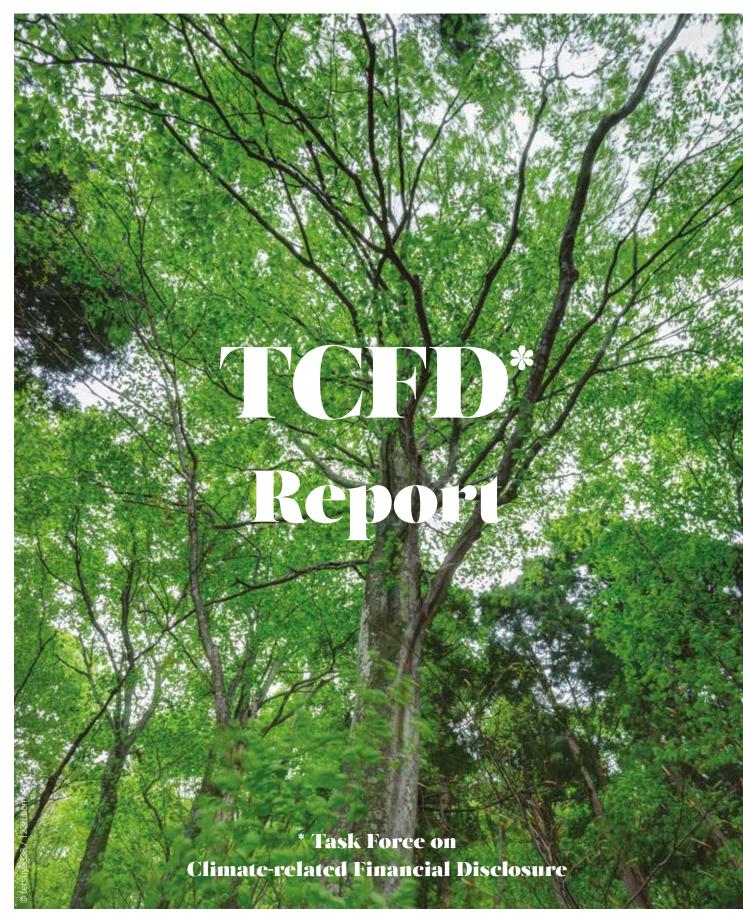


Liberté Égalité Fraternité





Overview

AFD Group is concerned by climate related financial risks both as a financial institution and as a development agency. It is its clients (governments, local authorities, companies, and banks) who may be vulnerable to physical or transitional risks, and thus experience difficulties in repaying their loans to AFD. As a financial institution, AFD Group must be able to measure this risk and report on it to regulators. AFD is also a development agency strongly committed to combating climate change, and supporting our customers and partners in identifying, analyzing, and mitigating climate risks is part of our mission.

In order to achieve this dual objective of better measuring its exposure to financial climate risks and better supporting its customers and partners in their transition, AFD Group has created a strategic and operational roadmap dedicated to financial climate risks that is in line with the TCFD's (Task Force on Climate-Related Financial Disclosure) recommendations.

Supporting our customers and partners in identifying, analyzing, and mitigating these risks is part of our mission as a development bank. As part of its commitment to transparency and accountability on climate issues, AFD Group presents its second TCFD report. This document details the Group's efforts to further develop and systematize its climate risk assessment processes, including the

evaluation of physical and transitional risks, and provides aggregated information on the Group's climate activity.

Some of the new features of this year's report, which follows the four TCFD guidelines, include:

- Governance: The Group has a well-established climate change governance structure, with a Board of Directors that deliberates on the Group's strategic priorities and corporate social responsibility (CSR) policy, and risk committees that are responsible for assessing all significant risks and the measures taken to remedy them, including climate change. AFD Group also relies on a number of additional teams within its executive departments, who are responsible for implementing the Group's climate and nature strategy on a day-to-day basis.
- Strategy: AFD Group has established a significant strategic corpus, including a climate strategy adopted in 2017 and a Strategic Orientation Plan (SOP) that commit the Group to aligning with the Paris Agreement. In addition, a roadmap dedicated to financial climate risks has been drawn up. It has been implemented since 2019 and mobilizes risk, operations, strategy, and research teams at AFD and PROPARCO.
- Risk management: In addition to the tools used for analyzing the funded projects, like the Vulnerability Climate Screening tool, AFD Group has been implementing processes to incorporate physical and transition climate risks into its credit risk analyses since 2020, at both sovereign and nonsovereign portfolio level, including in its IT system. The Group has also implemented tools and initiatives to support and raise awareness among its partners. They include support and technical assistance for financial intermediary partners on the subject of financial climate risks, and tools to help countries with their long-term strategies. Working closely with governments, central banks, and regulatory authorities, AFD is building research programs aimed at conducting in-depth assessments of financial

climate risks and making recommendations on public policies and risk management strategies for sovereign and non-sovereign stakeholders

- Metrics, risks, and opportunities: AFD Group has set a target of 50% of its annual funding in foreign countries for projects with climate co-benefits, including 30% for adaptation and 30% with biodiversity co-benefits. In addition, AFD Group has continued its efforts to take into account physical and transition risks in its portfolio. The key results for 2022 are as follows:
- 18% of the non-sovereign portfolio, i.e. the proportion of borrowers with a high level of risk for one or more physical climate risks. The "Three Oceans" geographical area, comprising the French overseas territories and foreign island states, is the most represented. Overall, AFD has high and very high exposure to each of the 5 climate risks analyzed, for at least 20% of its non-sovereign portfolio. Local authorities are the non-sovereign counterparties most highly exposed to climate-related risks.
- When it comes to transition risks, the results of the stress test carried out by the ACPR in 2020, which AFD voluntarily took part in, show that the risk could be high or higher for 9% of the portfolio, and very high for 3% of the portfolio. A satisfactory result, in line with AFD's intervention strategy and its 100% Paris Agreement policy.
- Lastly, with regard to its exposure in the fossil fuel industry, AFD Group reported to the ACPR, at the end of 2022, an exposure of 771 million euros¹, i.e. 1.2% of the Group's total balance sheet. Despite the Group's exclusionary policies, which cover the entire coal, oil, and gas value chain (including electricity), the Group does in fact have and will continue to have exposure to carbon-based electricity operators,

due to its significant involvement in supporting renewable energies and reinforcing power grids. This funding is earmarked for projects in line with the Paris Agreement and often actively contributes to the Group's and operators' mitigation objectives. This is essentially indirect exposure resulting from the exposure of the operators themselves.

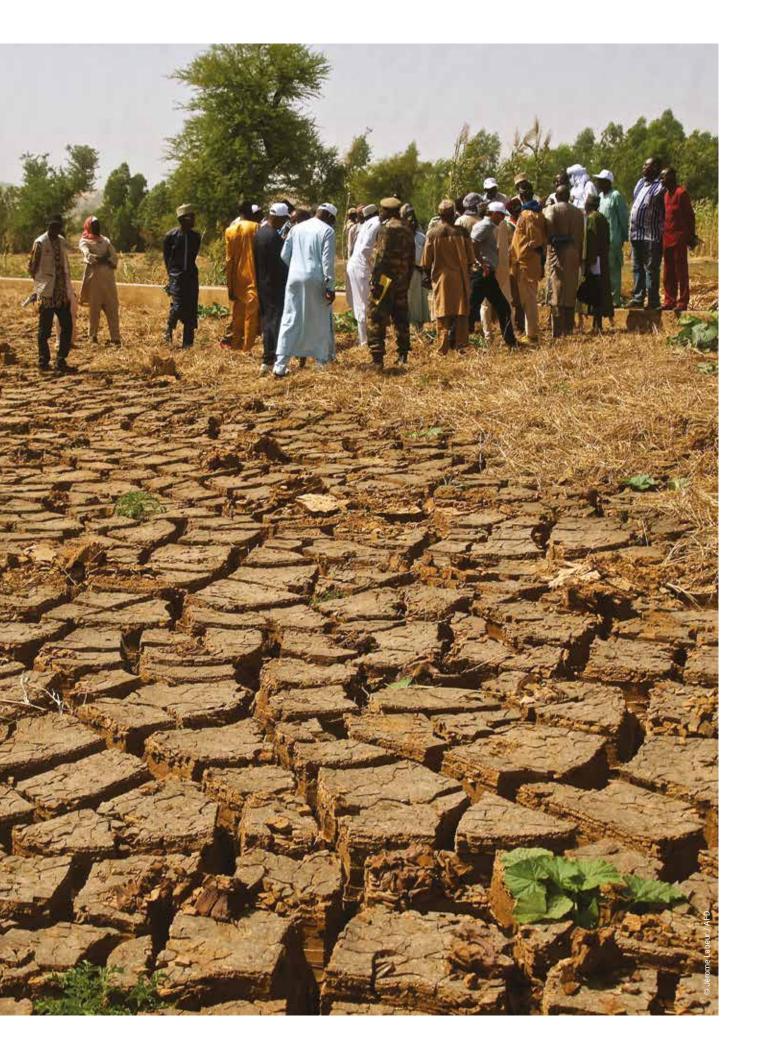
- In terms of climate finance, in 2022 AFD Group exceeded its objectives once again, with a record 6.9 billion euros of climate funding committed in developing countries and the French Overseas Departments and Territories, including 2.2 billion euros, or around one-third, dedicated to adaptation. Proparco approved 902 million euros for climate co-benefits, corresponding to over 40% of its annual commitments.
- Mitigation projects will save 10.5 million tons of CO₂ equivalent each year, over the lifetime of the projects.
- The Group is also pursuing its efforts in the area of sustainable bonds. After its first issue in 2020, AFD Group has completed 48% and 47% of its 2021 and 2022 programs respectively in a theme-based format.

AFD Group is constantly striving to improve the accountability of its climate activities, both quantitatively and qualitatively, and the publication of a TCFD report every two years is one of the cornerstones of this group-wide commitment •

^{1 •} Total outstanding amounts on electricity providers, weighted by the fossil fuel share (coal, oil, and gas) of the providers' electricity mix in MWh.

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Introduction

AFD Group is concerned by climate related financial risks both as a financial institution and as a development agency. It is its clients (governments, local authorities, companies, and banks) who may be vulnerable to physical or transitional risks, and thus experience difficulties in repaying their loans to AFD. As a financial institution, AFD Group must be able to measure this risk and report on it to regulators.

AFD is also a development agency strongly committed to combating climate change. A better understanding and consideration of financial climate risks has the potential of helping redirect public policies and the investment decisions of economic and financial

AFD is also a development agency strongly committed to combating climate change.

stakeholders to low-carbon, resilient pathways that are compatible with the objectives set out in the Paris Agreement. Supporting our customers and partners in identifying, analyzing, and mitigating these risks is part of our

mission as a development bank. In order to achieve this dual objective of better measuring its exposure to financial climate risks and better supporting its customers and partners in their transition, AFD Group has created a strategic and operational roadmap dedicated to financial climate risks that is in line with the TCFD's (Task Force on Climate-Related Financial Disclosure).

The TCFD was created in 2016, in the wake of COP21, by the G20 finance ministers meeting on the *Financial Stability Board*, to preserve global financial stability by encouraging economic and financial stakeholders to better understand and incorporate climate into their operations. In 2017, the TCFD drafted a series of recommendations to improve stakeholder transparency on taking climate change risks and opportunities into consideration voluntarily based on four main categories: governance, strategy, risk management, metrics and targets. Gradually, this approach has established itself as a standard for climate transparency.

The TCFD defines two main categories of risk: physical and transition risks.

Physical risks result from the damage directly caused to economic stakeholders by climate change through (i) extreme weather and climate phenomena (storms, heat waves, coastal flooding episodes, etc.) and (ii) gradual, long-term changes in the climate system (changes in precipitation, rising sea levels, average temperatures, etc.).

Transition risks result from the impact of a transition to a low-carbon economy on economic stakeholders, particularly when these adjustments are poorly anticipated or occur suddenly. The transition can come from political measures, technological developments conducive to the transition, and changes in consumer behavior

The Group publishes an annual climate report² which presents the level of funding related to climate change mitigation and adaptation. The Group also publishes an annual business and corporate social responsibility report³. AFD Group's TCFD report supplements these publications to provide a comprehensive account of how climate-related risks and opportunities are taken into account in the Group's governance, strategy, risk management and measurement indicators •

^{2 •} Climate - Activity Report 2022 | AFD - Agence Française de Développement

^{3 •} https://www.afd.fr/en/ressources/corporate-social-responsibility-activity-report-2023

1. Governance and Stakeholders

A DECISION-MAKING BODIES

AFD Group, which now consists of three organizations (AFD, Proparco, and Expertise France), supports, funds, and backs sustainable development initiatives in more than 150 countries and 11 French Overseas Departments and Territories. To achieve this, it has 3,500 employees and a network of 85 agencies worldwide.

AFD Group is a financial institution with a development mission, implementing most of France's development policy. ts objectives and resources are determined and renewed every two years by the Ministry of Europe and Foreign Affairs, the Ministry of the Economy and Finance, and the Ministry of Overseas France.

Status of Group Companies

Agence Française de Développement (hereinafter referred to as "AFD") is a state-owned industrial and commercial public establishment (EPIC), with its own legal status and financial independence. AFD is a finance company whose permanent mission is to serve the public interest. Its articles of association are codified in articles L. 515 13 and R. 515 5 to R. 515 25 of the French Monetary and Financial Code. AFD is managed by a Chief Executive Officer appointed for three years by decree (Article R. 515 16 of the French Monetary and Financial Code) and a Board of Directors acting within its remit (Articles R. 515 17 to R. 515 19 of the French Monetary and Financial Code).

As a finance company, AFD is directly supervised by the French Prudential Supervision and Resolution Authority (ACPR).

Proparco, a public limited company 79.76%-owned by AFD, is dedicated to promoting development projects, making equity investments, and granting loans in AFD's area of expertise.

Expertise France, a simplified joint stock company (société par actions simplifiée) 100% owned by AFD, provides French public technical assistance and international expertise abroad with bilateral and multilateral funding.

The Board of Directors

Since January 2022, AFD's Board of Directors has been chaired by Philippe Le Houerou. It is made up of 18 full members (and 17 alternates): 5

government representatives, 4 members appointed for their knowledge of economic and financial issues, 1 member appointed for their knowledge of environmental and sustainable development issues, 1 member appointed for their knowledge of migration issues, 4 members of parliament, and 2 elected members representing AFD personnel. A government commissioner sits on the Board.

The Board decides on the Group's strategic priorities. It has approved AFD Group's climate strategy (2017-2022)⁴ and corporate social responsibility (CSR) policy⁵ and is notified of their implementation and updating. The mid-term review of the climate strategy was submitted to the Board for approval in July 2020. The Board also approved the energy transition strategy⁶ and its midterm review⁷ in October 2021. This strategy covers the entire energy industry and specifies the Group's policy of excluding fossil fuels, including gas, in line with our commitments to the Paris Agreement. All these exclusions have been included in AFD Group's global exclusion list8. The Board of Directors decides on the projects and financial aid granted by AFD, based on project presentation documents that systematically present the project's consistency with AFD's climate strategy, the associated climate risks, and a qualitative analysis of its alignment with the Paris Agreement (in terms of low-carbon transition and resilience).

Proparco's Board of Directors sets the guidelines for Proparco's activities and oversees their implementation. It validated Proparco's 2023-2027 strategy, which is an extension of the Group's strategy and includes a strong climate component with the objectives of increasing funding for mitigation and adaptation, supporting customers' transitions, and promoting innovative solutions.

Expertise France's Board of Directors decides on the company's affairs, and in particular on how the company is structured and operates, its objectives and means, and its general guidelines. Expertise France's latest Objectives and Means Contract (COM) includes an objective on "combating climate change and preserving biodiversity" which stipulates that Expertise France is committed to fulfilling AFD Group's pledge to be 100% compatible with the Paris Agreement •

The Executive Committee

AFD's Executive Committee (COMEX) is made up of 3 representatives from senior management, the Executive Directors, the Inspectorate General and the Managing Directors of Proparco and Expertise France. The COMEX meets several times a year to discuss major issues relating to sustainable development objectives, especially climate and biodiversity. It oversees the implementation of AFD Group's climate and biodiversity objectives and confirms their main focuses.

Every two years, the Executive Committee is notified of work on financial climate risks pursuant to the internal roadmap on the subject.

Proparco's Executive Committee (COMEX) is made up of senior management and the heads of the various departments. It discusses internal guidelines and policies, and oversees all aspects of the Group's activities, including climate finance and the alignment of operations with the Paris Agreement.

B THE COMMITTEES

Group Risk Committee (GRC)

Reporting to the Board of Directors, the Group Risk Committee is responsible for (i) regularly reviewing strategies, policies, procedures, systems, tools and limitations, and underlying assumptions, (ii) assessing all significant risks, risk management policies and changes thereto, (iii) assessing measures taken to ensure business continuity, (iv) advising the Board of Directors on AFD Group's overall strategy and risk appetite.

Risk Committee (CORIS)

Chaired by the Executive Vice President of Risks (DXR), the committee is responsible for proprietary risks within AFD Group. It meets twice a year in a "country risk" format and quarterly in a "counterparty risk" format. The assessment methodologies and aggregate indicators of the non-sovereign portfolio's exposure to financial climate risks are presented, providing the Committee with a macro view of AFD portfolio's exposure to these risks. The methodology for analyzing physical risk was validated by the Country Risk Committee (CORIS country) in May 2019, while that for transition risk was validated in May 2022.

Theme-based Bond Monitoring Committee (COSOT), which took over from the Climate Bond Monitoring Committee in 2021.

It is made up of representatives from Proparco's Finance Department (DEF), Innovation, Strategy and Research Department (ISR), Geographies Department (GEO), Sustainable Development Solutions Department (SDD), and Support for Sustainable Development Department (A2D). It meets every six months and reviews the pool of assets underlying AFD Group's theme-based bond issues (climate and sustainable bonds) to ensure compliance with the criteria established for theme-based bond issues, and to validate the *reporting* documents shared with investors in line with the four principles of the *Green Bond Principles & Social Bond Principles*.

For AFD Group as a whole, the Audit Committee is responsible for verifying the quality of the information provided and assessing the relevance of accounting methods, as well as the quality of internal controls. The Audit Committee includes one Board member and four external experts.

The Climate and Biodiversity Risks Steering Committee

(COPIL). COPIL is an internal committee that includes members from several departments and divisions of AFD Group to steer and monitor the climate and biodiversity risk roadmaps and coordinate the various teams' work. COPIL includes teams from the executive departments responsible for operations, risk management, research and strategy, etc. with the aim of coordinating work and progress in this area. It meets once a year •

^{4 ·} https://www.afd.fr/en/ressources/climate-development-2017-2022-strategy

^{5 • 2018-2022} AFD Group Corporate Social Responsibility Policy | AFD - Agence Française de Développement

^{6 · 2019-2022} Energy Transition Strategy | AFD - Agence Française de Développement

^{7 • 2019-2022} Energy Transition Strategy - Mid-term review | AFD - Agence Française de Développement

^{8 ·} AFD Group's exclusion list | AFD - Agence Française de Développement

NETWORK

REGIONAL DIRECTORATES (RD)

Steering the objectives of the regional portfolio

Leading regional projects and regional initiatives

Agency support

(regional theme-based network, regional training courses, studies, project appraisal support) - some climate experts in the RDs

NETWORK OF AGENCIES

Key role in identifying, monitoring, and implementing climate co-benefit projects (inclusion in country strategies, customer dialog and awareness-raising, etc.)

Responsible for project-wide deployment of the *Climate Screening* tool for physical risks

Measuring the agency's carbon footprint

HEADQUARTERS: DIREX SI

CROSS-CUTTING SDGS DEPARTMENTS

CLIMATE AND ENVIRONMENT DIVISION (SDD / CLN)

Support for project teams and qualification of project climate co-benefits

- Monitoring/steering the implementation of the Group-wide climate strategy and climate accountability, including support for Group-wide crossfunctional climate projects
- Methodological development and dialog with peers on climate issues
- Head office of the two climate facilities: 2050 Facility and AdaptAction Program

HEADQUARTERS: DIREX INNOVATION, STRATEGY AND RESEARCH (ISR) / DIREX RISKS (DXR) / DIR

ECONOMIC ASSESSMENTS AND PUBLIC POLICIES DEPARTMENT (ISR / ECO)

Inclusion of climate risk (physical and transitional) in country risk analyses

Development and use of modeling tools: GEMMES, ESTEEM, and ESGAP

Design and management of country studies on the financial impact of the lowcarbon transition on national economies STRATEGY, FORESIGHT AND INSTITUTIONAL RELATIONS DEPARTMENT (ISR / SPR)

Sustainable development analysis and recommendations taking into account the low-carbon and resilient transition aspects, ensuring the project's alignment with the Paris Agreement

Group-wide support for cross-cutting climate projects

Implementation of the Group's CSR policy and extra-financial reporting, including its climate commitments.

NETWORK OF CLIMATE COORDINATORS AT HEAD

JSTAINABLE DEVELOPMENT SOLUTIONS (SDD) / DIREX GEOGRAPHIES (GEO) / DIREX FINANCE

TECHNICAL SECTOR DIVISIONS (SDD)

Project team leaders develop climate expertise linked to their sector of activity, enabling them to include climate issues in project appraisals. They liaise with the agencies and the various support teams (including the climate and nature division) to ensure that the climate targets set for each geographical department are met.

GEO DEPARTMENT (GEO)

The Operational Activity Management Division monitors and ensures that our climate objectives are met at the portfolio level

Geographical departments ensure climate targets are met in their own portfolios

FINANCE DEPARTMENT (DEF)

Raising market resources by issuing climate and sustainable development bonds

Financial communications

EX MOBILIZATION, PARTNERSHIPS AND COMMUNICATION (MPC) / GENERAL SECRETARIAT (SGN)

RISK DEPARTMENT

Credit Risk, Climate, Second Opinion Division in charge of analyzing (physical) climate and transition risk for the non-sovereign portfolio

Risk strategy and regulation unit coordinates dialog with regulators on climate risks

PARTNERSHIPS DEPARTMENT (MPC)

Strategic partnerships:

IDFC, FiCS and dialog with peers including multilateral development banks and coalitions of financial system climate stakeholders

Management of external delegated funds to support the appraisal of projects submitted to the Green Climate Fund, the NAMA Facility, and the EU

GENERAL SECRETARIAT / SGN

Internal Environmental Responsibility unit dedicated to measuring the GHG emissions generated by the Group's operations, defining an emissions reduction strategy, and overseeing compensation measures

Legal department responsible for monitoring regulatory obligations in conjunction with the Strategy and Finance departments

QUARTERS, BRANCHES, AND REGIONAL OFFICES

C • CLIMATE DUE DILIGENCE SUPPORT TEAMS

A team dedicated to climate issues supported by a network of over 100 expert agents:

Since 2022, the Climate and Nature Division (CLN) has brought climate and biodiversity issues under a single entity. Made up of 26 agents, the CLN division is responsible for incorporating climate and biodiversity into AFD's activities, strategy, mobilization capacities and accountability.

Part of the Sustainable Development Solutions Division with a Group-wide⁹ mission, this team is responsible for developing and monitoring the implementation of the Group's climate and nature strategy, converging issues that will be combined in a single roadmap for the first time.

With regard to climate and nature issues, the CLN division has two main missions:

1/ It provides comprehensive support for operational teams to ensure that climate and biodiversity issues are taken into account in all the Group's sectors and regions. To achieve this, it supports project appraisal and operational strategies, and develops

methodologies and tools designed to identify climate and biodiversity issues for each country, and to draw up sustainable and just development pathways. It develops and updates accounting methodologies for climate and nature finance. It calculates the contribution of AFD-financed projects to climate change mitigation and adaptation, as well as biodiversity conservation and sustainable management, and ensures accountability for this contribution

2/ The team leads the mobilization of international climate financing, in particular with the Green Climate Fund, and cultivates partnerships with other donors, French and international think-tanks, French banks, NGOs and government ministries. It supports French environmental diplomacy in international negotiations, mobilizes its peers (multilateral, national and regional banks within the IDFC Club¹o and the Finance in Common network¹¹) and promotes AFD Group's climate and environmental results.

Given the Group's climate ambitions, efforts have been made to disseminate climate expertise.



^{9 ·} Including Proparco, which draws on this expertise and also has in-house expertise

^{10 •} International development finance club - a network of 26 national, regional, and bilateral development banks (see page 26).



The CLN division relies on a network of over 100 focal points at headquarters, in all executive departments and at AFD's regional representative offices, as well as in certain countries. The climate and nature specialists are responsible for supporting teams in incorporating climate issues into their activities and coordinating the contribution of their respective organizations to the objectives of the climate strategy. AFD coordinates the community of climate focal points through bi-monthly newsletters, regular meetings, and an annual face-to-face seminar. To reinforce this ambition, the CLN division designs and leads internal training courses for agents at headquarters within the network, and external training courses for our partners.

At AFD, a 19-strong team dedicated to providing support on environmental and social issues also ensures that environmental and social due diligence is carried out on funded projects, with particular attention paid to climate risks. The team assesses the environmental and social risks and impacts of each project presented to the decision-making bodies and identifies measures to remedy the situation, drawing on CLN's expertise in adaptation solutions.

Proparco relies on a dedicated department (A2D) to ensure that sustainable development issues are taken into account in its operations and by its customers, and to help improve practices. It includes Proparco's experts in three fields: Environmental, Social and Governance (ESG), impact measurement and management, technical support and resource mix. These teams deal with a wide range

of climate-related issues: taking into account the physical climate risks to which projects are exposed, analyzing the risk of misaligning projects with the Paris Agreement, accounting for the climate co-benefits of projects, mobilizing delegated funds such as those from the Green Climate Fund, and helping customers incorporate climate issues into their strategies and operations. Each task force also includes a contact person.

In 2014, AFD also set up a Sustainable Development Analysis and Advisory System (SDAA). All projects funded by AFD are subject to an impact analysis covering six cross-cutting aspects (climate, biodiversity, social cohesion, gender, governance and the economy) and the 17 Sustainable Development Goals (SDGs)12. The system is a dialog tool in AFD's funding appraisal process. Its aim is to raise questions and encourage officers to consider the impact of projects on sustainable development as far upstream as possible. When it comes to the climate, the system can be used to assess the extent to which physical and transition risks have been taken into account by the project and/or the borrower, as the case may be. This analysis is prepared by the project teams and is used as the basis for a Sustainable Development Opinion issued by an independent body, part of the Strategy Department of the ISR Executive Division, staffed by 7 full-time analysts. The rating table for the sustainable development analysis system was adapted in 2022 to the specific needs of subsidiaries and is currently being rolled out by Proparco and Expertise France •

^{11 •} Finance in Common (FiCS) - a network of public development banks aiming to strengthen partnerships between development banks in order to align their funding with the Sustainable Development Goals and the Paris Agreement.

^{12 •} https://www.afd.fr/en/sustainable-development-analysis-opinion-mechanism

D INTEGRATION OF THE FINANCIAL CLIMATE RISK ASSESSMENT ROLE IN THE RISK MANAGEMENT DEPARTMENT (DXR) AND THE INNNOVATION, STRATEGY, AND RESEARCH DEPARTMENT (ISR)

The Credit, Climate and Second Opinion (CCS) risk assessment division was set up on September 5, 2022 under the Group Risk Management Department (GRM). It is the result of the merger of the former CRD division (credit risk assessment division) and the SOP unit (in charge of issuing regulatory second opinions), and makes it possible to systematically integrate the assessment of financial climate risks by establishing a climate risk score for each non-sovereign counterparty, for all loan funding and during the annual risk review of the non-sovereign portfolio. The division employs a total of 22 people, including 2 analysts who devote part of their time to managing the financial climate and biodiversity risk (development of methodologies and tools, reporting and communication, internal training courses and external exchanges).

As part of the Executive Division (ISR), reporting to the Economic Assessments and Public Policies (ECO) department, the division in charge of country risk analysis has systematically included the assessment of financial climate risks in country risk mission reports, as well as in biannual country risk sheets since November 2022. The division employs a total of 12 people •



















2. Strategies

A . THE GROUP'S CLIMATE STRATEGY AND FUTURE

In 2017, the French government announced in its climate plan that AFD Group would become the first bilateral development bank with an explicit mandate to implement the Paris Agreement. AFD Group has included this commitment in its 2017-2022 climate strategy and its **strategic orientation plan** adopted in 2018, making a commitment to be 100% Paris Agreement. This commitment sets a strong, clear course for AFD Group which is committed to making all its activities compatible with a low-carbon transition and resilient development.

Implementing a climate strategy for AFD Group: In 2007, AFD adopted a "green and inclusive growth" approach and its first climate strategy. Since then, climate issues have become an increasingly important part of AFD's funding activities. It became a strong marker of the bank's identity in 2012 with the adoption of three fundamental commitments:

(i) the measurement of the carbon footprint of the projects funded (carbon footprint) and the evaluation of their potential benefits in terms of adaptation to the effects of climate change, (ii) the objective of devoting

50% of funding to projects with climate co-benefits in foreign countries, and lastly (iii) a selective approach to projects in terms of their impact on the climate, taking into account the level of development of the countries concerned, leading to a halt in funding for high-emission projects in emerging countries.

The Group's latest climate strategy¹³ was adopted in 2017 for a 6-year period (2017-2022). This strategy, which is both operational and partnership-based, is based on 4 major commitments:

① Ensuring that our activity is 100% Paris Agreement-compliant: this means that AFD assesses the operations it funds to ensure that they are consistent with decarbonization and resilience strategies, with regard to national climate policies, nationally determined contributions (NDCs) and the countries' main climate challenges (mitigation, adaptation, etc.).

This commitment is set out in sector strategies, which specify funding conditions for sectors deemed sensitive that require greater selectivity. These strategies help reduce and manage the Group's and our partners' low-carbon transition risk, foremost among them the Energy Transition Strategy¹⁴, reviewed and updated in December 2021¹⁵. In particular, this strategy includes a stringent exclusion list covering all activities related to the fossil fuel sectors, including electricity¹⁶.

- ② Increasing volumes of climate finance: In total, over the 2017-2022 period, AFD Group has committed 33.3 billion euros in climate finance, including 11.3 billion euros in adaptation finance¹⁷, thus meeting the target of dedicating 50% of its annual funding to projects with climate co-benefits (including 1/3 for adaptation to the impacts of climate change). This testifies to a major climate mainstreaming effort in all AFD and Proparco's sectors of activity and geographical areas where they operate.
- ③ Contributing to redirecting financial flows towards investments consistent with low-carbon and resilient strategies: this commitment has led the Group to increase co-financing, in particular with IDFC members, to develop climate-related support for the Group's public and private financial institution partners, to mobilize private finance to a greater extent, to develop new innovative financial products and to seek financial resources for the climate from the Green Climate Fund and the European Union. At the same time, AFD continues to play an active role on the markets by issuing climate and sustainable bonds.

AFD Group also seeks to regularly raise its ambition in terms of supporting its partners and customers (governments, businesses, financial institutions, and local authorities) in adopting climate strategies aligned with the Paris Agreement, for a stronger redirection of financial flows. This support can be provided in addition to funding and project appraisal procedures. In particular, this approach¹⁸ makes it possible to take into account and manage climate-related financial risks at the customer level, regardless of the project being funded.

^{13 •} https://www.afd.fr/en/ressources/climate-development-2017-2022-strategy

^{14 •} https://www.afd.fr/en/ressources/energy-transition-2019-2022-strategy

 $^{15 \}cdot \underline{\text{https://afd.fr/en/ressources/energy-transition-strategy-2019-2022-mid-term-review}}$

^{16 •} https://www.afd.fr/en/ressources/afd-group-exclusion-list

^{17 •} Scope: Developing countries and French overseas departments

 $^{18 \}cdot \underline{\text{https://www.afd.fr/en/ressources/paris-alignment-operations-financial-institutions-afd-group-perspective}$

4 Jointly establishing solutions and influencing standards

AFD Group shares its practices in with Paris alignment the Agreement, finance. and integrating financial climate Through the International Development Finance Club (IDFC), which it has chaired since 2017 - having committed nearly \$1 trillion (USD) in green finance over the 2017-2021 period - and the Finance in Common (FiCS) initiative launched in 2020, AFD is encouraging public development banks to step up their climate commitments. Regular dialog is also maintained with NGOs and civil society through a Partners Committee.

At the same time, since 2020 AFD Group has been committed to aligning its internal practices by reducing its operating carbon footprint. In 2022, an ambitious target of a 30% reduction in GHG emissions by 2030 compared to 2019 was set by senior management. A study has shown that the various avenues to be explored mainly concern the global travel policy and a better understanding of the emissions purchases generated by our of services. The governance of this trajectory will make it possible to define, implement, and monitor the various actions in these areas in order to achieve this objective. The departments in charge of CSR and internal environmental responsibility have also begun to roll out the Climate Fresk to 318 employees by 2022. Climate focal points in charge of disseminating climate expertise throughout the AFD network play an important role in this awareness-raising effort. The Group is also continuing to improve its climate transparency by enhancing its Open Data platform and extending its reporting.

In 2023, alongside AFD Group's 5th Strategic Orientation Plan (POS 5), AFD is working on its future "Planet" roadmap, which will spell out its ambition to jointly meet the challenges of climate change and biodiversity •

AFD Group's climate funding since 2017 Changes in Group commitments / in € billions 6.9 6.2 6 5.3 4.9 4 2.3 2018 2017 2019 2020 2021 2022 Adaptation funding Mitigation funding Breakdown of commitments since 2017 **€11.3** billion for adaptation €22 billion for mitigation Annual funding for adaptation doubled since 2017 climate projects funded between 2017 and 2022 avoided annually over the lifetime **45** MtCO₂

of mitigation projects funded between 2017 and 2022

B • TOOLS FOR IMPLEMENTING THE STRATEGY

AFD Group sees alignment with the Paris Agreement as a two-fold imperative: ensuring that 100% of the projects it funds are aligned with the Paris Agreement (the "do no harm" principle) and seeking to maximize the mitigation and adaptation impact of all its funding through project design and support for its partners. The Group has developed several tools to facilitate alignment analysis by opertational teams: the Sustainable Development Analysis and project misalignment risk analysis methodologies, country climate analyses, 2050 and AdaptAction facilities.

The Group's strategy for alignment with the Paris Agreement was externally analyzed by the think-tank E3G¹⁹ and was rated the best among its peer group (bilateral and multilateral public development banks)²⁰. The rating ranges from - 2 to + 3: projects

SD Opinion

Set up in 2014, the Sustainable Development Analysis and Opinion system aims to facilitate the cross-functional consideration of sustainable development issues in the Group's funding operations²¹. In 2017, it was modified to incorporate the new guidelines of the climate strategy and the consistency of projects with the Paris Agreement: the analysis table, updated again in 2022²², details the rating criteria for "low-carbon" and/or "resilient" projects, based on a qualitative approach.

receiving a negative rating are those that are "inconsistent with the country's climate policy objectives or the issues identified as part of the analysis of its low-carbon strategy", "inconsistent with the adaptation objectives of public policies and representing a risk of increasing the area's vulnerability", "exposed to negative climate risks without taking adaptation measures to deal with them", or "involving a structuring long-term lock-in effect".

The selectiveness required by the "100% Paris Agreement" commitment is achieved first and foremost by opertational teams, when identifying projects. Projects are then submitted to the Sustainable Development opinion, which analyzes each project's alignment with the Paris Agreement, both in terms of low-carbon transition and resilience, as described above.

Between 2020 and 2022, an average of 90.5% of projects achieved a positive rating (+1, +2 or +3) on climate change mitigation or adaptation (86.7% of projects in 2020, 89.8% of projects in 2021 and 94.8% of projects in 2022). In the same vein, the number of projects with a positive impact on the low-carbon pathway has been rising steadily since 2018, from 2019 to 55% in 2022. 13 projects are estimated to have a structuring impact on the low-carbon strategy in 2022 (+3 rating). These projects aim to establish a low-carbon pathway by combining: a technical measure that enables long-term carbon efficiency, the mobilization of financial and private players to increase funding for the country's low-carbon pathway, and support for public policies. These projects include, for example, support for South Africa as part of the Just Energy Transition Partnership (JETP).

The "resilience to climate change" sub-dimension is the one in the "Planet" category where progress has been strongest. Between 2018 and 2022, the share of projects with significant and structuring impacts on this dimension more than doubled, from 16% (28 projects) to 40% (86 projects).

Between 2020 and 2022, 5 projects (out of a total of 600) received a negative or double-positive-negative rating on at least one of the two climate dimensions (including 2 in 2020, 2 in 2021 and 1 in 2022). The remaining projects were deemed compatible (neutral rating "0").

In 2022, the Group completed a project to converge its sustainable development analysis systems. Proparco and Expertise France now have impact analysis tables that are consistent with AFD's Sustainable Development Analysis and Opinion System,

 $^{19 \}bullet \underline{\text{https://www.afd.fr/en/actualites/are-afds-actions-aligned-paris-climate-agreement}}$

^{20 •} See: https://www.e3g.org/bdb-matrix/ et https://www.e3g.org/mdb-matrix/

^{21 •} The six dimensions of sustainable development analysis are: (i) preservation of biodiversity, management of environments and natural resources; (ii) climate (divided into two areas: transition to a low-carbon pathway and resilience to climate change); (iii) social cohesion: promoting inclusion and reducing inequalities; (iv) gender equality; (v) sustainable, resilient economy; (vi) sustainability of project impacts and governance framework. For more information: https://www.afd.fr/en/ressources/sustainable-development-analysis-grids

 $^{22 \}cdot \underline{\text{https://www.afd.fr/en/actualites/how-afd-group-aligns-its-projects-un-sustainable-development-goals}}$

and adapted to the specific nature of their businesses. This analytical framework provides a shared basis for dialog with partners and clients on sustainable development issues. It will enable us to share training courses, tools, and practices for improving Group practices.

Proparco has developed and implemented methodologies for analyzing the risk of misalignment with the Paris Agreement by type of project ("direct" funding and intermediated funding - via financial institutions and investment funds):

- Since 2018 for "direct" projects, this risk can be due to a high intrinsic level of greenhouse gas emissions (assessed by a carbon intensive footprint), a misalignment of the project with the country's decarbonization pathway, a lock-in effect in a carbon intensive pathway or even a crowding-out effect of the investment on less carbon-intensive alternatives.
- Since 2021 for projects with financial institutions, Proparco has begun to analyze the exposure of loan portfolios to the main emissions-intensive sectors (coal, oil, gas) and to support financial institutions in incorporating climate issues into their strategies and operations.

Country climate analyses: For each country where we operate, "climate country factsheets" have been drawn up to inform project sustainable development analyses, support public policy dialog with national authorities, and provide input for drafting all geographical strategies. These sheets, along with sector strategies, help to identify projects at an early stage.

AFD has deployed 3 main tools to support countries' long-term strategies: the 2050 Facility to support the transition to low-carbon and resilient pathways, the Adapt'Action Facility to boost resilient investments in the most vulnerable countries, and the GEMMES modeling tool to identify the macroeconomic impacts of climate change and low-carbon transition²³ •

The 2050 Facility: Supporting low-carbon, resilient pathways in our partner countries

Since 2018, the 2050 Facility has been supporting AFD's partner countries in developing and implementing their long-term low-carbon and climate-resilient development (LCCRD) strategies.

It funds studies and institutional and technical capacity-building initiatives in some thirty countries in Africa, Latin America, and the Asia-Pacific region. Through a technical cooperation program led by the Global Green Growth Institute (GGGI), the Facility has supported the formulation of LCCRDs in Burkina Faso, Ethiopia, and Vanuatu, which were presented at COP27. It also supported implementing the 2050 National Decarbonization Plan in Costa Rica on behalf of the Ministry of the Environment and Energy (MINAE) and in collaboration with the NGO Costa Rica Por Siempre.

C . THE FINANCIAL CLIMATE RISKS ROADMAP

A climate risk roadmap was approved by the COMEX in 2019. It is structured around 4 main areas:

- ① AFD Group's approach to climate-related financial risks as a financial institution: development and use of physical and transition risk analysis tools for all new loans, portfolio-wide risk monitoring, support and training courses for in-house teams, and monitoring of methodologies.
- **(2) Mobilization of financial climate risks** for public policy dialog with the Group's clients and partners (governments, local authorities, financial institutions, and businesses): detailed risk assessment studies at the country level, using macroeconomic and/or microeconomic tools (see section 3.c. Support for partners and clients), strategic discussions with governments, sectoral ministries (energy, environment, agriculture, transportation, etc.), businesses, financial institutions and local authorities to gain a better understanding of risk levels and develop risk reduction and management strategies.
- ③ Contributing to adopting tools for analyzing financial climate risks within financial systems in countries where the Group operates, and by AFD Group partner financial institutions: discussions with partner financial institutions on taking financial climate risks into account, support and technical assistance made available to financial institutions, institutional cooperation and financial public policy dialog with central banks and regulators.
- **Ontributing to international discussions** and developing standards on financial climate risks: participating in international and national dialogs through the *Mainstreaming Climate action in Financial Institutions initiative*²⁴ and other working groups and coalitions (IDFC, ALIDE, GIFS, etc.), publishing reports, research papers and capitalization notes²⁵, creating MOOCs²⁶.

This cross-cutting roadmap mobilizes risk, operations, strategy, and research teams at AFD and PROPARCO and is monitored annually by a steering committee and the Group's Comex.

^{24 ·} https://www.mainstreamingclimate.org/

^{25 ·} https://www.afd.fr/en/ressources/why-and-how-should-development-banks-take-physical-climate-risks-account

^{26 ·} https://www.afd.fr/fr/campus-afd/mini-mooc-risques-financiers-climatiques



D • ADOPTING CLIMATE OBJECTIVES

Continued focus on training courses

To ensure that the climate strategy is well known and benefits from a high level of ownership by all AFD Group staff, and that it is implemented by all executive departments, the CLN division provides several types of training courses on climate change and climate finance on a recurring basis or at the request of technical and geographical teams and, since the inclusion of nature in its remit in 2022, on biodiversity.

In particular, the division provides:

- A comprehensive 3.5-day annual training course on the challenges of climate change, climate finance, mitigation, adaptation and biodiversity;
- Twice a year, the climate and biodiversity module of the integration program for new employees ("onboarding");
- Once or twice a year, a specific training course on the AFD carbon footprint tool, and approximately every 2 years, a training course on the FAO carbon footprint tool for the agriculture, forestry and other land use sector (AFOLU);
- Once a year, a 2.5-day training course on climate change and climate finance at AFD Campus, as part of the Project Management for Development (MODEV) Masters program for foreign executives and civil servants;
- Where necessary, specific training courses are organized for local agencies, by regional offices, at the occasion of field missions, and to PROPARCO.
- **In terms of knowledge sharing**, to ensure the dissemination of information and participate in "mainstreaming" in all sectors and geographical areas:
- Holding bi-annual meetings for country directors ("Winter Meetings" and "Summer Meetings") to inform them on specific points relating to climate change, biodiversity, changes in methodologies, or the international framework, etc.
- Numerous climate-related informative events are also held, either for AFD colleagues or open to the public, for example: "Disaster risk reduction and contingency loans" in October 2023, round table in March 2023 on "Social protection in the age of adaptation to climate and environmental upheaval".

- In terms of online training courses, the Group is committed to producing **digital self-training modules** for both internal and external audiences on the following subjects:
- Climate finance, mitigation, carbon footprint, adaptation, climate and biodiversity in 4 languages (French, English, Spanish and Chinese) published in: https://mooc-campus.afd.fr/course/ and long-term strategies: https://mooc-campus.afd.fr/enrol/synopsis/ index.php?id=5
- An online training course on climate related financial risks, with a first part Climate Financial Risks, launched in 2021, aimed at providing the keys to understanding climate related financial risks (physical and transition), their potential impacts on financial stability and on financial sector oversight; a second part where AFD experts provide the keys to analyzing the specific mechanisms through which climate related financial risks can affect different types of economic actors: countries, local authorities, financial institutions, and companies.

Lastly, ensuring that all AFD employees understand the issue of climate risks is a major challenge for the Group, and in addition to the climate training courses described above, a major effort has been made to train all employees:

- Risk culture training: as part of the Group's risk culture, training courses include a module on climate related financial risks
- On-site methodological training during assignments: every time Risk Department staff travel, the training course offered to local staff includes a module dedicated to climate risks.
- In 2022, 238 agents (638 hours in total) were trained during the above-mentioned training courses.
- Since 2021, in-house training courses on country risk have also included a session dedicated to assessing physical risks, also including an assessment of transition risks and their macroeconomic consequences since 2022.

In addition, many other in-house training courses, attended by hundreds of employees every year, incorporate climate issues from a more sector-based perspective ("energy transition", "financial systems", "transportation", "water and sanitation", "sustainable cities", etc.).



In 2023, the Risk Department will continue its efforts to provide training in climate related financial risks by holding a training course for all agencies and regional offices which is scheduled for the second half of the year. The aim of this series is to train all network agents working on projects in tools for analyzing climate related financial risks (physical risk and transition risk) at the partner level •

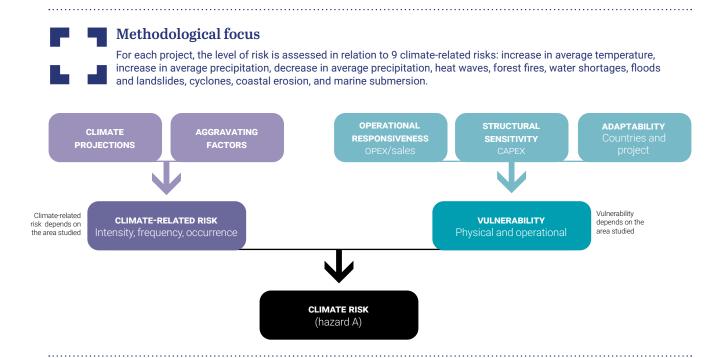
3. Risk management

A . INTEGRATING PHYSICAL RISKS

For funded projects, a climate risk analysis approach has been in place since 2015 aimed at determining the level of functional and/or structural risk that each project could face as a result of the expected effects of climate change. The aim of this approach is to identify high-risk projects as early as possible so that the risk can be taken into account at the appraisal stage, where appropriate.

The "Climate Screening" in-house tool is easy to use for non-experts and helps them to better anticipate the project's climate/adaptation challenges.

The methodology used by the tool to analyze the climate vulnerability of AFD projects can be summarized as follows:



In 2020, the tool was updated and widely distributed within AFD Group with the aim of increasing the number of users. Originally available in French, the tool is currently being translated into Spanish and English. Since 2022, the AFD project team has been responsible for deploying the *climate screening*tool, and more specifically for the teams located in the country agencies in charge of identification.

The tool's findings are incorporated into the documents discussed by the operations identification committee. To support the tool's roll-out, the Climate and Nature Division holds training courses on the tool and has developed a "toolbox" which should also be incorporated into the operations manual in the near future. This tool is also used by Proparco's ESG team.

At the counterparty level, the rating methodologies used to measure the financial risk presented by the

counterparty and to assign a credit rating include analytical elements that take into account the counterparty's historical exposure to climate related financial risks. This assessment takes place during the counterparty's qualitative analysis (i.e. during the analysis of non-financial elements). It thus measures the impact of direct shocks (via their assets) or indirect shocks (via value chains) that physical risks may have caused to counterparties, as well as their ability to assess these impacts and manage crises. This qualitative section also includes an analysis of the market the counterparty operates in, taking into account any significant climate-related events - such as droughts, floods, or water stress — that have had an impact on the borrower's macroeconomic environment. Nevertheless, the difficulty of combining climate and financial analysis models (essentially linked to time horizons) and the need to highlight the importance of climate risks as a subject for analysis in its own right have led AFD to equip itself with a specific tool capable of measuring the exposure of each of its counterparties to climate related financial risks for the present and the future.

Today, this model measures the counterparty's exposure to 5 physical climate risks: cyclone, sea-level rise, extreme precipitation, water stress, and heat stress. The model uses a country/industry crossover matrix to give an initial risk score for each of the 5 climate-related risks, thus highlighting certain

points of attention to be addressed during project due diligence. This due diligence is carried out through dialog with counterparties, using a qualitative questionnaire specific to the type of counterparty, to understand the measures implemented by the counterparty to mitigate the physical risks identified as "high" or "very high". At the end of this exchange, a final score is assigned to each climate-related hazard.

Country/sector cross-reference matrix for physical risks

Country Sector	Mayott Water production & distribution		Initial rating Identification committe (IDC)	Point to mention in IDC	Risk mitigation identified during appraisal?	Notel fatialg		
Cyclones	Country risk value Sector risk value	•	•	!	yes	•		
Sea level rise	Country risk value Sector risk value	•	•	!	no	•		
Extreme rainfall	Country risk value Sector risk value	•	•	!	no	•		
Water stress	Country risk value Sector risk value	•	•	!	yes	•		
Heat stress	Country risk value Sector risk value	•	•	!				
low risk • medium risk • high risk • very high risk ! points requiring enhanced due diligence								

The tool has been in place since 2020 and is systematically used when appraising new projects funded by AFD, and is built into the Group's information system.

It provides (i) a micro view, by counterparty, of the level of financial risk linked to physical climate risks incurred by a given counterparty, and (ii) a macro view, for the entire non-sovereign portfolio, of the level of exposure of AFD's customers to financial climate risks. Today, 92% of AFD's borrowers are covered by this tool, accounting for almost all outstanding loans.

For sovereign borrowers, a methodological framework for assessing the macroeconomic and financial consequences of physical climate risk has also been defined. The assessment of the level of physical climate risk by economic sector in a given country (country/sector crossover matrix) is compared with the country's economic structure and that of its public finances to determine the risks weighing on the State's ability to repay its debt. Indicators such as the weight of economic sectors vulnerable to the effects of climate

change in total value added, in exports (and therefore the country's capacity to generate foreign currency) and in public revenue are mobilized. Similarly, the economic consequences of major climate change-related shocks (such as cyclones, floods, and droughts) observed in the past are analyzed (long-term impact on real GDP growth, public spending, etc.).

Finally, the consequences of global warming are likely to lead to an increase in social tensions (migration, intensified competition for access to resources, etc.), which may have significant consequences for public finances (increased transfers between the State and local authorities, etc.) •

B INTEGRATING TRANSITION RISKS

For funded projects: Every year, AFD Group publishes the total volume of emissions avoided by mitigation projects and the absolute emissions generated by most²⁷ of the projects it funds²⁸. The calculation of emissions generated or emissions reduced or avoided by the project is carried out ex ante using a Carbon Footprint tool, the FAO Exact tool for AFOLU projects, or based on ad-hoc calculations. AFD Group has also introduced a selective approach to its operations, limiting the emissive impact of its project portfolio by taking into account the development level of each country. This selective approach may result in some projects being excluded from AFD funding. This table divides projects into 3 categories: mitigation or "neutral" projects, emission-intensive projects and high-emission projects, i.e. those generating more than one million tons of CO2 per year, which are excluded from AFD funding (with the exception of priority poor countries and Sub-Saharan Africa, for which exceptions are possible). In addition, an analysis of the consistency of each project with the countries' decarbonization and resilience strategies is carried out using the Sustainable Development Analysis described above, making it possible to rule out projects deemed not to be aligned or entailing major transition risks. In addition, the Group has ambitious exclusion policies²⁹ in line with its 100% Paris Agreement objective, including a reinforced exclusion of projects associated with fossil fuels (coal, oil, and gas), as well as high targets for climate funding (mitigation and adaptation). These policies greatly limit the transition risk borne by the Group's balance sheet.

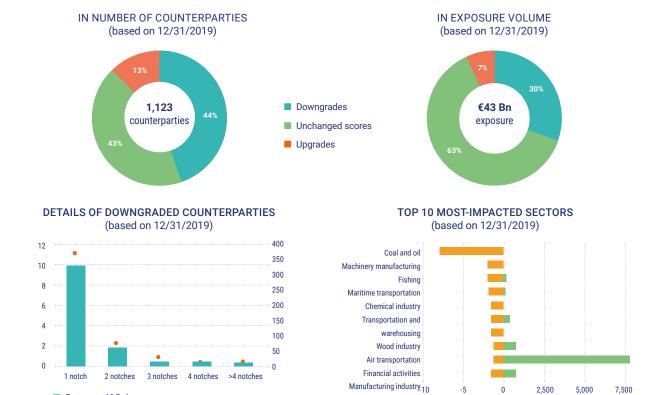
At the borrower level, current rating methodologies incorporate elements of transition risk exposure into analyzing the counterparty's market positioning. However, this analysis remained insufficient given the scale of transition risks.

In 2021, AFD therefore developed a transition risk rating tool for all its counterparties. As with the physical climate risk analysis matrix, this tool uses a cross-country/industry matrix to provide an initial exposure

■ Average downgrading (notches)
■ Exposure (€M)

Results from applying the ACPR 2020 stress test

Changes in credit ratings 2019-2050 (orderly transition)



^{27 •} Excluding budget support and financial intermediation operations

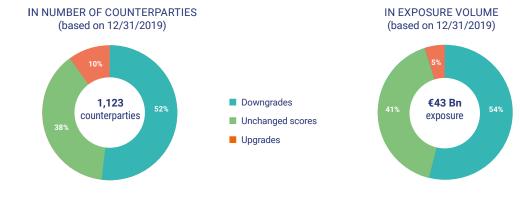
Number of counterparties (right scale)

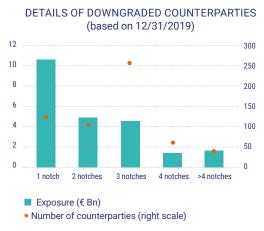
Exposure (€ Bn)

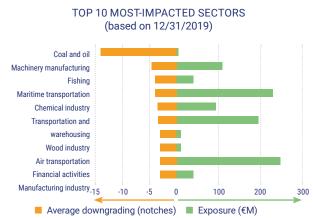
^{28 •} Carbon footprint tool | AFD - Agence Française de Développement

^{29 •} Fossil fuel exclusions: https://afd.fr/en/ressources/energy-transition-strategy-2019-2022-mid-term-review and exclusions list: https://www.afd.fr/en/ressources/afd-group-exclusion-list

Credit rating trends 2019-2050 (adverse scenario)







score for financial risks associated with the transition to a low-carbon economy. On the other hand, unlike the tool developed for physical risks, this matrix places greater emphasis on the sector of activity, weighting this component more heavily than the geographical component.

On one hand, the tool is based on an analysis of the country's vulnerability to transition risk, carried out by the country risks department (ECO), and, on the other hand, for sector risks, on an initial sector score derived from a combination of data provided by the ACPR (French Prudential Supervision and Resolution Authority)³⁰. The analysis is then further refined with a questionnaire to take into account the measures deployed by the borrower to mitigate this risk, giving a final transition risk exposure score.

The tool developed by AFD Group is now deployed in the 21 countries for which transition risk is analyzed by the ECO Country Risk Department³¹ and is currently being rolled out to all the regions covered by AFD. As part of AFD's information system, it will eventually be able to provide data which, like the data on physical

climate risk, will give AFD a micro and macro view of the transition related financial risks to which its counterparties are exposed.

Furthermore, in 2020, AFD took part in a stress test led by ACPR to assess the French banking sector's exposure to transition risk. The work carried out concluded that the impact on credit ratings was limited, even in the most adverse scenario (considering an "accelerated" transition, with carbon neutrality in 2050). Indeed, the model results in an average deterioration of one notch for the most adverse scenario, and only 0.03 notch for the middle scenario. These results are a natural consequence of AFD's 100% Paris Agreement policy and the exclusion policies mentioned above •

^{30 •} Corresponding to the three scenarios towards carbon neutrality in 2050: orderly, delayed, and accelerated transition.

^{31 •} These 21 countries correspond to AFD's 21 largest geographical exposures.

C SUPPORTING PARTNERS AND CUSTOMERS

Support for the Group's financial intermediary partners

Since 2019, AFD has been providing technical assistance on financial climate risk to financial system partners. This activity is an integral part of AFD Group's strategy to support the emergence of financial systems that are resilient to climate risks and help the transition to more sustainable economic models. The range of services is structured around two areas: (i) encouraging financial institutions to adopt approaches and tools to incorporate financial climate risks, and (ii) mobilizing climate risks in public policy dialog with financial regulators and supervisors.

As part of this process, AFD has now established a systematic dialog with its financial institution clients on the subject of climate related financial risks - both physical and transitional - as part of the appraisal process. To this end, a specific interview guide was developed by the Risk Department in conjunction with the operational teams. The strategic dialog established with these customers serves a twofold purpose: to help assess and manage AFD's climate related financial risks as a lender, and to identify opportunities for further collaboration. This dialog could lead AFD to offer its financial institution clients support in integrating financial climate risks. Since 2020, 18 AFD-funded projects with financial institutions have been involved, with a wide range of approaches and objectives: awareness-raising activities, capacity-building for staff and managers, technical assistance to conduct an initial analysis of a financial institution's exposure to climate related financial risks.

As part of its Pro Climate approach, which supports the integration of climate issues to the strategies and operations of financial institutions, and dedicated technical support, Proparco is currently supporting training efforts and climate risk management of 6 financial institutions in Africa and Central America.

The financial systems team has also developed an approach for public authorities, and in particular financial system regulators and supervisors (central banks, financial market regulatory authorities, etc.), to encourage the adoption of public policies contributing to the greening of financial systems. In geographical areas where the issue is well established and there is a demand, AFD offers support to these actors for a variety of purposes, ranging

from raising a regulator's awareness of climate related financial risks to helping set up regulatory frameworks and assessing the financial sector's climate related financial risks.

Building on these initial experiences, AFD will continue its efforts in the coming years to incorporate support for the inclusion of climate related financial risks as systematically as possible into its technical assistance programs for financial institutions, deployed alongside its lines of credit. Where there is a demand and the necessary resources within regulatory and supervisory bodies, AFD will also mobilize its technical cooperation and public policy dialog support tools to help authorities take financial climate risks into account for the financial sector as a whole.

Support and experience sharing with public banks through IDFC and FiCS

In addition to dialog and technical assistance on climate and climate risks with its clients and partners, AFD shares its experience through stakeholder networks such as the Mainstreaming Climate in Institutions (MCI) initiative and more Financial specifically with the International Development **Finance** Club (IDFC) created This club of 27 national and regional development banks from around the world, mostly active in emerging markets, is the world's largest provider of public development and climate funding, with combined assets amounting to USD 4 trillion and annual funding in excess of USD 600 billion, including USD 150 billion in climate finance. IDFC members have the unique role of supporting national policies while transferring international priorities within their own scope of action. The club has pledged to mobilize 1.3 trillion dollars (USD) in green investments between 2019 and 2025, with an increasing share going to adaptation.

The Club, chaired since 2017 by AFD, is a vehicle of influence for the public development bank community, particularly on climate. It played a leading role in driving the commitment to alignment with the Paris Agreement and the Sustainable Development Goals (SDGs) within the Coalition of 520 public development banks at the first Finance in Common summit in November 2020.



Since 2019, IDFC's commitment has been supported by the IDFC Climate Facility, hosted by AFD, which aims to support cooperation between club members on climate and reinforce taking climate into consideration in their strategies and funding. This includes training courses, mentoring sessions, peer exchanges, the publication of joint studies, and a presence at international events such as the COPs.

To leverage its impact, AFD continues to lead the **Finance in Common (FiCS)** initiative, which involves more than 520 Public Development Banks (PDBs), representing 12% of global public and private investment. This initiative has brought the voice of PDBs to the international stage and succeeded in gaining recognition for their unique role and potential for funding the SDGs, especially climate and nature. At the Summit for a New Global Financing Pact in June 2023, the FICS initiative was confirmed as a key element of the international financial architecture and is now part of the Paris Agenda for People and the Planet³² •

Supporting countries in their long-term strategies

AFD is also developing research programs in close collaboration with governments, central banks, and regulatory authorities to conduct in-depth assessments of climate related financial risks and make recommendations on public policies and risk management strategies for non-sovereign stakeholders. For this purpose, AFD is working on three **complementary modeling tools** to support countries in dealing with climate risks (physical and transitional) and to analyze the macroeconomic aspects of ecological transitions.

On one hand, the ESTEEM³³ tool looks at countries' exposure to transition risks in terms of jobs, wages, tax revenues, and exports. Identifying these vulnerabilities makes it possible to anticipate the macroeconomic

effects resulting from the dependence of the economies on industries with high greenhouse gas emissions.

The model thus helps to inform decision-making while taking into account the economic, social, and environmental circumstances of individual countries, so that states can achieve their Nationally Determined Contributions (NDCs) and pursue long-term strategies as part of the Paris Agreement and 2030 Agenda.

Adaptable to all sectors, GEMMES³⁴, another quantitative modeling tool developed by AFD, can be used **to calibrate adaptation strategies by analyzing the socio-economic impacts of climate change**. The model tests transition scenarios towards decarbonized futures by generating long-term pathways.

Anticipating macroeconomic transition risks with ESTEEM

The ESTEEM analysis shows that Vietnam is highly exposed from a socio-economic point of view, especially because well-paid jobs are to be found in high-emission industries. Nevertheless, the country's economy remains very dynamic and has a strong capacity to migrate towards green products, which can contribute to the transition's success.

While ESTEEM has been implemented in other countries such as Armenia, Colombia, Bolivia, and Uzbekistan, it has also been applied to the Border Carbon Adjustment Mechanism (BCAM) in order to identify the macroeconomic implication potential implementation for the EU's trading partners in developing countries³⁵. In particular, the model showed that some African countries, such as Mozambique, are highly dependent on exports of products subject to this mechanism, since almost a fifth of its total exports to the EU are aluminum. Wage income is therefore highly exposed to the adoption of the BCAM (6% of the wage bill). Another socioeconomic risk is the population's low level of coverage by social protection mechanisms.

Both ESTEEM and GEMMES contribute to **public policy dialog on ecological transitions**, at both national and international levels, based on the principle that the various objectives - ecological, social, economic, and financial - must be taken into account **simultaneously and not as substitutes for one another**. They are also based on **multi-dimensional indicators**, both economic and biophysical (land and water resources, greenhouse gas emissions, etc.), to help countries build strong

sustainability strategies and inform decision-makers on how to reconcile the ambitions of economic, social, and environmental pathways.

Finally, AFD is also developing a **research program on transition risks and opportunities** based on a **microeconomic and financial approach**. The country studies produced as part of this program are intended to inform public decision-making on

^{33 •} The "ESTEEM" (Exposure to Structural Transition in an Ecological-Economic Model) research project anticipates the transition risks faced by the economies of developing countries, and aims, in a future version, to help define a transition strategy tailored to each individual situation.

^{34 •} The "GEMMES" (General Monetary and Multi-sectoral Macrodynamics for the Ecological Shift) research project aims to develop a macroeconomic modeling tool capable of informing public action on decarbonized transition scenarios.

^{35 •} Guilherme Magacho, Etienne Espagne & Antoine Godin (2023): "Impacts of the CBAM on EU trade partners: consequences for developing countries", Climate Policy.

GEMMES:

Informing macroeconomic decision-making by taking climate issues and systemic imbalances into account

In Tunisia, the partnership between AFD, research centers, and government agencies has made it possible to test various adaptation policies, such as mechanization of agricultural production, improved practices, and investment in water resources to mitigate or compensate for lower yields. By quantifying the long-term macroeconomic impacts of climate change on Tunisian agriculture, GEMMES has shown that the benefits of these policies could exceed their costs.

This would help cover the country's food security needs, while limiting the adverse socio-economic effects of climate change (rising rural unemployment, rapid urbanization, falling per capita incomes, and rising food prices).

This instrument is currently deployed in ten countries:

- Vietnam to identify the socio-economic impacts of climate change in collaboration with the Ministry of the Environment and Natural Resources.
- Colombia to assess the macroeconomic impacts of a global transition, particularly in the finance and fiscal sectors, in collaboration with the Department of Planning and the University of Rogotá
- The Ivory Coast, to support political decisionmakers in defining an energy transition strategy for 2050, in line with the country's climate and poverty reduction objectives.

low-carbon transition policies in a large number of sectors (energy, fossil fuels, transportation, industry, and agriculture). By analyzing transition scenarios, economic relationships and stakeholder dynamics in a disaggregated way, this approach also enables companies, financial institutions, and local authorities to engage in strategic reflection in order to reduce and better manage their exposure to transition risks and to exploit the opportunities offered by this transition. The aim of this research program and the multistakeholder dialog that goes with it is to take better account of the possible economic effects of low-carbon transition dynamics in order to reinforce their financial and social stability. These studies are carried out through a technical partnership with the Climate Hub of Willis Towers Watson (formerly CPI Energy Finance) and are systematically supported by local, structuring institutional and technical partnerships, ensuring the relevance of analyses and recommendations.

An initial pilot study in South Africa was carried out³⁶ in close collaboration with the Development Bank of South Africa (DBSA) and involved many of the country's public and private institutions. The study explores the socio-economic consequences of a global low-carbon transition for the coal sector and the entire South African economy that depends on it. As well as having an impact on the strategic thinking of several companies, including DBSA, the study has been included in the public debate on the energy transition in South Africa. A similar study was conducted in Colombia³⁷ in close collaboration with the Ministry of Planning and the Central Bank. Colombia is also exposed to stranded asset risk (physical or financial) through existing coal assets or planned investments in the fossil fuel sector. The risk analysis was complemented by an analysis of opportunities linked to domestic or external transition that Colombia can take advantage of (hydrogen, transition minerals, renewable energy sources, etc.). Other studies are underway in Indonesia and Ghana •

 $^{{\}bf 36 \cdot https://www.climatepolicyinitiative.org/publication/understanding-the-impact-of-a-low-carbon-transition-on-south-africa/$

^{37 •} https://www.wtwco.com/en-gb/insights/2023/08/understanding-the-impact-of-a-low-carbon-transition-on-colombia#.~:text=For%20Colombia%20%20 reaching%20%E2%80%9Cnet%20zero.proactively%20to%20these%20climate%20 risks.)

4. Metrics, risks and opportunities

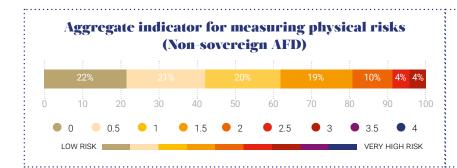
A . RISK INDICATORS

Physical climate risks

The tools and processes implemented by AFD Group since 2020 enable us to capture data and measure the Group's exposure to physical climate risks. The data presented below gives an overview of the non-sovereign exposure of AFD's portfolio³⁸ as of 03/31/2023.

The aggregate indicator is an index created by AFD's Risk Department to give an overall score of exposure to physical climate risks. It cross-references the number of climate-related risks (cyclones, extreme rainfall, etc.) the borrower is exposed to with the level assigned to each risk on a 4-notch scale (from low to very high risk).

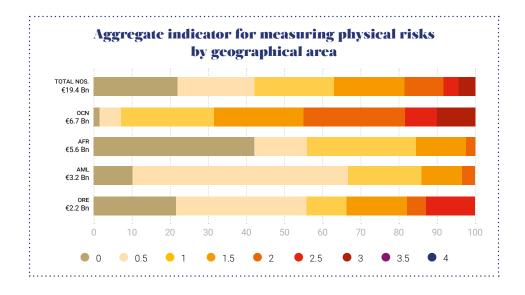
Thus, a high score corresponds to a high risk for one or more climate-related risks.



The results show a high score for an 18% of the non-sovereign portfolio, i.e. the proportion of borrowers with a high level of risk for one or more physical climate risks.

High exposure to physical climate risks for the non-sovereign portfolio in the French overseas departments

A breakdown by geographical area shows that the OCN zone has the highest exposure to physical climatic risks. This zone covers AFD's activities in the French overseas departments and in foreign island states. A high level of risk (score of 3 or more) is assigned to a unit representing 45% of the non-sovereign OCN portfolio. Conversely, the proportion of the OCN portfolio not exposed to any risk is almost zero. By virtue of their geographical location, these overseas intervention areas are heavily impacted by the climate crisis, with high risks of sea level rise, heat stress, extreme precipitation, and cyclones.



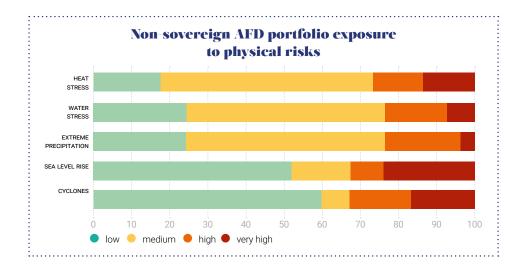
The ORE zone, which covers activities in Eastern Europe, the Middle East and Asia, also has a significant exposure for a significant portion of its non-sovereign portfolio. The risk is high for 18% of the loan portfolio.

Conversely, the Group's operations in Africa appear to be less exposed, with 40% of the Africa portfolio not exposed to any physical climate risk. However, counterparties' knowledge of their exposure to physical climate risks is deemed to be lower in this region than in the Group's other operating regions.

"Rising sea levels" and "Cyclones" climate-related risks have the greatest impact on AFD's non-sovereign portfolio

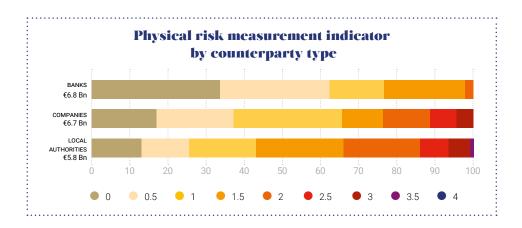
The breakdown by climate-related risk provides an overview of the exposure of AFD's non-sovereign portfolio to each type of climate-related risk. This data shows that AFD is exposed to *at least* 20% of its non-sovereign portfolio for each of the climatic-related risks analyzed.

The sea-level rise risk has the greatest impact on AFD's non-sovereign portfolio, with a high level of risk for 10% of the portfolio and a very high level for 23%. Next comes the cyclone risk with a high level of risk for 17% and very high for 16% of outstandings. These high percentages can be explained by AFD's mission in foreign island states and French overseas departments which involve significant exposure to these risks.



Local authorities are the most exposed to climate-related risks.

Analysis of the physical climate risks of AFD's portfolio by type of counterparty shows that local authorities represent the highest risk, with high and very high scores for almost 14% of the portfolio. These results are consistent with the above-mentioned geographical findings, as a significant proportion of these local authorities are located in the French Overseas Departments, most of which are islands highly exposed to climate change.

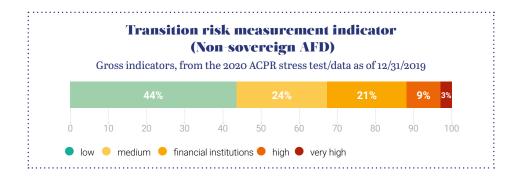


Transition risks and the Group's exposure to the fossil fuel sector

While the transition risk analysis tool is operational to date, it is currently being rolled out to the entire non-sovereign portfolio from H2 2023, after a pilot phase in 2022. A full year of portfolio review will be required before detailed information can be presented.

However, AFD has voluntarily participated in the stress test conducted by the ACPR in 2020 to assess its portfolio's exposure to transition risk. This test showed that risk could be high or higher for 9% of the portfolio, and very high for 3%. A satisfactory result, in line with AFD's intervention strategy and its 100% Paris Agreement policy.

On the other hand, this stress test excluded the financial institutions portfolio (which represented 21% of outstandings in 2019), due to a lack of satisfactory data. This bias in the analysis can be resolved by reviewing the entire non-sovereign portfolio using the new tool currently being deployed.



AFD Group also annually reports its exposure to the fossil fuel sector to the ACPR. At the end of 2022, this amount represented 771 million euros³⁹, or just 1.2% of the Group's total balance sheet. Despite the Group's exclusion policies, which cover the entire coal, oil, and gas value chain (including electricity), the Group does in fact have - and will continue to have - exposure to carbon-based electricity operators, due to its significant involvement in supporting renewable energies and reinforcing power grids. This funding is earmarked for projects in line with the Paris Agreement and often actively contributes to the Group's and operators' mitigation objectives. This is essentially indirect exposure resulting from the exposure of the operators themselves •

B CLIMATE FINANCE AND TONS OF CO₂ AVOIDED

Climate finance: Since 2012, AFD has committed to dedicating 50% of its funding to projects with climate co-benefits, a target that has always been met. Since 2018, this commitment has also applied to Proparco and since 2020 to AFD's activities in France's Overseas Departments. Despite the Covid-19 crisis, AFD Group has continued to increase its climate commitments, reaching €5.3 billion in climate funding in 2020, increasing to €6 billion in 2021.

In 2022, AFD Group exceeded its objectives once again, with a record 6.9 billion euros of climate finance committed in developing countries and the French Overseas Departments, including 2.2 billion euros dedicated to adaptation. The Group's climate commitments increased by 15% in 2022 compared to 2021.

AFD Group's mitigation projects represent 4.7 billion euros of committed climate finance in 2022, and will save 10.5 million tons of CO₂ equivalent each year, over the lifetime of the projects. The main aim of these projects is to reduce or avoid greenhouse gas emissions.

They can also promote carbon storage (in soil or trees, for example). To achieve this, they often focus on rolling out renewables, low-carbon urban development (by supporting public transportation policies, for example), energy efficiency, waste treatment and recovery, combating deforestation, and support for sustainable agriculture in a global warming context.

AFD Group's adaptation projects account for 2.2 billion euros of committed climate finance in 2022, or around 1/3 of its climate funding. Adaptation to climate change refers to all policies and measures aimed at reducing the exposure and vulnerability of societies to the risks of climate change (extreme temperatures, droughts, rainfall, coastal erosion, etc.). This includes risk management throughout the project chain, whether upstream (suppliers, for example) or downstream (outlets, access routes). By funding programs such as Adapt'Action40 and making specific investments, AFD Group helps developing countries implement their adaptation strategies...

Breakdown by region



Adaptation funding (including NGO projects and public policy loans)
 Mitigation funding (including NGO projects and public policy loans)

In 2022, **public policy loans** to combat climate change totaled 1.8 billion euros. Public policy loans are designed to support a sectoral or multi-sectoral policy and combine three components: budget support, a dialog based on a matrix of indicators, and technical cooperation. In addition to these loans, AFD Group provides studies, technical assistance, and capacity building. These loans are an essential means of supporting the emergence of low-carbon and resilient development pathways.

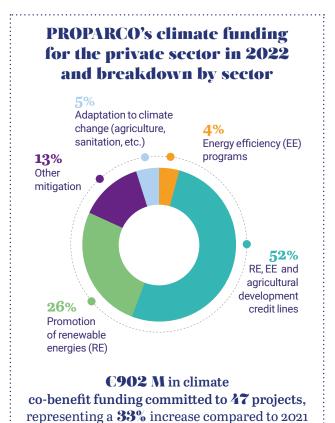
Among climate co-benefit funding, AFD Group is now focusing on tracking funding supporting **nature-based solutions**. In 2022, **29% of climate finance, i.e. 2 billion euros, was committed to projects that also benefited biodiversity**. These projects mainly involve the sustainable management of natural resources and sector-based approaches (water, agriculture, etc.) promoting nature-based solutions. This percentage will continue to increase in line with AFD's new commitment to dedicate 30% of its climate funding to biodiversity-friendly projects by 2025⁴¹.

In 2022, in geographical terms, climate-related operations were concentrated in Africa (2.6 billion euros) and the Middle East (2.5 billion euros), Latin America (1.1 billion euros), the Three Oceans region⁴² (600 million euros) and multi-country projects (100 million euros).

Funding the private sector to mitigate greenhouse gas emissions and adapt to the effects of climate change

In 2022, Proparco approved 902 million euros in climate co-benefits, corresponding to over 40% of its annual approvals, and increased its funding for private projects with a climate change adaptation component by approving 5 projects, representing 46 million euros in climate adaptation co-benefits.

For example, Proparco granted funding to the *Foreign Trade Bank of Cambodia* to support access to funding for private operators in the water and electricity sectors in rural and peri-urban areas. By facilitating access to better-quality water, the project will help reduce the development of water-borne diseases, the prevalence of which is set to increase in coming years as a result of climate change •



^{40 •} https://www.afd.fr/en/ressources/adaptaction-phase-1-lessons-learned

^{41 •} The share of climate funding for projects with a DAC Rio/Biodiversity 1 or 2 marker is counted as "climate-biodiversity" funding. This share is added to AFD's total climate finance to calculate the percentage of biodiversity-friendly climate funding.

^{42 •} Pacific, Atlantic and Indian Ocean countries

C CLIMATE AND SUSTAINABLE BOND ISSUES

The Group is also pursuing its efforts in the area of sustainable bonds. In 2014, the Group had been the first issuer of a climate-focused green bond in the French public sector (€1 billion over 10 years), then, in 2017, it adopted a climate bond framework and continued its policy of regularly issuing *Climate Bonds*. The Group reached a new milestone in this area in 2020, with the publication of a renewed framework focusing on the Sustainable Development Goals. The purpose of this reference document is to reflect the Group's actions in all their environmental and social dimensions.

It naturally follows the four principles of the "Green Bond Principles & Social Bond Principles", i.e. the justification of the use of funding, the appraisal process for funded projects, the monitoring of flows, and the requirement for *robust* reporting. After its first issue in 2020, AFD Group has completed 48% and 47% of its 2021 and 2022 programs respectively in a theme-based format⁴³ •

D • MOBILIZING THE PRIVATE SECTOR FOR THE CLIMATE

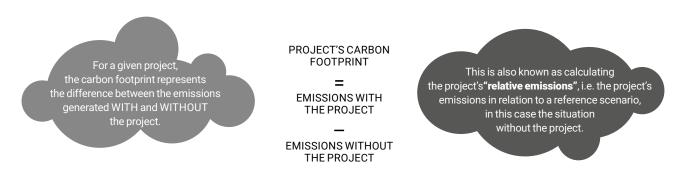
To encourage the shift of investment towards transition, AFD Group aims to increase its mobilizing effect and its role as a catalyst for private-sector actors. As a result, 1.2 billion euros of private finance were mobilized for climate co-benefit projects approved for AFD Group in 2022 according to OECD methodology, including 718 million euros by projects approved by Proparco.

This represents a mobilization ratio of 0.18. Lines of credit granted to public development banks and commercial banks are the main instrument for mobilizing private climate finance: 76% of private funding mobilized by 2022 •

E ■ CARBON EMISSIONS FROM FUNDED PROJECTS

Whenever possible, AFD Group performs a "carbon footprint" of projects for which funding is being considered, particularly infrastructure projects. For a given project,

the carbon footprint represents the difference between the emissions generated with and without the project:



A favorable carbon footprint, i.e. with negative relative emissions, is the main criterion used to highlight a project's co-benefits in mitigating climate change: emissions with the project lower are than the project emissions without the project, SO helps to reduce greenhouse gas emissions.

By 2022, the projects funded by AFD Group will have reduced 9.7 million ton of CO₂ equivalent annually over their lifetime.

This figure corresponds to the total carbon footprint of all projects funded by AFD Group in 2022.



Projects' carbon footprint and portfolio's carbon footprint

+ 7.4 million tons CO2 equivalent

of absolute emissions generated per year by all projects funded in 2022

- 9.7 million Tons of CO2 equivalent

emissions avoided annually over the lifetime of funded projects in 2022 The Group has also estimated that 7.4 million tons of CO2 equivalent will be generated annually by all projects funded by 2022. This figure shows the absolute emissions generated mainly by the infrastructure projects the Group funds, without taking into account the emissions generated in a reference scenario ◆

F ■ **GROUP CARBON FOOTPRINT (EXCLUDING FUNDING)**

At corporate level, AFD Group measures its residual CO₂ emissions (excluding funding) and offsets them.

Since 2006, the Group has been measuring its internal environmental footprint, and since 2007 has been offsetting the greenhouse gas (GHG) emissions associated with its internal operations. It also strives to limit its water and energy use and promotes environmentally-friendly modes of transportation for its employees, which it supports through an awareness-raising initiative. These actions are developed and implemented as part of the Group's CSR approach which aims to control the Group's direct environmental and societal footprint⁴⁴. AFD Group's 100% Paris Agreement and 100% social cohesion commitments have also led it to accelerate the reduction of its direct carbon footprint and to adopt more collectively and individually responsible behavior in its internal operations.

This approach is based on four key principles: (i) preparing the annual Group Carbon Footprint® (Bilan Carbone®) in accordance with the ADEME methodology, which is the result of AFD Group's internal operations; (ii) implementing a priority action plan to reduce AFD's ecological footprint, notably in the following areas: responsible purchasing, energy efficiency and renewable energies, travel, waste management; (iii) voluntary offsetting of greenhouse gas emissions generated by the business by funding environmental projects in developing countries (purchase of carbon credits) and (iv) raising awareness internally of the challenges of the 100% Paris Agreement and 100% social cohesion.

AFD's internal business practices' carbon footprint

The resumption of projects and operations after the Covid-19 crisis led to an increase in the headquarters' overall GHG emissions. However, this increase remains under control: $\pm 22\%$ overall, despite a 150% increase in business and home-to-work travel. With no increase in headcount during 2022, we can therefore see an increase in these emissions per agent (from 11.2 to 13.6 teq CO₂). When it comes to the AFD network's GHG emissions, the various Carbon Footprint items are almost all up in absolute terms, which, as for the headquarters, is mainly due to a return to more intensive activity as part of the global recovery from the Covid-19 crisis, but also to better feedback from the various agencies.

A series of projects aimed at improving this footprint will be launched, seeking both to improve the quality of the data reported (in order to reduce the need for estimates) and to achieve a real reduction in these emissions (in particular, work on our travel policy). These changes will be accompanied by awareness-raising and training courses for Group employees •

Towards a world in common

AFD Group contributes to the implementation of France's sustainable development and international solidarity policy. Consisting of Agence Française de Développement (AFD), which is responsible for public sector and NGO financing, research and training; its subsidiary Proparco, dedicated to private sector financing and support, and Expertise France, a technical cooperation agency, the Group has a mandate to fund, support and accelerate the transition to a fairer and more resilient world.

Together with our partners, we work with and for communities to build shared solutions in over 150 countries, as well as 11 French Overseas Departments and Territories. What is our objective? To reconcile economic development with preservation of common goods, in the fields of climate, biodiversity, peace-building, gender equality, education and health. Our teams are involved in more than 4,200 projects in the field, thus reinforcing France and the French people's commitment to supporting the Sustainable Development Goals (SDGs). Towards a common world.



www.afd.fr/en

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