OPEC FUND
for International Development

CLIMATE FINANCE

REPORT 2024

Climate Action in Addressing Development Challenges

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The OPEC Fund has prioritized climate action dedicating its resources and institutional capacity to the challenge and integrating climate assessments into its operations.

Preface by the OPEC Fund President

ABDULHAMID ALKHALIFA

President
The OPEC Fund for International Development

In an era marked by the intensifying impacts of climate change, the global community is at a critical juncture. The need for immediate and concerted action to address climate challenges has never been more urgent. The OPEC Fund for International Development, fully committed to advancing sustainable development in the spirit of South-South cooperation, recognizes the pivotal role that climate finance plays in shaping a sustainable, resilient and equitable future.

To demonstrate how we translate this recognition into action, I am pleased to present the OPEC Fund's inaugural Climate Finance Report. This document underscores our commitment to confronting the global climate crisis through strategic planning and targeted investments in both mitigation and adaptation initiatives. The report not only highlights the far-reaching impacts of climate change but also outlines the financial imperatives necessary to limit global warming to below 1.5°C as envisaged by the Paris Agreement.

Our approach to climate action is underpinned by the OPEC Fund's Climate Action Plan. Launched in 2022, the plan sets out ambitious targets to significantly increase our climate financing in the coming years. We are proud to have already surpassed our goal of allocating a minimum of 25 percent of new approvals towards climate action by 2025, having achieved 34 percent in 2023. This achievement demonstrates our proactive approach and the effectiveness of our strategies.

The Climate Finance Report provides a comprehensive overview of our efforts, showcasing the sectoral and geographical distribution of our financing. More precisely, it presents key projects that significantly contribute to positive impacts in both climate mitigation and adaptation. This detailed presentation not only illustrates our climate finance activities but also provides transparency and accountability in line with international best practices.

Building on the OPEC Fund's mission of fostering development and combating poverty, we regard climate action as one of the defining challenges of our time. Developing nations, in particular, face a range of multifaceted and complex issues. However, we are confident that through collaborative efforts and strategic partnerships, the development community can facilitate a just transition to a low-carbon, sustainable and climate-resilient future.

Together we can shape the future and make sustainable development a reality for all.

Foreword

SHAIMAA AL-SHEIBY

Vice President, Strategy
The OPEC Fund for International Development

It is widely recognized that global warming is likely to exceed the critical threshold of 1.5°C before mid-century and may reach the 2°C threshold by 2050, even if CO_2 emissions are kept at 2019 levels throughout the current decade (2020 to 2030). To mitigate these scenarios, higher levels of commitment and corresponding investments to reduce emissions are essential. On a hopeful note, according to the Intergovernmental Panel on Climate Change's 2023 report, more than 100 countries, accounting for at least two-thirds of global emissions, are developing strategies for carbon neutrality or zero greenhouse gas (GHG) emissions. However, this can only be achieved if global initiatives to reduce emissions are accelerated and effectively implemented.

The OPEC Fund is actively engaged in the global dialogue, hosting climate events and participating in key multilateral policy discussions aimed at reinforcing mitigation efforts and strengthening adaptation measures. In addition to supporting partner countries in achieving their emission reduction targets through renewable energy and energy efficiency projects, the OPEC Fund has been addressing the immediate impacts of climate change such as extreme weather events, unprecedented floods, droughts and record-high temperatures. Recognizing that effective climate resilience requires ongoing updates of policy documents, environmental regulations and climate-sensitive sectoral reforms, the OPEC Fund has prioritized collaborating with other multilateral development banks (MDBs) and bilateral partners to implement these changes in several partner countries.

Our efforts were brought into sharp focus with the introduction of our Climate Action Plan in 2022, which was then followed by a comprehensive Climate Action Strategy. The Climate Action Plan reflects our firm commitment to proactively seek climate financing opportunities and to align with the Paris Agreement's mandate. By doing so, the OPEC Fund joins the MDB community, , advancing the global climate financing agenda with ambitious targets, including achieving 25 percent climate finance by 2025 and 40 percent of all new financing by 2030.

Starting in 2022, we also inaugurated the annual climate finance tracking of our portfolio, utilizing the joint MDB Framework for Climate Finance Tracking methodology. This takes an activity-based approach and ensures that our assessments are context-specific, granular and transparent.

This report, comprising five sections, outlines the evolution of the OPEC Fund's climate policy and action, examines temporal trends in climate financing and highlights significant contributions being made towards global climate goals. The OPEC Fund remains committed to driving change and fostering sustainable development through robust climate finance initiatives.

EXECUTIVE SUMMARY

The OPEC Fund's inaugural Climate Finance Report discusses the imperative of climate action in addressing development challenges. It underlines the institution's strong commitment to tackling global climate challenges through strategic planning as well as the financing of both mitigation and adaptation activities. The report provides an overview of the global impacts of climate change, estimates the climate financing required to limit global warming to no more than 1.5°C above pre-industrial levels by the latter half of the 21st century, and in this context, highlights the progress made so far by the OPEC Fund in fulfilling its commitment to climate finance.

01 The OPEC Fund has prioritized the climate challenge to benefit from its resources and institutional capacity and will fully integrate climate assessments into all operational activities. This approach is continuously enhanced to align with the evolving global landscape, which advances various climate resilience initiatives to reduce emissions and prepare for the adverse impacts of climate change, particularly in the Global South. The report documents the OPEC Fund's climate agenda as demonstrated through its Climate Action Plan and the annual climate finance accounting initiative.

02 In 2022, the OPEC Fund crafted its Climate Action Plan to drive its climate agenda in a focused manner. The plan details the institution's climate finance goals and approach to enhancing climate finance. A major anchor of the plan is the OPEC Fund's commitment to achieve at least 25 percent of climate finance by 2025 and increasing that threshold to 40 percent by 2030. This report captures the key features of the Climate Action Plan as well as the strategy for its implementation.

03 The strategy focuses on three functional categories namely a) climate finance and energy mitigation, b) food security and climate adaptation, and c) nature-based solutions, in other words, the protection of ecosystems and biodiversity. The OPEC Fund plans to expand its climate finance portfolio, focusing on innovative solutions and partnerships to reach its ambitious strategic goals. The approach and investments will be targeted, in keeping with the OPEC Fund's model, in close collaboration with peer MDBs and key stakeholders, both of which are crucial to drive global efforts to combat climate change.

04 In 2021, the OPEC Fund introduced an annual accounting of its climate finance efforts. The latest report provided a comprehensive review of the institution's annual climate financing for the periods 2018-21, 2022 and 2023. The report also shows that the OPEC Fund has already achieved its 25 percent climate finance target well ahead of the 2025 deadline, reaching 33 percent in 2022 and 34 percent in 2023.

05 Furthermore, this report provides insights into the sectoral and geographical distribution of the OPEC Fund's climate financing. It showcases select projects aimed at achieving the climate finance goals and analyzes their effectiveness in contributing to mitigation and adaptation targets in different partner countries. The joint MDB methodology for tracking climate change adaptation and mitigation is applied to assess the impact of OPEC Fund-supported projects and to calculate their contributions to climate mitigation and adaptation. An inventory of OPEC Fund projects contributing to climate finance is provided in the Annex.

INTRODUCTION

The OPEC Fund's vision is a world where sustainable development is a reality for all. To achieve this, the OPEC Fund is now focusing on three strategic objectives: promoting South-South cooperation and sustainable development, building resilient and equitable societies, and driving climate innovation and a just transition.

1

Sustainable development is a multi-faceted and increasingly complex challenge. As the world emerged from the COVID-19 crisis, it became clear that achieving the Sustainable Development Goals (SDGs) by 2030 would be extremely challenging. Additionally, the impacts of climate change have worsened in recent years, further reversing progress towards SDG targets.

The Paris Agreement and the SDGs, both adopted in 2015, reflect a shared vision for sustainable development in the context of climate change. This vision requires integrating efforts to shift to a low-carbon and climate-resilient pathway while pursuing core development goals. The landmark Paris Agreement aims to strengthen the global response to the threat of climate change by keeping global warming "well below" 2°C above pre-industrial levels and striving to keep warming below 1.5°C. It also emphasizes adaptation, resilience and low emissions development in line with adequate food production and drastically increased climate financing.

Accurate tracking of climate finance flows has become a priority for governments, NGOs, researchers, donors and other stakeholders. In response, multilateral development banks (MDBs) developed a methodology in 2011 to track climate finance flows consistently, comparably and transparently.[1] That same year, MDBs published the first Joint Report on Climate Finance, establishing a harmonized methodology for tracking flows. This initial methodology covered climate finance data for a group of emerging and developing economies, including low- and middle-income as well as some high-income countries. By 2015, MDBs, in collaboration with the International Development Finance Club (IDFC), agreed on common principles for climate finance, including mitigation and adaptation.[2] This initiative aimed to create a unified approach for publicly-owned banks to track and report climate finance. The annual report was significantly expanded in 2019 with data for all countries in which MDBs operate, while also focusing on improving transparency through income-level classifications. In 2021, the MDBs and IDFC updated the Common Principles for Climate Change Mitigation Finance Tracking. This update included a more granular breakdown of eligible activities and clear criteria for tracking climate finance. Further improvements were made in 2022 when the MDBs updated their joint methodology for tracking adaptation finance.[3] This update, reflecting the evolving understanding and advancements in adaptation finance, was launched at COP27 and implementation began in 2023.[4] MDBs continue to enhance their climate finance tracking and reporting methodologies as part of their commitment to aligning financial flows with the Paris Agreement. They are also focusing on improving the assessment and reporting of climate outcomes and impacts, working with the international financial institution working group on greenhouse gas (GHG) accounting, and contributing to impact reporting for green bonds and climate resilience metrics.

As part of the global development finance community, the OPEC Fund is fully committed to the goals of the Paris Agreement and engages with many partners in the Global South to address climate change issues. In 2022, in line with the OPEC Fund Strategic Framework 2030, the institution adopted a Climate Action Plan to channel climate investments more systematically. Concurrently, the OPEC Fund joined the international community in accounting and disclosing its climate financing in accordance with the MDB tracking methodology.

[1]EBRD: https://www.ebrd.com/what-we-do/sectors-and-topics/mdbs-climate-finance.html
[2]MDB Joint Report: https://thedocs.worldbank.org/en/doc/3258e1d4c1e84fd961b79fe54e7df85c-0020012023/original/2023-0128-MDB-Report-2022-NEW.pdf
[3]https://www.eib.org/en/publications/20220242-mdbs-joint-methodology-for-tracking-climate-change-adaptation-finance
[4]MDB Joint Report: https://thedocs.worldbank.org/en/doc/3258e1d4c1e84fd961b79fe54e7df85c-0020012023/original/2023-0128-MDB-Report-2022-NEW.pdf

The OPEC Fund's strategy as outlined in its Strategic Framework 2030 focuses on maximizing development impact and becoming a leading multilateral development bank that is larger, more financially sustainable and more responsive to the needs of its partner countries. This strategy is driven by the OPEC Fund's commitment to support and align with the emerging needs of partner countries, particularly in the face of climate change.

A South-South Mandate and Climate Integration

The OPEC Fund operates with a South-South mandate, which promotes cooperation among developing countries. This mandate drives its engagement in various activities which are in compliance with the OPEC Fund's ESG Policy.[5] Developed in 2022 and effective from April 2023, the policy ensures that social and environmental risks associated with investment proposals are properly identified and addressed. The policy mandates the consultation of project-affected communities and all relevant stakeholders during the preparation and implementation phases of projects.

Given the increasing unpredictability of climate change impacts, a heightened focus on climate issues is essential for ensuring sustainable development. Consequently, the screening of projects and assets for environmental and climate risks is becoming critical for assessing potential risks to project sustainability. To this end, the OPEC Fund is implementing such environmental and social screening while introducing mechanisms to better understand and address climate-related risks.

The Growing Climate Imperative

The overarching need today is to reduce emissions while also preparing for the consequences of global warming. This challenge is complicated by the fact that many countries in the Global South, which contribute the least to global GHG emissions, are among the most severely affected by climate change impacts. These countries often have fragile economies, large vulnerable communities and limited access to basic needs, energy, income opportunities, infrastructure and connectivity. The Intergovernmental Panel on Climate Change's (IPCC) Sixth Assessment Report (AR6)[6] indicates that 10 percent of households with the highest per capita emissions contribute 34–45 percent of global consumption-based household GHG emissions, while the bottom 50 percent contribute 13–15 percent. As global warming progresses, the adverse impacts of climate change will intensify, leading to widespread devastation that could derail the SDGs and endanger the lives and livelihoods of millions of people, particularly in the Global South. The challenge lies in reducing emissions equitably while ensuring that vulnerable communities, especially in the Global South, do not face energy insecurity or a lack of development infrastructure. Achieving sustainable development requires resilient infrastructure capable of withstanding the growing impacts of climate change and promoting long-term progress.

The Paris Agreement aims to limit the rise in global temperatures to 1.5°C above pre-industrial levels, with an ultimate goal of staying well below 2°C.

Vulnerable regions, often those least responsible for emissions such as Least Developed Countries (LDCs) and Small Island Developing States (SIDS), are experiencing significant energy insecurity. The Paris Agreement aims to limit the rise in global temperatures to 1.5°C above pre-industrial levels, with an ultimate goal of staying well below 2°C. This target was agreed by 196 countries in 2015, with commitments first outlined through Intended Nationally Determined Contributions (INDCs) and later through Nationally Determined Contributions (NDCs), detailing emission reduction pledges, targets and strategies.

[5] OPEC Fund's ESG Policy 2022
[6] Climate Change 2023, IPCC

Achieving net zero CO_2 emissions is critical and requires substantial reduction in fossil fuel use, widespread adoption of renewable energy, carbon capture and storage as well as improved energy efficiency. Scaling up climate action involves implementing near-term adaptation and mitigation measures, which in turn demand various policy reforms and updates to environmental regulations. Overall, the challenges are complex and difficult to address.

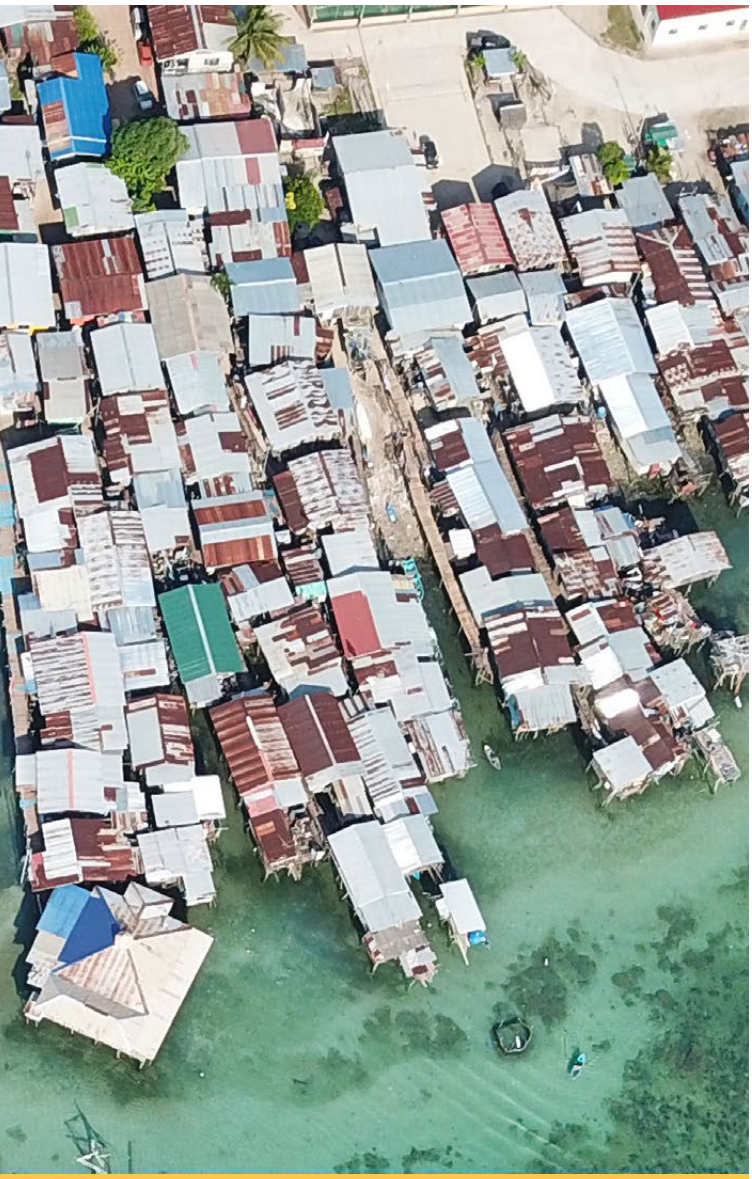
Given the current emission trajectory, limiting the global temperature rise to 1.5°C is becoming increasingly difficult, further complicating the achievement of the SDGs. Therefore, there is an emerging consensus on the need for increased climate-focused financing, transforming this challenge into an opportunity and integrating climate considerations into all mainstream activities.

Global Climate Finance Needs

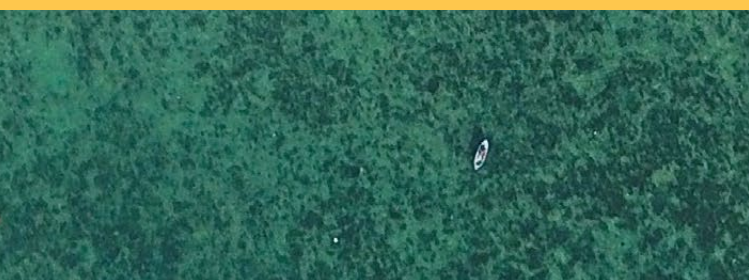
According to the Climate Policy Initiative (CPI), global climate finance increased from US$653 billion in 2019-2020 to an annual average of US$1.3 trillion in 2021–2022.[7] Significant investments have been made globally in emission reductions as climate finance almost doubled between 2019-20 and 2021-22. However, about five times more financing is required annually to keep global warming below 1.5°C.[8] Thus, the demand for increased climate financing has been consistently raised at the global level and the MDB community has been urged to do more in addressing climate change impacts.

According to estimates by the IPCC, annual climate finance needs range from US$5 to 12 trillion until 2050. Emerging markets and developing economies alone, excluding China, need US$2.4 trillion annually by 2030 for climate and

[7] Climate Policy Initiative: Global Landscape of Climate Finance 2023: Climate Policy Initiative
[8] World Economic Forum: Speed, Scale, Pragmatism: How to boost Climate Finance in 2024



Achieving the SDGs is inherently linked to addressing climate change.



nature-related investments, plus an additional US$3 trillion to achieve the other Sustainable Development Goals. The IPCC's Sixth Assessment Report indicates that current climate financing levels need to increase by four to seven times to meet the Paris Agreement targets.

The 2024 World Bank Spring Meeting highlighted that the estimated climate finance need is currently US$8 trillion per year, a figure that will rise to US$10 trillion per year after 2030.[9] This substantial financial requirement reflects the increasing frequency and severity of climate-related disasters and the growing need for both mitigation and adaptation strategies worldwide.

The analysis and data clearly show that the global need for climate finance is progressively growing due to the increasing adverse impacts of climate change. These impacts are manifested by more frequent and more severe climate-related calamities such as floods, droughts and hurricanes, which cause significant economic losses and humanitarian crises.

Transitioning to a low-carbon economy requires substantial investment in renewable energy, energy efficiency and other green technologies. Many countries, particularly those in vulnerable regions, need significant funding to build resilience against climate impacts, including infrastructure upgrades, disaster preparedness and sustainable agricultural practices. Climate experts have also emphasized the importance of investing in sustainable agriculture and restoring natural capital and biodiversity, addressing issues such as degraded land, deforestation and damage to water supplies and oceans. It is important to note that achieving the SDGs is inherently linked to addressing climate change, necessitating integrated and comprehensive financial strategies.

[9] https://live.worldbank.org/en/series/2024/spring-meetings

THE CLIMATE ACTION PLAN

The OPEC Fund Climate Action Plan (CAP) 2023-2030 was developed to enhance the OPEC Fund's climate finance efforts. The CAP sets out a broad vision and outlook to help better implement the OPEC Fund's mission and vision.

The aim is to strengthen operational actions for more climate-resilient investments. The plan is aligned with other MDBs' climate initiatives and sets clear targets. The CAP was informed by a comprehensive review of the OPEC Fund's 2019-2021 portfolio, during which climate finance represented 17 percent of the total budget for approved projects. The plan calls for the OPEC Fund to increase its climate finance contributions to at least 25 percent by 2025 and at least 40 percent by 2030 of all new approved financing. To achieve these targets, the CAP focuses on three key areas:

a. Support climate diagnostics, planning and policies;
b. Promote transformative climate investments[10]; and
c. Drive innovative climate finance solutions for the private sector.

The CAP expands on each of these areas with actionable items and technological innovations that can be implemented in partner countries to address the impacts of climate change.

As part of its support for climate policy and diagnostics, the OPEC Fund has pledged to assist partner countries in reviewing and updating their national climate policies, including NDC reports, long-term strategies under the Paris Agreement and other regulatory and legislative instruments for managing climate change. When necessary, the OPEC Fund provides grant-funded technical assistance and resources to help countries develop climate risk profiles and prioritize climate measures in partnership with other MDBs, development finance institutions and development sector actors.

The OPEC Fund aims to promote transformative public and private investments in key sectors such as energy, infrastructure, agriculture, food, water and sanitation. Historically, the OPEC Fund's climate contributions have been concentrated in the energy, water and agriculture sectors. Support to these sectors will continue under the CAP with an eye toward increased impact. For instance, the OPEC Fund is prioritizing large-scale renewable energy projects and energy efficiency initiatives such as advanced transmission and distribution technologies. Climate-smart agriculture is another key focus, promoting efficient irrigation, drought-resistant crops, reducing losses and increasing carbon sequestration. The OPEC Fund is also participating in commercially viable transformative projects in the transport sector and smart city initiatives, integrating low-carbon pathways in infrastructure design.

Through nature-based solutions, the OPEC Fund is helping to conserve ecosystems while building infrastructure and promoting livelihoods. Transformative climate action is envisaged through a combination of sovereign and non-sovereign financing, leveraging OPEC Fund grants, trust funds and partnerships with other institutions to maximize impact and mobilize private sector funding[11].

The OPEC Fund continues to work in conjunction with other partner institutions where relevant and to prioritize projects that crowd-in private sector funding, either within the context of the funded project or in the context of replication of the project. The CAP also proposes investing in climate bonds, the proceeds of which will be used to finance mitigation and/or adaptation investments.

The OPEC Fund is striving to develop innovative financing solutions to mobilize private capital for sustainable and resilient infrastructure and low-carbon innovation. Recognizing the critical role of the private sector in achieving climate change objectives, the OPEC Fund is exploring the possibility of providing financing through on-lending mechanisms for low-carbon and green projects. The OPEC Fund is exploring engagement with the Climate Bond Initiative[12] on climate bonds issued by the private sector.[13]

[10] Transformative climate investments focus on key sectors to reduce emissions or taking adaptive measures. So in case of energy, transformative climate investment will imply global transition to low carbon energy that is resilient to climate change and extreme events. In urban cities, transformative investments will imply improving urban air quality; decarbonizing urban energy systems; promote green and resource-efficient buildings and infrastructure; promote integrated solid-waste management and circular-economy approaches; improve urban transportation; and improve the coverage, efficiency and resilience of urban water supply, sanitation and wastewater treatment.
[11] Partnerships for blended finance with agencies offering concessional financing
[12] https://www.climatebonds.net
[13] As part of this process, the OPEC Fund may also consider supporting the issuance of such bonds in cooperation with other development partners.

Impacts of Climate Change in Partner Countries

An actionable strategy to implement the CAP was necessary to effectively address the needs of partner countries, primarily in the Global South. Consequently, the OPEC Fund's strategy is informed by its extensive experience in tackling climate challenges in these regions. Partner countries face a range of climate-related issues, which shape the OPEC Fund's climate-focused approach and identify the specific risks to be addressed. An overview of these direct and indirect climate risks is provided in the following sections.

Many OPEC Fund partner countries frequently experience extreme weather events such as hurricanes, droughts and floods. These events lead to widespread destruction of infrastructure, loss of livelihoods and displacement of communities. In regions like East and Southern Africa, the focus is not only on protecting existing infrastructure but also on coping with emerging vulnerabilities due to climate-influenced disasters.

Countries with low-lying coastal areas are particularly vulnerable to rising sea levels, which cause coastal erosion, salinization of freshwater sources and increased flooding. In addition to Small Island Developing States (SIDS), coastal regions of countries like Bangladesh are severely threatened. SIDS are already witnessing the inundation of agricultural lands and habitations, leading to mass migration to urban areas.

The agriculture sector is significantly impacted by irregular and extreme weather events. Climate change disrupts crop growing seasons, reduces yields and results in crop losses. This, in turn, leads to food scarcity and threatens the livelihoods and food security of millions of people, which can quickly escalate from a local to a global threat. These issues are particularly evident in Africa, which is why the OPEC Fund is working closely with governments and communities to safeguard agriculture and livelihoods.

Reduced flow in perennial glacier-fed rivers and over-extraction of groundwater have exacerbated water scarcity in already water-stressed regions. Additionally, rising sea levels can lead to the salinization of freshwater in inland areas. These factors contribute to a lack of water availability for agriculture, industry and domestic use.

The public health implications of climate change are still evolving, but it is evident that extreme weather conditions will lead to an increase in heat-related illnesses such as heatstroke as well as malnutrition due to food shortages. Public health facilities in the Global South are currently not equipped to address these emerging challenges.

Climate change significantly impacts economic and infrastructure development, especially in climate-sensitive sectors like agriculture, fisheries and tourism. This destabilizes fragile economies and leads to increased migration, poverty and social inequality on a large scale. Additionally, the loss of critical habitats, coral bleaching and deforestation further threatens ecosystems and biodiversity. These adverse effects risk reversing the progress made towards achieving the SDGs.

Addressing Climate Justice and South-South Cooperation

The challenges outlined above highlight the urgent need for effective approaches to climate justice and South-South cooperation to equitably address global climate challenges. Developing countries in the Global South often lack the financial resources and technology required to effectively combat these negative impacts. Achieving climate justice is particularly challenging because the burden of adaptation and mitigation disproportionately falls on these nations.

It is essential to support less developed and climate-vulnerable nations through funding, technology transfer, capacity building, data and monitoring support as well as policy alignment tailored to their specific needs. By integrating climate justice principles with South-South cooperation we can ensure that the most marginalized communities receive the support they need, while collectively working towards a more resilient and sustainable future.

Partnership Strategy for Implementation of the Climate Action Plan

To address climate mitigation and adaptation effectively the OPEC Fund has implemented a three-way partnership strategy comprised of the:

1. Climate Finance and Energy Innovation Hub,
2. Food Security and Climate Adaptation Facility and,
3. Nature Solutions Finance Hub for the Asia-Pacific Region.

Climate Finance and Energy Innovation Hub

In collaboration with Sustainable Energy for All, an organization promoting climate-compatible forms of energy, and the United Nations Capital Development Fund, the OPEC Fund established the Climate Finance and Energy Innovation Hub in June 2022.[14] This initiative provides comprehensive policy support to accelerate access to modern energy services and facilitate the energy transition in partner countries. The hub also promotes projects that reduce emissions such as clean cooking technologies in underdeveloped and developing countries, offers advisory services and facilitates knowledge sharing. Its primary focus is on promoting climate mitigation efforts to tackle the dual challenges of poverty reduction and energy security.

Food Security and Climate Adaptation Facility

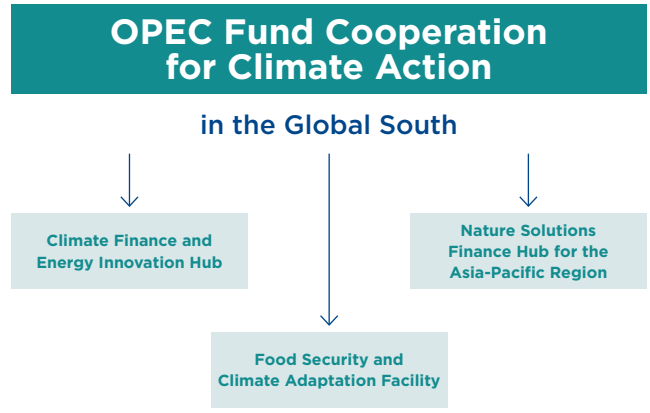
The OPEC Fund is also spearheading the Food Security and Climate Adaptation Facility[15] in partnership with the World Food Programme, the International Fund for Agricultural Development and other development partners. This facility aims at providing funding for capacity building, project preparation and technical assistance. It supports the development of a bankable pipeline of projects designed to enhance agricultural value chains and strengthen food systems, particularly in the context of climate change. The goal is to effectively address the impacts of climate change on food security and nutrition.

Nature Solutions Finance Hub for the Asia-Pacific Region

In partnership with the Asian Development Bank, the OPEC Fund has launched the Nature Solutions Finance Hub for the Asia-Pacific region[16]. Recognizing the critical role of nature in climate resilience the hub focuses on the rehabilitation and conservation of ecosystems. It leverages nature-based solutions to protect communities, optimize infrastructure and ensure a stable and biodiverse future. This approach includes the restoration of coastal mangroves, wetlands and mountain landscapes; watershed management; reforestation for cooling; climate-resilient cropping systems and water resource management.

Additionally, the OPEC Fund is expanding its partnership with the Saudi Fund for Development and other institutions of the Arab Coordination Group (ACG) to establish a similar Nature Solutions Finance Hub for the MENA and Africa regions.

Figure 1: **Cooperation for Implementation of the Climate Action Plan**



In addition to these key partnerships, the OPEC Fund has also collaborated with the ACG to collectively pledge US$24 billion in climate finance from 2022 to 2030. This commitment was announced at COP27 at Sharm El-Sheikh in Egypt, underscoring the OPEC Fund's commitment to addressing climate change on a global scale.

[14] https://publications.opecfund.org/view/137836564
[15] https://www.wfp.org/news/opec-fund-and-un-world-food-programme-wfp-launch-new-facility-catalyze-us500m-support
[16] https://www.adb.org/climatebank/cop28/launch-nsfh-asia-pacific-region

Commitment to Societal Security and Development

The OPEC Fund is particularly concerned about the development impacts of climate change on local communities. Ensuring a just transition in the energy sector, promoting emission reductions in the transport sector and bolstering climate-smart agricultural practices for small and medium-sized farmers are key aspects of our climate action approach. Protecting livelihoods, exploring alternative employment opportunities and addressing the needs of women and children are emerging as critical areas of concern. This necessitates active engagement with governments on societal development planning and engaging communities for awareness generation and active participation.

Engaging the Private Sector

Recognizing that advanced economies have historically been the largest contributors of GHG emissions and that public funding from wealthy nations has not kept pace with the growing adverse impacts of climate change, it is clear that public finance from countries most responsible for climate change is insufficient to fully counter its effects. Therefore, engaging the private sector in promoting transformative technologies and innovation is imperative, not only to drive sustainable growth but also to secure the necessary funding and investment that can scale up these solutions effectively. The OPEC Fund actively collaborates with stakeholders to devise mechanisms that de-risk private capital through guarantees, risk insurance and first-loss compensation.

By understanding and addressing climate risks, the OPEC Fund fosters sustainable development and resilience in partner countries, ensuring that climate actions are equitable and effective.

The OPEC Fund fosters sustainable development and resilience in partner countries by understanding and addressing climate risks.

TRACKING CLIMATE FINANCE

3

In line with the Joint Report on MDB Climate Finance, the OPEC Fund publishes details of the climate finance measures for its approved portfolio (excluding trade finance) retrospectively from the previous year. The following section of this report reviews the OPEC Fund's performance in meeting its climate finance targets in the past three years and evaluates the performance across regions and sectors.

The analysis of the OPEC Fund's climate finance initiatives highlights the institution's commitment to addressing the urgent challenges of climate change. By adopting the established terminology and methodology for tracking climate finance, the OPEC Fund demonstrates its dedication to transparency and accountability in its climate finance reporting practices.

Climate Finance Baseline 2018-2021

The first climate finance review for the OPEC Fund was released in 2022. The results were derived from the entire portfolio (excluding trade finance) during the period 2018–2021. The analyzed portfolio included 133 projects with a total OPEC Fund contribution of US$4 billion. Of this portfolio, 54 projects (40 percent) addressed climate finance: 23 projects (17 percent of the total number of investments in the reviewed portfolio) were for climate change adaptation finance, 18 projects (14 percent) were for climate change mitigation finance and 15 projects (11 percent) were a mix of both.

Across the board, the OPEC Fund's climate change adaptation finance in the period amounted to US$219 million (5.3 percent of total financing), and climate change mitigation finance amounted to US$457 million (11.5 percent of total financing). Total OPEC Fund climate finance was US$676 million, accounting for 17 percent of the total portfolio.

The share of OPEC Fund climate finance in the public sector was higher (58 percent) than in the private sector (42 percent). The main focus of climate finance was on the energy sector (25.3 percent), followed by water and agriculture.

Climate Finance 2022

The review of the OPEC Fund's climate finance in 2023 was based on net project board approvals for 2022, excluding trade finance projects. The analyzed portfolio included 37 projects with total OPEC Fund financing of US$1.5 billion. Out of these 37 projects, 25 (67.6 percent of the total number of investments) addressed climate finance, 5 projects (13.5 percent) involved climate change adaptation finance, 10 projects (27 percent) involved climate change mitigation finance and 10 projects (27 percent) were a mix of both.

Climate change adaptation finance amounted to US$146.6 million (9.5 percent of total OPEC Fund financing), and climate change mitigation finance amounted to US$368.8 million (23.9 percent). Total OPEC Fund climate finance was US$515.4 million, accounting for 33.4 percent of the total portfolio.

Out of this US$515.4 million, 80 percent was committed to sovereign projects and 20 percent to non-sovereign projects.

Climate Finance 2023

The latest climate finance review was based on net project approvals for the year 2023, excluding trade finance projects. Total financing for this period amounted to US$1.2 billion across 34 projects. Of these, 32 projects (94.1 percent of the total number of investments) contributed to climate finance: 13 projects (38.2 percent) involved adaptation finance, 4 projects (11.8 percent) focused on mitigation finance and 15 projects (44.1 percent) included a mix of both.

Across the board, climate change adaptation finance amounted to US$205.1 million (16.9 percent of total OPEC Fund financing), while climate change mitigation finance totaled US$212.3 million (17.5 percent). Total OPEC Fund climate finance for 2023 was US$417.4 million, accounting for 34.4 percent of the total portfolio.

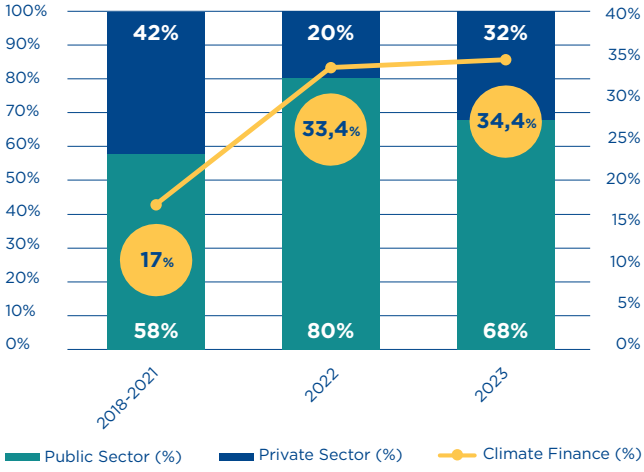
Of this US$417.4 million, 68 percent was committed to sovereign projects and 32 percent to non-sovereign projects.

The Comparative Picture

The OPEC Fund's level of climate financing has notably advanced in recent years. Comparing the baseline period of 2018-2021 to the year 2023, there has been a significant increase in total climate finance, rising from 17 percent in the baseline period to 34 percent in 2023. Adaptation finance increased from 5 percent to 17 percent, and mitigation finance increased from 11.5 percent to 18 percent, demonstrating significant progress over the course of just a few years. However, the number of projects is relatively small. As a result, the observed changes may represent shorter-term fluctuations over the last few years, rather than a broad and consistent trend. As the OPEC Fund continues to track its climate finance efforts, more defined trends and observations will become more apparent.

The contribution of the OPEC Fund's Public Sector operations to the institution's climate financing has averaged around 70 percent over the baseline period, primarily driven by energy and multisectoral projects. Climate finance from the OPEC Fund's Private Sector operations accounted for approximately 30 percent, also primarily driven by the energy sector, with additional contributions from banking and finance as well as multisectoral (financial intermediaries) projects.

Chart 1: **Climate Finance Summary 2018-2023**



Source: OPEC Fund climate finance reports, 2018-21, 2022 and 2023
See also Annex 7.3, Table 1 and Table 2

Sectoral Distribution of Climate Finance

SECTOR DEFINITIONS

Agriculture
This sector encompasses all projects related to farming, livestock, fisheries and forestry. It includes initiatives aimed at improving agricultural productivity, sustainability and resilience to climate change.

Financial Institutions
This sector includes financial institutions transactions, primarily loans to banks. It covers all financial services provided by banks and other financial institutions, including credit, investment and insurance services that support various economic activities.

Education
This sector includes projects aimed at improving educational infrastructure, access to education and quality of education. It includes investments in schools, universities and vocational training centers as well as educational programs and initiatives.

Energy
This sector includes projects related to production, distribution and consumption of energy. It covers renewable energy projects (such as solar, wind and hydroelectric power), energy efficiency initiatives and other efforts to transition to sustainable energy sources.

Multisectoral
This category is used for projects that are cross-cutting and do not fit into a single sector. Multisectoral projects might include initiatives that address climate resilience, energy transition and agriculture simultaneously. This classification is used for loans and other financial transactions that have impacts across multiple sectors.

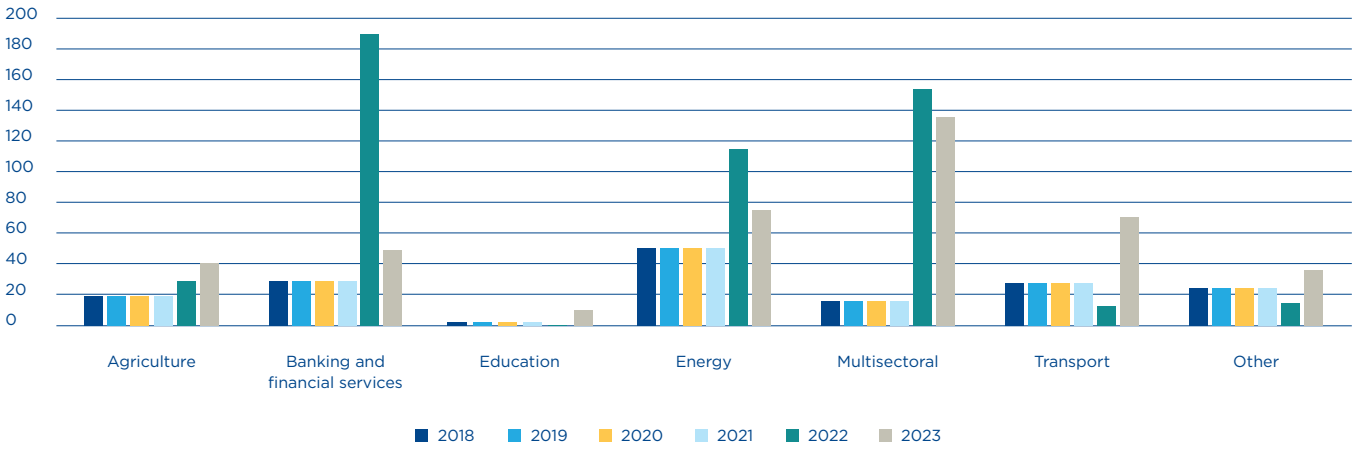
Transport
This sector includes projects related to the development and maintenance of transportation infrastructure. It covers roads, railways, airports, seaports and public transportation systems as well as initiatives aimed at improving transportation efficiency and sustainability.

Other
This category includes any projects that do not fit into the specific sectors mentioned above. It is a category for miscellaneous projects that have unique or diverse objectives.

The analysis of the OPEC Fund's portfolio indicates that the distribution of sectoral investments varied considerably over the three time points (Table 3a, 4a and 5a). Out of the total sectoral allocation the percentage of climate finance showed interesting trends. For instance, financing in the energy sector over this time period varied from US$794.7 million (20 percent) in the base year to US$193 million (12 percent) in 2022 and US$113.1 million (9 percent) in 2023. However, the contribution of climate finance in the energy sector to total investment in the sector increased from 25 percent in the base year to 59 percent in 2022 to 66 percent in 2023 (Table 6b).

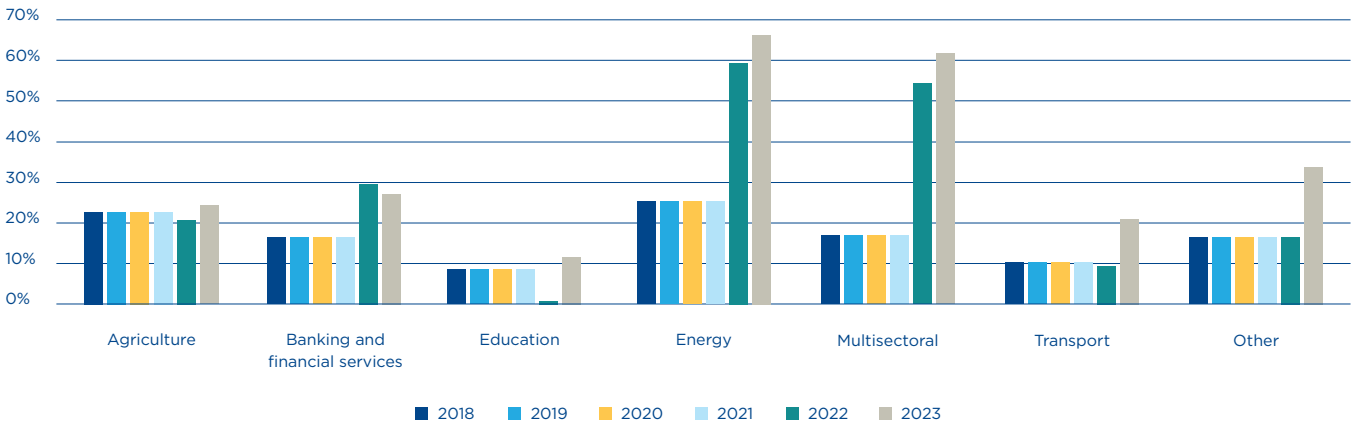
Chart 2 depicts contributions of different sectors for 2018-21, 2022 and 2023. Chart 3 indicates the percentage of climate finance of each sector to total investment in the sector for the respective time periods.

Chart 2: **Climate Finance Summary, 2018-2023**



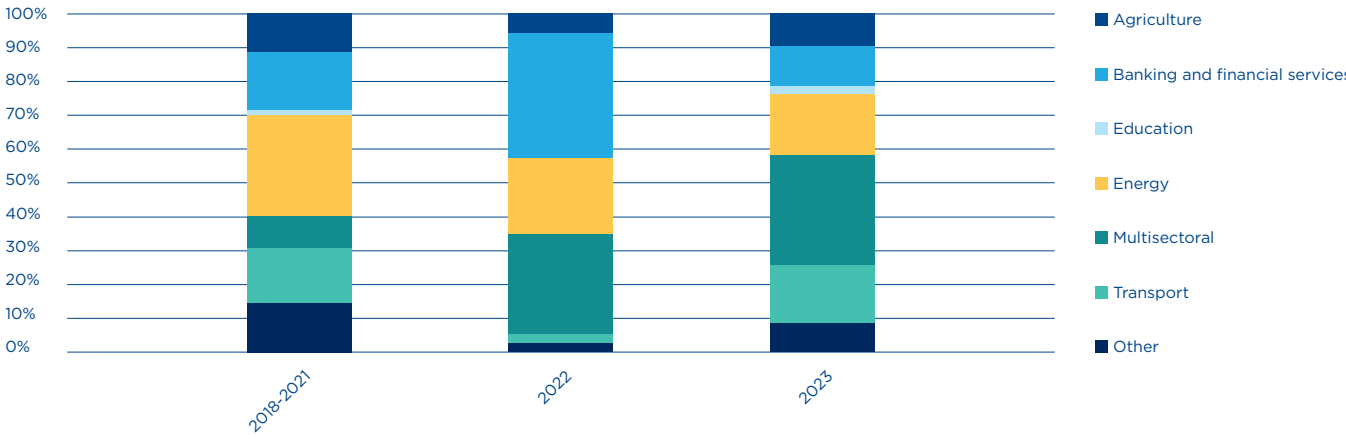
Source: OPEC Fund climate finance reports, 2018-21, 2022 and 2023 | See also Annex 7.3, Table 6a

Chart 3: **Climate Finance Percentage to Total Sectoral Financing, 2018-2023**



Source: OPEC Fund climate finance reports, 2018-21, 2022 and 2023 | See also Annex 7.3, Table 10

Chart 4: **Sectoral Contribution to Total Climate Finance, 2018-2023**



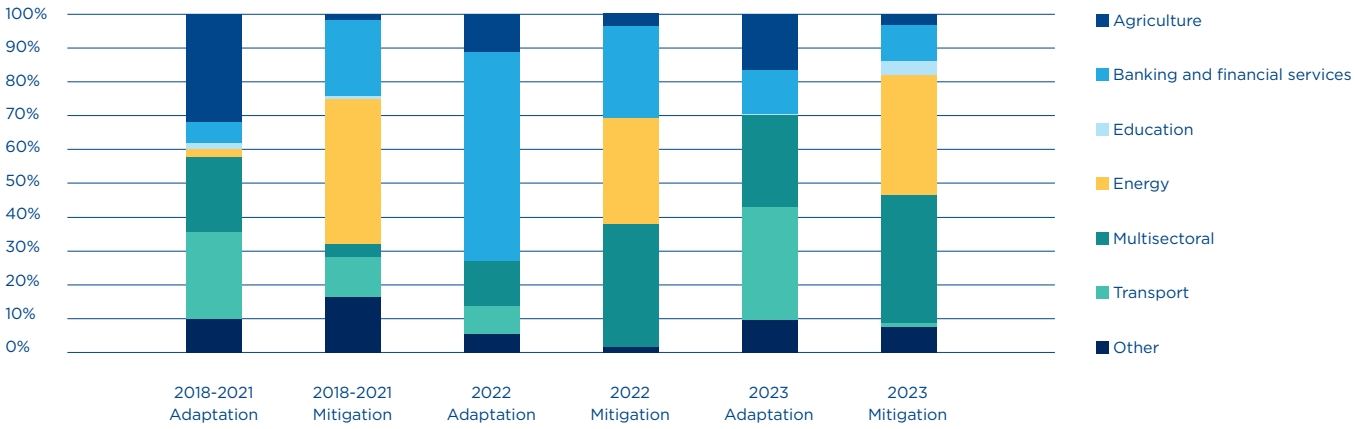
Source: OPEC Fund climate finance reports 2018-21, 2022 and 2023 | See also Annex 7.3, Table 7, 8 and 9

Chart 4 depicts the sectoral contribution of climate finance to total climate finance of the OPEC Fund for the time periods 2018-21, 2022 and 2023. This corresponds with Tables 7, 8 and 9 in the Annex.

The review of the data indicates that the sectoral contribution to the OPEC Fund's total climate finance over the years (Chart 4) does not indicate a consistent sectoral focus. In the baseline, energy (30 percent) contributed most climate finance followed by banking and finance (17 percent) and transport (16 percent). In 2022, banking and finance (37 percent) saw the highest contribution followed by multisectoral projects (30 percent) and energy (22 percent). In 2023, multisectoral projects (32.4 percent) recorded the highest contributions, followed by energy (18 percent) and transport (17 percent).

The energy sector was the main contributor to total climate finance from 2018 to 2021 (baseline period). However, the contributions from the energy sector decreased gradually from 30 percent to 18 percent over the last three years (Table 10 in the Annex). Climate finance in the energy sector serves primarily energy mitigation projects such as renewable energy. This decreasing trend is mainly due to the reduction in the public sector's contribution to the energy sector, which fell from 21 percent in the base year to 9 percent in 2022 and zero in 2023 (Tables 11a, 11b and 11c). During this period, the energy sector's contribution to the OPEC Fund's private sector operations increased from 42 percent in the base year to 75 percent in 2022, recording 57 percent in 2023 (Table 12a, 12b and 12c). Renewable energy projects (solar and wind) in the private sector have emerged as key drivers of climate finance in the OPEC Fund. As a result, increased financing in energy in the private sector and the expansion of policy-based loans in the public sector has been yielding higher climate finance.

Chart 5: **Sectoral Contributions of Adaptation and Mitigation Finance to Total Climate Finance 2018-2023**



Source: OPEC Fund climate finance reports 2018-21, 2022 and 2023 | See also Annex 7.3, Table 10

Chart 5 shows the distribution of different sectors in relation to total mitigation and adaptation for the time periods 2018-21, 2022 and 2023. This corresponds to Table 10 in the Annex.

Regional Distribution of Climate Finance

REGIONAL DEFINITIONS

To provide clarity on the regional classifications used in this report, below are the OPEC Fund definitions for each region:

Asia and the Pacific (ASP)
This region includes all countries in Asia except for Central Asia and Asian Middle East countries. It also includes the Pacific Island Countries. Work focuses on projects in countries such as Bangladesh, India, Nepal and Pacific nations.

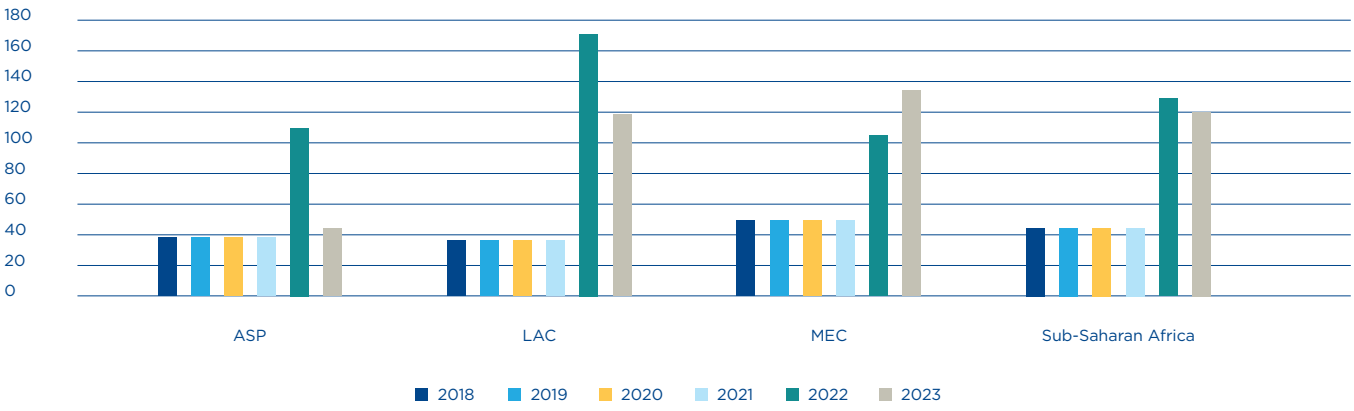
Latin America and the Caribbean (LAC)
This region includes countries in Latin America and the Caribbean. From 2018-2023 our partner countries in that region, including among others, Colombia, Nicaragua, Panama and the island nations of the Caribbean.

MENA, Europe and Central Asia (MEC)
This region includes the Middle East and North Africa (MENA) countries as well as countries in Europe and Central Asia. Work focuses on projects in countries such as Jordan, Kyrgyz Republic, Kosovo, Armenia and Uzbekistan.

Sub-Saharan Africa
This region encompasses all countries in Africa except for North Africa. It includes Eastern and Southern Africa (ESA) and Western and Central Africa (WCA). Countries in this region that were partner countries include Malawi, Liberia, Senegal, Burundi, Tanzania and Zimbabwe.

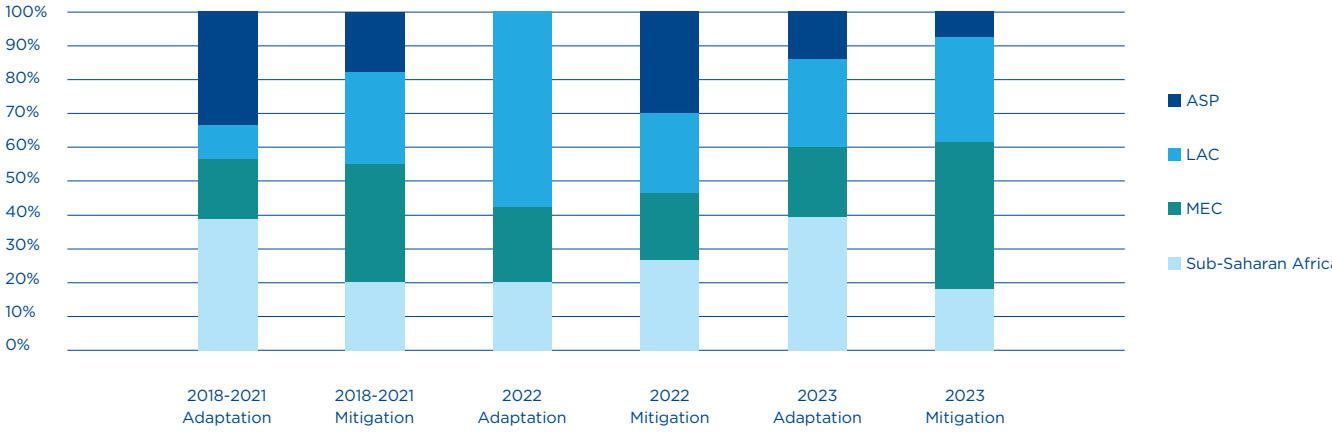
Climate finance as percentage of total regional allocation is displayed in Tables 16a and 16b. From 2018 to 2023, the Middle East and Central Asia (MEC) consistently increased its share of climate financing, starting at 20.23 percent in the period 2018-2021 (Table 16b). This region increased to 28.02 percent in 2022, and again to 34.93 percent in 2023. The Latin America and Caribbean (LAC) region showed remarkable growth with climate finance increasing from 21.72 percent in 2018-2021 to 43.93 percent in 2022 and further to 55.25 percent in 2023 (Table 16b). The Asia and Pacific (ASP) region saw a significant spike in 2022, reaching 50 percent, but dropped to 19.2 percent in 2023. Sub-Saharan Africa also showed notable improvement, increasing from 11.77 percent in 2018-2021 to 23.19 percent in 2022 and then to 31.49 percent in 2023. Overall, the LAC region showed the most significant growth, achieving the highest climate finance percentage by 2023 (Table 16b). The climate finance performance in LAC can be attributed to climate-related PBLs.

Chart 6: **Regional Distribution of Climate Finance, 2018-2023**



Source: OPEC Fund climate finance reports 2018-21, 2022 and 2023 | See also Annex 7.3, Table 16a

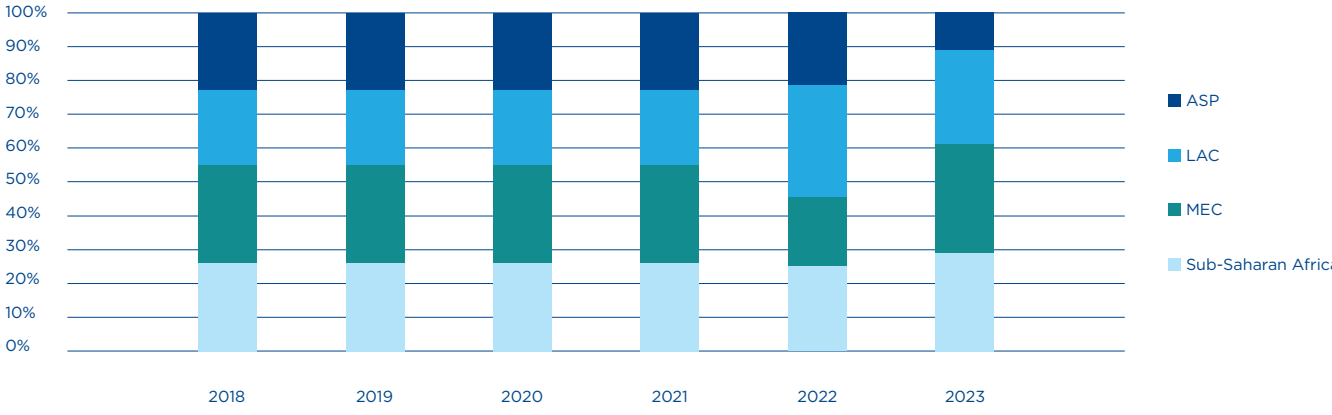
Chart 7: **Regional Distribution Share of Adaptation and Mitigation Finance, 2018-2023**



Source: OPEC Fund climate finance reports 2018-21, 2022 and 2023 | See also Annex 7.3, Table 16b

The regional distribution of the OPEC Fund's total climate financing over the time periods 2018-21, 2022 and 2023 is represented in Chart 8. This chart corresponds to Tables 15-17 in the Annex.

Chart 8: **Regional Distribution of Climate Finance, 2018-2023**



Source: OPEC Fund climate finance reports 2018-21, 2022 and 2023 | See also Annex 7.3, Table 17, 18 and 19

Roadmap 2030

CLIMATE FINANCE TARGETS

4

Thematic Priorities

The annual accounting of the OPEC Fund's climate finance investments indicates that the institution has achieved and exceeded its climate finance targets for 2025. Following the climate finance figures of 17 percent achieved in 2021, the OPEC Fund took several steps to bolster its share of climate finance. Firstly, a focused approach was adopted to originate projects with significant climate finance components. Secondly, concerted efforts were made to strengthen the climate components in projects and to highlight these in the project approval documents. Thirdly, the OPEC Fund adopted an approach to assist partner countries in updating their climate and environmental policies and regulations.

Implementing the OPEC Fund's climate action strategy will require intensified efforts to achieve higher levels of climate financing and achieving targets. As outlined in the section on the climate action strategy, the Climate Finance and Energy Innovation Hub will be a crucial tool in assisting partner countries define low-emission pathways, particularly in the energy sector.

At the same time, the OPEC Fund will continue collaborating with partners in the Global South to address the impacts of climate change, which are increasingly manifested in unprecedented and severe weather events. The Food Security and Climate Adaptation Facility will be essential in advancing this agenda. Consequently, there will be a concerted effort to enhance climate adaptation financing in fragile and vulnerable regions to protect existing assets, support new infrastructure and safeguard community livelihoods from climate-related adversities.

The OPEC Fund will also actively participate in advancing projects featuring nature-based solutions in partnership with the Asian Development Bank, addressing issues of biodiversity and ecosystem conservation on a large scale. This will involve local communities and address natural resource depletion impacting livelihoods (e.g., fisheries and animal rearing). The OPEC Fund plans to expand its geographical coverage of nature-based solutions projects from Asia to Africa and Latin America in collaboration with Arab Coordination Group members.

One significant intervention will be in the SIDS, where partnerships with regional associations and the United Nations Framework Convention on Climate Change (UNFCCC) will help clear bottlenecks in financing for climate mitigation, rehabilitation from climate impacts and infrastructure development. The OPEC Fund will devote significant resources to building the capacity of SIDS and facilitating forums to mobilize capital for climate action.

Achieving Climate Finance Targets

To achieve the OPEC Fund's climate finance targets it is crucial to integrate climate change considerations in the project cycle. Starting in 2025, climate change will be fully addressed in all projects. All new projects (excluding trade finance) will undergo climate screening to identify potential climate actions, including climate-proofing and adaptation options.

The OPEC Fund will systematically include low-carbon and climate resilience opportunities in project planning and state the results of this review in the project approval documentation. Additionally, the OPEC Fund will monitor, evaluate and draw lessons from the climate change performance of its projects for improvement and replication.

Historically, the OPEC Fund's climate contributions have been concentrated in development financing in the energy, water and agriculture sectors. This focus will be maintained in the future. In addition, special emphasis will be placed on development policy loans to enhance policies and regulations on climate, environment and natural resources in the Global South.

The OPEC Fund will continue strategic investments in climate-related projects that contribute to climate

mitigation and adaptation. One critical sector for enhancing climate finance will be financial institutions. The priority will be to partner with institutions that have large portfolios of green projects, including renewable energy, energy efficiency and agriculture projects with significant adaptation potential.

Additionally, the OPEC Fund will align projects with the Paris Agreement by December 31, 2024, when a tracking approach will be introduced targeting 20 percent Paris Alignment by 2026, 30 percent by 2027 and 50 percent by 2030. This alignment has been identified as a key programmatic priority to establish the OPEC Fund as a significant climate finance institution.

Paris Alignment means that OPEC Fund's support will be consistent with the objectives of the Paris Agreement and a country's pathway to low greenhouse gas emissions and climate-resilient development.

Paris Alignment means that OPEC Fund financial support (loans and guarantees) to countries, public or private sector entities will be consistent with the objectives of the Paris Agreement and a country's pathway to low GHG emissions and climate-resilient development. A core assumption underpinning the OPEC Fund's commitment is that countries have flexibility in defining their own contributions to the Paris Agreement. This is consistent with the fundamental principles of the accord, recognizing that countries have different needs and circumstances in integrating climate and development, that reducing GHG emissions will take longer for developing countries and that each country, depending on its circumstances, has both common and unique responsibilities and capabilities.[17]

The OPEC Fund's commitment is part of a broader vision shared by MDBs to align financing flows with the objectives of the Paris Agreement as announced in 2017 and reiterated in the 2018 MDBs' Joint Declaration. This vision has led to the development of the MDB Paris Alignment Methodological Principles, which allow each MDB to create their own methods. The OPEC Fund's Paris Alignment methods are conceptually consistent with the MDBs' principles.[18]

The positioning of the OPEC Fund's financing is assessed using three Paris Alignment methods, conceptually in line with the MDB PA Methodological Principles and applicable across sectors and country contexts. These methods provide an operational framework to address relevant climate design issues and risk management, following three steps: assessing whether the proposed operation is consistent with a given country's climate strategies; assessing the operation's mitigation and adaptation climate risks; and demonstrating that the design incorporates measures to reduce or manage these risks. The methods also emphasize the need to assist countries in improving institutional processes and capacities to manage climate risks and revising the scope and design of operations as necessary.

The OPEC Fund, like other MDBs, will learn from the experience of implementing Paris Alignment by monitoring its rollout, refining and updating implemented methods as needed, taking stock of initial implementation, facilitating knowledge exchange and lessons learning, strengthening capacity and efficiency and reviewing and sharing experiences with other MDBs and institutions.

[17] UNFCCC. 2015. "Paris Agreement." FCCC/CP/2015/10/Add.1. Paris: United Nations Framework Convention on Climate Change. http://unfccc.int/paris_agreement/items/9485.php. Art. 2.
[18] The MDB PA Methodological Principles cover: (i) direct lending, (ii) policy-based lending, (iii) intermediated financing, and (iv) general corporate purpose finance.

PROJECTS

Contributing to the OPEC Fund's Climate Finance

In this section we highlight projects that exemplify how we support countries by addressing key global challenges – such as biodiversity and nature, climate adaptation and mitigation, energy access as well as food and nutrition security – and significantly contribute to the OPEC Fund's climate finance in recent years.

5

The documentation of the featured projects is designed to discuss the purpose of a loan and the expected outcomes within the context of the climate risk profile of each country. To set the country context, the featured projects refer to the ND-GAIN Index - 2023[19], which assesses the vulnerability and readiness of 181 countries in facing climate change and other global challenges. The country's ranking on the ND-GAIN index reflects its vulnerability. The ND-GAIN Index scores countries based on their susceptibility to climate risks (with lower scores indicating higher vulnerability) and their readiness to enhance resilience (with higher scores indicating greater preparedness). For context, Norway, which is ranked first, holds the highest score for resilience.

Each featured project provides a detailed account of climate finance tracking calculations, delving into project components and sub-components.

Selected Case Studies Overview

Country	Project	Year of approval	OPEC Fund Contribution in US$MN	Adaptation Finance (%)	Mitigation Finance (%)	Total Climate Finance (%)
ARMENIA	**Green Inclusive and Sustainable Development**	2023	50.00	15.63	28.13	43.75
AZERBAIJAN	**240 MW Khizi-Absheron Wind Power Plant**	2023	50.00	0	100	100
BURUNDI	**Agricultural Production Intensification and Vulnerability Reduction**	2020	20.00	28.95	0	28.95
COLOMBIA	**Climate Action and Energy Transition**	2023	150.00	29.27	43.90	73.17
MALDIVES	**Outer Islands Harbors, Water Supply and Sewerage Facilities**	2018	41.60	10.00	10.00	20.00
PANAMA	**Program for National Climate Change**	2022	120.00	58.33	41.67	100
SENEGAL	**Water and Value Chain**	2020	20.00	20.00	20.00	40.00
UZBEKISTAN	**500 MW Bash & 500 MW Dzhankeldy Wind Farm**	2022	20.00	0	100	100

[19] The ND-GAIN index is a global free open-source index that measures a country's current vulnerability to climate disruptions and assesses its readiness to leverage private and public sector investment for adaptive actions: https://gain.nd.edu/our-work/country-index

ARMENIA

Green Inclusive and Sustainable Development

The OPEC Fund is co-financing the Green Inclusive and Sustainable Development Program in Armenia with a policy-based loan of €50 million. The program aims to support Armenia's transition towards a sustainable, inclusive and green economy through three main approaches: a) improving climate resilience and reducing environmental impacts, b) enhancing equity and human capital development, and c) improving public sector governance and efficiency. The loan supports a series of reforms aimed at improving climate resilience, environmental management and energy efficiency.

FUNDING DETAILS:

- **Total program cost: US$153.61 million**
- **OPEC Fund contribution: €50 million**
- **Type of financial instrument: Policy-based loan**
- **World Bank contribution: US$100 million**
- **OPEC Fund climate finance as percentage: 44 percent of which 16 percent adaptation finance and 28 percent mitigation finance**

TIMELINE:

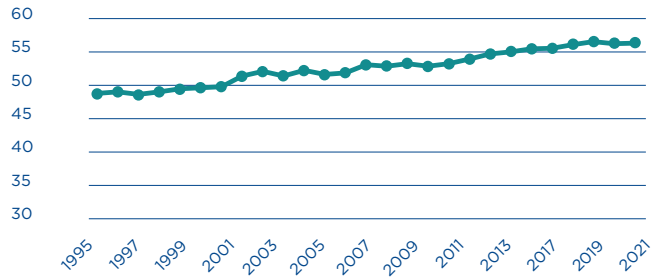
- **The Ministry of Finance of Armenia officially requested co-financing from the OPEC Fund in June 2022.**
- **The World Bank and the OPEC Fund approved the program in March 2023.**
- **The OPEC Fund loan was disbursed in December 2024.**

Situation Analysis of Climate Impacts

Located at the heart of the South Caucasus, landlocked Armenia faces an array of challenges. Over the past decades, Armenia has made significant strides in economic growth and poverty reduction. However, the twin crises of the COVID-19 pandemic and military conflict with Azerbaijan have underscored the fragility of these gains.[20]

Due to a combination of political, geographic and social factors, Armenia is recognized as highly vulnerable to the impacts of climate change. Armenia is ranked 57th on the ND-GAIN index. Figure 4 presents a time-series plot illustrating Armenia's progress in the ND-GAIN Index over time.[21]

Figure 4: **Armenia ND-GAIN Index**



Source: https://gain.nd.edu/our-work/country-index

Armenia faces significant disaster risks, ranking 116 out of 191 countries on the 2024 INFORM Risk Index[22], primarily due to its high exposure to natural hazards such as riverine, flash and coastal floods, as well as tropical cyclones. The country's climate change challenges are profound, with unpredictable climate phenomena leading to increased droughts and shifting precipitation patterns that

severely impact rural livelihoods. It is predicted that the climate change impacts in Armenia will be more severe than the global average as the shrinking Caucasus glaciers intensify pressure on the country's water management infrastructure. This will increase the risk of floods and landslides, particularly in rural areas where infrastructure and resilience are weakest, necessitating robust disaster risk reduction strategies.[23]

Purpose of the Loan

This operation in Armenia includes a US$100 million loan by the World Bank Group and a €50 million loan provided by the OPEC Fund. The loans will assuage the immediate economic stress post-2020 at the outset and provide the necessary financial cushion to implement critical climate resilience and mitigation measures without diverting resources from essential services.

Secondly, the operation will support a series of reforms aimed at improving climate resilience, environmental management and energy efficiency. Thirdly, the loan will enhance long-term sustainability by reducing GHG emissions and promoting the transition to a greener economy.

The loan will support the modernization of critical climate-resilient infrastructure, bolster social protection programs and drive economic reforms that are essential for sustainable development. Moreover, the loan will help Armenia build a resilient economy capable of withstanding future shocks, whether they stem from climate change, economic volatility or geopolitical tensions. The reforms are aligned with the national and international climate goals presented in the table that follows.

Figure 5: **Key National Adaptation Policies, Plans and Agreements**

Policy/Strategy/Plan	Status
Disaster Risk Management National Strategy and Action Plan	Enacted
Nationally Determined Contribution (NDC) to Paris Climate Agreement	Submitted
Technology Needs Assessment Report	Completed
National Communications to the UNFCCC	Four Submitted
National Platform for Disaster Risk Reduction	Enacted
National Adaptation Plan (NAP) to Advance Medium and Long-Term Adaptation Planning in Armenia	In development phase
National Forest Policy and Strategy	Enacted
Wildfire Action Management Plan	Enacted
EU-Armenia Comprehensive and Extended Partnership Agreement (CEPA) (2017)	Adopted
EU-Armenia CEPA Roadmap	Adopted
Green City – Yerevan Action Plan	Enacted

Source: Government of Armenia, World Bank, Climate Watch Data

Armenia's NDCs outline ambitious targets, including a 40 percent reduction in GHG emissions by 2030 compared to 1990 levels. Achieving these targets will require a comprehensive approach that integrates climate considerations into all aspects of national planning and development. The loan's focus on energy efficiency in buildings, renewable energy and climate-resilient infrastructure is directly aligned with these targets. By fostering a low-carbon, resilient economy Armenia is not only meeting its international commitments but also setting a course for sustainable development that can withstand the test of time.

[20] IMF Country Profile: https://www.imf.org/en/Countries/ARM
[21] University of Notre Dame (2024). Notre Dame Global Adaptation Initiative. URL: https://gain.nd.edu/our-work/country-index
[22] European Commission (2024). INFORM Index for Risk Management. Armenia. URL: https://drmkc.jrc.ec.europa.eu/inform-index
[23] Climate Change Knowledge Portal: https://climateknowledgeportal.worldbank.org/country/armenia

Expected Outcomes

The policy actions supported by the program are designed to strengthen Armenia's climate policies and environmental management, delivering critical socio-economic benefits. These actions are part of Armenia's broader strategy to combat climate change and are funded equally by the OPEC Fund, with US$6.25 million allocated per action.

One of the key actions is climate-informed public investment management, which integrates climate considerations into all infrastructure projects. This policy mandates climate screening for all investments, aiming for full compliance by 2025, and aligning Armenia's development with international climate goals. Another significant action is the promotion of energy efficiency, particularly in residential buildings, to reduce greenhouse gas emissions. The policy supports energy-efficient renovations, aiming to benefit 5,000 families by 2025, while also revising building codes and enhancing energy security. This approach could cut energy consumption by up to 50 percent in urban retrofitting projects, reduce dependency on imported energy, and create jobs in the green economy.

Additionally, the program includes efforts to improve ambient air quality and public health by addressing air pollution. This involves new legislation for air quality and GHG monitoring, which will have direct health benefits and contribute to both climate adaptation and mitigation. Finally, the program introduces a competency-based curriculum in education, emphasizing Science, Technology, Engineering and Math (STEM) subjects, green education and foreign languages. This curriculum is designed to foster climate awareness and equip future generations to tackle environmental challenges through sustainable practices and innovative solutions.

Assessment according to the Joint MDB Methodology for Tracking Climate Finance

The OPEC Fund financed both mitigation and adaptation policy actions under the policy-based loan for Armenia. Each prior action was uniformly assessed to determine its contribution to either mitigation or adaptation.

Policy Action 1 focuses on climate-informed public investment management by introducing climate screening for investments, with half of the US$6.25 million allocated equally to adaptation and mitigation finance. Policy Action 2 emphasizes promoting energy efficiency, particularly in residential households, fully contributing to mitigation efforts and allocating the entire US$6.25 million to mitigation finance. Policy Action 3 targets atmospheric air protection by enhancing air quality monitoring, with 50 percent of the US$6.25 million allocated to both adaptation and mitigation finance. Lastly, Policy Action 6 introduces a new competency-based curriculum aimed at improving STEM education with a focus on green education, which addresses both adaptation and mitigation. However, since the action includes non-climate-related elements, only 25 percent of the US$6.25 million is allocated to adaptation finance and the same amount to mitigation finance.

Following this analysis, mitigation finance accounts for a total of US$14.06 million and adaptation finance totals US$7.81 million.

SPOTLIGHT STATEMENT
The OPEC Fund's Contribution to Climate Resilience in Armenia

"Today, we are witnessing the global challenge of climate change, which necessitates a profound transformation. In this context, the government of the Republic of Armenia is committed to implementing measures and approaches aimed at minimizing the adverse effects of climate change. We are pleased to highlight that the Green, Resilient, and Inclusive Development Program, supported jointly by the World Bank and the OPEC Fund, aligns with Armenia's climate action policies and has significantly bolstered our efforts to address climate-related challenges. This program has been instrumental in advancing green development in Armenia by promoting climate change mitigation and adaptation and enhancing the regulatory framework for environmental management.

Key achievements include enhancing resilience to disaster and climate risks by introducing climate change screening for proposed public investment projects and supporting revisions to the building code to incorporate new norms on disaster and climate resilience. The reforms have also contributed to Armenia's updated Nationally Determined Contributions by reducing emissions in the energy sector through an energy-saving and renewable energy program, state support measures for energy-efficient renovations, and revisions to the building code to improve energy efficiency standards. Additionally, the amendment to the law on Atmospheric Air Protection has established a framework for monitoring atmospheric air pollution, including greenhouse gases, in line with international standards. Finally, the reforms have reduced the overall environmental footprint of economic activity by amending the law on Environmental Impact Assessment to introduce mechanisms for identifying and preventing environmental damage."

EDUARD HAKOBYAN
Deputy Minister of Finance, Republic of Armenia

AZERBAIJAN

240 MW Khizi-Absheron Wind Power Plant

A loan of up to US$50 million has been provided to finance the construction and operation of the Absheron-Khizi wind power project in Azerbaijan. ACWA Power's 240 MW Absheron-Khizi Wind Power Plant will be the first independently developed utility-scale wind power project in Azerbaijan and the largest in the Caucasus region. The plant will generate clean electricity and is expected to reduce carbon emissions by more than 400,000 tons per year. It will operate for 25 years on a build-own-operate basis, with ACWA Power managing operations and maintenance.

FUNDING DETAILS:

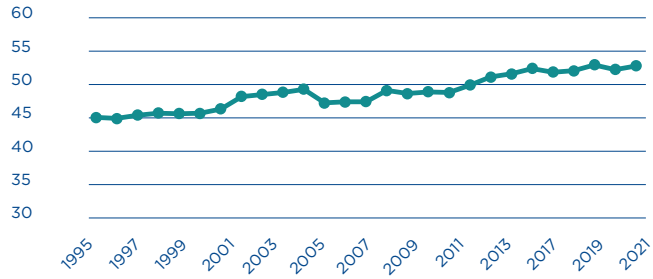
- **Total program cost: US$347 million**
- **OPEC Fund contribution: US$50 million**
- **Type of financial instrument: term loan**
- **EBRD co-financing: US$250 million**
- **OPEC Fund climate finance as percentage: 100 percent mitigation**
- **The OPEC Fund approved the loan in October 2023.**

Situation Analysis of Climate Impacts

The country has set ambitious long-term goals as outlined in the Socio-Economic Development Strategy (SEDS) for 2022–2026.[24] The SEDS aims for annual GDP growth of 3–4 percent over the medium term, with nearly 5 percent growth targeted specifically in the non-oil and gas sectors, aligning with the priorities of its strategy "Azerbaijan 2030: National Priorities for Socio-Economic Development." Achieving these objectives requires moving away from the current growth model, which relies heavily on oil and gas rents and state investment. Instead, Azerbaijan needs a fundamentally new growth model driven by a dynamic private sector that is more integrated into the global economy, operates on a level playing field and is supported by a skilled workforce.

Due to a combination of political, geographic and social factors, Azerbaijan is recognized as vulnerable to the impacts of climate change. Azerbaijan is ranked 53rd on the ND-GAIN Index. Figure 6 presents a time-series plot illustrating Azerbaijan's progress on the ND-GAIN Index over time.[25]

Figure 6: **Azerbaijan ND-GAIN Index**



Source: https://gain.nd.edu/our-work/country-index

Azerbaijan faces significant disaster risks, ranking 38th out of 191 countries on the 2024 INFORM Risk Index, driven largely by its high exposure to natural hazards and conflicts.[26] The country is particularly vulnerable to flooding (including riverine, flash and coastal floods) and has relatively low institutional capacity to manage these risks. Drought poses particularly high risk, with Azerbaijan ranked 35th globally, alongside moderate flood risk and social vulnerability. Climate change exacerbates these risks, impacting Azerbaijan's exposure component significantly.[27]

Changes in temperatures and precipitation in Azerbaijan are projected to worsen, significantly impacting water availability in the agriculture and energy sectors. Climate change will exacerbate droughts and floods, leading to desertification, soil salinity and reduced agricultural productivity. To mitigate these impacts Azerbaijan must prioritize adaptive measures such as improving water management, enhancing flood defenses and adopting resilient agricultural practices to protect vulnerable populations and sustain economic stability.

Purpose of the Loan

Investing in decarbonization is vital for Azerbaijan to meet global climate goals, transform its energy systems and gain economic benefits. The country requires an additional US$7.9 billion in energy investments from 2022 to 2030 and US$28.1 billion from 2022 to 2060, with significant allocations to the transport, power, residential and industrial sectors. These investments account for about 1.5 percent of GDP from 2022–2030 and 2.1 percent from 2022–2060.

Azerbaijan is committed to climate action, aligning with the targets of its Nationally Determined Contributions (NDC) and National Adaptation Plan. As a UNFCCC member since 1995 and a Paris Agreement signatory since 2016, it initially aimed to reduce GHG emissions by 35 percent by 2030, later revising this to 40 percent by 2050. The updated NDC submitted in October 2023 targets a 40 percent emissions reduction by 2050 compared to 1990 levels. The Azerbaijan 2030 Strategy and the Strategic Roadmap for 2022-2026 emphasize the country's green energy transition and response to global decarbonization challenges.

The Absheron-Khizi Wind Power Plant is a key milestone in Azerbaijan's low-carbon transition, expected to cut carbon emissions by over 400,000 tons annually and generate 893 GWh of clean electricity each year. This project, the first foreign investment-based wind power initiative structured as a public-private partnership, exemplifies Azerbaijan's climate goals in action. It plays a crucial role in meeting the 2030 targets, promoting clean energy investments, reducing domestic gas consumption and supporting energy exports, while advancing the broader decarbonization agenda without harming the economy.

Expected Outcomes

Extending a loan of up to US$50 million to the Absheron-Khizi wind power project establishes a significant private sector presence in Azerbaijan's nascent but critical renewable energy sector. This project, the first of its kind structured as a public-private partnership with foreign direct investment, sets a precedent for increased private sector participation in Azerbaijan's clean energy initiatives.

[24] Government of Azerbaijan 2022a 'Republic of Azerbaijan Socio-Economic Strategy for 2022-2026', approved on July 21, 2022 https://static.president.az/upload/Files/2022/07/22/5478ed13955fb35f0715325d7f76a8ea_3699216.pdf
[25] University of Notre Dame (2024). Notre Dame Global Adaptation Initiative. URL: https://gain.nd.edu/our-work/country-index
[26] European Commission (2024). INFORM Index for Risk Management. Armenia. URL: https://drmkc.jrc.ec.europa.eu/inform-index
[27] The ND-GAIN Index provides an overview of the country's vulnerability and capacity for resilience improvement, while the INFORM Risk Index identifies specific risks to aid in decisions regarding prevention, preparedness, response and overall risk management.

The benefits of decarbonizing Azerbaijan's energy sector are manifold. Reducing domestic natural gas consumption will allow Azerbaijan to increase energy exports, partially offsetting the anticipated decline in oil exports. In the country's New Zero Scenario (NZS), oil exports are projected to drop to about 94 terawatt-hours (TWh) by 2060, a stark contrast to over 350 TWh in 2021, due to lower global demand and declining productivity of Azerbaijan's oil fields.[28] This deficit can be offset if the economics of electricity trade through renewable energy proves successful.

Conversely, as Azerbaijan shifts towards domestic renewable energy, natural gas exports are expected to rise by 35 percent by 2060 (from 210 TWh in 2021 to 286 TWh in 2060), a significantly higher increase compared to the baseline scenario (214 TWh in 2060)[29]. This surge in gas exports, driven by reduced domestic demand (3 TWh in NZS versus 71 TWh in business-as-usual by 2060)[30], will help meet the growing global demand for natural gas as a transitional fuel, particularly in Europe. However, this increase is temporary, as global decarbonization will eventually reduce the demand for all fossil fuels.

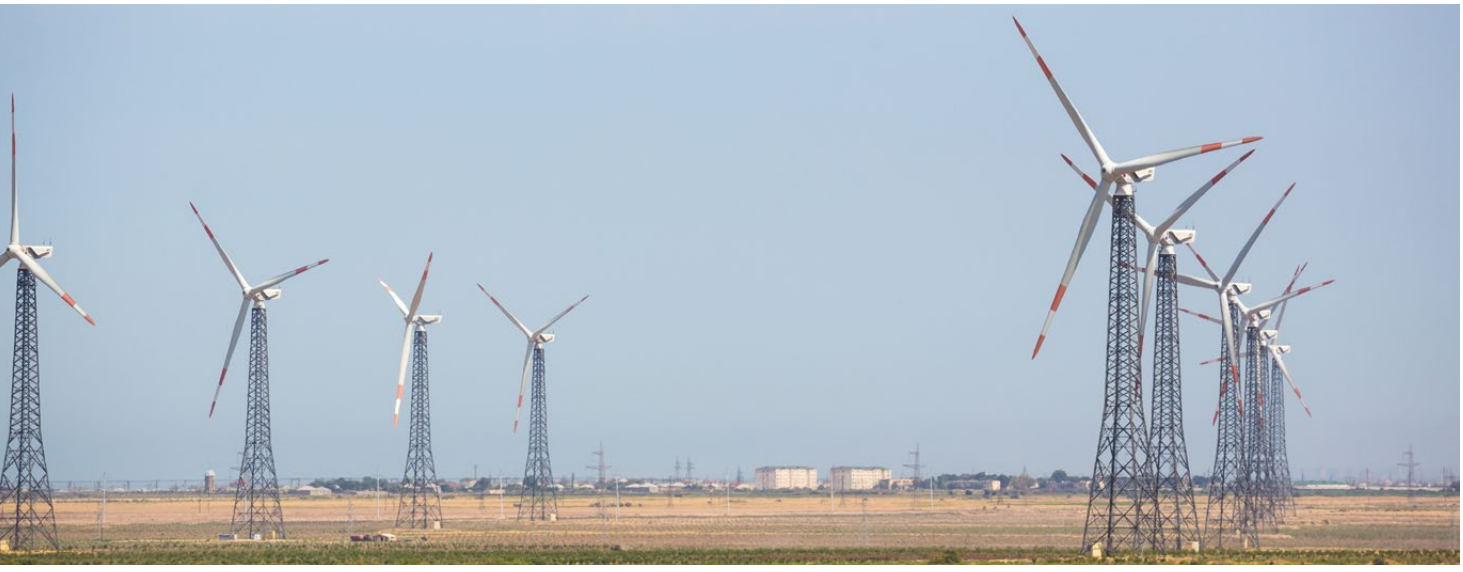
The Absheron-Khizi project will be the first independently developed utility-scale wind power project in Azerbaijan and the largest in the Caucasus region and pivotal in shifting the trend towards renewable energy, demonstrating the feasibility and attractiveness of such investments in Azerbaijan.

Assessment according to the Joint MDB Methodology for Tracking Climate Finance

According to the Common Principles for Climate Mitigation Finance Tracking, both wind power projects fall under the category of "renewable energy generation" and, specifically, the "generation of renewable energy with low life cycle GHG emissions to supply electricity, heating, mechanical energy, or cooling." Therefore, these projects are eligible to be counted as mitigation finance.

The criteria specify that the GHG emissions of renewable energy must be substantially lower than those from fossil fuel generation without carbon capture and storage or utilization. However, for energy sources widely recognized to have very low life cycle emissions such as solar, wind and tidal energy, a detailed examination of GHG emissions is not necessary. As such these investments are eligible to be counted wholly as mitigation finance.

Therefore, all of the OPEC Fund's US$50 million towards this project is classed as mitigation finance.



[28] World Bank Country Climate and Development Report Azerbaijan, https://www.worldbank.org/en/country/azerbaijan/publication/country-climate-and-development-report-for-azerbaijan
[29] Ibid.
[30] Ibid.

BURUNDI

Agricultural Production Intensification and Vulnerability Reduction

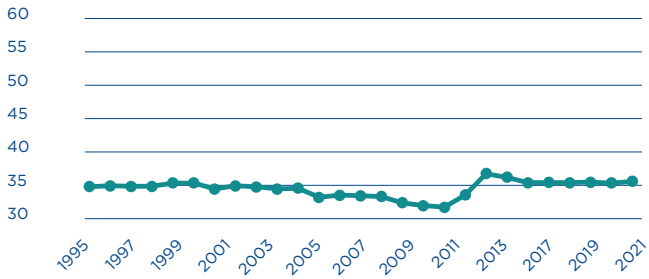
The OPEC Fund signed a US$20 million public sector loan agreement with Burundi in 2021 to co-finance a project that will improve food security, expand access to marketplaces and social services and strengthen the resilience of agricultural production systems. The project's overall objective is to contribute to improving the living conditions and resilience of rural populations in central Burundi through an integrated land management approach.

Situation Analysis of Climate Impacts

Burundi contributes less than 0.02 percent to global GHG emissions, yet it faces profound vulnerabilities to the impacts of climate change. As a Least Developed Country and one of Africa's most densely populated nations, Burundi faces high debt and fragility. Approximately three-quarters of its 11.6 million population live in extreme poverty. 86 percent of Burundi's workforce is employed in agriculture, primarily as subsistence farmers.[31] Sectors that rely on natural resources and are sensitive to climate conditions also contribute to the majority of the gross domestic product (GDP).

Burundi is widely acknowledged as highly vulnerable to climate change. On the 2021 ND-GAIN Index it scored 35, reflecting its significant susceptibility, whereas its neighboring countries scored higher (e.g. Rwanda 45, Tanzania 40).[32] The country's vulnerability primarily stems from human factors, including its predominantly rural, natural resources-dependent population, declining crop productivity, poor health conditions, inadequate infrastructure and low levels of social, governance and economic readiness alongside targeted climate adaptation efforts.

Figure 7: **Burundi ND-GAIN Index**



Source: https://gain.nd.edu/our-work/country-index

FUNDING DETAILS:

- **Total program cost: US$82.4million**
- **OPEC Fund contribution: US$20 million**
- **Type of financial instrument: sovereign loan**
- **Co-financiers: IFAD, WFP, the Green Climate Fund, the beneficiaries and the Government of Burundi**
- **OPEC Fund climate finance as percentage: 29 percent adaptation finance.**

TIMELINE:

- **The OPEC Fund was approached by IFAD in late 2017 regarding a possible joint financing of the Agricultural Production Intensification & Vulnerability Reduction Project in Burundi (PIPARV-B). Subsequently, the OPEC Fund received an official funding request in January 2018 from the Government of Burundi.**
- **The OPEC Fund approved the program in September 2020.**
- **The first tranche of the OPEC Fund loan was disbursed in December 2022.**

[31] World Bank: Diagnosing Drivers of Climate and Environmental Fragility in Burundi's Colline Landscapes: Towards a Multisectoral Investment Plan to Scale up Climate Resilience
[32] University of Notre Dame (2024). Notre Dame Global Adaptation Initiative. URL: https://gain.nd.edu/our-work/country-index/

Alongside temperature changes, an increase in extreme precipitation events has been recorded, particularly in the northern regions, while the south may experience decreased rainfall. These climatic shifts exacerbate flood risks, especially in western and eastern Burundi, impacting people and infrastructure as well as contributing to severe land degradation. Urban areas around Bujumbura Mairie are highly exposed to flood hazards, while rural communities suffer from crop destruction due to landslides and heavy rainfall, leading to significant economic losses.[33]

Climate change disproportionately affects vulnerable groups, including women, children, the elderly and internally displaced persons, with climate-induced hazards like floods and landslides being primary causes of internal displacement in Burundi.

Figure 8: **Program Implementation Area**

Source: IFAD Program Completion Report

Purpose of the Loan

Burundi, heavily impacted by climate change, faces significant challenges in its agricultural sector, including low productivity, soil degradation and limited market access. These issues are worsened by climate variability, deepening rural poverty. The OPEC Fund's PIPARV-B[34] project aims to address these concerns and enhance resilience in central Burundi

The project focuses on revitalizing agriculture through innovative techniques, reclaiming 1,500 hectares of marshlands and implementing irrigation on 300 hectares, benefiting over 1,000 smallholders. It also aims to protect 56,800 hectares of watersheds through sustainable soil conservation practices.

Infrastructure improvements include rehabilitating 150 kilometers of rural roads and building storage facilities, which enhance market access and reduce post-harvest losses. This investment fosters local entrepreneurship and job creation.

Beyond agriculture, the project promotes community development by supporting farmer cooperatives, diversifying livelihoods and addressing infant malnutrition through nutritional education and health programs.

Finally, the project emphasizes strong governance and oversight, ensuring transparent management, effective coordination and rigorous evaluation to sustain long-term resilience against climate-related shocks.

Expected Outcomes

The project will help to reverse the risks for the agricultural sector manifested in unpredictable length of the seasons, land degradation, soil fertility loss, dwindling groundwater resources, altered growing seasons for crops and forests and unpredictable pest migrations. The adaptation priorities highlighted in the INDC will be supported through technical

[33] World Bank Climate Knowledge Portal: https://climateknowledgeportal.worldbank.org/country/burundi
[34] Stands for Projet d'Intensification de la Production Agricole et de Reduction de la Vulnerabilite au Burundi

skills among stakeholders, particularly women and farmers, to promote sustainable, intensified production methods through new crop systems and techniques. The project will also improve irrigation efficiency to conserve water, diversifying agricultural production by facilitating access to inputs like fertilizers and drought-resistant seeds, and promote agro-ecological practices such as soil fertility management, composting, agroforestry and water conservation of water.

PIPARV-B recognizes the adverse impacts of climate change on Burundi's agricultural sector and seeks to address issues such as low agricultural yields, deteriorating soil fertility, inadequate input use, climate change effects, insufficient supervision of agro-pastoral activities, limited participation in producer organizations and inadequate access to credit. The project explicitly aims to enhance resilience to climate change as reflected in its overarching goal of improving living conditions and resilience among rural populations living on Burundi's central plateau through integrated land management. The intended outcomes include strengthening the resilience of small farmers to external shocks.

SPOTLIGHT STATEMENT
The OPEC Fund's Contribution to Climate Resilience in Burundi

"In Burundi, the OPEC Fund and IFAD have emerged as critical partners in bolstering agricultural and food security initiatives. The OPEC Fund's financing has played a pivotal role in Burundi's efforts to combat malnutrition and poverty, focusing on improving agricultural infrastructure and land management. The Agricultural Production Intensification & Vulnerability Reduction Project (PIPARV-B) exemplifies this commitment, driving socio-economic development in a country grappling with acute and chronic food insecurity, exacerbated by erratic weather patterns, the Ukraine conflict, and rising inflation.

Within PIPARV-B, IFAD's focus on agricultural and livestock intensification complements the OPEC Fund's contributions to rural infrastructure development. This partnership extends across five central plateau regions—Karuzi, Kayanza, Ngozi, Gitega, and Muyinga—with the Green Climate Fund further supporting expansion into the Imbo and Moso regions. The project emphasizes environmental stewardship, requiring comprehensive environmental and social impact assessments (ESIA) and the implementation of Environmental and Social Management Plans (ESMP) before and during infrastructure development.

Key achievements include the protection of 80,000 hectares of hilly terrain through anti-erosion measures and reforestation, which have safeguarded watersheds and enhanced soil fertility. Additionally, the rehabilitation of 150 kilometers of rural roads has been designed to manage runoff, preventing erosion and flooding. In marshland areas, innovative irrigation and drainage systems have transformed previously flooded lands into fertile ground for crops, significantly increasing Burundi's arable land and boosting food production during both wet and dry seasons.

This collaborative effort underscores the vital role of targeted investment and strategic partnerships in building agricultural resilience and securing a sustainable future for Burundi."

NTIRANYIBAGIRA DAMASE
Project Coordinator, PIPARV-B

Assessment according to the Joint MDB Methodology for Tracking Climate Finance

PIPARV-B clearly identifies the adverse impacts of climate change on the agricultural sector. The project has the clear intent to increase resilience to climate change. This is evident in its overall objective to improve the living conditions and resilience of rural populations in central Burundi through an integrated land management approach. The project's intended objectives emphasize achieving greater resilience of small farmers to external shocks.

The OPEC Fund-financed adaptation activities are linked to this intent. Specific activities funded by the OPEC Fund that address these adaptation needs are included in component 1, which aims to strengthen the resilience of agricultural production systems.

The OPEC Fund's adaptation activities for subcomponent 1.1 assign approximately equal importance to adaptation and development. Therefore, 50 percent of the OPEC Fund's financing for subcomponent 1.1 has been classified as adaptation finance, amounting to US$5.79 million, or 29 percent of the total OPEC Fund financing for PIPARV-B.

COLOMBIA

Climate Action and Energy Transition

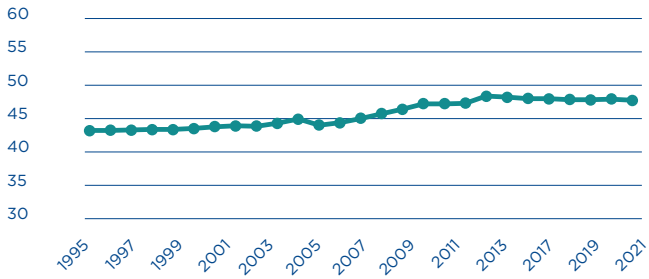
The OPEC Fund is co-financing the Support to Climate Action and Energy Transition Program in Colombia with a policy-based loan of US$150 million. The main objective of the loan is to contribute to sustainable, resilient growth with the aim of supporting Colombia's economic growth. The specific objectives are to: (i) strengthen the Colombian government's capacity to plan, manage and finance climate action; (ii) foster economic opportunities based on the sustainable use of natural resources and the development of circular economy models; and (iii) promote the energy transition.

Situation Analysis of Climate Impacts

Colombia ranks among the most unequal countries globally, with low social mobility and significant spatial disparities.[35] Although the poverty rate, which spiked in 2020 due to the COVID-19 pandemic, has decreased since 2020, 39 percent of the population – more than in 2019 – remain poor, with poverty increasing in rural areas. High poverty and inequality hinder the full utilization of the population's human potential, limiting economic expansion.[36]

At the same time, Colombia is grappling with significant climate challenges. The country is highly exposed to natural hazards. Due to a combination of political, geographic and social factors, Colombia is recognized as highly vulnerable to climate change impacts, ranking 48th out of 181 countries on the 2023 ND-GAIN Index.[37] Figure 9 presents a time-series plot of the ND-GAIN Index, illustrating Colombia's progress over time.

Figure 9: **Colombia ND-GAIN Index**



Source: https://gain.nd.edu/our-work/country-index

FUNDING DETAILS:

- **Total program cost: US$1.4 billion**
- **Type of financial instrument: policy-based loan**
- **OPEC Fund contribution: US$150 million**
- **Co-financiers: laDB (US$300 million), CAF (US$300 million), KfW (200 million), AFD (€200 million), CABEI (US$250 million)**
- **OPEC Fund climate finance as percentage: 73 percent, of which 29 percent adaptation finance and 44 percent mitigation finance.**
- **In August 2022, the government officially requested the OPEC Fund to join the Climate Action Policy and Energy Transition Program through the approval of a policy-based loan of US$150 million.**

[35] World Bank, 2024: URL:https://www.worldbank.org/en/country/colombia/overview#2
[36] World Bank Poverty & Equity Brief: URL: https://databankfiles.worldbank.org/public/ddpext_download/poverty/987B9C90-CB9F-4D93-AE8C-750588BF00QA/current/Global_POVEQ_COL.pdf
[37] University of Notre Dame (2024). Notre Dame Global Adaptation Initiative. URL: https://gain.nd.edu/our-work/country-index

Colombia faces significant disaster risks and is ranked 29 out of 191 countries by the INFORM Risk Index.[38] This is due to the fact that Colombia has one of the highest rates of disasters caused by natural and climate-induced hazards in Latin America, with floods and landslides being the most prevalent and increasingly frequent.[39] Climate risks are widespread, with 47 percent of the territory facing "high" or "very high" climate risks. Additionally, 84 percent of Colombia's population and 86 percent of its assets are exposed to two or more natural hazards.[40]

Climate change in Colombia is expected to result in higher temperatures and more frequent extreme weather events, leading to increased flood risks, significant societal and economic damage and damage of nature. Historical records indicate a rising frequency of climate-related disasters over the past decades. Even a 1.5°C increase in average temperatures could double or triple the population affected by floods in Colombia.[41]

Purpose of the Loan

This policy-based loan supports Colombia's Climate Action and Energy Transition Program, enhancing climate resilience and accelerating the shift to a sustainable energy system. Aligned with Colombia's NDCs under the Paris Agreement, the loan aids reducing GHG emissions by 51 percent by 2030 and strengthens the planning and management capacity for climate action, focusing on both mitigation and adaptation.

Key actions include the approval of the Climate Action Law, which formalizes Colombia's NDC commitments and the presentation of the long-term climate strategy (E2050 COLOMBIA) to the UNFCCC. Regulatory frameworks have also been strengthened with the publication of the decree for the National Climate Change Information System (SNICC) and the issuance of sector-specific climate plans for agriculture, industry and energy.

Financial instruments such as green taxonomy and sovereign Green Bonds have been developed to channel investments into sustainable projects. Methodological guidelines for costing adaptation measures, evaluating environmental projects and securing funding ensure the effective implementation of climate actions. Together, these measures create a strong institutional and regulatory foundation for Colombia's climate goals and energy transition.

Expected Outcomes

The loan is expected to strengthen regulatory frameworks and integrate climate policies into national and local planning, fostering an environment that encourages public and private investment in green technologies. The renewable energy transition plans will reduce GHG emissions, decrease reliance on fossil fuels and improve public health through cleaner air.

These outcomes are directly tied to Colombia's Climate Action and Energy Transition Program, enhancing resilience against climate impacts and helping meet the country's NDC mitigation targets. The loan will also promote sustainable economic growth by supporting circular economy models and climate-smart agriculture, reducing dependency on hydrocarbons.

The institutional framework for climate action will be significantly strengthened, ensuring effective implementation and improved transparency. Ultimately, these outcomes will advance Colombia's vision of a low-carbon, climate-resilient future, serving as a model for other nations in driving climate action and sustainable development.

Assessment according to the Joint MDB Methodology for Tracking Climate Finance

Through this policy-based loan to Colombia the OPEC Fund financed mitigation and adaptation policy actions. The specific

[38] European Commission (2024). INFORM Index for Risk Management. Armenia. URL: https://drmkc.jrc.ec.europa.eu/inform-index
[39] World Bank Disaster Risk Analysis Colombia: URL https://www.worldbank.org/en/results/2023/03/16/resilience-to-disaster-risk-and-climate-change-in-colombia
[40] iBid
[41] IPCC Sixth Assessment Report: URL: https://www.ipcc.ch/report/ar6/wg2/chapter/chapter-12/

objectives are: (i) to strengthen the Colombian government's capacity to plan, manage and finance climate action; (ii) to foster economic opportunities based on the sustainable use of natural resources and the development of circular economy models; and (iii) to promote the energy transition. The OPEC Fund is funding each of the 41 policy actions equally (in other words, about US$3.7 million per action). Each action was assessed for its contribution to mitigation, adaptation or both. Below is a summary of this analysis.

Mitigation: A total of 18 effective policy actions contribute to mitigation with each action assigned a mitigation contribution between 0 percent and 100 percent. The total effective number of mitigation actions is the sum of these percentages, resulting in 18 effective actions. This number is used to calculate mitigation finance.

Adaptation: A total of 12 effective policy actions contribute to adaptation with each action assigned an adaptation contribution between 0 percent and 100 percent. The total effective number of adaptation actions is the sum of these percentages, resulting in 12 effective actions. This number is used to calculate adaptation finance.

Finance calculations: Each of the 41 actions in the US$150 million loan is funded equally. Therefore, mitigation finance comes in at US$65.85 million (18 of 41 actions) while adaptation finance amounts US$43.9 million (12 of 41 actions).

SPOTLIGHT STATEMENT
The OPEC Fund's Contribution to Climate Resilience in Colombia & Panama (page 54)

"The OPEC Fund has been a pivotal strategic partner for CAF in advancing environmental and climate change initiatives. Through a strong collaborative effort, we have co-financed key projects such as the Program to Support the National Climate Change Policy in Panama and the Sectoral Support Program for Biodiversity and Climate Change in Colombia. Together, CAF and the OPEC Fund have invested close to US$1 billion (US$700 million from CAF and US$300 million from the OPEC Fund) to help countries develop and implement sustainable public policies. Thanks to the OPEC Fund's flexibility, agility and technical expertise, these projects have played a crucial role in enhancing comprehensive climate change strategies and driving impactful environmental investments."

SERGIO DÍAZ-GRANADOS
Executive President CAF

MALDIVES

Outer Islands Harbors, Water Supply and Sewerage Facilities

The project's goal is to improve the living conditions for approximately 20,000 people living on 13 outer islands of the Maldives by providing sustainable access to safe water supply and sanitation services and harbor infrastructure. This will promote health and connectivity, supporting economic growth and alleviating poverty in the country. The scope of the project includes five components: (i) Water Supply Networks, (ii) Sewerage Network Systems, (iii) Harbor Reconstruction, (iv) Consultancy Services and (v) Project Management.

FUNDING DETAILS:

- **Industry: Water**
- **Total program cost: US$65.25 million**
- **OPEC Fund contribution: US$50 million**
- **Type of financial instrument: Sovereign loan – blended facility**
- **Government contribution: US$15.25 million**
- **OPEC Fund climate finance as percentage: 51.2 percent adaptation finance.**

TIMELINE:

- **The Ministry of Finance and Treasury officially requested a loan from the OPEC Fund in June 2018.**
- **The project is executed over a period of 6 years, starting in Q1/2020 with the engagement of a project management unit and the preparation of detailed designs and is scheduled to close in 2025 with the completion of the civil works.**

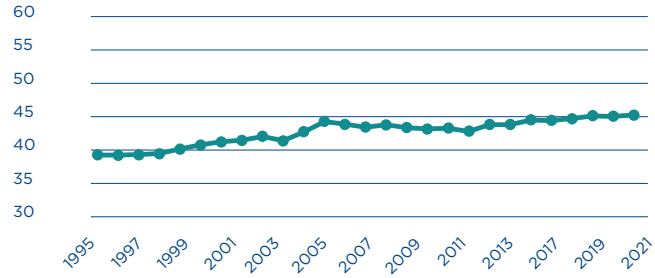
Situation Analysis of Climate Impacts

The Maldives has experienced significant economic success over the past few decades. However, the Maldives is highly vulnerable to climate risks such as sea level rise and warming and climate-related extreme events. The Maldives is recognized as highly vulnerable to climate change impacts, ranking 45th out of 181 countries on the 2023 ND-GAIN Index.[42]

Sea level rise is a significant risk for the country, given the fact that 80 percent of the Maldives' total land area is less than one meter above sea level. The IPCC estimates that global mean level rise could be in the range of 0.44 to 0.74 meters by the end of the 21st century, with some other studies estimating that the sea level could rise even higher.[43]

The Maldives is also vulnerable to other climate risks such as temperature rise. The country has already experienced a 0.8°C increase between 1978 and 2018, and future projections under the highest emission pathway suggest that warming could go over 3°C by the 2090s.

Figure 10: **Maldives ND-GAIN Index**



Source: https://gain.nd.edu/our-work/country-index

[42] University of Notre Dame (2024). Notre Dame Global Adaptation Initiative. URL: https://gain.nd.edu/our-work/country-index
[43] World Bank and ADB (2021). Climate Risk Country Profile: Maldives.

The Maldives is also vulnerable to the impacts of other natural hazards, including geophysical risks such as tsunamis. According to the Ministry of Climate Change, Environment and Energy, over 90 percent of the islands report flooding annually, 97 percent are reporting shoreline erosion and 64 percent of the islands experience severe erosion.[44]

The climate and environmental impacts described above will most negatively impact critical economic sectors such as tourism and the fishing industry. The large economic damage is partly due to the country's dependence on the tourism sector, which represented 27 percent of GDP in 2021.[45] Tourism will likely be adversely impacted by climate change in several ways. Sea level rise and coastal flooding will damage most of the sector's critical infrastructure (e.g. harbors, airports and resorts), which is usually located close to the coastline, and the marine biodiversity.

Purpose of the Loan

The purpose of the loan is to support the Maldives in achieving its ambitious climate goals as outlined in the updated NDC. The loan will fund the implementation of critical infrastructure projects, including water supply networks, sewerage systems and harbor reconstruction across several islands. These projects aim to provide sustainable access to safe water supply, sanitation services and improved harbor infrastructure, directly contributing to the Maldives' efforts to climate-proof the infrastructure and support coastal adaptation planning as outlined in the NDC.

The loan's focus is on enhancing public health, boosting connectivity and stimulating economic growth. It aligns with the Maldives' broader adaptation strategies to address the impacts of climate change such as saltwater intrusion and pollutant contamination, which have been exacerbated by events like the 2004 Indian Ocean tsunami. By improving water resource management, prioritizing safe water and sanitation and strengthening sectoral capacity, the loan will not only help reduce the Maldives' dependency on costly desalination but also support the country's decarbonization targets, aiming to reduce 26 percent of national GHG emissions by 2030 and potentially achieving net-zero emissions with adequate international support.

Expected Outcomes

As is common for many Small Island Developing States, the Maldives face severe freshwater scarcity, exacerbated by the impacts of climate change such as unreliable rain and inadequate groundwater sources. The loan is expected to enhance water security and resilience by improving the reliability of freshwater resources through efficient water management practices and technologies, thereby reducing the dependence on expensive desalination mechanisms. Additionally, increased access to safe and clean drinking water, particularly in areas affected by saltwater intrusion and pollutant contamination, will lead to better public health outcomes.

Strengthened sanitation services will be achieved by upgrading infrastructure to become resilient against climate impacts such as flooding and sea-level rise, ensuring continuous and safe sanitation services. Enhanced wastewater treatment processes will prevent contamination of water sources and promote the safe reuse of treated water, contributing to environmental sustainability.

[44] IMF (2021). No higher ground.
[45] ADB (2014). Assessing the costs of climate change and adaptation in South Asia.

The development of climate-proofed harbor infrastructure will involve constructing facilities designed to withstand rising sea levels, increased storm intensity and coastal erosion, ensuring the continuity of maritime activities and connectivity. Adaptive measures such as sea walls, flood barriers and elevated structures will be implemented to protect the harbor infrastructure from climate-related disruptions.

Supporting the Maldives' NDC targets, the loan will directly contribute to climate-proofing key infrastructure systems, supporting coastal adaptation planning and strengthening coral reef formations. This will promote public and private sector investment in green technologies and sustainable practices, fostering economic opportunities based on the sustainable use of natural resources and the development of circular economy models.

Improved public health and livelihoods are anticipated through a reduction in waterborne diseases and other health issues related to inadequate water supply and sanitation. This will result in better overall public health. Enhanced livelihoods will stem from better access to safe water and sanitation, increased economic activities in climate-resilient harbor areas and the creation of green jobs.

By achieving these outcomes the loan will not only address immediate water, sanitation and infrastructure needs, but also contribute to the Maldives' long-term climate resilience and sustainable development goals. This integrated approach aligns with the commitment to reducing GHG emissions and adapting to the impacts of climate change, fostering a healthier, more resilient and economically vibrant future.

Assessment according to the Joint MDB Methodology for Tracking Climate Finance

The OPEC Fund financed adaptation activities in the project. To count adaptation finance it is essential to demonstrate that climate change vulnerabilities have been identified, that there is a clear intent to address these vulnerabilities and that the financed activities are linked to this intent (three-step approach).

The project clearly identifies the adverse impacts of climate change. As the approval document states, "A specific climate change study was carried out covering temperature, rainfall, sea level, and implications for climate change over the lifetime of the project. The technical solutions finally adopted correspond to the most economic choices and will be designed to adapt to future climate changes in the Maldives."

The project also had a clear intent to increase resilience to climate change. The objective is to improve the living conditions of approximately 20,000 people on 13 outer islands by providing sustainable access to safe water supply, sanitation services and harbor infrastructure. This will promote health and connectivity, supporting economic growth and alleviating poverty in the country. The specific climate change study links sustainability to addressing resilience needs.

Adaptation finance has been estimated at US$25.62 million using a proportional approach. The project includes a clear intent to address the identified vulnerabilities and links the financed activities to reducing climate vulnerability. Adaptation finance is calculated using the proportional approach as 100 percent of the OPEC Fund's contribution to component 1, 50 percent of the contribution to component 2 and 20 percent of the contribution to component 3. The total amount of adaptation finance by the OPEC Fund is US$25.62 million.

SPOTLIGHT STATEMENT

The OPEC Fund's Contribution to Climate Resilience in the Maldives

"With the vital support of the OPEC Fund, the Maldives has successfully completed 29 water supply projects and 9 sewerage projects, with an additional seven water supply and eight sewerage projects currently underway. These initiatives, which include the establishment of reverse osmosis plants, clean water distribution networks and advanced sewerage systems with deep sea outfalls and treatment plants, have transformed public health and environmental sustainability across several islands.

As a result, 75,606 Maldivians now enjoy reliable access to clean water and proper sanitation, significantly reducing waterborne diseases and safeguarding groundwater quality. These projects are instrumental in enhancing the resilience of Maldivian communities to climate change, ensuring the long-term preservation of natural resources and building a sustainable future for generations to come."

IBRAHIM THOAAM MOHAMED
Minister of State, Republic of Maldives

PANAMA

Program for National Climate Change

The OPEC Fund is providing a US$120 million loan to Panama to support the country's climate action, adaptation and resilience and mitigation policies. The Panama Program for the National Climate Change Policy aims to mitigate, contain and reverse the effects of climate change, helping Panama to achieve its long-term climate change commitments aligned with the Paris Agreement. The OPEC Fund is partnering with CAF - Development Bank of Latin America, which is supporting the program with a US$320 million sovereign loan.

FUNDING DETAILS:

- **Total program cost: US$440 million**
- **OPEC Fund contribution: US$120 million**
- **Type of financial instrument: policy-based loan**
- **CAF contribution/co-financing: US$320 million**
- **OPEC Fund climate finance as percentage: 58.33 percent adaptation and 41.67 percent mitigation.**

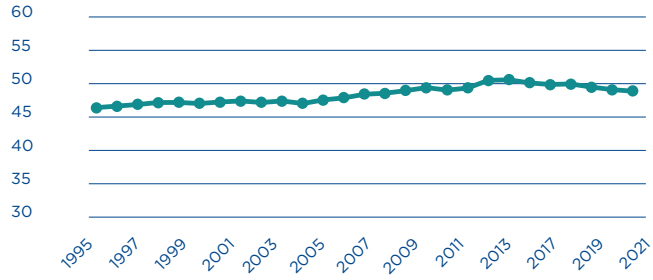
TIMELINE:

- **In March, 2022, CAF extended an invitation to the OPEC Fund to participate in the parallel co-financing of the program, which is part of Panama's National Climate Change Policy.**
- **The OPEC Fund's loan was disbursed as a single-tranche credit of US$119.7 million in December 2022.**

Situation Analysis of Climate Impacts

Panama is highly exposed to climate change risks and its sensitivity to these risks is expected to increase. On the 2023 ND-GAIN Index, Panama is ranked 49th.[46] Rising temperatures and sea levels and more intense and frequent extreme weather events are likely to increase Panama's climate change-related risks, underscoring the importance of enhanced resilience. Panama's environmental vulnerability to climate change is a significant constraint to sustaining inclusive, resilient and green growth. The country faces increasing frequency and intensity of natural disasters due to rising temperatures, which pose substantial risks. This is particularly concerning as the country's major economic assets and sectors – including the Panama Canal, hydroelectricity, tourism and agriculture – are highly dependent on sustainable water management. Additionally, these sectors require support for a green energy transition. This environmental vulnerability is also intertwined with other major development challenges facing the country.

Figure 11: **Panama ND-GAIN Index**



Source: Own calculations,
Data Source: https://gain.nd.edu/our-work/country-index

[46] University of Notre Dame (2024). Notre Dame Global Adaptation Initiative. URL: https://gain.nd.edu/our-work/country-index

With one of the highest percentages of forest cover globally, making it one of only three carbon-negative countries in the world, Panama must protect and optimize its natural assets in order to successfully achieve its development goals. Most of Panama's forests are within protected areas and indigenous territories, which are crucial for forest conservation and climate change mitigation. Although the country's per-capita GHG emissions have been increasing, they remain below the averages of Latin America and the Caribbean and the Organization for Economic Co-operation and Development (OECD) countries. Nevertheless, climate change significantly impacts productivity, innovation and health, necessitating enhanced adaptation measures. Panama's water resources face considerable pressure, endangering economic activities in key sectors such as the transportation (which includes the canal), hydroelectricity, tourism and agriculture.[47]

Panama is ranked 14th globally in terms of exposure to multiple impacts from climate change, primarily due to its extensive land area.[48] Recently, the country has witnessed heightened occurrences of climate-induced natural disasters, including heavy rainfall, windstorms, floods, droughts, landslides, tropical cyclones and El Niño-Southern Oscillation-La Niña events. These events are projected to lead to adverse social and economic consequences such as crop failures, heightened heat stress affecting both agriculture and vulnerable populations, loss of biodiversity and forests, diminished water quality and availability and increased incidences of climate-related health issues.[49]

Purpose of the Loan

The primary purpose of the PBL is to assist the Government of Panama through a fast-disbursing financial instrument that supports specific activities aimed at reducing and limiting GHG emissions and enhancing resilience to climate change. The loan aims to recognize and support the actions undertaken by the Government of Panama since 2020 in developing and implementing public policies and instruments to address climate change and promote sustainable development. The National Climate Change Policy 2050 outlines a comprehensive strategy to reduce GHG emissions, adapt to climate change and enhance resilience across all sectors. Key goals include maintaining Panama as a carbon sink, net zero emissions, transitioning to a resilient and low-carbon economy, and reducing social and climate vulnerabilities.

Panama's ambitious commitment to combating climate change is also expressed in its latest Nationally Determined Contributions (NDCs). Among its regional peers, Panama stands out for its significant efforts in both mitigation and adaptation, with a particularly strong focus on adaptation measures. The OPEC Fund's loan is strategically aligned with Panama's NDCs, playing a pivotal role in advancing the country's climate objectives through targeted policy development. One of Panama's key mitigation goals is a 24 percent reduction in total emissions from the energy sector by 2050 (and 11.5 percent by 2030). Additionally, the nation aims to restore 50,000 hectares of forest by 2050,

[47] Climate Change Knowledge Portal – World Bank: https://climateknowledgeportal.worldbank.org/country/panama
[48] Ibid.
[49] Ibid.

compared to business-as-usual scenarios. These targets underscore Panama's commitment to reducing its carbon footprint and enhancing its natural carbon sinks.

Expected Outcomes

The loan is crucial for Panama's climate adaptation and mitigation goals, supporting the country's efforts to enhance climate resilience and meet its NDCs.

A key expected outcome is implementing a vulnerability index, using spatial analysis to assess biophysical and social factors. The data supports sustainable development by informing planners and decision-makers.

Another expected outcome is the Adaptation, Monitoring, and Evaluation System, which tracks progress toward Paris Agreement goals. It includes a National Climate Transparency Platform to consolidate and monitor climate and development initiatives.

The loan also aids in creating tools to identify vulnerable populations, helping to assess specific climate change impacts on these groups.

It supports developing a national manual for nature-based solutions, serving as a guide for managing infrastructure projects to enhance resilience. Terms of reference for engaging experts have been finalized.

The loan helps consolidate the National Adaptation Plan, prioritizing adaptation measures in line with the updated NDC. It includes an updated progress report and roadmap for sector-specific plans.

Another expected outcome is a community technical guide for assessing vulnerability, resilience, and climate risk, approved by Ministerial Resolution. It provides a methodology for applying climate criteria to public infrastructure projects.

Mitigation finance will enhance Panama's biodiversity, promote sustainable land use, and support the National Climate Change Policy 2050, focusing on carbon sequestration and a low-carbon economy. The loan will fund 25 policy actions critical to these goals.

The program will establish norms for managing low-carbon development and include a Procedures Manual for National GHG Inventories to ensure efficient and systematic inventory processes.

Finally, the loan will support the creation of a National Carbon Market, promoting a sustainable, low-emission recovery. A draft Executive Decree for the market has been prepared.

Assessment according to the Joint MDB Methodology for Tracking Climate Finance

Through the loan, the OPEC Fund financed both mitigation and adaptation policy actions.

There are 25 policy actions, each funded by the OPEC Fund in equal proportion.

A total of 10.4 effective policy actions contribute to mitigation. Each action was reviewed and assigned a mitigation contribution between 0 percent and 100 percent. This number is used to calculate mitigation finance.

A total of 14.6 effective policy actions contribute to adaptation. Each action was reviewed and assigned an adaptation contribution between 0 percent and 100 percent. This number is used to calculate adaptation finance.

Finance calculations: Mitigation finance is calculated as 10.4/25 of US$120 million, totaling US$50 million. Adaptation finance is calculated as 14.6/25 of US$120 million, totaling US$70 million.

SENEGAL

Water and Value Chain

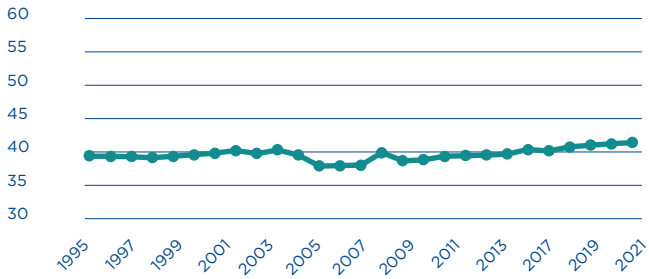
The Water Valorization for Value Chain Development Project (PROVALE-CV) in Senegal covers three agro-ecological areas: Niayes, the Groundnut Basin and Casamance, and eight administrative regions: Kaolack, Fatick, Kaffrine, Diourbel, Thiès, Ziguinchor, Sédhiou and Kolda. The project's goal is to provide a concrete response to key development problems by valorization[50] of water to develop climate-smart agriculture and promote value chains in promising sectors, particularly rice and market gardening. It will also help to open up production areas, reduce production costs through the use of new technologies, build the capacity of stakeholders, create rural entrepreneurship opportunities for young people and protect the environment.

Situation Analysis of Climate Impacts

Senegal's sustainable social and economic development is threatened by climate risks, external shocks and rising global uncertainties. On the 2023 ND-GAIN Index, Senegal's score is 41. Figure 12 presents a time-series plot illustrating Senegal's progress on the ND-GAIN Index over time.[51] These challenges, coupled with increasing domestic political uncertainty and regional instability, have slowed the country's growth from 6 percent during 2014-2019 to 3.8 percent over 2020-2023. This deceleration exacerbates structural vulnerabilities such as low productivity, limited human capital, high informality and youth emigration.

Senegal's coastal exposure and reliance on natural resources for economic activities, jobs and livelihoods make the country particularly vulnerable to climate change. With rising temperatures, erratic rainfall, weather-related hazards and sea-level rise Senegal is becoming warmer and drier at a much faster pace than other countries in the world.

Figure 12: **Senegal ND-GAIN Index**



Source: https://gain.nd.edu/our-work/country-index

FUNDING DETAILS:

- **Total program cost: US$136 million**
- **OPEC Fund contribution: US$20 million**
- **Type of financial instrument: Sovereign loan**
- **Co-financiers: AfDB, IFAD, the Africa Growing Together Fund/People's Bank of China (AGTF), the beneficiaries and the Government of Senegal**
- **OPEC Fund climate finance as percentage: 20 percent adaptation and 40 percent mitigation finance of the total OPEC Fund investment amount.**

TIMELINE:

- **The OPEC Fund received an official funding request oin April 2019 from the Senegalese authorities for the co-financing of PROVALE-CV.**
- **The OPEC Fund approved a loan in support of the program in June 2020.**

[50] Reuse of water by reintegrating it into productive processes
[51] University of Notre Dame (2024). Notre Dame Global Adaptation Initiative. URL: https://gain.nd.edu/our-work/country-index

In Senegal, climate hazards, particularly floods and droughts have had severe human and economic impacts over the last 40 years, with floods accounting for nearly half of weather-related hazards and droughts affecting the largest number of people. Additionally, climate change is causing population movements as pastoralists leave dry pastures and people relocate from flooded coastal areas. Senegal's coastal zones, home to 52 percent of the population, 68 percent of GDP and 90 percent of industrial facilities, are particularly vulnerable to these changes. Accelerated sea level rise is expected to increase coastal erosion, flooding and salinization, with the population at risk in the capital Dakar projected to rise by 20-30 percent by 2050 and economic damages potentially increasing by 30 percent.[52]

Purpose of the Loan

Agriculture in Senegal is predominantly characterized by family farming in semi-arid zones, heavily reliant on rain-fed irrigation. The sector faces substantial risks from drought, land degradation and the effects of climate change. Several structural challenges hinder the integration of smallholder agriculture and livestock development into the market economy. These include weak local support institutions, poorly organized producer groups, inadequate market infrastructure, low-profitability technologies, limited formal private sector investment, unorganized sectors (with the exception of a few crops), restricted access to credit for inputs and equipment, and ongoing degradation of natural resources.

In response to these challenges, the PROVALE-CV initiative aims to foster strong, inclusive and sustainable economic growth, enhancing the living conditions of rural communities. The project focuses on boosting agricultural production, rural employment and income through sustainable water management, agricultural value chain development, improved access to production areas and storage infrastructure and capacity building for stakeholders.

Additionally, the loan is designed to address climate change impacts by financing investments that reduce GHG emissions and enhance resilience to climate-related vulnerabilities. Specifically, the loan targets improvements in energy efficiency, protection and restoration of marine and terrestrial ecosystems and enhancement of agricultural practices. This dual approach aligns with the project's goals to mitigate climate change effects and adapt to its impacts, contributing to sustainable development and climate resilience.

Expected Outcomes

The OPEC Fund's US$20 million loan is vital for modernizing agricultural infrastructure under the PROVALE-CV project, integrating both grey and green infrastructure for development, mitigation, and adaptation.

The loan supports climate mitigation by funding energy-efficient stoves to cut CO_2 emissions and protecting mangroves to prevent ecosystem degradation and reduce GHGs.

It also enhances climate resilience through the construction of 131 water retention dikes, rehabilitation of eight ponds, and establishment of eight water points. These efforts improve water management and support horticulture projects that create income opportunities for women and youth.

The loan includes upgrading marketing infrastructure by rehabilitating 100 km of rural roads and building 70 warehouses, improving market access and reducing post-harvest losses.

The project's Sustainable Natural Resources Management Plan includes anti-erosion works, reforestation, and mangrove restoration. Establishing 32 village nurseries and distributing 6,000 improved stoves will promote sustainable land use and boost local livelihoods.

PROVALE-CV aligns with Senegal's updated NDC and National Adaptation Plan, addressing climate challenges by improving infrastructure, mobilizing water resources, and supporting climate-smart practices to reduce GHG emissions and enhance resilience.

Assessment according to the Joint MDB Methodology for Tracking Climate Finance

The OPEC Fund financed mitigation and adaptation activities in PROVALE-CV.

[52] Senegal's country profile on the website for West Africa Coastal Areas Management Program (WACA): Whttps://www.wacaprogram.org/country/senegal

Investments in household stoves are eligible for mitigation finance. According to the Common Principles for Climate Mitigation Finance Tracking, these investments fall under the category "energy efficiency, on-site renewable energy, CO_2e-emission reduction and carbon sinks in buildings," specifically the activity "measures that reduce net energy consumption, resource consumption, or CO_2e emissions, or increase plant-based carbon sinks in greenfield and brownfield buildings and associated grounds." This includes energy efficiency improvements in equipment in existing buildings.

Investments in mangrove protection and restoration are also eligible for mitigation finance. According to the Common Principles, these investments fall under the category "marine and other water habitats: GHG-emission reduction," specifically the activity "projects that reduce GHG emissions from the degradation of marine ecosystems or other water-based ecosystems."

The costs of these two activities have been estimated at US$4 million, all of which is counted as mitigation finance.

PROVALE-CV clearly identifies the adverse impacts of climate change on the agricultural sector. In Senegal, the agriculture sector is especially dependent on particular rainfall conditions. The water resources are among the most sensitive to climate change, despite the country's relatively high water resource potential.

The project is clearly focused on enhancing resilience to climate change, as highlighted in its technical justification, which aims to incorporate innovative strategies like developing climate-smart agricultural value chains, promoting rural entrepreneurship and generating knowledge. The project also identifies risks and corresponding mitigation strategies, noting the risk of climate hazards that directly impact agricultural and livestock production and proposing solutions such as improving water management, distributing improved seeds and implementing resilient approaches and technologies.

Adaptation finance has been estimated at US$4 million using a proportional approach. Given the clear statement of the climate vulnerability context, the intent to address these vulnerabilities and the linked activities, adaptation finance can be assessed. The adaptation activities are confined to component A, which addresses development, mitigation and adaptation objectives. The proportional approach determines that 20 percent of the OPEC Fund contributions to this component is adaptation finance. Therefore, all US$4 million is counted as adaptation finance.

SPOTLIGHT STATEMENT

The OPEC Fund's Contribution to Climate Resilience in Senegal

"As the Minister of Agriculture, Food Sovereignty, and Livestock of Senegal, I want to highlight the critical role of the Water Utilization Project for Value Chain Development (PROVALE CV) in addressing climate change impacts. With funding support from the African Development Bank, the OPEC Fund for International Development, and the Africa Growing Together Fund, PROVALE CV is vital in strengthening the resilience of our communities. The OPEC Fund's contribution of 11.7 billion CFA francs is enabling the construction of 40 water retention and anti-salt structures and the development of nearly 7,000 hectares of agricultural land.

This project also promotes natural resource protection, innovative agricultural practices, and the dissemination of climate information to our producers. Additionally, it supports the establishment of solar-powered farms and agricultural processing units. PROVALE CV is a cornerstone of Senegal's food sovereignty strategy. On behalf of the Government of Senegal, I express our deep appreciation to the OPEC Fund for standing with us in the fight against the adverse effects of climate change."

MABOUBA DIAGNE
Minister of Agriculture, Food Sovereignty, and Livestock of Senegal

UZBEKISTAN

500 MW Bash & 500 MW Dzhankeldy Wind Farm

The OPEC Fund is supporting 1 GW renewable energy generation in Uzbekistan with two US$20 million loans for the construction of two wind power plants. The total US$40 million provided to ACWA Power will support the construction and operation of the 500 MW Dzhankeldy wind farm and the 500 MW Bash wind power plant in the Bukhara region of Uzbekistan. The new facilities will boost renewable energy generation capacity, reduce GHG emissions and diversify the country's energy mix.

FUNDING DETAILS:

- **Total program cost: US$656.57 million for ACWA Power Dzhankeldy and US$688.41 million for ACWA Power Bash**
- **OPEC Fund contribution: US$20 million for each project (US$40 million in total)**
- **Type of financial instrument: Senior loan**
- **Co-financiers: EBRD, Asian Development Bank, Proparco, DEG Standard Chartered Bank and Industrial and Commercial Bank of China**
- **OPEC Fund climate finance as percentage: 100 percent mitigation finance.**

TIMELINE:

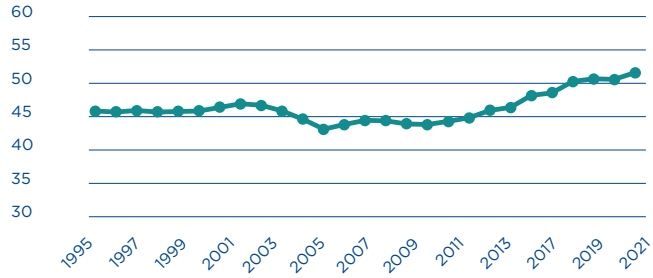
- **The OPEC Fund was invited to this transaction by one of its strategic partner, International Company for Water and Power Projects (ACWA Power or the Sponsor) with whom the Fund has developed a strategic relationship towards investing in power and water infrastructure internationally.**
- **The OPEC Fund approved the program in December 2022 but signed in March 2023.**
- **The first disbursement from the OPEC Fund was in August 2023.**

Situation Analysis of Climate Impacts

Uzbekistan faces significant challenges due to climate change, which will heavily influence its accelerated development path. Although Uzbekistan contributes only 0.3 percent to global CO_2 emissions, it is one of the most energy-intensive countries worldwide. If the country does not take steps to decarbonize, its rapid economic growth will increasingly conflict with global climate change mitigation efforts.

Due to a combination of political, geographic and social factors, Uzbekistan is recognized as vulnerable to the impacts of climate change. On the 2023 ND-GAIN Index, Uzbekistan's score is 52. Figure 13 presents a time-series plot illustrating Uzbekistan's progress on the ND-GAIN Index over time.[53]

Figure 13: **Uzbekistan ND-GAIN Index**



Source: https://gain.nd.edu/our-work/country-index

Uzbekistan ranks 112th out of 191 countries on the INFORM Index for global disaster risks.[54] This ranking is largely due to its high exposure to earthquakes, where it scores 9.9 out of 10, making it the second highest in the world. The country also ranks among the top 20 globally for drought exposure and faces significant hazard from wildfires. Additionally, Uzbekistan experiences above-average flood hazards. Despite these high exposure levels, Uzbekistan benefits from relatively low vulnerability and moderate coping capacity.

The country is already experiencing the harmful effects of climate change, with the ecological disaster of the drying Aral Sea – once the fourth largest lake in the world – creating substantial environmental and developmental issues. Droughts, extreme heat, unpredictable rainfall and dust storms are severely impacting both the population and the economy. Air pollution is also a growing environmental and health challenge in Uzbekistan, with annual health damage costs increasing. Effects of pollution are now equalling 6.5 percent of the country's GDP. This pollution disproportionately affects women, children and vulnerable groups.[55]

Purpose of the Loan

The OPEC Fund's loans are key to Uzbekistan's transition to a low-carbon economy, focusing on renewable energy, particularly wind power. This shift is essential for reducing the country's high GHG emissions from its fossil fuel-dependent energy sector.

The loan helps Uzbekistan meet its goal of a 35 percent reduction in GHG emissions per GDP unit by 2030, financing one-third of its wind power target. Partnering with ACWA Power, the loan provides capital and international expertise for renewable energy development.

This funding supports immediate climate targets and long-term sustainable development by transitioning from gas to renewables like wind and solar. It enhances energy security, reduces emissions, and fosters economic growth, setting the stage for a cleaner, more resilient energy sector and positioning Uzbekistan as a regional renewable energy leader.

Expected Outcomes

Uzbekistan is ambitiously tackling climate change and transforming its economy. After ratifying the Paris Agreement in 2018, it committed to a 10 percent reduction in GHG emissions per GDP unit by 2030, which was increased to 35 percent at COP26 in 2021.

OPEC Fund-supported projects are vital for Uzbekistan's climate goals. The updated NDC targets a 35 percent reduction in GHG emissions per GDP unit by 2030 and aims for renewables to make up 25 percent of power generation. The OPEC Fund supports one-third of the 3 GW wind power target and fosters private sector investment through a partnership with ACWA, aligning with the government's climate policy.

Transitioning to renewable energy will establish Uzbekistan as a regional leader in sustainable energy and reinforce its climate commitments. The partnership emphasizes the role of global cooperation in achieving climate targets and promoting sustainable development.

Assessment according to the Joint MDB Methodology for Tracking Climate Finance

The OPEC Fund financed mitigation activities in both ACWA power projects:

Investments in wind power are eligible for mitigation finance. According to the Common Principles for Climate Mitigation Finance Tracking, wind power projects fall under the category "renewable energy generation," specifically the eligible activity "generation of renewable energy with low life cycle GHG emissions to supply electricity, heating, mechanical energy, or cooling." Therefore these investments are eligible to be counted as mitigation finance.

Both investments satisfy additional criteria to determine eligibility. The additional criteria state that GHG emissions from renewable energy should be substantially lower than those from fossil fuel generation without carbon capture and storage or utilization. However, examination of GHG emissions is not necessary for energy forms widely recognized to have very low life cycle emissions, such as solar, wind, and tidal energy. Therefore, both investments qualify as mitigation finance.

Mitigation finance for these projects has been estimated at US$20 million each, totaling US$40 million.

[53] University of Notre Dame (2024). Notre Dame Global Adaptation Initiative. URL: https://gain.nd.edu/our-work/country-index
[54] European Commission (2024). INFORM Index for Risk Management. Armenia. URL: https://drmkc.jrc.ec.europa.eu/inform-index
[55] World Bank Climate Knowledge Portal: https://climateknowledgeportal.worldbank.org/sites/default/files/2021-09/15838-Uzbekistan percent20Country percent20Profile-WEB.pdf

ANNEX

Annex 1: Climate Finance Tracking Methodology

Simplified Description of the MDB Climate Finance Tracking Methodology

Since 2011, MDBs have jointly reported on climate finance using a harmonized methodology for tracking both adaptation and mitigation projects. The OPEC Fund has integrated this standardized approach into its own reporting framework.

Key definitions and principles

- According to the UNFCCC, "adaptation involves adjustments in ecological, social or economic systems in response to actual or expected climatic stimuli and their effects. It includes changes in processes, practices and structures to moderate potential damages or benefit from opportunities associated with climate change."
- Mitigation: Climate change mitigation involves limiting or preventing greenhouse gas emissions and enhancing activities that remove these gases from the atmosphere.
- Resilience: Climate resilience refers to the ability to anticipate, prepare for and respond to hazardous events, trends or disturbances related to climate change. Improving resilience involves assessing how climate change will alter climate-related risks and taking steps to cope with these risks.

Climate Change Adaptation Finance [56]

Adaptation finance aims to reduce risks or vulnerabilities posed by climate change and enhance climate resilience. For a project to qualify as contributing to adaptation finance it must:

- Define the project's context of vulnerability to climate change.
- Explicitly state the intent to address this vulnerability.
- Clearly link specific project activities to the identified vulnerability.

The MDB methodology for tracking adaptation finance is context-specific, location-specific and conservative. It only includes components, sub-components or elements of projects that directly contribute to or promote adaptation. Key points include:

- Scope of Reporting: Adaptation finance might not capture activities that contribute to resilience, but are difficult to quantify or are not associated with direct costs (e.g., siting assets outside flood-prone areas).[57]
- Project Value: Adaptation finance captures only the value of activities specifically addressing climate vulnerabilities, not the entire project value.
- Action Coverage: Reported adaptation finance includes support for actions aimed at mitigating climate risks, including extreme weather and slow-onset events, as well as financing post-disaster recovery and reconstruction.
- Methodology Update: The MDBs updated their joint methodology for tracking adaptation finance in November 2022 to reflect advances in understanding adaptation and resilience activities.

[56] https://thedocs.worldbank.org/en/doc/20cd787e947dbf44598741469538a4ab-0020012022/original/20220242-mdbs-joint-methodology-climate-change-adaptation-finance-en.pdf

Climate Change Mitigation Finance

Mitigation finance focuses on activities that reduce, avoid, limit or sequester GHG emissions. According to the MDB/IDFC Common Principles for Climate Mitigation Finance Tracking [57] methodology, an activity is classified as climate change mitigation if it substantially contributes to stabilizing GHG concentrations in the atmosphere, consistent with the Paris Agreement's long-term temperature goal. Mitigation activities fall into three categories:

- Negative or Very Low Emission Activities: These result in negative, zero or very low GHG emissions and are fully consistent with the PA (e.g., carbon sequestration in land use, some renewable energy forms).
- Transitional Activities: These are part of GHG-emissive systems but contribute to the transition towards a climate-neutral economy (e.g., energy efficiency improvements in manufacturing using fossil fuels).
- Enabling Activities: These facilitate other activities that make substantial contributions to climate mitigation (e.g., manufacturing very low-emission technologies).

However, not all GHG-reducing activities qualify for MDB mitigation finance. This finance is calculated based on a specific list of activities compatible with low-emission pathways.

Explicit Exclusions

The methodology explicitly excludes certain sectors:

- Hydropower plants with high methane emissions from reservoirs that surpass the GHG reductions from the plant's renewable energy output.
- Geothermal power plants with high carbon dioxide content in the geothermal fluid that cannot be reinjected.
- Biofuel projects that deplete carbon pools more than they reduce GHG emissions, due to high emissions during production, processing and transportation.

Methodological Differences and Tracking

The methodologies for tracking adaptation and mitigation finance differ fundamentally:

- Adaptation: Adaptation activities are context-specific and tailored to certain climate vulnerabilities, making it impossible to produce a standalone "list of adaptation activities."
- Mitigation: Mitigation activities can be tracked based on predefined lists of typical activities that support low-carbon development, as the impact of a 1-ton reduction in CO_2 emissions is consistent regardless of location.

[57] https://www.worldbank.org/content/dam/Worldbank/document/Climate/common-principles-for-climate-mitigation-finance-tracking.pdf

Annex 2: OPEC Fund Climate Finance Portfolio 2018-2023

Year of Approval	Country	Project	Sector	OPEC Fund contribution in US$MN	Adaptation Finance (%)	Mitigation Finance (%)	Total Climate Finance (%)
2018	Cameroon	Nachtigal Hydropower Company (NHPC)	Energy	60	0	100	100
2018	Kenya	Modogashe – Wajir Road Project	Transport	25.00	5.00	0	5.00
2018	Senegal	Support To The Development Of Agricultural Production Areas (PDZP/PNDL)	Agriculture and Livelihoods	20	10	0	10
2018	Malawi	Rehabilitation, Upgrading And Expansion Of Karonga Water Supply System	Water	15.00	10	5.00	15.00
2018	Tajikistan	Improvement Of Water Supply In Yangikurgan District And The City Of Namangan Project	Water	10	15.00	33.41	48.41
2018	Dominican Republic	Program To Expand Electricity Networks And Reduce Technical Losses In Distribution Systems (Loan 2)	Energy	75.00	0	49.36	49.36
2018	Cuba	Las Tunas Province Water and Sanitation Project (Phase II)	Water	25.00	0	10	10
2018	Albania	Tirana - Elbasan Road Emergency Remedial Works Project	Transport	16.00	25.00	0	25.00
2018	China	Hohhot Healthcare Project	Basic Infrastructure	41.60	10	10	20
2018	China	Hezhou Healthcare Project	Basic Infrastructure	50	0	8.75	8.75
2018	Argentina	Cordoba Sanitation System Development Project	Water	60	0	80.54	80.54
2019	Africa (regional)	Humania North Africa Holding Company	Basic Infrastructure	25.00	0	10	10
2019	Egypt	National Bank Of Egypt	Financial Intermediation	50	5.00	5.00	10
2019	Nepal	Nmb Bank Limited	Financial Intermediation	15.00	0	22.50	22.50
2019	Nepal	Nepal Water And Energy Development Company (NWEDC)	Energy	30	0	100	100
2019	Benin	Agricultural Development And Market Access Support Project (Padaam)	Agriculture and Livelihoods	10	50	0	50

Year of Approval	Country	Project	Sector	OPEC Fund contribution in US$MN	Adaptation Finance (%)	Mitigation Finance (%)	Total Climate Finance (%)
2019	Niger	Strengthening Resilience Of Rural Communities To Food And Nutrition Insecurity Program (Precis)	Agriculture and Livelihoods	15.00	100	0	100
2019	Senegal	Support To Agricultural Development And Rural Entrepreneurship Programme - Phase II Padaer II	Agriculture and Livelihoods	10	100	0	100
2019	Malawi	Transforming Agriculture Through Diversification And Entrepreneurship (Trade)	Agriculture and Livelihoods	20	35.00	0	35.00
2019	Uganda	National Oil Seeds Project	Agriculture and Livelihoods	30	20	0	20
2019	Mozambique	Temane Transmission Project (TREP/TTP)	Energy	36.00	15.00	0	15.00
2019	Madagascar	Mangoky River Bridge Construction Project (RN9)	Transport	10	20	0	20
2019	Tajikistan	Sustainable Highlands Highway Investment Program (Tranche 2)	Transport	40	6.67	0	6.67
2019	Uzbekistan	Improvement of Water Supply in Yangikurgan District and the City of Namangan Project	Water	53.96	0	13.89	13.89
2019	Cuba	West Havana Sanitation and Pluvial Drainage Project	Water	25.00	15.60	0	15.60
2019	Belize	Upgrading of Caracol Road Project, Phase II	Transport	10	20	0	20
2019	Honduras	Northeastern Small Producers' Economic and Social Inclusion Project	Agriculture and Livelihoods	20	8.92	4.46	13.37
2019	China	Wenshan Vocational Education Project	Basic Infrastructure	25.00	6.24	6.24	12.48
2019	Oman	Alsharqiya Expressway Tunnels Project	Transport	130	18.07	0	18.07
2019	Maldives	Outer Islands Harbors, Water Supply and Sewerage Facilities Project	Water	50	51.24	0	51.24
2020	Egypt	Acwa Power Kom Ombo For Energy S.A.E	Energy	30	0	100	100
2020	Türkiye	Izmir Metropolitan Municipality	Transport	45.20	0	100	100

Year of Approval	Country	Project	Sector	OPEC Fund contribution in US$MN	Adaptation Finance (%)	Mitigation Finance (%)	Total Climate Finance (%)
2020	India	PTC India Financial Services	Financial Intermediation	30	0	100	100
2020	Burundi	Agricultural Production Intensification & Vulnerability Reduction Project In Burundi (Piparv-B)	Agriculture and Livelihoods	20	28.95	0	28.95
2020	Egypt	Sustainable Transformation For Agricultural Resilience In Upper Egypt (Star)	Agriculture and Livelihoods	20	21.39	0	21.39
2020	Sierra Leone	Freetown Wash And Aquatic Environment Revamping Project	Water	20	10	30	40
2020	Senegal	Water Valorisation For Value Chains Development Project (Provale-CV)	Agriculture and Livelihoods	20	20	20	40
2020	Madagascar	Integrated Growth Poles' Energy Access Enhancement Project, Phase II (Pic 2.2)	Energy	15.00	0	100	100
2020	Sierra Leone	Agricultural Value Chain Development Project	Agriculture and Livelihoods	15.00	30	0	30
2020	Papua New Guinea	Papua New Guinea	Transport	50	23.00	0	23.00
2020	China	Hubei Vocational Education Project	Basic Infrastructure	30	8.80	8.80	17.60
2020	Uzbekistan	Sustainable Rural Development Project	Agriculture and Livelihoods	75.00	14.83	14.83	29.67
2020	Nicaragua	Ochomogo-Las Salinas Rural Road Project	Energy	20.50	0	100	100
2020	Nicaragua	El Tortuguero – La Esperanza Rural Electricity Transmission Project	Transport	30	16.67	0	16.67
2021	Viet Nam	Southeast Asia Commercial Joint Stock Bank	Financial Intermediation	35.00	11.54	11.54	23.08
2021	Regional Latin America and the Caribbean	Corporacion Interamericana para el Financiamiento de Infraestructura	Financial Intermediation	25.00	0	43.00	43.00

Year of Approval	Country	Project	Sector	OPEC Fund contribution in US$MN	Adaptation Finance (%)	Mitigation Finance (%)	Total Climate Finance (%)
2021	Armenia	Ameriabank Cjsc	Financial Intermediation	30	10	40	50
2021	Morocco	Financial And Digital Inclusion Program	Other	100	10	0	10
2021	Ghana	Integrated Rural Development Project (Phase 2)	Agriculture and Livelihoods	20	20	0	20
2021	Morocco	Nigeria-Morocco Gas Pipeline (NMGP) Front End Engineering Design Study (Feed) Phase II Project	Energy	14.30	0	25.00	25.00
2021	Lesotho	Lesotho Regeneration Of Landscapes & Livelihood Project (Roll)	Agriculture and Livelihoods	19.00	20	10	30
2021	Côte d'Ivoire	The Northern Agro-Industrial Pole Project	Agriculture and Livelihoods	60	9.96	4.85	14.81
2021	Turkmenistan	Improvement Of Water Resources Management In Khatlon Region Project	Transport	45.00	0	20	20
2021	Nicaragua	Empalme La Tranquera-Pueblo Nuevo Rural Road Project	Transport	23.00	20	0	20
2022	Uzbekistan	Acwa Power Dzhankeldy LLC	Energy Generation; Distribution And Efficiency	20	0	100	100
2022	Bangladesh	Unique Meghnaghat Power Limited	Energy Generation	38.00	0	100	100
2022	Uzbekistan	Acwa Power Bash LLC	Energy Generation; Distribution And Efficiency	20	0	100	100
2022	Regional Africa	Banque Ouest Africaine De Développment (BOAD)	Banking and Financial Services	50	0	50	50
2022	Senegal	Dakar - Saint Louis Highway Project	Transport	62.50	9.29	0	9.29

Year of Approval	Country	Project	Sector	OPEC Fund contribution in US$MN	Adaptation Finance (%)	Mitigation Finance (%)	Total Climate Finance (%)
2022	Uzbekistan	Accelerating Uzbekistan's Transition Program	Banking and Financial Services/ Financial Policy and Administrative Management	100	17.86	14.29	32.14
2022	Zimbabwe	Smallholder Agriculture Cluster Project	Agriculture	15.00	18.61	0	18.61
2022	Chad	Insta Expansion Project (Phase 2)	Education	11.00	0	4.89	4.89
2022	Liberia	Sustainable Management Of Fisheries Project	Fishing	20	17.49	12.35	29.84
2022	Madagascar	National Clean Cooking Transition Program	Multisector (energy – cooking fuel & solutions; forestry)	35.00	0	81.37	81.37
2022	Malawi	SADC Sub Regional Transport And Trade Facilitation Project	Transport	20	8.85	0	8.85
2022	Uganda	Katine Ochero Road Upgrading Project	Transport	30	9.64	0	9.64
2022	Paraguay	Policy-Based Loan For The Sustainable Development Of The Republic Of Paraguay	Multisector/ crosscutting	100	10	23.33	33.33
2022	Liberia	Special Agro-Industrial Processing Zone Project	Agriculture	10	20	20	40
2022	Jordan	Emergency Food Security Project	Agriculture	100	10	10	20
2022	Kyrgyz Republic	Reconstruction Of Suusamyr – Talas – Taraz Road (Phase IV) Project	Transport	15.00	10	0	10
2022	Benin	Agricultural Development & Market Access Support Project (Padaam) Supplementary Loan	Agriculture/ Agricultural Development	14.00	10	5.00	15.00
2022	Tanzania	Benaco – Kyaka Transmission Line Project (Tranche 1)	Energy Appraising	30	0	8.92	8.92

Year of Approval	Country	Project	Sector	OPEC Fund contribution in US$MN	Adaptation Finance (%)	Mitigation Finance (%)	Total Climate Finance (%)
2022	Niger	Niger Solar Plant Development And Electricity Access Improvement Project (Ranaa)	Energy generation, Distribution and Efficiency	25.00	0	100	100
2022	Panama	Panama Support Program For The National Climate Change Policy	Banking and Financial Services/ Financial Policy and Administrative Management	120	58.33	41.67	100
2022	Saint Vincent and the Grenadines	Strengthening Health System Resilience Project	Health/ Basic Health Infrastructure	30	15.00	15.00	30
2022	Pakistan	Mohmand Dam Multi-Purpose Project	Multisectoral/ Cross-Cutting (Energy, Water supply, Agriculture)	72.00	0	100	100
2022	Côte d'Ivoire	Economic And Social Reform Support Program (Pares Phase III)	Multisector	70	12.50	12.50	25.00
2022	Dominican Republic	Program To Expand Electricity Networks And Reduce Technical Losses In Distribution Systems (Loan 2)	Energy Generation, Distribution and Efficiency/ Electric Power Transmission and Distribution.	60	0	15.00	15.00
2022	Kosovo	Public Finances And Economic Growth Program	Banking and Financial Services/ Financial Policy and Administrative Management	40	7.14	21.43	28.57
2023	Albania	MSME Financing	Banking And Financial Services	20	25.00	5.00	30
2023	Azerbaijan	Azerbaijan 240MW Wind Power Plant	Energy	50	0	100	100
2023	Armenia	Armeconombank MSME Financing	Banking And Financial Services	20	5.00	5.00	10

Year of Approval	Country	Project	Sector	OPEC Fund contribution in US$MN	Adaptation Finance (%)	Mitigation Finance (%)	Total Climate Finance (%)
2023	Uzbekistan	Asaka Bank	Banking And Financial Services	35.00	25.00	25.00	50
2023	Nepal	Global IME Bank – MSME And WSME Loan	Banking And Financial Services	25.00	20	20	40
2023	Bangladesh	International Trade Finance	Banking And Financial Services	30	20	20	40
2023	Uganda	Achwa I 42MW Hydroelectric Power Plant	Energy	25.00	0	100	100
2023	Regional Africa	ETG Syndicated Sustainability Linked Loan	Agriculture	40	11.00	11.00	22.00
2023	Paraguay	Rehabilitation, Upgrading And Maintenance Of National Route Py22 (Concepcion-Vallemi-San Lazaro) And Access Roads (Vial IV) Project	Transport	50	15.00	0	15.00
2023	India	Chennai Peripheral Ring Road Project (CPRR) Sections II & III	Transport	100	17.50	2.50	20
2023	Guatemala	National Biologicals Center Health Project	Health	15.00	10.20	0	10.20
2023	Colombia	Support To Climate Action And Energy Transition Program	Multisector	150	29.27	43.90	73.17
2023	Uzbekistan	Reconstruction And Upgrading Of M39 Road Project, 1,255-1,315 Km	Transport	47.20	15.00	0	15.00
2023	Seychelles	Fiscal Sustainability And Climate Resilience Program	Multisector	20	20	0	20
2023	Armenia	Green Inclusive And Sustainable Development Program	Multisector	50	15.63	28.13	43.75
2023	Malawi	Shire Valley Transformation Program, Phase II (SVTP-II)	Agriculture	20	40	10	50
2023	Senegal	Cities Modernization Program (Promovilles-OF)	Transport	38.03	45.10	0	45.10
2023	Liberia	Integrated Fisheries Sector Strengthening Project	Agriculture	20.24	20	1.20	21.20

Year of Approval	Country	Project	Sector	OPEC Fund contribution in US$MN	Adaptation Finance (%)	Mitigation Finance (%)	Total Climate Finance (%)
2023	Benin	Ouidah & Djougou Vocational Training Schools Project	Education	25.50	0	26.18	26.18
2023	North Macedonia	Sustainability And Resilience Program	Government And Civil Society	50	10	30	40
2023	Liberia	Mano River Union Road Development And Transport Facilitation Project (Liberia Section)	Transport	20	25.00	0	25.00
2023	Tajikistan	Guliston-Farkhor-Panj-Dusti Road Reconstruction Project (Phase I)	Transport	10	16.64	0	16.64
2023	China	Jiangxi Vocational Education Project	Education	50	0	4.32	4.32
2023	Eswatini	Mkhondvo Ngwavuma Water Augmentation Program, Phase 2	Agriculture	20	40	0	40
2023	Comoros	El-Maarouf Hospital Project	Health	17.00	14.54	0	14.54
2023	Tanzania	Upgrading Of Kagwira, Karema Port Road Project	Transport	41.00	20	0	20
2023	Zimbabwe	Horticulture Enterprise Enhancement Project	Agriculture	15.00	28.04	0	28.04
2023	Uganda	The Fourth Line Of Credit To Uganda Development Bank	Financial	25.00	2.50	2.50	5.00
2023	Tajikistan	Support To Implementation Of The National Education Development Strategy Of The Republic Of Tajikistan Project (Phase II)	Education	8.00	6.25	5.00	11.25
2023	Türkiye	Food Security And Resilience Project (FSRP)	Agriculture	50	10	0	10
2023	Rwanda	Expansion Of Karenge Water Supply Project	Water Supply	21.20	50	0	50
2023	Madagascar	Facilitation Of Commerce Corridors Project (PACFC II)	Transport	30	8.52	0.56	9.07

Annex 3: OPEC Fund Climate Finance Analysis 2018-2023

Tabulation Plan for Data Analysis

The climate finance data for the periods 2018-2021, 2022, and 2023 has been segregated into three layers: a) public sector versus private sector, b) sectoral distribution, and c) regional distribution. The tables are prepared both in absolute numbers and percentages. While all the tables are provided in the annexures, the tabulation plan is elucidated here for ease of reading this report.

Table 1 and 2 provides a summary of the OPEC Fund's climate financing bifurcated by a) mitigation and adaptation and b) public and private sectors.

Sectoral Distribution

Tables 3, 4, 5: These tables provide climate finance data for each sector as a percentage of total sectoral allocation for the years 2018-2021, 2022, and 2023, respectively.

Table 6: This table is a summary of the figures from Tables 1, 2, and 3 for the three years.

Tables 7, 8, 9: These tables show the contribution of each sector to the total climate finance for the OPEC Fund for the years 2018-2021, 2022, and 2023, respectively.

Table 10: This table summarizes the figures from Tables 5, 6, and 7 for the three years.

Tables 11, 12: These tables provide the contribution of each sector to the total climate finance for the OPEC Fund for the years 2018-2021, 2022, and 2023, bifurcated by public sector and private sector.

Regional Distribution

Tables 13, 14, 15: These tables present climate finance data for each region as a percentage of total regional allocation for the years 2018-2021, 2022, and 2023, respectively.

Table 16: This table is a summary of the figures from Tables 11, 12, and 13 for the three years.

Tables 17, 18, 19: These tables show the contribution of each region to the total climate finance for the OPEC Fund for the years 2018-2021, 2022, and 2023, respectively.

Table 20: This table summarizes the figures from Tables 15, 16, and 17 for the three years.

Tables 21, 22: These tables provide the contribution of each region to the total climate finance for the OPEC Fund for the years 2018-2021, 2022, and 2023, bifurcated by public sector and private sector.

Table 1: **Climate Finance Summary – Adaptation and Mitigation**

Year	Total Financing (US$BN)	Climate Finance (US$MN)	Climate Finance (%)	Adaptation Finance (%)	Mitigation Finance (%)
2018-2021	3.98	675.3	17.0	5.5	11.5
2022	1.54	515.4	33.4	9.5	23.9
2023	1.21	417.4	34.4	16.9	17.5

Climate finance percentages are expressed as a percentage of the total OPEC Fund financing, adaptation finance and mitigation finance are percentages to total OPEC Fund financing.

Table 2: **Climate Finance Summary – Public and Private Sectors**

Year	Total Financing (US$BN)	Climate Finance (US$MN)	Climate Finance (%)	Public Sector (%)	Private Sector (%)
2018-2021	3.98	675.3	17.0	58	42
2022	1.54	515.4	33.4	80	20
2023	1.21	417.4	34.4	68	32

Climate finance percentages are expressed as a percentage of the total OPEC Fund financing, Public Sector percentage is the percentage of public sector climate finance in total climate finance, and private sector percentage is the percentage of private sector climate finance in total climate finance.

Table 3a: **Distribution of OPEC Fund portfolio and Climate Finance by Sector 2018-2021** (US$MN)

	OPEC Fund Finance	Climate Finance	Mitigation finance	Adaptation finance
Agriculture	340.00	77.13	7.80	69.33
Financial Institutions	705.00	115.54	101.83	13.71
Education	98.00	8.40	4.20	4.20
Energy	794.65	201.50	196.10	5.40
Multisectoral	378.50	64.41	16.37	48.04
Transport	1073.70	110.70	54.20	56.50
Other	592.56	97.66	76.10	21.56
Total	3,982.41	675.34	456.60	218.74

Table 3b: **Climate Finance as percentage to Sector allocation 2018-2021,**
Sectoral split, 2018-2021, percent of sector total

	OPEC Fund Finance (US$MN)	Climate Finance (%)	Mitigation finance (%)	Adaptation finance (%)
Agriculture	340.00	22.69	2.30	20.39
Financial Institutions	705.00	16.39	14.44	1.94
Education	98.00	8.57	4.29	4.29
Energy	794.65	25.36	24.68	0.57
Multisectoral	378.50	17.02	4.32	12.69
Transport	1073.70	10.31	5.05	5.26
Other	592.56	16.48	12.84	3.64
Total	3,982.41	16.96	11.47	5.29

Table 4a: **Distribution of OPEC Fund portfolio and Climate Finance by Sector 2022** (US$MN)

	OPEC Fund Finance	Climate Finance	Mitigation finance	Adaptation finance
Agriculture	139.00	28.89	12.70	16.19
Financial Institutions	643.32	190.23	99.52	90.71
Education	61.00	0.54	0.54	0
Energy	193.00	114.68	114.68	0
Multisectoral	283.15	153.70	134.36	19.33
Transport	131.65	12.35	0	12.35
Other	90.24	15.04	7.00	8.04
Total	1,541.37	515.43	368.80	146.63

Table 4b: **Climate Finance as percentage to Sector allocation 2022**

	OPEC Fund Finance (US$MN)	Climate Finance (%)	Mitigation finance (%)	Adaptation finance (%)
Agriculture	139.00	20.79	9.14	11.65
Financial Institutions	643.32	29.57	15.47	14.10
Education	61.00	0.88	0.88	0
Energy	193.00	59.42	59.42	0
Multisectoral	283.15	54.28	47.45	6.83
Transport	131.65	9.38	0	9.38
Other	90.24	16.67	7.76	8.91
Total	1,541.37	33.44	23.93	9.51

Table 5a: **Distribution of OPEC Fund portfolio and Climate Finance by Sector 2023** (US$MN)

	OPEC Fund Finance	Climate Finance	Mitigation finance	Adaptation finance
Agriculture	165.24	40.25	6.64	33.61
Financial Institutions	181.78	49.28	22.46	26.82
Education	83.50	9.74	9.24	0.50
Energy	113.11	75.00	75.00	0
Multisectoral	220.00	135.63	79.92	55.71
Transport	339.64	71.12	2.67	68.45
Other	107.69	36.40	16.35	20.05
Total	1,210.96	417.41	212.27	205.14

Table 5b: **Climate Finance as percentage to Sector allocation 2023**

	OPEC Fund Finance (US$MN)	Climate Finance (%)	Mitigation finance (%)	Adaptation finance (%)
Agriculture	165.24	24.36	4.02	20.34
Financial Institutions	181.78	27.11	12.36	14.75
Education	83.50	11.66	11.06	0.60
Energy	113.11	66.30	66.30	0
Multisectoral	220.00	61.65	36.33	25.32
Transport	339.64	20.94	0.79	20.15
Other	107.69	33.80	15.18	18.62
Total	1,210.96	34.47	17.53	16.94

Table 6a: **Absolute numbers of sector allocation and climate finance for 2018-2021, 2022 and 2023** (US$MN)

	Mitigation			Adaptation			Total Climate Finance		
Sectors	**2018-2021**	**2022**	**2023**	**2018-2021**	**2022**	**2023**	**2018-2021**	**2022**	**2023**
Agriculture	7.80	12.70	6.64	69.33	16.19	33.61	77.13	28.89	40.25
Financial Institutions	101.83	99.52	22.46	13.71	90.71	26.82	115.54	190.23	49.28
Education	4.20	0.54	9.24	4.20	0	0.50	8.40	0.54	9.74
Energy	196.10	114.68	75.00	5.40	0	0	201.50	114.68	75.00
Multisectoral	16.37	134.36	79.92	48.04	19.33	55.71	64.41	153.70	135.63
Transport	54.20	0	2.67	56.50	12.35	68.45	110.70	12.35	71.12
Other	76.10	7.00	16.35	21.56	8.04	20.05	97.66	15.04	36.40
Total	456.60	368.80	212.27	218.74	146.63	205.14	675.34	515.43	417.41

Table 6b: **Climate Finance as percentage to sector allocation, 2018-2021, 2022 and 2023**

	Mitigation (%)			Adaptation (%)			Total Climate Finance (%)		
Sectors	**2018-2021**	**2022**	**2023**	**2018-2021**	**2022**	**2023**	**2018-2021**	**2022**	**2023**
Agriculture	2.30	9.14	4.02	20.39	11.65	20.34	22.69	20.79	24.36
Financial Institutions	14.44	15.47	12.36	1.94	14.10	14.75	16.39	29.57	27.11
Education	4.29	0.88	11.06	4.29	0	0.60	8.57	0.88	11.66
Energy	24.68	59.42	66.30	0.57	0	0	25.36	59.42	66.30
Multisectoral	4.32	47.45	36.33	12.69	6.83	25.32	17.02	54.28	61.65
Transport	5.05	0	0.79	5.26	9.38	20.15	10.31	9.38	20.94
Other	12.84	7.76	15.18	3.64	8.91	18.62	16.48	16.67	33.80
Total	11.47	23.93	17.53	5.29	9.51	16.94	16.96	33.44	34.47

Table 7: **Share of sectors in total Climate Finance – percentages, 2018-2021** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
Agriculture	340.00	77.13	11.42	31.69	1.71
Financial Institutions	705.00	115.54	17.11	6.27	22.30
Education	98.00	8.40	1.24	1.92	0.92
Energy	794.65	201.50	29.84	2.47	42.95
Multisectoral	378.50	64.41	9.54	21.96	3.58
Transport	1,073.70	110.70	16.39	25.83	11.87
Other	592.56	97.66	14.46	9.86	16.67
Total	3,982.41	675.34	100	100	100

Table 8: **Share of sectors in total Climate Finance – percentages, 2022** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
Agriculture	139.00	28.89	5.61	11.04	3.44
Financial Institutions	643.32	190.23	36.91	61.87	26.98
Education	61.00	0.54	0.10	0	0.15
Energy	193.00	114.68	22.25	0	31.09
Multisectoral	283.15	153.70	29.82	13.18	36.43
Transport	131.65	12.35	2.40	8.43	0
Other	90.24	15.04	2.92	5.48	1.90
Total	1,541.37	515.43	100	100	100

Table 9: **Share of sectors in total Climate Finance – percentages, 2023** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
Agriculture	165.24	40.25	9.64	16.38	3.13
Financial Institutions	181.78	49.28	11.81	13.07	10.58
Education	83.50	9.74	2.33	0.24	4.35
Energy	113.11	75.00	17.97	0	35.33
Multisectoral	220.00	135.63	32.49	27.16	37.65
Transport	339.64	71.12	17.04	33.37	1.26
Other	107.69	36.40	8.72	9.77	7.70
Total	1,210.96	417.41	100	100	100

Table 10: **Share of sectors in total Climate Finance – percentages, 2018-2021, 2022 and 2023** (percent)

	Mitigation (%)			Adaptation (%)			Total Climate Finance (%)		
Sectors	**2018-2021**	**2022**	**2023**	**2018-2021**	**2022**	**2023**	**2018-2021**	**2022**	**2023**
Agriculture	1.71	3.44	3.13	31.69	11.04	16.38	11.42	5.61	9.64
Financial Institutions	22.30	26.98	10.58	6.27	61.87	13.07	17.11	36.91	11.81
Education	0.92	0.15	4.35	1.92	0	0.24	1.24	0.10	2.33
Energy	42.95	31.09	35.33	2.47	0	0	29.84	22.25	17.97
Multisectoral	3.58	36.43	37.65	21.96	13.18	27.16	9.54	29.82	32.49
Transport	11.87	0	1.26	25.83	8.43	33.37	16.39	2.40	17.04
Other	16.67	1.90	7.70	9.86	5.48	9.77	14.46	2.92	8.72
Total	100	100	100	100	100	100	100	100	100

Table 11a: **Share of sectors in total Climate Finance – percentages, 2018-2021, Public Sector** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
Agriculture	340.00	77.13	19.67	33.81	4.17
Financial Institutions	20.00	0	0	0	0
Education	98.00	8.40	2.14	2.05	2.25
Energy	398.80	81.50	20.78	2.63	40.68
Multisectoral	378.50	64.41	16.43	23.43	8.75
Transport	978.50	65.50	16.71	27.56	4.81
Other	567.56	95.16	24.27	10.52	39.34
Total	2,781.36	392.10	100	100	100

Table 11b: **Share of sectors in total Climate Finance – percentages, 2022, Public Sector** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
Agriculture	139.00	28.89	7.03	11.04	4.17
Financial Institutions	260.00	163.57	39.82	61.87	27.58
Education	61.00	0.54	0.13	0	0.20
Energy	115.00	36.68	8.93	0	13.89
Multisectoral	283.15	153.70	37.42	13.18	50.87
Transport	131.65	12.35	3.01	8.43	0
Other	90.24	15.04	3.66	5.48	2.65
Total	1,080.04	410.77	100	100	100

Table 11c: **Share of sectors in total Climate Finance – percentages, 2023, Public Sector** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
Agriculture	125.24	31.45	11.01	16.73	2.02
Financial Institutions	25.00	1.25	0.44	0.36	0.56
Education	83.50	9.74	3.41	0.29	8.32
Energy	0	0	0	0	0
Multisectoral	220	135.63	47.49	31.92	71.98
Transport	339.64	71.12	24.90	39.22	2.40
Other	107.69	36.40	12.74	11.49	14.72
Total	901.07	285.58	100	100	100

Table 12a: **Share of sectors in total Climate Finance – percentages, 2018-2021, Private Sector** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
Agriculture	0	0	0	0	0
Financial Institutions	685.00	115.54	40.79	100	37.78
Education	0	0	0	0	0
Energy	395.85	120	42.37	0	44.52
Multisectoral	0	0	0	0	0
Transport	95.20	45.20	15.96	0	16.77
Other	25.00	2.50	0.88	0	0.93
Total	1,201.05	283.24	100	100	100

Table 12b: **Share of sectors in total Climate Finance – percentages, 2022, Private Sector** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
Agriculture	0	0	0	0	0
Financial Institutions	383.32	26.66	25.47	0	25.47
Education	0	0	0	0	0
Energy	78.00	78.00	74.53	0	74.53
Multisectoral	0	0	0	0	0
Transport	0	0	0	0	0
Other	0	0	0	0	0
Total	461.32	104.66	100	0	100

Table 12c: **Share of sectors in total Climate Finance – percentages, 2023, Private Sector** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
Agriculture	40.00	8.80	6.68	14.38	4.35
Financial Institutions	156.78	48.03	36.44	85.62	21.57
Education	0	0	0	0	0
Energy	113.11	75.00	56.89	0	74.08
Multisectoral	0	0	0	0	0
Transport	0	0	0	0	0
Other	0	0	0	0	0
Total	309.89	131.83	100	100	100

Table 13a: **Distribution of OPEC Fund portfolio and Climate Finance by region, 2018-2021**

	OPEC Fund Finance	Climate Finance	Mitigation finance	Adaptation finance
ASP	817.10	153.15	80.15	73.00
LAC	670.50	145.60	124.15	21.45
MEC	980.46	198.31	159.24	39.07
Sub-Saharan Africa	1514.35	178.28	93.06	85.22
Total	3,982.41	675.34	456.60	218.74

Table 13b: **Percentage of Climate Finance to total regional allocation, 2018-2021**

	OPEC Fund Finance (US$MN)	Climate Finance (%)	Mitigation finance (%)	Adaptation finance (%)
ASP	817.10	18.74	9.81	8.93
LAC	670.50	21.72	18.52	3.20
MEC	980.46	20.23	16.24	3.46
Sub-Saharan Africa	1,514.35	11.77	6.15	5.63
Total	3,982.41	16.96	11.47	5.29

Table 14a: **Distribution of OPEC Fund portfolio and Climate Finance by region, 2022**

	OPEC Fund Finance	Climate Finance	Mitigation finance	Adaptation finance
ASP	220.00	110.00	110.00	0
LAC	390.00	171.33	86.83	84.50
MEC	375.00	105.07	72.86	32.21
Sub-Saharan Africa	556.37	129.02	99.11	29.92
Total	1541.37	515.43	368.80	146.63

Table 14b: **Percentage of Climate Finance to total regional allocation, 2022**
Regional split, 2022, percent of regional total

	OPEC Fund Finance (US$MN)	Climate Finance (%)	Mitigation finance (%)	Adaptation finance (%)
ASP	220.00	50.00	50.00	0
LAC	390.00	43.93	22.26	21.67
MEC	375.00	28.02	19.43	8.59
Sub-Saharan Africa	556.37	23.19	17.81	5.38
Total	1,541.37	33.44	23.93	9.51

Table 15a: **Distribution of OPEC Fund portfolio and Climate Finance by region, 2023**

	OPEC Fund Finance	Climate Finance	Mitigation finance	Adaptation finance
ASP	230.00	44.16	15.66	28.50
LAC	215.00	118.79	65.85	52.93
MEC	384.58	134.35	91.65	42.70
Sub-Saharan Africa	381.38	120.11	39.11	81.01
Total	1,210.96	417.41	212.27	205.14

Table 15b: **Percentage of Climate Finance to total regional allocation, 2023**

	OPEC Fund Finance (US$MN)	Climate Finance (%)	Mitigation finance (%)	Adaptation finance (%)
ASP	230.00	19.20	6.81	12.39
LAC	215.00	55.25	30.63	24.62
MEC	384.58	34.93	23.83	11.10
Sub-Saharan Africa	381.38	31.49	10.25	21.24
Total	1,210.96	34.47	17.53	16.94

Table 16a: **Total Climate Finance, Mitigation Finance, Adaptation Finance by Region, 2018-2021, 2022 and 2023**

	Mitigation			Adaptation			Total Climate Finance		
Regions	**2018-2021**	**2022**	**2023**	**2018-2021**	**2022**	**2023**	**2018-2021**	**2022**	**2023**
ASP	80.15	110.00	15.66	73.00	0	28.50	153.15	110.00	44.16
LAC	124.15	86.83	65.85	21.45	84.50	52.93	145.60	171.33	118.79
MEC	159.24	72.86	91.65	39.07	32.21	42.70	198.31	105.07	134.35
Sub-Saharan Africa	93.06	99.11	39.11	85.22	29.92	81.01	178.28	129.02	120.11
Total	456.60	368.80	212.27	218.74	146.63	205.14	675.34	515.43	417.41

Table 16b: **Share of Regional Climate Finance, Mitigation, Adaptation percentage to Regional Allocation, 2018-2021, 2022 and 2023**

	Mitigation (%)			Adaptation (%)			Total Climate Finance (%)		
Regions	**2018-2021**	**2022**	**2023**	**2018-2021**	**2022**	**2023**	**2018-2021**	**2022**	**2023**
ASP	9.81	50.00	6.81	8.93	0	12.39	18.74	50.00	19.20
LAC	18.52	22.26	30.63	3.20	21.67	24.62	21.72	43.93	55.25
MEC	16.24	19.43	23.83	3.46	8.59	11.10	20.23	28.02	34.93
Sub-Saharan Africa	6.15	17.81	10.25	5.63	5.38	21.24	11.77	23.19	31.49
Total	11.47	23.93	17.53	5.29	9.51	16.94	16.96	33.44	34.47

Table 17: **Regional contribution percentage to total OPEC Fund Finance Climate Finance, 2018-2021** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
ASP	817.10	153.15	22.68	33.38	17.55
LAC	670.50	145.60	21.56	9.81	27.19
MEC	980.46	198.31	29.36	17.86	34.87
Sub-Saharan Africa	1,514.35	178.28	26.40	38.96	20.38
Total	3,982.41	675.34	100	100	100

Table 18: **Regional contribution percentage to total OPEC Fund Finance Climate Finance, 2022** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
ASP	220.00	110.00	21.34	0	29.83
LAC	390.00	171.33	33.24	57.63	23.55
MEC	375.00	105.07	20.39	21.97	19.76
Sub-Saharan Africa	556.37	129.02	25.03	20.40	26.87
Total	1,541.37	515.43	100	100	100

Table 19: **Regional contribution percentage to total OPEC Fund Finance Climate Finance, 2023** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
ASP	230.00	44.16	10.58	13.89	7.38
LAC	215.00	118.79	28.46	25.80	31.02
MEC	384.58	134.35	32.19	20.82	43.18
Sub-Saharan Africa	381.38	120.11	28.78	39.49	18.42
Total	1,210.96	417.41	100	100	100

Table 20: **Regional contribution percentage to total OPEC Fund Finance Climate Finance, 2018-2021, 2022 and 2023**

	Mitigation (%)			Adaptation (%)			Total Climate Finance (%)		
Regions	**2018-2021**	**2022**	**2023**	**2018-2021**	**2022**	**2023**	**2018-2021**	**2022**	**2023**
ASP	17.55	29.83	7.38	33.38	0	13.89	22.68	21.34	10.58
LAC	27.19	23.55	31.02	9.81	57.63	25.80	17.64	33.24	28.46
MEC	34.87	19.76	43.18	17.86	21.97	20.82	29.36	20.39	32.19
Sub-Saharan Africa	20.38	26.87	18.42	38.96	20.40	39.49	26.40	25.03	28.78
Total	100	100	100	100	100	100	100	100	100

Table 21a: **Regional contribution percentage to total OPEC Fund Finance Climate Finance, Public Sector, 2018-2021** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
ASP	583.60	81.70	20.84	33.64	6.81
LAC	490.50	126.52	32.27	8.43	58.39
MEC	580.26	68.11	17.37	16.37	18.46
Sub-Saharan Africa	1,127.00	115.78	29.53	41.56	16.34
Total	2,781.36	392.10	100	100	100

Table 21b: **Regional contribution percentage to total OPEC Fund Finance Climate Finance, Public Sector 2022** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
ASP	122.00	72.00	17.53	0	27.26
LAC	310.00	171.33	41.71	57.63	32.87
MEC	255.00	65.07	15.84	21.97	12.44
Sub-Saharan Africa	393.04	102.36	24.92	20.40	27.43
Total	1,080.04	410.77	100	100	100

Table 21c: **Regional contribution percentage to total OPEC Fund Finance Climate Finance, Public Sector, 2023** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
ASP	150.00	22.16	7.76	10.03	4.20
LAC	215.00	118.79	41.60	30.33	59.31
MEC	219.69	58.31	20.42	15.76	27.75
Sub-Saharan Africa	316.38	86.31	30.22	43.89	8.74
Total	901.07	285.58	100	100	100

Table 22a: **Regional contribution percentage to total OPEC Fund Finance Climate Finance, Private Sector, 2018-2021** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
ASP	233.50	71.45	25.23	29.47	25.01
LAC	180.00	19.08	6.74	30.40	5.53
MEC	400.20	130.20	45.97	40.13	46.27
Sub-Saharan Africa	387.35	62.50	22.07	0	23.19
Total	1,201.05	283.24	100	100	100

Table 22b: **Regional contribution percentage to total OPEC Fund Finance Climate Finance, Private Sector, 2022** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
ASP	98.00	38.00	36.31	NA	36.31
LAC	80.00	0	0	NA	0
MEC	120.00	40.00	38.22	NA	38.22
Sub-Saharan Africa	163.32	26.66	25.47	NA	25.47
Total	461.32	104.66	100	NA	100

Table 22c: **Regional contribution percentage to total OPEC Fund Finance Climate Finance, Private Sector, 2023** (US$MN and percent)

	OPEC Fund Finance (US$MN)	Climate Finance (US$MN)	Climate finance contribution (%)	Adaptation finance contribution (%)	Mitigation finance contribution (%)
ASP	80.00	22.00	16.69	35.95	10.87
LAC	0	0	0	0	0
MEC	164.89	76.03	57.67	49.66	60.09
Sub-Saharan Africa	65.00	33.80	25.64	14.38	29.04
Total	309.89	131.83	100	100	100

Glossary

ACG	Arab Coordination Group
ADB	Asian Development Bank
AFD	Agence Française de Développement
AfDB	African Development Bank
AGTF	Africa Growing Together Fund
ASP	Asia and the Pacific
BCIE	Banco Centroamericano de Integración Económica
BOO	Build-own-operate
CAF	Development Bank of Latin America and the Caribbean
CAP	Climate Action Plan
CEPA	Comprehensive and Extended Partnership Agreement Armenia
CO_2e	Carbon dioxide equivalent
COP	Conference of the Parties
CPI	Climate Policy Initiative
DFI	Development finance institution
EBRD	European Bank for Reconstruction and Development
EMDE	Emerging Markets and Developing Economies
ESA	Eastern and Southern Africa
ESG	Environmental, social and governance
ESMP	Environmental and Social Management Plan Senegal
FDI	Foreign direct investment
GDP	Gross domestic product
GHG	Greenhouse gas
GoC	Government of Colombia
GoP	Government of Panama
GWh	Gigawatt hours
IDB	Inter-American Development Bank
IDFC	Infrastructure Development Finance Company
IFAD	International Fund for Agricultural Development
IFI	International financial institution
IMF	International Monetary Fund
INDC	Intended Nationally Determined Contribution
IPCC	Intergovernmental Panel on Climate Change
KfW	Kreditanstalt für Wiederaufbau
LAC	Latin America and the Caribbean
LDC	Least developed country

LTS	Long-term strategies
MDB	Multilateral development bank
MEC	MENA, Europe and Central Asia
MENA	Middle East and North Africa
MHCP	Ministry of Finance and Public Credit, Colombia
MW	Megawatt
NAP	National Adaptation Plan
NBS	Nature-based solutions
NCM	National carbon market
NDC	Nationally Determined Contribution
ND-GAIN	Notre Dame Global Adaptation Initiative
NGO	Non-governmental organization
NZS	New Zero Scenario
OECD	Organisation for Economic Co-operation and Development
PBL	Policy-based loan
PIGCC	Sector-Specific Climate Change Plans Colombia
PIPARV-B	Agricultural Production Intensification and Vulnerability Reduction Project Burundi
PMU	Project management unit
PNCC	Panama's National Climate Change Policy
PPP	Public-private partnership
PROVALE-CV	Water Valorization for Value Chain Development Project Senegal
SDG	Sustainable Development Goal
SEDS	Socio-Economic Development Strategy
SEforALL	Sustainable Energy for All
SIDS	Small Island Developing States
SNICC	National Climate Change Information System Colombia
SSINGEI	Sustainable System of National GHG Inventories Panama
STEM	Science, technology, engineering and mathematics
T&D	Transmission and Distribution
TWh	Terawatt hours
UNCDF	United Nations Capital Development Fund
UNFCCC	United Nations Framework Convention on Climate Change
WACA	West Africa Coastal Areas Management Program
WCA	Western and Central Africa
WFP	World Food Programme
WTG	Wind turbine generator

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