carbon credits, in the sense that member states can obtain finance in return for certified mitigation actions, with the important distinction that the payment is received from and "outcomes payer" once pre-defined metrics are achieved. This modality can be arranged directly between an outcome payer and implementer, such as a member state, and does not necessarily involve any tradeable credits.

[190] World Bank Group, 2019.
[191] World Bank Group, 2019.
[192] World Bank Group, 2019.

IV. Summary of Key Findings and Conclusions

A. Key Findings

Global climate finance flows demonstrate areas of progress in mobilizing resources for climate action, but also outstanding gaps. The UNFCCC high-bound estimates of total public and private international climate finance flows were virtually unchanged from 2015 (USD 680 billion) to 2016 (USD 681 billion), the most recent years for which comprehensive data is available.

Climate specific finance flows from developed countries to developing countries are estimated by the UNFCCC to have increased from USD 49.7 billion to USD 55.7 billion over the same period, a 14% increase. These totals include flows through bilateral, regional, and other channels, as well as multilateral development banks and UNFCCC dedicated climate funds. The USD 55.7 billion reported in 2016 includes a large loan finance component. Beginning in 2019 monitoring, the OECD will no longer include the loan component of concessional finance in its calculations of ODA. Comprehensive global estimates of flows in 2017 and 2018 are not yet available.

The financial mechanisms of the UNFCCC, including the GCF, AF, GEF Trust Fund, SCCF, and LDCF accounted for 1.6 billion of global flows in 2016, or just 3% of public international flows from developed to developing countries, and just 0.2% of global public and private flows. While the GCF was in its first full year of implementation in 2016, with approximately USD 1 billion in commitments that year, it has not significantly increased operations since, committing approximately USD 1 billion more in 2017, and just over USD 2 billion in 2018. Whether it can continue to scale operations depends on its fundraising activities. Paid-in capital to date remains well below the USD 10.8 billion that the fund has raised in pledges.

Total climate finance flows to the Arab region appear to be increasing, but the supply of finance is not well matched to the region's needs and priorities, is unequally distributed, and total public international flows remain insufficient. Furthermore, while the COP provides a forum for Arab States to engage in negotiation related to the allocation of funds by the GCF and other UNFCCC funds, direct negotiations related to the allocation of the majority of public international flows to developing countries occur bilaterally.

The involvement of the private sector in financing climate change related activities is increasing. Concessional loans, investment guarantees, and other forms of blended are financial instruments that can make mitigation and adaptation projects more attractive to private sector in some instances by reducing the cost of capital and/or financial risk. By scaling-up investment guarantees, among other financial instruments, GCF may be able to increase private sector investment in countries with low adaptive capacities to climate change, including least developed countries and countries in conflict.

International private finance opens new and expanded opportunities in climate finance but cannot replace international public finance flows, particularly the need for grant and concessional finance. The Paris Agreement COP and AAAA both advocate for the use of public finance "including ODA, is to catalyse additional resource mobilization from other sources, public and private."[193] However, private finance is not always feasible or appropriate, and mobilization is uneven, concentrated primarily in the energy sector. It can be easier to scale climate finance through loans and private sector mobilization, but many projects to date have required a high share of grant finance and/or have attracted little private sector financing. This is especially true of adaptation projects.

Geographic distribution remains uneven across all distribution channels, including the dedicated UNFCCC climate funds. For example, just 4 Arab States have had projects funded by the GCF; Comoros is the only Arab LDC that has had a project financed through the GCF, despite the fact that the fund is mandated to serve countries based on need.

[193] UNGA, 2015. Addis Ababa Action Agenda. Annex I, para. 54.

The majority of global climate finance flows to the energy sectors: A majority of global climate finance flows have been committed to renewable energy and energy efficiency investments, estimated at USD 526.8 billion in 2016, primarily through private finance. This represents 77% of total climate finance flows reported by the UNFCCC that year.[194] The energy and transportation sectors also capture most international climate finance flows to Arab States.

UNFCCC dedicated climate funds are currently of limited scale in relation to total public international climate flows. These funds, including the GEF, GCF, SCCF, LDCF, and AF accounted for approximately 1% of public international climate finance flows, including just an estimated 3% of flows from developed to developing countries in 2016. The GCF has increased commitments from USD 1.2 billion in 2016 to USD 2.1 billion in 2018, but the GEF has announced a decrease in allocations earmarked for climate change in response to the ramp up of the GCF since 2015. Instead, most allocation decisions are made by bilateral institutions or multilateral development banks that don't serve the UNFCCC or the COP.

Mitigation receives more public and private finance than adaptation; more grant finance is needed for adaptation. While the Paris Agreement mandates an equal emphasis on adaptation and mitigation, across all channels of international public and private climate finance, mitigation projects receive a much higher share of funds. This includes finance flowing through multilateral climate funds, of which only 25% is adaptation specific compared to 53% that is mitigation specific. While several funds serving the UNFCCC have an adaptation focus, including the Adaptation Fund, SCCF, and LDCF, total flows through these funds are dwarfed by flows through the Green Climate Fund. There has been very little private sector investment in pure adaptation projects. Adaptation project require a significantly higher share of grant finance than mitigation finance; increases in loan finance are unlikely to replace the need for grants.

UNFCCC dedicated climate funds present barriers to access for many Arab States. Accessing climate-dedicated funds to finance adaptation projects is a priority for the Arab region, but countries face multiple constraints to access these funds, including:

- Complex and lengthy processes: accreditation takes up to 27 months, while time from submitting a proposal to getting the approval takes up to 22 months. These complicated procedures are preventing countries with limited institutional abilities, including many Arab states, from accessing the funds. Technical barriers to access the funds have been recognized by dedicated climate funds, and technical assistance is available, but long accreditation and project approval timelines suggest that many Arab states will continue to encounter challenges accessing funds in the coming years.
- Country cap implemented by the Adaptation Fund: the cap is an impediment to countries to sufficiently benefit from available funds as caps are quickly reached. Three Arab countries have already reached their cap by implementing only one project. This is contrary to the priority of developing predictable, sustainable climate flows.
- Projects financed by GEF need to be in line with the fund's priority, fall within the country allocation, and contribute to global environmental goal. GEF gives more importance to the type of projects and country's capacity to manage the funds rather than to the vulnerability of the country to climate change.
- The GEF Trust Fund is shifting focus away from directly financing climate change adaptation and mitigation, resulting reduced allocations to the climate change focal area by 36%, and the floor for country allocations by 46%.
- The UNFCCC finds that "The results frameworks or allocation frameworks used by the multilateral climate funds do not necessarily match the needs of beneficiary countries."[195]
- While there has been a significant increase in the number of national accredited entities in recent years, the percentage of finance to public national entities has remained low, while the percentage of finance committed to the private sector increased significantly in 2016.

[194] UNFCCC SCF, 2018, p 57.
[195] UNFCCC SCF, 2018, p. 91.

Most public international climate flows from developed to developing countries are not flowing through the financial mechanisms of the UNFCCC. While Annex II countries committed to provide USD 100 billion in finance to non-Annex I countries, a majority of public international climate finance is not flowing through the dedicated climate funds established as the financial mechanisms of the UNFCCC. Instead, allocation decisions are made by donor countries based on their national policy interests, or by development banks that do not serve the UNFCCC.

Overall bilateral and regional ODA, MDB finance, and private sector participation is increasing, but flows through multilateral climate funds remain limited over the period 2013-2016.[196] Since the GCF began operations in 2015, it has gradually increased lending, with USD 2.1 billion in commitments in 2018.

Multilateral engagement is currently needed to harmonize standards for greening global finance flows. This multilateral process provides an opportunity for Arab states to engage in defining standards that are consistent with the development objectives and pathways prioritized by the region. This has the potential to realign the flow of trillions of dollars towards low carbon and climate resilient pathways. A harmonized regional approach could reduce the risk of capital flight to countries with weaker standards.

Alternative climate finance instruments may provide opportunities for Arab States to attract new and additional sources of finance for climate change adaptation and mitigation. However, these instruments cannot and should not replace public international climate finance flows. The private sector in the Arab region may also be interested in green bonds and green sukuk, which offer an incentive for private sector to invest in climate change mitigation and adaptation. While green bonds are projected by some to reach a scale of USD 1 trillion by 2020, this market has not been developed among Arab States.

Disbursement of climate finance by the UNFCCC climate-dedicated funds is not balanced. Mitigation projects receive more finance than adaptation, and geographic allocation is uneven. Many Arab states, including least developed countries and states affected by conflict, have struggled to receive funding. Furthermore, multilateral accredited institutions continue to capture most finance rather than national or regional entities. Mitigation projects are often energy-related projects and have a high share of loan element, while adaptation projects have a significant grant element.

Accessing public international climate finance under commitments made by the parties to the UNFCCC remains a priority for developing countries. An attempt to combine climate fund resources with innovative tools has been explored by some countries. Increasing private sector participation, tapping into green bonds and green sukuk market.

196 UNFCCC SCF, 2018, p. 10.

B. Conclusion

The total need for climate finance in the Arab region remains undefined, yet stakeholders consistently report that available resources are insufficient. Existing flows provide **neither the quantity nor the quality of finance needed by the region**.

- **Mitigation exceeds adaptation:** Adaptation is the priority for the Arab region yet, across public and private finance channels, mitigation finance exceeds adaptation finance by a factor of five.
- **Loans far exceed grants:** this makes it more difficult to access climate finance for highly indebted countries, for countries requiring higher shares of grant support like Arab LDCs, and for projects that do not directly generate cashflows to repay loans. Just 2% of climate finance in the Arab region flowed to Arab LDCs in the most recent reporting year.
- **Multilateral climate funds have limited impact**, as they are difficult to access and limited in scale: a more comprehensive resource mobilization solution is required for each member state. Globally, for the last reporting year (2016), bilateral, regional, and other flows exceeded flows through the multilateral financial mechanisms of the UNFCCC convention by a factor of twenty to one. Only one Arab LDC (Comoros) and only 4 or 22 Arab States in total have had projects financed by the Green Climate Fund.
- **Climate finance is not defined**: there is no clear definition to differentiate climate finance from development aid, humanitarian aid, or even security expenditure (e.g., peacekeeping). This creates a risk of double counting ODA, humanitarian aid, and even security expenditure as climate finance. In comparison, the OECD has clear guidelines to differentiate official development assistance (ODA) from other official flows (OOF) based on objective criteria.
- **Poor accounting practices may inflate totals:** Developed countries are required to report total climate finance support provided via bilateral, regional and other channels. Countries must provide a methodology but are free to report combined totals of committed and disbursed, can count both concessional and non-concessional finance, and have no restrictions on double counting development or humanitarian aid. As a result, data is not fully comparable across countries or over time, and may inflate flows, particularly in the short term as climate finance ramps up. In comparison, the OECD has adopted new guidelines to calculate ODA on a grant equivalency basis, which may provide a better barometer of the value added of the finance.
- **Private finance accounts for two thirds of financial flows** reported by the UNFCCC, but it is not known to what degree the contribution to climate action per dollar of private investment is comparable with the contribution per dollar of public expenditure.
- **Private finance is not always an appropriate substitute for public expenditure:** while there are important opportunities to engage private finance to further public policy objectives, private finance is not always efficient or even suited to fund the underlying need. Adaptation typically relies on a higher share of grant finance.

Based on these findings, the following activities may support Arab States to track, negotiate, mobilize and efficiently target climate finance flows:

- **Through a needs-based approach, identify and evaluate unmet financing needs** to identify areas where the characteristics (quality) of existing climate finance flows (supply) are not matched to the need (demand). Clearly identified technical needs facilitate the identification of potential financing sources, structures, and other policy options to promote increased investment in climate change adaptation and mitigation. Sharing or completing more granular country and sector-level reviews of adaptation and mitigation strategies that allow for greater granularity of analysis than is covered within the scope of this assessment.
- **Benchmark climate finance receipts** from developed countries to compare with totals reported by developed countries and identify any discrepancies to inform global and bilateral negotiations. This

could be achieved through reporting under the UNFCCC by Arab States, or through a regional reporting and monitoring platform.

- **Conduct economic costing** to identify potential efficiencies and trade-offs of policy options, including any sustainable development benefits and costs of climate action to identify win-win actions that can be implemented with available resources. However, also recognizing that not all climate actions will be win-win, more clearly measure the full economic cost of climate actions requiring international support as a result of trade-offs between climate action and sustainable development, or due to other sources of losses and damages.
- **Evaluate targeted opportunities for private sector engagement** based on a review of risks and opportunities, to ensure the efficient use of scarce public resources through appropriate private sector engagement, while ensuring that the risks of excessive private sector engagement are avoided and that public policy remains based on the principle of maximizing sustainable development and climate action additionality. These opportunities must be identified and carefully analysed early in government planning processes.
- **Identify national priority climate finance needs that are not well suited to private sector engagement** to help ensure efficient allocation of scarce public and international resources to nationally prioritizes climate actions that are not well suited to private sector involvement.
- **Strengthen the integration of climate actions into national and sectoral planning processes** to identify opportunities for private sector engagement, cost efficiencies and financial de-risking though timely policy action, opportunities to use alternative climate finance instruments to mobilize additional resources, among other opportunities to reduce the cost and increase resources for climate action through early and timely action in the planning, design, and implementation process.

Of note, policymakers have additional tools at their disposal to pursue nationally determined priorities. For example, fiscal policy, competitive policy, financial policy and regulations, and related policy levers may realign other economic incentives and flows or improve the investment climate. These policy tools may have economic costs and benefits rather than direct implementation costs. However, Arab States face resource constraints, and while these policy levers may be tools to advance climate action, they may sometimes also result economic costs, such as trade-offs for sustainable development. Even in cases with long term benefits, up-front costs may be financially or politically prohibitive for developing countries. Developed countries have a historic responsibility for greenhouse gas emissions, and for mobilizing climate finance to address the economic and financial costs of climate action by developing countries, as enshrined in the UNFCCC.

However, both the **quality and quantity** of existing public international finance flows to Arab States is still insufficient. While likely due principally to supply-side constraints, Arab States may wish to more systematically define their finance need to inform negotiations under the UNFCCC, and to increase information available to investors, donors, and other partners providing climate finance to Arab States. In turn, developed countries need to recognize their historic responsibility, and the fact that Arab States require more and better public international climate finance support to enable greater action. In particular, Arab states need more finance support for adaptation, a higher share of grant finance, and a more even distribution based on need that more effectively reaches Arab LDCs and ensures no one is left behind.

Appendix A

Methodology and Limitations:
Analysis of Bilateral, Regional, and Other Public International Climate Finance Flows to Arab States

Note on the Data Source

The data analysed by ESCWA is self-reported information provided by UNFCCC Annex I parties in their Third Biennial Reports. ESCWA has not attempted to verify the reported data or definitions and has noted the data limitations defined below. The information presented herein does not necessarily reflect the views of ESCWA, the United Nations, nor the authors, who make no judgement as to the completeness, accuracy, or correctness of the underlying data. Rather, ESCWA presents this analysis to disseminate the information reported by the UNFCCC parties in a more accessible format and with a regional focus, for review by any relevant stakeholders. Furthermore, neither the data presented herein, nor the underlying definitions and assumptions used by the Annex I parties in preparing the Biennial Reports, have been validated by the recipient states. As such, the data, definitions, and assumptions may not reflect the recipient state's nationally determined definitions nor their national estimates of climate finance flows.

Data Source

This report analyses the self-reported information submitted by parties to the UNFCCC in their third biennial reports. Annex I parties were "requested" to submit the Third Biennial Report by 2018, covering the 2015-2016 reporting period.[197] This information has been compiled into a single database by the UNFCCC and published on the Biennial Reports Data Interface (BR-DI) under the *Bilateral, Regional and Other Channels* page of the *Financial Support* section.[198] This is based on the information reported by each Annex I party in table 7(b) of the common tabular format. The UNFCCC SCF notes that it has not verified or validated this self-reported information.

ESCWA downloaded the complete database of financial flows for the years 2015 and 2016 via *Bilateral, Regional and Other Channels* on 21 February 2019. The columns included in the database are presented in Table A.

Table A Structure of Data Downloaded from UNFCCC Biennial Reports Interface

Column in UNFCCC Database	Description
Party	Name of the Annex I party that reported the finance flow
Data source	In all cases for the downloaded database the source is Biennial Report 3
Recipient country/region	Name of recipient country or region, as defined by the reporting *Party*
Project/programme/activity	Name as defined by the reporting *Party*
Type of support	Includes Adaptation, Mitigation, Cross Cutting, and REDD+
Year	Calendar Year
Currency	Values reported in US Dollars (USD) or Specified Domestic Currency
Contribution	Value of climate finance flow reported for the given row, in specific currency. Units vary by reporting party.
Contribution type	All *Bilateral, Regional, and Other* flows in the database are reported as "Climate Specific"
Status	Reporting Parties report flows as Committed, Disbursed, or Provided. Annex I parties Kazakhstan and Hungary report a small number of flows without specifying the status.

[197] https://unfccc.int/process/transparency-and-reporting/reporting-and-review-under-the-convention/national-communications-and-biennial-reports-annex-i-parties/submitted-biennial-reports-brs-from-annex-i-parties.
[198] Accessed February 25, 2019 from https://www4.unfccc.int/sites/br-di/Pages/FinancialSupport.aspx?mode=2.

Column in UNFCCC Database	Description
Funding source	The reporting party defines whether the flow was Official Development Assistance (ODA), Other Official Flows (OOF), a mix of ODA and OOF, or another source. Under OECD definitions, OOF refers to non-concessional finance, while ODA refers to concessional finance with at least at 25% grant component.[199] Reporting formats vary by reporting party. For example, one flow to Nepal reported by Norway in 2015, has a funding source reported as "ODA (2133%), OOF (-2033%)"
Financial instrument	The reporting party defines the type of capital provided, such as grant, concessional loan, loan, equity, and other. Reporting formats vary by reporting party. For example, one flow to Nepal reported by Norway in 2015, has a funding source reported as "Grant (2133%), Equity (-2033%)." In Many cases, flows are reported as a mix of grants and loans, with percentages totalling 100%.
Sector	The reporting party defines the sector. A total of 634 sector definitions are reported in the database.

Correction of database inconsistences and duplications

The unprocessed database includes reported values in United States Dollars (USD) and in local currency units (LCU). The structure of the database is such that a single flow can be reported in both LCU and USD; one row is used for the value in USD and the subsequent row is used for the value in LCU. In fact, on the UNFCCC data portal, it is possible to download the database only in USD or only in LCU.

However, upon review, ESCWA determined that some entries are only reported in LCU, while others are only reported in USD, while yet others are reported in both the USD and LCU. For example, if only values reported in USD are downloaded, the value of *bilateral, regional, and other* climate finance flows included in the global database are USD 11.1 billion in 2016 and USD 9.6 billion in 2016. This does not match the total worldwide *bilateral, regional, and other* climate finance flows from Annex II to non-Annex I parties of USD 33.6 billion in 2016 and USD 29.9 billion in 2015 reported by the UNFCCC SCF in the 2018 Biennial Assessment of Climate Finance Flows. Given these discrepancies, ESCWA downloaded the database in both USD and LCU and then eliminated duplicate entries. For flows reported only in LCU, ESCWA converted these amounts to USD using OECD exchange rates for the corresponding year, which is the conversion method reported by the UNFCCC SCF in the 2018 Biennial Assessment.

Another discrepancy identified by ESCWA is that the reporting units for the value of the "contribution" (the value of the finance flow) did not match for all countries. In some cases, flows were reported in millions of USD or LCU, while in others exact dollar amounts were reported. ESCWA corrected the database to ensure the units of all reported flows were presented in dollar amounts, not in millions. To confirm the reporting units for contributions, ESCWA reviewed the official PDF submissions of the biennial reports in which the units are reported.[200]

Information on bilateral, regional, and other climate finance flows from the United States is not included in the UNFCCC database because the United States did not submit the third biennial assessment report. The UNFCCC SCF reports in the 2018 Biennial Assessment of Climate Finance Flows that it used preliminary data from the United States when calculating the total of 33.7 billion in climate finance flows. Data from the United Kingdom is based on the official PDF submission of the 3rd Biennial Report, which matches the

[199] As of 1 January 2019, the OECD has updated the definition of ODA. The new definition of ODA will only measure the grant component of concessional finance. Previously, the full value of concessional facilities with at least 25% grant components were counted as ODA.

[200] Accessed 26 February 2019 from https://unfccc.int/process/transparency-and-reporting/reporting-and-review-under-the-convention/national-communications-and-biennial-reports-annex-i-parties/submitted-biennial-reports-brs-from-annex-i-parties.

information in the UNFCCC biennial reports database but does not match the United Kingdom Excel submission posted on the UNFCCC database.[201]

Data for Japan is based on the official submission[202] posted to the UNFCCC website (accessed in January 2019). This submission reports a worldwide total of USD 10.7 billion in *bilateral, regional, and other* climate finance flows by Japan in 2016, and 8.8 billion in 2015; of these totals, flows from Japan to the Arab region accounted for USD 2.2 billion in 2016 and 0.4 billion in 2015. The global totals for Japan (USD 10.7 and USD 8.8 billion in 2016 and 2015, respectively) are consistent with the "total climate-specific finance (bilateral, reg & other)" for Japan presented in tables L.3 (2016, p. 148) and L.1 (2015, p. 146) in the UNFCCC SCF Biennial Assessment.[203] However, the information downloaded from the UNFCCC biennial reports data interface does not match these totals. Rather, it reports USD 3.5 billion in 2016 in 2016 and USD 4.8 billion in 2015. In total ESCWA corrected the database by adding 13 financial flows reported by Japan in 2016 (a total of USD 7.2 billion) and 25 flows reported by Japan in 2015 (a total of USD 4.1 billion) that were mission from the UNFCCC database.

Following these corrections by ESCWA, the final corrected database included a at total of USD 31.3 billion in *bilateral, regional, and other* climate finance flows from Annex II to non-Annex I parties globally in 2016. The USD 2.3 billion difference between this total and the 33.6 billion reported by the UNFCCC SCF in its 2018 Biennial Assessment can be attributed to USD 1.9 billion in flows from the United States that are reported in table L.3 if the UNFCCC 2018 Biennial Assessment, but which are not included in the UNFCCC database.[204] The majority of the remaining USD 0.4 billion in discrepancy, equal to 1.17% of the USD 33.6 billion in bilateral, regional, and other flows in 2016, is mostly attributable to discrepancies between the official PDF and Excel submissions by the United Kingdom, which accounts for USD 0.35 billion of this total; there are less than USD 0.05 billion in discrepancies attributable to flows from other parties, as presented in Table B.

For 2015, the final corrected database includes a total of USD 26.3 billion, compared with a total of USD 29.9 billion reported by the UNFCCC in table L.3. The USD 3.6 billion discrepancy includes USD 2.5 billion in finance flows from the United States that are reported in table L.1 of the UNFCCC 2018 Biennial Assessment, but which are not included in the UNFCCC database. The remaining USD 1.1 billion discrepancy is largely attributable to the United Kingdom and Germany.

[201] Accessed 26 February 2019 from https://unfccc.int/process/transparency-and-reporting/reporting-and-review-under-the-convention/national-communications-and-biennial-reports-annex-i-parties/submitted-biennial-reports-brs-from-annex-i-parties

[202] The PDF and Excel submissions are consistent with each other.

[203] Table L.3 reports a collective total of USD 33.6 billion in "total climate-specific finance (bilateral, reg & other)" provided by Annex II parties in 2016, which matches the totals reported elsewhere in the Biennial Assessment.

[204] The UNFCCC notes that amounts reported in Table L.3 for the United States are based on preliminary data. The United States has not submitted a third biennial report and therefore is not part of the UNFCCC database.

Table B Comparison of ESCWA Processed Database with UNFCCC BA Database

Party	ESCWA Processed Database		UNFCCC Biennial Asssessment		Difference	
	2015	2016	2015	2016	2015	2016
Australia*	$ 90.1	$ 100.2	$ 90.1	$ 100.2	$ 0.0	$ (0.0)
Austria*	$ 116.0	$ 131.0	$ 121.4	$ 135.2	$ (5.4)	$ (4.2)
Belgium*	$ 44.2	$ 52.3	$ 44.2	$ 52.3	$ (0.0)	$ 0.0
Canada*	$ 38.6	$ 46.7	$ 38.6	$ 46.7	$ 0.0	$ (0.0)
Czech Republic	$ 6.0	$ 5.3	$ 6.0	$ 5.3	$ 0.0	$ (0.0)
Denmark*	$ 137.4	$ 148.4	$ 137.4	$ 148.4	$ 0.0	$ (0.0)
Estonia	$ 0.4	$ 0.2	$ 0.4	$ 0.2	$ (0.0)	$ 0.0
European Union (28)*	$ 4,204.7	$ 5,174.7	$ 4,204.7	$ 5,174.7	$ 0.0	$ 0.0
Finland*	$ 42.7	$ 29.0	$ 42.7	$ 29.0	$ (0.0)	$ 0.0
France*	$ 2,961.4	$ 3,473.9	$ 2,961.5	$ 3,474.0	$ (0.0)	$ (0.0)
Germany*	$ 7,490.5	$ 8,806.4	$ 7,792.9	$ 8,837.7	$ (302.3)	$ (31.3)
Greece*	$ 0.3	$ 0.3	$ 0.3	$ 0.3	$ 0.0	$ (0.0)
Hungary	$ -	$ 36.8	$ -	$ 36.8	$ -	$ (0.0)
Iceland*	$ 10.2	$ 10.8	$ 10.2	$ 10.8	$ 0.0	$ (0.0)
Ireland*	$ 38.0	$ 53.9	$ 38.0	$ 53.9	$ 0.0	$ (0.0)
Italy*	$ 197.3	$ 136.4	$ 197.3	$ 136.4	$ 0.0	$ (0.0)
Japan*	$ 8,838.4	$ 10,697.5	$ 8,838.4	$ 10,697.5	$ -	$ -
Kazakhstan	$ 0.5	$ 1.4	No Data	No Data	$ 0.5	$ 1.4
Lithuania	$ 0.3	$ 0.4	$ 0.3	$ 0.4	$ 0.0	$ 0.0
Luxembourg*	$ 30.7	$ 46.3	$ 30.9	$ 47.0	$ (0.2)	$ (0.7)
Malta	$ 0.1	$ 0.1	$ 0.1	$ 0.1	$ 0.0	$ 0.0
Monaco	$ 0.9	$ 0.9	$ 0.9	$ 0.9	$ (0.0)	$ 0.0
Netherlands*	$ 324.3	$ 256.8	$ 324.3	$ 256.8	$ 0.0	$ (0.0)
New Zealand*	$ 40.3	$ 34.6	$ 40.3	$ 34.6	$ -	$ -
Norway*	$ 354.5	$ 290.5	$ 354.5	$ 290.5	$ 0.0	$ (0.0)
Poland	$ 2.9	$ 2.3	$ 2.9	$ 2.4	$ 0.0	$ (0.0)
Portugal*	$ 4.7	$ 2.2	$ 4.7	$ 2.2	$ 0.0	$ (0.0)
Romania	$ -	$ 0.1	$ -	$ 0.1	$ -	$ 0.0
Russian Federation	$ 3.0	$ 10.8	$ 3.0	$ 10.8	$ 0.0	$ 0.0
Slovakia	$ 1.9	$ 1.5	$ 1.9	$ 1.5	$ 0.0	$ 0.0
Slovenia	$ 1.7	$ 2.1	$ 1.7	$ 2.1	$ 0.0	$ (0.0)
Spain*	$ 498.3	$ 550.1	$ 498.3	$ 550.1	$ (0.0)	$ (0.0)
Sweden*	$ 303.9	$ 325.8	$ 303.9	$ 325.8	$ (0.0)	$ (0.0)
Switzerland*	$ 173.2	$ 202.3	$ 173.2	$ 202.3	$ 0.0	$ 0.0
United Kingdom*	$ 400.4	$ 697.5	$ 1,168.9	$ 1,054.9	$ (768.5)	$ (357.4)
United States*	No Data	No Data	$ 2,503.0	$ 1,897.6	$ (2,503.0)	$ (1,897.6)
Total: Annex II Parties	**$ 26,340.1**	**$ 31,267.5**	**$ 29,919.5**	**$ 33,558.9**	**$ (3,579.4)**	**$ (2,291.3)**
Total: Annex I Parties no	$ 17.8	$ 61.8	$ 17.4	$ 60.4	$ 0.5	$ 1.4
Grand Total	**$ 26,357.9**	**$ 31,329.4**	**$ 29,936.8**	**$ 33,619.3**	**$ (3,578.9)**	**$ (2,289.9)**

Note: * Denotes that the Party is listed in Annex II of the UNFCCC.

Source: Elaborated by ESCWA. Information from the UNFCCC SCF 2018 Biennial Assessment of Climate Finance Flows was found in tables L.1, L.2, L.3, and L.4.

Segmentation by Recipient Country and Region

There is not a common geographic segmentation of recipient countries and regions across all biennial reports; rather, each reporting country determined its own geographic segmentation. In the Arab region, almost all flows were reported by recipient country (see Table C), although a small number were reported as regional flows. There are three general reporting formats: country specific, multi-country (specific countries are identified), and regional (specific countries are not identified). In some cases, multiple regions were identified.

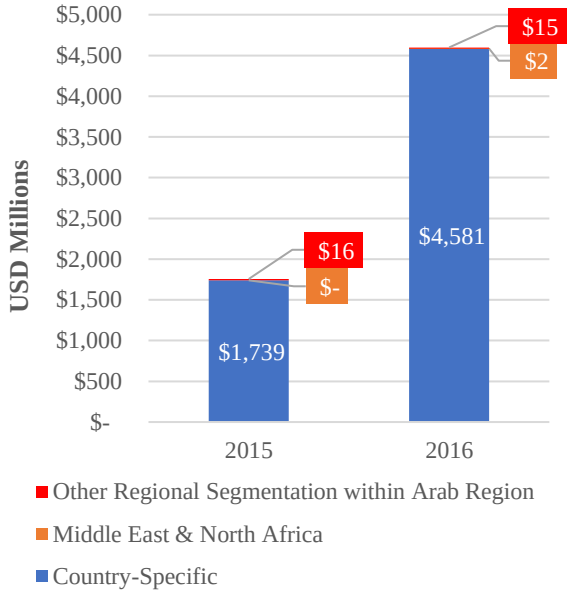
Given the limitation that data was not always desegregated by each recipient country, the data were analysed by grouping flows into the following three categories. Flows to:

1. The Arab region (see Table C)
2. The Arab region and another region
3. Other regions

These three categories were defined as follows:

All country-specific flows to Arab States were included in category 1, and all country-specific flows to non-Arab States were in included in category 3. Multi-country flows were included in category 1 if all recipient countries were Arab countries, category 2 if some but not all recipient countries were Arab Countries, and Category 3 if none of the recipients were Arab Countries. Regional flows exclusively to the "Middle East," "North Africa," and/or "Middle East and North Africa" were included in Category 1.[205] Flows to multiple regions, including the "Middle East," "North Africa," and/or "Middle East and North Africa" as well as another region were included in Category 2. Regional flows to the "Horn of Africa", the "Intergovernmental Authority on Development" (IGAD),[206] the "Mediterranean" region, "Francophone Africa Countries," "West Africa," and multi-regional flows with specific mention of the Middle East and/or North Africa were included in category 2. All other flows were included in category 3, including flows with unspecified recipients.

Table C Regional vs Country Segmentation of Bilateral, Regional, and Other Climate Finance Flows to the Arab Region (Category 1), as reported by Developed Country Parties



While this approach was necessary due to data limitations, it does present some limitations including the possibility that a share of the regional flows under category 1 may flow to non-Arab countries, and that that a share regional flows under category 3 may flow to some Arab countries.

Type of Support

Most flows were reported as adaptation, mitigation, or cross cutting. Flows reported as REDD+ in the Arab region were always specified as REDD+ (Adaptation), REDD+ (Mitigation), or REDD+ (Cross-Cutting). To simplify the analysis, these were included within the broader Adaptation, Mitigation, and Cross-Cutting categories.

Status of Disbursement

All reported flows, including committed and disbursed were included, because this was consistent with the reporting of climate finance flows in the 2018 Biennial Assessment of Global Climate Finance Flows by the Standing Committee on Finance. For committed funds, the reporting format does not specify the expected timeframe for the disbursement of funds.

[205] ESCWA could not verify whether regional flows include flows to non-Arab countries.
[206] IGAD is a trade block including Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, The Sudan and Uganda.

Financing Source
Reporting on whether finance was official development assistance (ODA), other official flows (OOF), or "other" was also not consistent among the parties. Some parties reported flows as a per centage mix of ODA and OOF. To facilitate analysis, ESCWA recategorized flows as "ODA," "ODA and OOF," "OOF," and "Other." The OECD Development Assistance Committee (DAC) definition of ODA, based on the definition valid through 31 December 2018,[207] was used for this classification.

Financial Instrument
Flows were also re-categorized as grants, concessional loans, non-concessional loans, equity, and other, given that many flows were reported in per cent grants and per cent loans in this report.

Sector
Parties did not report with a standardized set of sectors; rather, each reporting party established its own sector classifications. Therefore, ESCWA re-categorized reporting categories based on the categories used by the UNFCCC Standing Committee on Finance in the 2018 Biennial Assessment of Climate Finance flows, with some adjustments for sectors that did not clearly fit this framework.

Data limitation: lack of common definition of climate finance
There is no common definition of which public international finance flows should be considered climate finance flows under the Paris Agreement. While table 7(b) of the Biennial Reports has provided a standard, mandated tabular format to report climate finance as part of biennial reports, there are different national interpretations of what underlying flows are considered climate finance. As is noted by the UNFCCC SCF, only 18 reporting countries provided information on the funding source, mostly using OECD Development Assistance Committee classifications of ODA and OOF.

Data limitation: reported values are not annualized and include a mix of commitments and disbursements
The Status of climate finance flows reported by the parties includes funds that have been committed, disbursed, or provided. However, this creates a temporal mismatch, as commitments may be to provide financing over a multi-year period, while as disbursements are for a given reporting year. It is not possible to verify whether disbursements reported in 2015 or 2016 may have previously been reported as commitments, just as it is not possible to ensure that commitments reported in 2015 and 2016 will not be reported again as disbursements in a future year. This creates the risk of double-counting; given the lack of standard assumptions and definitions for reporting by Annex I parties, this makes it difficult to verify the accuracy of reported totals in a given year. Furthermore, reporting commitments can inflate the flows in a given calendar even if no funds are disbursed, further complicating the ability to verify the accuracy of climate finance totals in a given year.

Given these limitations, to allow for comparability with the global climate finance flows reported by the UNFCCC SCF 2018 Biennial Assessment of Climate Finance Flows which included flows marked as "disbursed," "committed," and "provided" in annual totals, the same methodology has been used here.

Data limitation: gap in data and inconsistencies
The Third Biennial Report marks the first time that the reporting period included a year (2016) following the adoption of the Paris Agreement. Nevertheless, there are important outstanding gaps, inconsistencies and/or lack of clarify regarding the data and underlying definitions and assumptions used by Annex I parties in the Biennial Reports, which limit the ability to validate and compare the information reported with statistical rigor, or to use it as a baseline for future assessment of progress.

[207] The definition was updated in 2019. Through 31 December 2018, ODA included all concessional facilities with a grant component of at least 25%.

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