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Foreword

As a responsible international financial institution, the European Bank for Reconstruction and Development ("the EBRD" or "the Bank") pays great attention to the climate risks facing our projects and our clients. Our commitment to environmental sustainability is enshrined in the Agreement Establishing the EBRD. Since 1991, we have been proud to remain at the forefront of efforts to support businesses, communities and economies in responding to the challenge of climate change across our regions.

As a result, it was only natural for the EBRD to become the first multilateral development bank (MDB) to sign up as a supporter of the Task Force on Climate-related Financial Disclosures (TCFD). Since 2018, TCFD disclosures have formed part of our Sustainability Report, which outlines the impact that EBRD operations have on the environment around us.

This year, I am very pleased to introduce the first stand-alone disclosure document focusing on climate-related risks faced by the EBRD. This is an important milestone, of which we are proud. But it does not mark the end of our work. We are already doing many things but more substantial work is needed.

In particular, we still need to strengthen the measurement of the climate risks we face. We need to ensure consistency in our approach to climate risks across our portfolio and develop metrics that help us quantify these risks. We need to enhance our stress testing and scenario analysis to include climate risks and events and to better understand how potential regulations on greenhouse gas emissions would impact the Bank’s portfolio. Similarly, we should do more to improve the identification of financially sound climate-related business opportunities. Over the next five years, the Bank’s updated Green Economy Transition (GET) approach for 2020-25, approved by our Board of Directors on 8 July 2020, will provide an important framework for pursuing these goals.

This is important as the global challenges facing the world today mean that we are likely to increase our climate-related activities. We have a clear mandate and a strong balance sheet to do this. While we will not hesitate to take the necessary investment risks, we need to do this in an informed way.

The TCFD’s recommendations provide a roadmap for this journey and we are committed to following it.

We do so because we know that the risks that climate change poses to business, financial markets, and society as a whole are real and present. We also know that they will only increase. As a development lender, we think this is the right thing to do, and we want to be in the vanguard to help others manage, mitigate and adapt to climate changes around us.

Annemarie Straathof
Vice President, Risk and Compliance, and Chief Risk Officer
European Bank for Reconstruction and Development
1. Introduction and report overview

The Task Force on Climate-related Financial Disclosures (TCFD) was established in 2016 by the G20’s Financial Stability Board to better understand and promote disclosure of climate-related financial risks. In 2017, the TCFD published recommendations for the voluntary disclosure of such risks, for use by companies and financial institutions in providing information to investors, lenders, insurers and other stakeholders. The TCFD recommended preparing this disclosure under four high-level pillars: (i) governance, (ii) strategy, (iii) risk management, and (iv) metrics and targets.

The EBRD became a supporter of the TCFD in March 2018 and was the first multilateral development bank (MDB) to sign up to this key initiative. It continues to recognise the relevance of the TCFD recommendations to the EBRD’s mission.

This report is the EBRD’s first stand-alone disclosure under the TCFD framework. It aims to provide an update on progress made by the EBRD in working towards the implementation of TCFD recommendations, to provide some initial financial disclosure on the EBRD’s performance against various preliminary climate risk indicators and metrics, and to provide clarity on plans for fuller financial disclosure. It marks a significant step towards including TCFD disclosures in the Bank’s annual Financial Report in the years ahead.

This report follows the disclosure structure recommended by the TCFD and considers the two key categories of climate-related risks highlighted by the TCFD: (i) physical climate risks and (ii) carbon transition risks, defined as follows:

- **Physical climate risks** result from the impacts of a changing and more variable climate, which may result in losses, disruptions and increased costs to a wide range of economic activities. These risks may either be acute (in other words, event-based physical climate hazards such as storms or floods) or chronic (in other words, progressive shifts in weather patterns such as increasing water stress).

- **Carbon transition risks** arise from the process of adjustment towards a low-carbon economy and are influenced by a range of factors including: developments in policy and regulation, the emergence of disruptive technologies or business models, shifting sentiment and societal preferences and evolving legal interpretations. These processes may prompt a reassessment of the value of assets and create credit exposures for banks and other lenders as costs become apparent.\(^1\)

The TCFD also emphasises the identification of corresponding financially sound climate-related opportunities. For example, building resilience to projected physical climate risks may give certain firms additional comparative advantages. To this end, firms may pursue investments associated with the expanding demand for low-carbon products and services or for renewable energy.

Along with introducing initial financial disclosures in section 5 of this report, the most notable actions taken by the EBRD during the period 2019-20 have been:

(i) strengthening the EBRD’s climate-risk governance by formalising a Climate Action Network and a Climate Risk Group

(ii) piloting methodologies for assessing the climate risks faced by the EBRD in its projects

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\(^1\) Adapted from TCFD (2017).
(iii) participating as an observer in the Network of Central Banks and Supervisors for Greening the Financial System (NGFS) alongside other multilateral development organisations

(iv) contributing to the EU Technical Expert Group (TEG) on Sustainable Finance and the European Union (EU) International Platform on Sustainable Finance

(v) cooperating with multilateral development banks\(^2\) on climate action and, in particular, on the publication of the *Joint Report on Multilateral Development Banks’ Climate Finance 2019*, as well as in joint work on the alignment of MDBs’ operations with the goals of the Paris Agreement

(vi) implementing the EBRD’s new Energy Sector Strategy 2019-23, which will limit future exposure to carbon-intensive assets

(vii) publishing a new Environmental and Social Policy

(viii) participating in the UNEP FI Pilot Phase II project on implementing TCFD recommendations for banks

(ix) expanding active green bond operations, including issuing the first-ever climate resilience bond (September 2019), and

(x) approval by the Bank’s Board of Directors in July 2020 of the EBRD’s Green Economy Transition (GET) Approach 2020-25, which provides a mandate and strategic framework for further advancing the Bank’s climate-related operations.

\(^2\) In the context of this report, MDBs are a group of multilateral development banks composed of the African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, the European Investment Bank, the Inter-American Development Bank Group, the Islamic Development Bank and the World Bank Group.
2. Governance

2.1. Board oversight

The EBRD is owned by 69 countries, the European Union and the European Investment Bank. Each shareholder is represented individually on the EBRD’s Board of Governors, which has overall authority over the Bank and is responsible for approving its strategic direction.

The Board of Governors delegates most powers to the Board of Directors, which approves the EBRD’s country, sector and thematic strategies, policies and operations. The Board of Directors is based permanently in London at EBRD Headquarters. Given their role as representatives of shareholder governments and organisations, the remuneration of EBRD Board Directors is fixed annually and not linked to the fulfilment of specific organisational objectives or to corporate performance.

The EBRD’s Board of Directors has ultimate responsibility for the oversight of the EBRD’s climate-related risks. It exercises this oversight through the Board’s Audit Committee, which focuses on all risk-related issues. The Audit Committee receives quarterly reports on the evolving risk profile of the Bank and conducts annual reviews of the risk management function. The quarterly reports also cover performance against the Bank’s institutional objectives, including those linked to climate change-related activities. These quarterly reports are prepared by cross-departmental teams, with overall accountability for their delivery resting with the Vice President, Chief Financial Officer (CFO).

The Board’s Financial and Operations Policies Committee (FOPC) is responsible for reviewing and exercising oversight of the EBRD’s financial and operational policies, including in relation to climate issues.

Lastly, the Budget and Administrative Affairs Committee (BAAC) of the Board assists the Board of Directors in fulfilling its responsibilities in relation to approval and oversight of the budgetary, staff and administrative resources of the Bank. This includes ensuring ongoing compliance with the objectives of the EBRD’s Strategic and Capital Framework, which is the main planning instrument of the Bank and is approved every five years by the Board of Governors.

The Board of Directors and its committees exercise oversight of climate-related issues through the approval of several strategic and operational documents. These include:

1. The Banking Credit Process, which sets out key principles that define and govern the process of managing risk for banking transactions and is periodically reviewed and updated by the Board of Directors.
2. The Risk Appetite Statement, which provides a comprehensive summary of the Bank’s risk appetite as defined in its policy framework. The Statement is updated at least annually and is periodically reviewed by the Audit Committee.
3. The Environmental and Social Policy (ESP), approved in 2019. This policy requires all EBRD projects to integrate considerations of potential environmental and social challenges and opportunities associated with the envisaged activities.
4. Country strategies, which cover individually all economies where the EBRD invests and are revised every five years according to country-specific timetables.
5. Sector strategies, which are revised every five years. Of particular relevance are: (i) the Energy Sector Strategy 2019-2023, approved in 2018; (ii) the Agribusiness Sector Strategy 2019-2023, approved in 2019; (iii) the Transport Sector Strategy 2019-2024, approved in 2019; (iv) the Municipal and Environmental Infrastructure Sector Strategy, approved in 2019; and (v) the Property and Tourism Sector Strategy 2020-2024, approved in 2019.
6. The Green Economy Transition (GET) approach, initially approved in 2015, covering the period 2016-20, and a second GET approach for 2020-25, approved in July 2020. The GET approach defines the EBRD’s objectives and operational arrangements, particularly in relation to climate opportunities.
2.2. Management’s role

The EBRD operates “three lines of defence” for the governance and management of risks (see Figure 1). In terms of climate-related risks, these lines of defence encompass:

- the shared responsibility of all staff members to identify and manage climate-related risks incurred in the course of fulfilling their responsibilities (“first line of defence”)
- independent, empowered and appropriately resourced “second line of defence” functions, with control of and responsibilities for matters falling into their areas of competence, including Risk Management and the Environment and Sustainability Department, and
- the Internal Audit Department, which acts as a “third line of defence” and independently assesses the effectiveness of the processes within the first and second lines of defence.

The work of the Internal Audit Department is complemented by the Evaluation Department, which independently evaluates the performance of the Bank against its mission and development objectives. For example, in 2019 the Evaluation Department completed a special study on the EBRD’s climate-related initiatives.3

Within the first line of defence, the mandate of the Energy Efficiency and Climate Change team is to support primary project assessment, structuring and execution in respect of climate risks and opportunities.

Within the second line of defence, the Vice President, Risk and Compliance and Chief Risk Officer (CRO) has overall responsibility for the formulation, communication and implementation of the EBRD’s risk management strategy and policies, including in the area of climate risks. The Vice President is a member of key executive management committees of the Bank and engages directly with the Board of Directors. Matters related to Bank-wide risks and associated policies and procedures are governed by the Risk Committee. The Risk Committee is chaired by the Vice President, CRO, and is accountable to the President. It oversees all risk aspects of the EBRD’s portfolios across all sectors and countries, and provides advice on risk management policies, measures and controls. The membership comprises senior managers across the Bank, including representatives from Risk Management, Finance, Banking and the Office of the General Counsel.

To ensure adequate alignment and coordination, the Vice President, CRO, has combined responsibility for the Risk Management and Environment and Sustainability departments. The Environment and Sustainability Department is, among other things, responsible for:

- the integration of climate risk assessments and adaptation measures into all investment projects
- the assessment of the environmental and social impacts of all investment projects, and
- supporting the Bank’s clients in identifying those climate change impacts that are likely to affect their businesses, facilitating increased resilience through improved practices and reducing long-term risk.

Based on the information provided by the business delivery teams and the work of the Environment and Sustainability Department, Risk Management:

- provides an independent assessment of risks associated with individual investments undertaken by the EBRD
- performs an ongoing review of the portfolio to monitor the risks presented by investments from inception to repayment or exit, and
- assesses and proposes ways to manage risks arising from correlations and concentrations within the portfolio.

The EBRD’s second line of defence is supported by the Economics, Policy and Governance (EPG) Department, which is part of the Vice Presidency for Policy and Partnerships at the EBRD. EPG defines and maximises the Bank’s work on transition impact through operations and policy engagement, including with regard to green investment. This work includes leading the Bank’s work on shadow carbon pricing.

EPG provides economic, political and political economy analysis and supports high-level dialogue with shareholder governments. It provides political assessments according to the EBRD’s mandate. It also leads development of the Bank’s policies on gender and economic inclusion, steers work on governance and business environment and serves as the organisation’s knowledge hub.

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3 The report (see EBRD 2019a) and management response can be found at: https://www.ebrd.com/what-we-do/evaluation-latest-reports.html.
Within the framework of the above three lines of defence, the prioritisation and delivery of business activities are guided by the EBRD’s strategies and policies. Prior to their submission to the EBRD Board of Directors, all key strategies and policies are reviewed and approved by either the Executive Committee, chaired by the EBRD President and comprising all Vice Presidents, or by the Strategy and Policy Committee, chaired by the Vice President, Policy and Partnerships. The considerations of these committees include issues related to both climate risks and financially sound climate-related business opportunities.

In 2019 the EBRD established the Climate Action Network (CAN) to further enhance coordination and information-sharing on climate-related issues and to better leverage the expertise available in different departments. The CAN is a Bank-wide group of senior managers responsible for various climate-related activities. It comprises managing directors from all Banking sector groups, Donor Co-Financing, the Environment and Sustainability Department, the Economics, Policy and Governance Department, the Office of the General Counsel, the Risk Management Department, and Treasury. The CAN reports to the Executive Committee and is chaired by the Managing Director, Energy Efficiency and Climate Change, in the Banking Department.

Five cross-departmental working groups support the work of the CAN. They are responsible for developing operational procedures and internal guidelines on specific climate-related issues. These include issues relating to (i) climate risks; (ii) climate data management; (iii) alignment of EBRD operations with the objectives of the Paris Agreement; (iv) corporate climate governance support to EBRD clients; and (v) “just transition”.

Within this framework, the Climate Risk Group (CRG) focuses on identification, coordination and mitigation of climate-related risks. Created in 2019, the CRG is chaired by the Managing Director, Risk Management, and brings together expertise from the following departments: Banking; Risk Management; Environment and Sustainability; Economics, Policy and Governance; and Treasury. A key role of the CRG is to support the development of a methodology for the identification, measurement and disclosure of the EBRD’s exposure to climate-related financial risks.

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* Including all banking teams for relevant projects.
** The Bank’s second line of defence is supported by the Economics, Policy and Governance Department.

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To ensure adequate incentives for EBRD staff, including in terms of meeting climate-related objectives, salary increases and bonuses for EBRD staff below Vice President level are determined based on the achievement of personal and team objectives. Where relevant this includes achievement of climate-related as well as wider environmental and social objectives.

Figure 2. **Management coordination of climate strategy and climate risk management**

![Diagram of climate risk management and information-sharing groups and networks]

- **Executive Committee**
  - EBRD President

- **Vice President, Risk and Compliance/Chief Risk Officer**

- **Climate Risk Group**
  - MD Risk Management

- **Climate information-sharing groups and networks**
  - **Climate Action Network**
    - MD Energy Efficiency and Climate Change
  - Other climate-related groups
3. Strategy

3.1. High-level strategies relating to climate change and long, medium and short-term climate risks

The promotion of environmental sustainability has been at the core of the EBRD’s mission since the Bank was created in 1991. In fact, environmental sustainability is enshrined in the Agreement Establishing the EBRD (the Agreement), the document that laid the foundation for the EBRD’s operations. In particular, Article 2.1(vii) of the Agreement explicitly mandates the EBRD “to promote in the full range of its activities environmentally sound and sustainable development”.

In response to this mandate, the EBRD introduced an energy efficiency practice in its early years of establishment, which progressively became more developed. Both energy efficiency and climate change now feature prominently among the Bank’s activities and operational priorities.

These overarching objectives are underpinned by the Bank’s Strategic and Capital Framework (SCF) 2016-20, a high-level document that was approved by the Bank’s Board of Governors at the 2015 EBRD Annual Meeting. The SCF drives the current strategic focus and capital deployment by the Bank and specifically prioritises investments addressing climate change and energy efficiency challenges.

The EBRD’s GET approach, approved by the Board of Directors in 2015, operationalises the financing of environmentally sustainable activities, with two of its three main pillars focusing directly on climate-related challenges (the third pillar being related to other environmental dimensions besides climate change):

- **Climate change mitigation**, which focuses on (i) reducing greenhouse gas (GHG) emissions into the atmosphere and (ii) sequestering GHG emissions from the atmosphere. Projects eligible for funding include, among others, renewable energy, lower-carbon and efficient energy generation, energy efficiency and non-energy sector GHG reductions.

- **Climate change adaptation**, which focuses on reducing the vulnerability of human and natural systems to the impacts of climate change by maintaining or increasing adaptive capacity and resilience.

The EBRD’s target to increase green financing to 40 per cent of its total annual financing by 2020, was achieved in 2019, with total GET-eligible finance reaching 46 per cent. The Bank is currently in the process of preparing its next green economy targets to cover the period 2021-25.

The EBRD remains actively aligned with key global policy developments in this area. In particular, in response to the signing of the Paris Agreement at COP21 in 2015, the EBRD along with other MDBs pledged to support their clients in delivering the goals of the Paris Agreement. Further to this pledge, in 2017, at the One Planet Summit, the MDBs announced their commitment to align their financial flows with the Paris Agreement objectives.

At COP24 in 2019 the MDBs presented their joint approach to alignment with the Paris Agreement building on more than 10 years of cooperation on international climate action. The approach comprises six building blocks, which incorporate all aspects of the Paris Agreement that are relevant to the MDBs’ activities: climate mitigation, climate resilience, climate finance, policy support to clients, reporting and institutional policies.

The detailed methodologies underpinning the joint MDB approach to alignment with the Paris Agreement are currently under development and are being tested to support the assessment of alignment at a project level. The MDBs will report periodically on the process of defining these methodologies and their applications.

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7 For more details about the Bank’s Green Economy Transition approach see https://www.ebrd.com/what-we-do/get.html.
3.2. Operational strategies and policies relating to climate change

The EBRD employs a range of operational strategies and policies to help apply its high-level strategy in project investments. These include sector strategies, country strategies, environmental and social policy and procedures, and annual Strategy Implementation Plans.8

Sector strategies

At sector level, the Bank sets out medium-term strategies that include the operationalisation of priority themes set out in the Bank’s green financing approach.

In particular, in 2018 and 2019, the Bank adopted new five-year sector strategies in the agribusiness, energy, municipal and environmental infrastructure, transport, and property and tourism sectors.9 All of these strategies emphasise relevant areas for responsible green investment, highlighting climate-related risks and opportunities in which the Bank plans to actively engage.

The energy strategy puts particular emphasis on promoting and financing decarbonisation efforts and the transition to low-carbon energy systems. It reaffirms the EBRD’s commitment to finance renewable energy generation, and incorporates the Bank’s commitment to no longer finance coal mining, coal-fired electricity generation capacity, upstream oil exploration and upstream oil development projects (except in rare and exceptional cases where projects reduce GHG emissions or flaring).10

Country strategies

The EBRD invests in 38 economies with different climatic conditions and profiles. In this context, the relevant climate risks at an operational level are identified and reflected in the five-year objectives of each EBRD country strategy. The formulation of the operational priorities for each economy are based on specific country diagnostics, which include analytical inputs assessing their vulnerability to the impact of climate change.

Country strategies are designed to identify areas where the EBRD can, in the medium term, assess, manage and deliver on the climate-related objectives, taking into account the economic context, as well as the Bank’s mandate and risk appetite.

The EBRD Board receives, on an annual basis, a progress report on the Bank’s implementation of each country strategy, which measures progress against the impact indicators set out under the strategic objectives of each country strategy. Climate-related objectives are measured by corresponding “green” indicators.

Environmental and social safeguards

The Environment and Sustainability Department, led by the Managing Director, Environment and Sustainability, is responsible for assessing all EBRD projects against the Bank’s Environmental and Social Policy.11 The Policy clearly recognises the importance of addressing both the causes and the consequences of climate change in the economies in which the Bank invests. The Environmental and Social Policy states that the EBRD will engage, whenever appropriate, in innovative investments and technical assistance to support carbon-neutral or low-carbon investments and climate change mitigation and adaptation opportunities, as well as to identify investments that avoid, minimise or reduce greenhouse gas emissions in projects. The Environmental and Social Policy also requires that EBRD clients assess the risks that climate change presents to projects, and notes that the EBRD will also support its clients in developing climate adaptation measures and climate-resilient investments, as well as in managing risks caused by climate change.

Annual Strategy Implementation Plans

The EBRD’s annual Strategy Implementation Plans (SIPs) serve as vehicles to reaffirm priorities and ensure adequate resourcing of the key strategic objectives set out in the SCF. The SIP for 2020-22, approved by the EBRD’s Board of Directors in December 2019, reaffirmed tackling climate change as a core priority for the Bank, both by including explicit financing targets in the Bank’s corporate scorecard and by listing it among key directional priorities. The document confirmed that green transition remains an important objective across the EBRD regions, reflecting the EBRD’s strategic focus and capabilities in this area.12

8 All of the EBRD’s strategies and policies are available at https://www.ebrd.com/what-we-do/strategies-and-policies.html
9 A new strategy for the information and communications technology sector is scheduled to be adopted by the EBRD Board of Directors in 2020.
10 For more details see EBRD (2018).
11 See EBRD (2019b).
12 For more details see EBRD (2019c).
3.3. Impact of the EBRD’s strategy on exposure to climate-related financial risk

The mainstreaming of the EBRD’s green finance initiative throughout the Bank’s business, strategy and financial planning has allowed the EBRD to significantly increase its share of climate finance and thereby reduce exposure to climate-related risks. The GET approach has been effective in delivering climate-related opportunities, from small-scale energy efficiency investments in small and medium-sized enterprises, financed through local financial intermediaries, to large-scale renewable energy projects. These investments play a particularly important role in supporting the development of the EBRD regions, which include some of the least energy-efficient economies in the world and, at the same time, some of the best locations for solar and wind energy.

Extensive involvement in climate mitigation and adaptation projects has clear consequences for the Bank’s balance sheet and risk profile. In particular:

- the share of sustainable infrastructure projects in the EBRD’s portfolio increased from 43 per cent in 2015 to 49 per cent in 2020, driven mainly by energy sector transactions (up from 17 per cent to 20 per cent) and municipal and environmental infrastructure projects (up from 8 per cent to 12 per cent)
- the exposure to regulatory risks increased in parallel, particularly in terms of projects and operations benefiting from legislative or regulatory support.

While the share of green assets in the Bank’s portfolio continues to grow, inevitably some of the investments that the EBRD has made in the past did not fully take into consideration climate-related risks. Moreover, regardless of the nature of the investments, the EBRD does not have full visibility of the carbon transition and/or physical climate risks to which the Bank’s clients are exposed (for example, in the EBRD’s intermediated financing).

The Bank has been working towards better understanding of its exposure to carbon transition risk and physical climate risk through each individual project and client. While the EBRD’s Sustainable Infrastructure Group already looks at many projects on a case-by-case basis to understand physical climate uncertainties during investment appraisal, especially in the case of investments that are screened as being more exposed to physical climate risks, work is under development to expand this analysis to a larger share of the Bank’s portfolio. Over time, this will include stress testing the Bank’s existing portfolio against a range of scenarios for climate risks.

Despite these important efforts, the EBRD recognises that it has to accept and manage some risks in pursuit of its development objectives. In line with its general approach to risk management, when dealing with climate risks:

- the Bank protects itself from idiosyncratic (transaction-specific) credit risk related to development banking transactions by carefully selecting and structuring individual investments, including by taking security over movable and immovable assets, by accepting guarantees from companies and individuals, and by requiring a set of financial and operational covenants, as well as by imposing associated reporting obligations, and
- the Bank protects itself from systemic (correlated) credit risk by adopting portfolio limits, including country and sector-specific limits, to reduce the impact of adverse external events on its capital.

To identify emerging risk and enable appropriate risk-mitigating actions, the EBRD also conducts regular stress-testing exercises and comprehensive reviews of its investment portfolios. The Bank recognises that any resulting risk mitigation is constrained by the limited geography within which the EBRD operates.

The Bank also works with bilateral and multilateral donors to leverage its impact and facilitate project preparation and execution, including through the mitigation of climate-related risks. In relation to climate-focused investments, donor funding is mainly used for:

- funding of consulting advice in support of project preparation and execution
- capital grants that reduce the capital costs of a project, particularly in the low-carbon, energy efficiency and municipal infrastructure sectors
- incentives that, based on agreed terms, encourage financial institutions and sub-borrowers to invest in energy efficiency and/or climate risk mitigation, and
- the provision of co-financing concessional loans by donors to support and incentivise green economy projects.
In addition, the EBRD conducts an annual review of progress in green transition in all economies where it operates. The indicators and the associated assessment of remaining gaps then inform country and sector strategies, as well as planned Bank-wide stress tests and ad hoc sub-portfolio stress tests pursued in the course of regular risk management activities and as part of the annual business and financial planning cycle.

Given its mandate, triple-A credit rating and current high level of capitalisation, the Bank’s business model, funding strategy and financial sustainability are all expected to be resilient to a range of adverse climate scenarios. In the future, as part of the enhanced testing that is planned, more detailed disclosure will be provided.

3.4. Climate-related opportunities

Climate change may in addition to posing risks also present certain opportunities for some firms under certain conditions. The TCFD recommends the assessment and, where appropriate, disclosure of these financially sound climate-related opportunities together with climate-related risks. The identification and delivery of these is an important aspect of the EBRD’s overall climate change operations, as detailed in its GET approach.

The transition towards a low-carbon economy creates opportunities for companies and financial institutions to respond to growing demand for low-carbon products and services, as well as for renewable energy. For example, under the GET approach the EBRD has supported more than 140 local financial institutions to provide more than €4 billion of financing for green, low-carbon technologies and investments.

Growing evidence of a changing and more variable climate means that firms that make their assets and operations climate-resilient may gain comparative advantages over their competitors. Again, under its GET approach the EBRD has supported its clients in pursuing climate resilience through more than 270 climate resilience investments, with a total business volume exceeding €8 billion, and around one-third of this investment delivered through private-sector transactions.

Figure 3. The EBRD is considering climate-related risks and opportunities for our clients

Source: Adapted from European Commission (2019).
4. Risk management

4.1. Processes for identifying, assessing and managing climate risks

The EBRD identifies and manages climate-related risks through its existing risk management framework. Within this framework, the primary responsibility for identification, analysis and mitigation of climate-related risks in individual transactions rests with the Banking department.

For many projects, the EBRD already identifies, assesses and manages climate-related risks in the process of due diligence, preparation and structuring of individual transactions. In particular:

- the EBRD’s Environment and Sustainability Department assesses the environmental and social impacts of every project and works with the Bank’s clients to achieve good international standards to reduce environmental risks, and
- sector teams in Banking and in particular, Energy Efficiency and Climate Change, consider how to mitigate climate risk by reducing carbon emissions or by adapting to its effects through climate-resilient investments.

The specific measures taken in due diligence and structuring of environmental and social aspects of individual transactions by the Environment and Sustainability Department are articulated in the Environmental and Social Policy. The Policy sets out detailed performance requirements applicable to the Bank’s clients, including in the context of (i) the assessment and management of environmental and social risks and impacts (Performance Requirement 1, or PR1) and (ii) resource efficiency and pollution prevention and control (PR3). It further mandates the Bank’s clients to adopt environmental and social systems, policies and management plans in order to manage, mitigate and adapt to a series of environmental issues, including climate change-related risks.

This analysis includes a range of climate risk-related issues, for example:

- the impact of changing hydrology patterns when making hydropower project investments
- changes in weather affecting agribusiness projects and clients, or
- the effects of a potential increase in carbon prices on the cash flow of carbon-intensive industries when exposed to carbon markets (for example, electricity generation projects in the EU).

These and other climate risks are assessed as part of the standard project’s due diligence, including a review and, when appropriate, challenge by the Risk Management team.

In addition, to inform project approval decisions, the EBRD also applies shadow carbon pricing to selected operations (see Box 1). The Bank also plans to apply a lifecycle assessment for those projects with complex value chains or presenting substantial environmental trade-offs compared to alternative scenarios.

Prior to submission to the Board of Directors for final approval, investment decisions are reviewed by the EBRD Investment Committee (OpsCom). OpsCom is chaired by the First Vice President and Head of Client Services Group and includes representatives of all relevant functions involved in the business activity, including Banking, Legal, Risk Management, and the Economics, Policy and Governance team looking after the mandated objectives of the EBRD.

In conjunction with the relevant Banking teams, Risk Management reviews all exposures within the Banking portfolio at least on an annual basis. The main objective of these reviews is to ascertain whether there have been changes to the risk profile and whether closer engagement with the client is required to support the project and protect the related repayment stream. For equity transactions, this process also involves revaluing the investment exposures. Risk Management reports on the development of the portfolio as a whole on a quarterly basis to senior management and the Board of Directors, as mentioned in section 2.1.
Box 1. Economic assessment of EBRD projects with high GHG emissions

Since January 2019, the Bank has been performing economic assessments on projects with high GHG emissions, using a shadow carbon price based on the high and low values from the range of prices recommended by the High-Level Commission on Carbon Prices.

This economic assessment applies to projects with annual GHG emissions that either increase net emissions by 25,000 metric tonnes or more per year or increase gross emissions by 100,000 metric tonnes or more per year in absolute terms. Where applied, the assessment has provided useful information for the EBRD’s management when considering whether to make an investment.

A shadow carbon price seeks to put a monetary value on GHG emissions and corrects the market failure associated with the absence of carbon markets or equivalent tools (for example, a carbon tax). This is particularly important in instances where carbon prices remain limited or non-existent, as is the case in many of the economies in which the EBRD invests. This methodology ensures that these projects are compared to viable low-carbon alternatives. The results are included in project documents that are presented to the Board of Directors in a dedicated annex.


Based on its strong capitalisation, the EBRD accepts significant credit and market risk in pursuit of its development mandate, including climate-related risks. The Bank makes considerable efforts to manage those risks, both at an individual transaction level and at portfolio level.

At the level of individual transactions, any risks related to debt investments are normally mitigated by a combination of:

- **a conservative capital structure**, with sufficient equity or quasi-equity to absorb climate change-related shocks, both of a physical and regulatory nature
- **tenors** that take into account the expected useful lifetime of the underlying asset, including potential obsolescence due to technological or regulatory changes
- **collateral** that could offer an alternative repayment route, in case cash flows generated by the project are not sufficient to repay the debt, and
- **assigning key contracts** to facilitate lender-led restructurings in the event that cash flows are insufficient to repay scheduled borrowings.

At the portfolio level, the Bank also mitigates and manages these risks by:

- engaging in **policy dialogue** with the authorities in economies where it invests, to promote the stability of the regulatory environment and the progressive adoption of solutions aimed at climate risk mitigation and adaptation, and
- abstaining from financing **sectors that are particularly vulnerable to carbon transition risk**, including coal mining, coal-fired electricity generation, upstream oil exploration and upstream oil development projects, as guided by EBRD’s Energy Sector Strategy 2019-23.

In addition, the EBRD manages exposure to individual transactions and clients by mobilising private-sector co-financiers (both on a funded and on an unfunded basis) and/or through using concessional donor funding alongside its own loans.
4.2. Planned enhancements

While the current risk management and business processes are well tested and proven to be effective in ensuring the financial sustainability of the Bank, the EBRD recognises that climate risk analysis is not yet being completed systematically for all clients. Similarly, the Bank is not yet collecting sufficient data and information to be able to comprehensively disclose these risks in an aggregated form.

In the coming years, the EBRD will also work towards implementing a more comprehensive climate-risk assessment framework. This new framework is likely to involve two components:

- **Project risk analysis** – the Bank is in the process of introducing a consistent methodology to analyse (and score) physical climate risks and carbon transition risks for all EBRD clients.

- **Portfolio analysis** – the Bank is developing the capability to assess the impact of climate risk on its investments more systematically, including:
  1. risk measurement to enable appropriate risk-mitigating actions;
  2. dynamic climate-risk scenario and stress-test analysis; and
  3. reporting on how climate risks impact the portfolio. The Bank will monitor regulatory developments for the design of these stress tests, given that this type of analysis is in its infancy.

Climate risk assessment and management is a rapidly developing field and the methodologies for this analysis across the financial services sector are still in their infancy. The EBRD is therefore collaborating with external organisations, other MDBs and private-sector banks to develop the methodologies for this analysis. In particular, the Bank has been participating as an observer in the Network of Central Banks and Supervisors for Greening the Financial System alongside other multilateral development organisations and contributing to the EU Technical Expert Group (TEG) on Sustainable Finance and to the EU International Platform on Sustainable Finance.

In June 2019, the EBRD also joined the United Nations Environment Programme’s FI TCFD Pilot Phase II, along with 38 commercial banks. The Phase II Pilot, which ran from May 2019 to July 2020, helped to define and disseminate good practices on TCFD implementation across the financial sector. The EBRD aims to continue sharing its experiences and learning from other banks and development institutions, and will adapt its approach as industry best practice develops.

Furthermore, the EBRD has recently begun to assist a number of clients with their own climate financial risk analysis and disclosure (see Box 2 for a recent example). These activities help enable the Bank to understand its exposure to climate financial risks and disseminate good practices on climate risk management among the EBRD’s clients and across the regions in which it operates.

**Box 2. Assisting the Bank’s clients to implement TCFD disclosure: Louis Dreyfus Company**

In 2020, the EBRD signed a US$ 100 million project to finance Louis Dreyfus Company’s (LDC) subsidiaries operating in Bulgaria, Egypt, Kazakhstan, Poland, Romania, Tajikistan, Turkey and Ukraine. The transaction will finance working capital needs for the trading activities of LDC’s subsidiaries in these countries.

As part of the project, the EBRD will assist LDC in introducing enhanced practices for climate-related risk assessment and disclosure. This includes supporting the company in signing up as a TCFD supporter and in starting to analyse and disclose the climate financial risks to which the company is exposed in selected value chains, with significant demonstration effects in the agricultural commodities sector.

5. Metrics and targets

5.1. Existing metrics for measuring and disclosing climate-related risks and opportunities

The EBRD has considerable experience in the application of dedicated metrics for assessing climate-related risks and opportunities at the project level. These include the following:

- **Climate finance attribution**, using a component-based approach developed jointly by the MDBs and applied since 2006. Notably, the MDBs, including the EBRD, disclose their individual and aggregate climate finance volumes for both climate mitigation and adaptation in a dedicated report.13

- **GHG emissions** (in tonnes of CO₂ equivalent) are screened for all projects and assessed in detail for those that are expected to result in significant increases or decreases of Scope 1 and 2 emissions. These are ex-ante estimates of how projects will perform once fully implemented. The methodologies are based on the *International Financial Institution Framework for a Harmonised Approach to Greenhouse Gas Accounting*.14 A summary of the results for each year’s investments is published in the EBRD’s *Sustainability Report*.15

- **Economic assessment** from the application of shadow carbon pricing, which is applied to selected carbon-intensive projects as explained in Box 1 in section 4.1. The resulting metrics can include an expected rate or return, net present value, and/or cost approach.

- **Dedicated climate resilience** metrics, resulting from collaboration with other MDBs that has yielded the development of a common framework published in 2019.16

The Bank also uses other quantitative and qualitative indicators to appraise climate risks, for example, specific GHG emission indicators in carbon-intensive industries and installations, which are compared with international best practice (for example, the GHG emissions-specific benchmarks of the EU Emissions Trading System).

The Bank calculates and reports on the carbon footprint (scope 1, 2 and 3) related to its own operations (see Section 5 of the *Sustainability Report 2019*). Since 2017, the EBRD has been carbon neutral in its own activities, through a combination of efforts to reduce emissions related to business travel and to energy use in the EBRD’s offices, as well as through the purchase of Gold Standard carbon credits to offset the emissions generated by its activities.

For more information, see the EBRD’s *Sustainability Report* at: https://www.ebrd.com/news/publications/sustainability-report/ebrd-sustainability-report-2019.html

5.2. Metrics towards measuring and disclosing climate-related risks

The EBRD is in the process of incorporating carbon transition and physical climate risks into the quantification of counterparty and project-specific risk analysis, and testing this analysis against climate risk scenarios. In reflection of this ongoing work, this report includes some preliminary disclosures of the type of information that may be used to explore the EBRD’s exposure to carbon transition and physical climate risk. This data is for illustrative purposes. It should not be used to draw conclusions, but is presented to show the Bank’s willingness to undertake more quantitative disclosures. At this early stage it indicates the relatively small risks and positive trends, even before we have undertaken a more detailed systemic analysis.

Supporting the transition towards low-carbon and climate-resilient economies is of central importance to the EBRD, in line with its environmental sustainability mandate. However, the EBRD still has exposure to industry sectors that could be highly vulnerable to carbon transition risk, often because the Bank is aiming to help its clients improve their energy efficiency and reduce their carbon emissions, including, for example, projects in the oil and gas sector, and electricity and heat utilities. An idea of this exposure can be obtained by aggregating project investments across their industry sector (see Table 1, which also includes the EBRD’s total exposure to the renewable energy sector to show the Bank’s significant investment in this important area).

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14 See ADB, AFD, AfDB, EBRD, GEF, IDB, KFW, NEFCO, NIB and WBG (2015).
15 For more information, see EBRD (2019).
16 See ADB, AfDB, EBRD, EIB, IADB, IsDB and WBG (2019).
Table 1. EBRD investments in renewable energy and carbon transition-related sectors, based on North American Industry Classification System (NAICS) codes

<table>
<thead>
<tr>
<th>Industry sector</th>
<th>NAICS code(s)</th>
<th>Loans 2019 € million</th>
<th>Equity 2019 € million</th>
<th>Undrawn commitments and guarantees 2019 € million</th>
<th>Total portfolio 2019 € million</th>
<th>Share of total portfolio 2019 %</th>
<th>Total classified as supporting Green Economy Transition 2019 € million</th>
<th>Share classified as supporting Green Economy Transition 2019 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renewable energy</td>
<td>237130</td>
<td>2,554</td>
<td>148</td>
<td>768</td>
<td>3,470</td>
<td>7.6%</td>
<td>3,204</td>
<td>92.3%</td>
</tr>
<tr>
<td>Oil and gas</td>
<td>2212, 2211, 3241, 486, 486210, 213112, 447</td>
<td>1,877</td>
<td>66</td>
<td>954</td>
<td>2,897</td>
<td>6.3%</td>
<td>724</td>
<td>25.0%</td>
</tr>
<tr>
<td>Electricity distribution and transmission</td>
<td>221122, 22112</td>
<td>1,225</td>
<td>44</td>
<td>1,006</td>
<td>2,274</td>
<td>5.0%</td>
<td>1,734</td>
<td>76.3%</td>
</tr>
<tr>
<td>Electricity and heat generation</td>
<td>22111, 22133</td>
<td>1,299</td>
<td>13</td>
<td>584</td>
<td>1,896</td>
<td>4.1%</td>
<td>1,183</td>
<td>62.4%</td>
</tr>
<tr>
<td>Metals mining and production</td>
<td>2122, 331, 332</td>
<td>1,488</td>
<td>122</td>
<td>254</td>
<td>1,863</td>
<td>4.1%</td>
<td>599</td>
<td>32.1%</td>
</tr>
<tr>
<td>Automotive and shipping</td>
<td>53211, 44431, 3361, 488, 3366</td>
<td>724</td>
<td>56</td>
<td>162</td>
<td>942</td>
<td>2.1%</td>
<td>136</td>
<td>14.5%</td>
</tr>
<tr>
<td>Chemicals and building materials</td>
<td>444, 325, 327</td>
<td>654</td>
<td>146</td>
<td>132</td>
<td>932</td>
<td>2.0%</td>
<td>387</td>
<td>41.5%</td>
</tr>
<tr>
<td>Aviation</td>
<td>3364, 481, 4881</td>
<td>605</td>
<td>27</td>
<td>101</td>
<td>733</td>
<td>1.6%</td>
<td>65</td>
<td>8.9%</td>
</tr>
<tr>
<td>Coal mining</td>
<td>2121</td>
<td>36</td>
<td>0</td>
<td>0</td>
<td>36</td>
<td>0.1%</td>
<td>9</td>
<td>25.0%</td>
</tr>
</tbody>
</table>

Note: This table includes EBRD Banking portfolio investments as of 31 December 2019 based on a preliminary analysis of the Bank’s projects and counterparties. It does not include the Treasury portfolio. Adjustments are made for the effective interest rate associated with amortised cost assets. The equity portfolio is calculated based on historic cost. 

1,2 The Green Economy Transition (GET) total and share for each industry sector is calculated by multiplying the proportion of EBRD Annual Bank Investment (ABI) classified as GET-eligible (including both mitigation and adaptation finance) for each project, at the time the project was approved, by the value of the project remaining in the portfolio.

The sector exposures outlined in Table 1 should not be assumed to imply that these investments are associated with high GHG emissions and are thereby associated with carbon transition risk, as these exposures have not yet been tested against different scenarios for global policies to reduce global GHGs. In fact, many of these projects may not be exposed to carbon transition risks because they involve projects where the EBRD’s clients are already taking climate change and carbon transition into account as part of their business model. Moreover, many of these investments are to help the Bank’s clients improve their energy efficiency and reduce their carbon emissions, or help improve resilience to the physical effects of climate change, and are therefore classified as part of our GET investments.
A more comprehensive assessment of the EBRD’s exposure to carbon transition risks can be viewed by combining sector and country information with the exposure of EBRD’s investments over time. Table 2 shows the results of such preliminary analysis for carbon transition risk, and applies this to analysis over different years to present a dynamic snapshot of the EBRD’s portfolio. The proposed draft methodology assigns equal weightings to: (i) the EBRD’s internal assessment of the country’s preparedness and the impact of climate risk policy and regulatory changes; (ii) industry-specific carbon transition risks as categorised by Moody’s; and (iii) the remaining tenor of each exposure. Each one is scored on a scale of 1 to 10. Exposures with an average rating of 8 or above are deemed to be “very high risk”.

### Table 2. Evolution of exposure to carbon transition risks in the EBRD’s portfolio

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very high risk (€ million)</td>
<td>3,194</td>
<td>1,831</td>
<td>1,753</td>
</tr>
<tr>
<td>Very high risk (%)</td>
<td>7.7%</td>
<td>4.2%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

Note: Exposure includes Banking portfolio assets only and does not include the Treasury portfolio.

Despite the growth of the EBRD’s overall development commitments and the increasing prominence of climate-related activities in new business, this early assessment indicates that the overall quantum of the Bank’s exposure to carbon transition risks has decreased since 2015. This is mainly due to a significant reduction in the Bank’s exposure to high (and very high) risk sectors in Russia (by around €1.6 billion), driven by debt repayments and a lack of new operational activities in the country. The parallel decline in high-risk sector exposures in central Europe and the Baltic states (mainly in energy and chemicals) and Central Asia (mainly energy) was offset by the expansion of similar portfolios in Turkey and in the southern and eastern Mediterranean region.

The highest-risk assets (with a carbon transition (CT) rating of 8 or above) are largely made up of exposures to high (and very high) risk sectors, particularly independent power producers, energy traders and airport services. These high-risk projects are all ones that the Bank has been scrutinising closely at the assessment stage.

Regarding physical risks, the intention is to focus the analysis on all risks arising from the 15 hazard sub-categories under four major types of physical climate risk that the EBRD uses to analyse the impact of physical climate risks on its Banking portfolio. In the meantime, Table 3 provides a very preliminary disclosure related to physical climate risks. Given a lack of adequate transaction and counterparty-specific information at this stage, this analysis focuses on the assessment of exposure to increased water stress, which is a chronic physical risk. It is driven mainly by long-term gradual climate change, based on a country and industry sector-level analysis as opposed to a project-level location-specific analysis. Within this nascent context, it is deemed an appropriate measure to give an indication of the high-risk segments in the EBRD’s portfolio. Counterparties with scores of 8 or above are deemed to be very high risk.

### Table 3. Evolution of exposure to increasing water stress risk in the EBRD’s portfolio

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very high risk (€ million)</td>
<td>2,169</td>
<td>2,266</td>
<td>2,317</td>
</tr>
<tr>
<td>Very high risk (%)</td>
<td>5.2%</td>
<td>5.2%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

Note: Exposure includes Banking portfolio assets only and does not include the Treasury portfolio.

The very high-risk categories encompass risk exposure to counterparties mainly in Central Asia and Turkey and several countries outside the Bank’s regions (mainly in the Gulf). The risk assessment is done based on the key risk counterparty. In particular, where a project has a guarantee, the physical risk assessment is based on the guarantor, which is considered to be the key risk party in such circumstances.

The nominal exposure to water stress showed a small increase from 2015 to 2019. Early assessments indicate that this relates to portfolio movements in economies more impacted by water stress as well as to increasing operations with counterparties in the southern and eastern Mediterranean (SEMED) region, which are more susceptible to this risk.

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17 Sector risk classification is derived from the sectors classified as very high, high, or moderate risk for carbon regulations as classified by Moody’s. See Moody’s (2018). The country carbon transition assessment scores are derived from HSBC (2019).

18 The EBRD uses four major risk types (temperature, wind, water and solid mass-related risks) and 15 hazard sub-categories for both acute (event-driven) and chronic (gradual) physical climate risk, based on hazard classifications defined in EU Technical Expert Group on Sustainable Finance (2019).

19 Counterparty industry water stress exposure scores were developed internally by the EBRD. Country water stress scores are based on World Resources Institute, Beta Aqueduct country rankings for baseline water stress. See WRI (n.d.). Risks associated with sovereign obligations, financial institutions and equity funds are deemed low risk, at present, given their diversification.
The early assessments included here are mainly for illustration purposes. The underlying methodologies will be thoroughly developed, robustly tested and further enhanced over time.

The climate-risk analysis methodology under development for individual debt projects and the portfolio could have implications for the EBRD’s standard risk management metrics. The two key metrics used within the EBRD’s risk management framework are the probability of default (PD) ratings and the loss-given default (LGD) ratings. The Bank assigns internal PD ratings to all key counterparties, including borrowers, investee companies, guarantors, put counterparties and sovereigns in the Banking and Treasury portfolios. These PD ratings reflect the financial strength of the counterparty, which in some cases may already include considerations about the projected financial impact of climate change. The sovereign ratings take into consideration the ratings assigned by external ratings agencies, which also increasingly reflect the impact of climate change.

5.3. Targets for climate-related risks and opportunities

The main target for climate-related opportunities at the EBRD is defined in the GET approach (see section 4.1.2) as the share of green financing compared to the total annual investment volume. It was set at 32 per cent in 2016, with linear increases to reach 40 per cent by 2020, in line with the period covered by the Strategic and Capital Framework 2016-20. In 2019, the Bank’s green finance was in excess of €4 billion, reaching 46 per cent of its total annual investment.

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Green finance as per the GET approach includes investments in: (i) climate mitigation; (ii) climate adaptation; and (iii) other environmental and sustainability components.
References

ADB, AfDB, EBRD, EIB, IADB, IsDB and WBG (2019)

ADB, AfD, AFD, EBRD, GEF, IDB, KFW, NEFCO, NIB and WBG (2015)

EBRD (n.d.)

EBRD (1990)

EBRD (2015)

EBRD (2018)

EBRD (2019a)

EBRD (2019b)

EBRD (2019c)

EBRD (2020)

European Commission (2019)

EU Technical Expert Group on Sustainable Finance (2019)

HSBC Global Research (2019)

Moody’s (2018)

TCFD (2017)

WRI (n.d.)