In December 2018, Multilateral Development Banks (MDBs) announced six building blocks for Paris alignment: Mitigation (Building Block 1), Adaptation (Building Block 2), Climate Finance (Building Block 3), Policy Support (Building Block 4), Reporting (Building Block 5), and Internal Operations (Building Block 6). Building Block 5 is concerned with improved reporting on, and in consequence of, MDBs’ Paris alignment approach. This memo discusses central avenues through which MDBs could report on the compatibility of their annual project commitments, past commitments on their portfolios and internal activities with the Paris objectives, and their Paris-alignment processes more comprehensively, while fostering and advocating for harmonized financial practices conducive to low-carbon climate-resilient development.\(^1\) MDBs have helped to improve transparency in climate finance over the last decade. The goal of Article 2.1c of the Paris Agreement, making financial flows consistent with low greenhouse gas (GHG) emissions and climate-resilient development, is an important impetus behind MDBs’ ambitions to improve their tracking and reporting.\(^2\) So far MDBs have harmonized reporting in climate finance, focusing on input metrics and targets such as finance volumes. Moving from a climate finance paradigm to a Paris alignment paradigm requires harmonized disclosure standards on all activities, as well as transparency regarding the climate impacts of all MDB financing and the potential risks that climate change poses to investments\(^3\) and the development goals which MDBs aim to achieve (see Figure 1).
Overarching Principles

To become Paris aligned, MDBs will need to report on not only the results of their Paris-alignment activities but also the extent to which their portfolios and projects are aligned. The following overarching principles can lay the groundwork:

1 | All financial flows of an institution are Paris aligned if and only if all investments and their impacts are Paris aligned. Reporting on Paris alignment of financial flows thus entails reporting on all investments, including climate finance and non-climate finance. MDBs’ responsibility does not end with the disbursement of funds but involves supporting clients’ transition to a low-carbon climate-resilient development. Reporting on progress towards Paris alignment needs to include reporting on misaligned activities – for example, via a ratio of misaligned-to-total-assets or a brown-to-green energy ratio.

2 | For all climate finance, Paris aligned reporting should expand to include reporting on harmonized impact indicators. Seven MDBs now report on climate finance volumes, based on the common Principles for Climate Change Mitigation and Adaptation Finance Tracking. A continued improvement in common reporting on climate finance should reflect impacts of the projects on the temperature goal of the Paris Agreement, impacts on systemic resilience.

3 | For all projects of the portfolio, Paris-aligned reporting should entail reporting on climate-related financial risks and on the impacts of projects on emissions and resilience. On the one hand, financed assets are exposed to financial risks that stem from a warming climate and transforming economies. As part of their Paris alignment approach, MDBs have thus committed to assess their investments for transition risks and for physical risks. This can be seen as a necessary, but not a sufficient condition for Paris aligned reporting. On the other hand, reporting on the impacts of projects and portfolios on emissions and resilience and thus on their contribution to achieving the Paris Goals is needed (see Figure 1).

4 | The dimension of climate impacts on emissions and resilience and the dimension of financial risk and opportunity are linked and reinforce each other. For example, minimizing transition risks, eg, by avoiding fossil fuel–related investments that risk becoming stranded assets, also has an impact on financed emissions. However, minimizing risks will not always be sufficient to ensure Paris-aligned project impacts on emissions and resilience. It is thus vital that MDBs report on both dimensions.

5 | Rigorous and harmonized Paris-aligned disclosures would help MDBs to build mutual trust and confidence among financial actors. Some MDBs are incorporating the TCFD recommendations into their annual financial reports – a trend that could play a valuable part in MDBs’ Paris-alignment process (see Box 1).
Financial Risks and Opportunities | Impacts on Emissions and Resilience
---|---
Influence of Financed Activities on Climate

Financed Activities

Influence of Climate on Financed Activities

Recommendations of the TCFD

Paris-Aligned reporting of climate-related financial risks and climate impacts

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**Box 1: The TCFD Framework**

The Task Force on Climate-related Financial Disclosures was established in 2015 by the Financial Stability Board in response to the financial crisis of 2007/08 and in anticipation of a transformation towards lower-carbon economies. It was called upon to develop climate-related disclosures “that could promote more informed investment, credit [or lending], and insurance underwriting decisions” that would “enable stakeholders to understand better the concentrations of carbon-related assets in the financial sector and the financial system’s exposure to climate-related risks”.

The task force developed recommendations applicable to organizations across sectors and provided supplementary guidance for financial institutions. It found a need for comprehensive forward-looking management and disclosure of climate risks and opportunities with respect to banks’ governance, strategy and risk management, in addition to metrics and targets to guide operations. This new vantage point could expand MDBs’ reporting focus from inputs (finance volumes) in climate-related activities to also include the assessment, management and communication of financial risks due to climate change and climate policies.

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**Implementing Building Block 5**

This memo is structured thematically around TCFD’s four pillars of action – governance, strategy, risk management, and metrics and targets – which were developed to assist financial sector participants to use and understand the materiality of climate change-related financial risks and opportunities and thus help corporate disclosure to converge around certain terminology and practice.

While focusing on financial risk-related disclosures, the TCFD’s framework can provide a powerful starting point for MDBs to demonstrate leadership in disclosing climate-related information in a clear, comprehensive and harmonized fashion. Moreover, this should be complemented by detailed reporting of climate impacts, targets and underlying metrics and tools.
The two major categories\(^8\) of climate risks are transition risk (the financial risk that could result from the process of adjustment towards a lower-carbon economy) and physical risk (effects on the value of financial assets that may arise from climate- and weather-related events and via insurance liabilities). Transition risks include the potential for increasing exposure to litigation revolving around financial assets and their negative climate impacts.

Considering these risk categories as part of their Paris alignment approach, MDBs have made a commitment to assess their investments for transition risks (under Building Block 1) and for physical risks (under Building Block 2).\(^9\)

It is tempting to think that development banks' portfolios are not likely to be affected by climate-related financial risks, as a significant proportion of their lending is guaranteed by sovereign clients.

Particularly for transition risks it is argued that countries that give the necessary guarantees, for example, for a fossil fuel power plant, are not likely to undertake policy measures that do not allow this plant to produce electricity until the end of its economic lifetime. Yet, transition risks depend not only on national policy measures but also on (international) demand, technology development and other factors. In addition, countries might increase climate policy measures despite guarantees taken for individual projects, as climate impacts become more evident and severe. Indeed, new research by academia and central banks stresses that “transition risks, could affect in a relevant and negative way the value of sovereign bonds in countries where revenues from economic activities and GDP growth are still carbon intensive”.\(^10\)

Beyond risks to MDB portfolios, assessing and mitigating their clients’ transition and physical climate risks is well in line with the development mandate of the banks.

For transition risks, the reliance on governments to either (i) pay back loans for stranded assets or (ii) hold back climate policy measures to minimize transition risks, would be at odds with broader sustainable development goals and with supporting the temperature goal of the Paris Agreement (Building Block 1).

Neglecting physical risks, on the other hand, would be at odds with strengthening the clients’ climate resilience (Building Block 2).

Most MDBs are currently further advanced in assessing and reporting projects’ physical climate risks, as a significant and increasing number of clients are already affected by these. Research commissioned by the UN Environment Programme found that vulnerability to physical climate risks has already raised the average cost of debt of developing countries.\(^11\)

**Box 2: Risk categories of the TCFD and why they are relevant to MDB’s Paris alignment approach**

The idea that countries will be able to pay back loans may thus not always hold true. First, because there have been cases of country insolvencies or inability to pay back loans in the past. Second, because in the future, particularly countries that rely on carbon-intensive exports and which are highly indebted may be severely affected by the low-carbon transformation. Similarly, the risk of insolvency increases for countries most vulnerable to the physical impacts of climate change.

The need for a definition of Paris alignment has emerged as a considerable challenge that requires the commitment of senior leadership and dedicated management capacities with a focus on climate-spanning relevant departments.

Providing information on how climate-related issues are overseen throughout institutions allows for evaluation of whether material risks and impacts receive appropriate attention at appropriate levels. This is a core prerequisite for successfully identifying climate risks and impacts and taking appropriate measures on strategy and risk management.
1. MDBs should disclose whether and how Paris alignment is incorporated into their mandates, to what extent it is a priority for senior management and how this priority is reflected in incentive structures. This should include information on how senior managers have advocated for addressing climate risks and impacts within the institution.

2. MDBs should report on how responsibilities to include climate risks and climate impacts are assumed throughout the organization, including the managing board, corporate strategy, risk management and at projects level (such as dedicated climate divisions or project managers).

**Strategy (scenario analysis)**

Climate-related considerations, including risks and impacts associated with mitigation and adaptation activities, need to be clearly articulated in banks’ overall strategies. It is notable that individual banks have implemented climate strategies to emphasize and facilitate climate action. However, commendable as past strategy innovations may be, they currently fall short of the ambition to incorporate the goal of Paris alignment across all MDB operations.

MDBs and other financial institutions have faced challenges in assessing the compatibility of annual commitments with climate scenarios, citing data availability and ambiguity about methodological approaches. The variety of available scenarios and stress testing approaches makes comparisons of analyses difficult. It is thus important that banks report transparently on chosen scenarios, underlying assumptions and analysis approaches. Aside from the comparability aspect, a joint framework could provide guidance for common practice where data gaps exist and establish best practice for necessary assumptions. Moreover, climate-related risks and impacts are sure to evolve and have different implications as conditions change, making a vigilant and concerted use of scenario analysis supremely relevant in ensuring progress towards Paris alignment. This is a crucial point: even if risks of default are not borne by MDBs due to the sovereign backing of projects, the incidence of a stranded asset results in wasted resources and failed development goals.

1. MDBs should commit to a timeline to implement comprehensive climate scenario analyses, common timeframes (short: <10 years; medium: 20–30 years; long term: 30–50 years) and stress test approaches to assess climate risks. Distinct methodologies will need to be developed to assess transition risk (including litigation risk) under Building Block 1 and to assess physical risk under Building Block 2.

2. MDBs should aim to harmonize their approaches to improve comparability of results and foster mutual learning. This could be achieved by MDBs agreeing on the climate scenarios (or at least criteria for establishment of those scenarios) used for assessing different risk and impact types under Building Block 1 and 2, a joint methodology for scenario analysis and stress testing, and a joint reporting format (such as regarding assumptions and results of quantitative climate risk analyses).

3. Banks should utilize at least one scenario in line with a temperature rise of no more than 1.5°C to analyze transition risks, including litigation risks, under Building Block 1. For physical risk analysis assessed under Building Block 2, various scenarios that model a range of possible pathways should be included – both pessimistic and optimistic – for example, 1.5, 2, 3 and 4°C. Utilized scenario characteristic and assumptions should be disclosed.

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1 According to the International Actuarial Association (2013) a scenario is a projection of a possible future environment either at a specific point in time or over a certain time horizon. Complex scenarios may include interaction between numerous variables over several time periods. Due to uncertainty about future developments a number of possible scenarios exist. For example, “future emissions scenarios” model the effect that developments in supply and demand, climate policy, technology and consumer preferences have on future emission levels and, in a next step, on temperature levels. Some scenarios backcast what kind of developments will be necessary to limit global warming to a defined temperature target with a defined probability. From these can be derived the types of projects and activities which are in line with the temperature goal, but also what type of transition risks may arise (policy changes, technology changes, changes in consumer preferences, etc). Other climate scenarios model plausible effects of climate change (such as rainfall, likelihood of storms, temperature, etc) in certain regions independent of the development of global emissions. These scenarios can be useful in deriving physical risks.

2 Stress testing has become a frequently used technique in the finance domain, where it is used to assess the resilience of financial institutions and portfolios or whole economies under a stress scenario. There are four basic elements of any financial stress test: (i) a scenario describes an external shock, (ii) risk exposures affected are identified and quantified, (iii) a model explains the impact of the shock on the exposures, and (iv) an evaluation defines or describes which outcome a financial institution is able to absorb (Borio, Drehman and Tsatsaronis, 2014).
Risk and impact management

Risk management

Transition and physical climate risks have increasing potential to result in a significant deterioration in portfolios – both for private and sovereign lending (see Box 2) – and threaten successful implementation of new commitments. MDBs have thus made a commitment to assess transition risks and physical risks under Building Block 1 and 2 of their Paris alignment approach. Adequate management of these risks and opportunities is highly relevant to MDBs’ strategies, business models and financial planning. Disclosure of how risk management following the risk assessment is also necessary for accountability reasons, and can help shareholders, clients, financial actors, civil society and other stakeholders to advance their understanding of climate-related risks and potential ways to manage these. The analysis should be done at borrower level (for new commitments) and at portfolio level (to assess the exposure of credit loan portfolios).

In a warming world, the management of climate risks may imply a reduction in commitments and financed activities exposed to physical climate risks. Yet, it is a part of MDBs’ mandates to take on a certain risk profile in line with their development mandates. MDBs can use information from risk assessments to better identify the most vulnerable borrowers and provide them with adapted financing solutions.

According to the section “Reporting under the TCFD” in the International Finance Corporation (IFC) annual report for 2018, climate risks have been recognized as material to financial returns, which has led the IFC to heed implications that result from climate change and investing in a business-as-usual scenario. Updates to risk management have resulted in a more careful consideration of climate impacts and climate risks in IFC’s new investments.

Impact management

As public finance institutions with a development mandate and in line with their Paris alignment commitment, MDBs should also report on the negative and positive impacts of their projects on emissions and resilience. This includes reporting on measurable direct impacts of projects (such as gross GHG emissions, resilience impact metrics or volume of transformational projects – see next section “Metrics and Targets”) and reporting on impacts through climate

finance under Building Block 3 (see also Memo 3) and through policy support and engagement with clients under Building Block 4.

1. Building on existing environmental and social safeguard practices and risk management frameworks, MDBs should disclose how they manage transition risks (under Building Block 1) and physical climate risks (under Building Block 2) identified by means of scenario analysis and stress testing. Climate risks should be characterized in the context of traditional banking industry risk categories, such as credit risk, market risk, liquidity risk and operational risk. Risk management should include milestones every five years – for example, in step with the UNFCCC’s common timeframes.

2. To manage portfolio risks identified through risk assessments under Building Block 1 or 2, MDBs should explore risk management strategies as alternatives to divestment from non-aligned assets that bring about real-economy impacts, for example, through their modification or early retirement. MDBs could also propose de-risking solutions to mobilize the private sector to finance risk mitigation (physical or transition) for the most vulnerable borrowers identified.

3. MDBs should disclose the impacts of their operations (see next section “Metrics and Targets”) and how they will manage these impacts to align all operations with the goals of the Paris Agreement. Impacts of project investments on emissions and resilience as well as impacts on a client’s climate-resilient decarbonization strategy could at the same time be part of an effective risk management.

For example, reporting on impact management of policy support under Building Block 4 could include reporting on how policy support is strategically used to (i) reduce climate-related risks for the client or (ii) help to build a Paris-aligned project pipeline (over time). For equity investments and financial intermediary financing, impact management could be achieved through binding targets and financing conditional on implementation of Paris-alignment strategies (such as the successive reduction of carbon-intensive assets as a share of the client’s portfolio).
Metrics and targets
MDBs’ climate finance tracking is a strong example of collaboration between banks and an important cornerstone of their efforts to mobilize climate finance. However, projects tagged under the MDBs’ methodologies for mitigation and adaptation finance tracking are not explicitly aligned with the Paris Agreement, and climate impacts are as yet not consistently accounted for in the remaining investments and bank operations. Similarly, a harmonized GHG accounting methodology has increasingly served as a basis for climate-related decision-making tools among MDBs (see Box 2). Still, MDBs have not commonly defined Paris-aligned benchmarks. In spite of the progress made, banks and stakeholders stand to benefit from a more rigorous harmonization and disclosure of science-based benchmarks and targets used to ensure Paris alignment.

Reporting on climate impacts
MDBs have individually committed to support increased climate finance levels, resulting in a collective effort totaling at least $65 billion annually by 2025. These ambitions are well regarded but focus only on a relatively small – if growing – part of overall Bank activities. “MDB Climate Finance”, as reported by banks in the joint annual report, refers to those financial resources committed to “development operations and components thereof, which enable activities that mitigate climate change and support adaptation to climate change”. This focus of reporting on financial inputs will not be enough to bring about a comprehensive understanding of the climate impact of MDB investments. Furthermore, MDBs have yet to agree on a harmonized reporting methodology for investments that are not categorized as climate finance.

Assessing impacts that result from MDBs’ financing is important in judging overall progress in aligning with the Paris Agreement. Furthermore, including projects not eligible for mitigation and adaptation finance would allow for an easier understanding of and comparison between MDB investments, raising awareness of activities that potentially could have negative impacts on climate goals.

Greenhouse gas accounting metrics are already used to reflect climate impacts of projects and can inform a Paris alignment assessment that works with emission benchmarks or emission targets. The effectiveness of tools based on projects’ GHG footprint crucially depends on the methodology used for GHG accounting, which should thus be disclosed (see Box 3).

Making disclosure of these metrics mandatory and achieving a harmonized framework to account for these metrics would greatly improve transparency and enable comparability of data, for example against Paris aligned benchmarks.

An overwhelming proportion of MDB climate finance flows towards mitigation activities, due to their impact in terms of net GHG emission reductions. Given the urgency of climate change mitigation and a shrinking space to settle for options that are impactful only on a relative basis, dedicated efforts to align with the Paris temperature goals and striving for net-zero emissions by 2050 need to make gross GHG emissions the core metric.

1. MDBs should start to report on Paris alignment of the entire portfolio in a harmonized manner. This could be done, for example, by defining indicators such as “aligned” or “misaligned” with the Paris Agreement. It should be made clear how indicators are defined and under which category existing and new projects fall. In that way, generated transparency on MDBs activities and their impacts could be evaluated in terms of Paris alignment against countries’ long-term strategies and climate-resilient low-carbon development pathways.

2. MDBs should report on positive and negative climate impacts of projects building on the joint GHG accounting approach (see Box 3) and on resilience metrics developed under Building Block 2 (see Memo 2) for all projects. Harmonized impact metrics should be reported for climate finance (see Memo 3). MDBs should make it mandatory to report on actual annual and expected future (lifetime) gross emissions and disclose (global/sector/country) benchmarks used in the Paris alignment assessment of investments as well as their scientific basis (see Memo 1). At sector level, we recommend that MDBs report on sector indicators of their portfolio, for example: the average emissions intensity of power generation projects (tCO₂/MWh), the average energy efficiency for new buildings (kgCO₂/m² yr) and the indicators to assess how financed projects contribute to sector decarbonization. In addition, we recommend that MDBs develop indicators to reflect transformational outcomes for climate finance (under Building Block 3) as well as for all other finance.
A framework developed by a technical working group of international financial institutions – among them six MDBs – stipulates a methodology to account for gross (absolute) and net (relative) emissions from direct investments and asks members to disclose net emissions of projects to “capture their development and mitigation contribution”. Accordingly, GHG emissions shall be accounted for as tons of CO$_2$e that the project is expected to produce on an annual basis.

Regarding disclosure, the minimum requirement of the framework is to disclose net emission reductions for mitigation projects at project level. However, emission reductions do not paint the full picture of climate impacts. For example, improvements in energy efficiency of fossil fuel-related investments that reduce annual emissions may still lead to a lock-in of emissions by extending asset lifetimes – a possible conflict with national sector strategies and decarbonization pathways. For accountability purposes with regard to the Paris commitments and national decarbonization pathways, reporting of gross emissions is crucially important.

When using gross emission targets, budgets and benchmarks, lifetime emissions of financed projects will need to be taken into account and should be disclosed. The Netherlands Development Finance Company (FMO) was the first international finance institution to set a target pathway for gross portfolio emissions in order to align with the 1.5°C temperature goal of the Paris Agreement.

It accounts for financed annual emissions as long as the investment is part of the bank’s portfolio (economic life). This reflects an approach that looks at financial risks. From the impact point of view, it should be considered that the technical lives of assets are often conceivably longer than the periods for which they remain on portfolios. Projects continue to emit after leaving the banks’ books. To ensure that the climate impacts of projects are in line with the temperature goal, estimated technical lifetimes could be taken into account. A third approach would be to trace emissions ex-post until the project closes down. This would require significant monitoring capacities but would ensure the most accurate reporting of financed emissions. Banks need to agree on a common methodology to transparently account for these legacy emissions.

Additional reporting on baselines, portfolio-wide emissions, lifetime GHG emissions and disaggregate GHG data by sector, country or project is currently voluntary under the joint framework. While including scope 1 and 2 emissions (direct emissions and emissions from electricity use as defined in the GHG accounting protocol) is mandatory, inclusion of scope 3 emission (upstream and downstream emissions) is voluntary.

Making disclosure of these metrics mandatory and achieving a harmonized framework to account for these metrics would greatly improve transparency and enable comparability of data, for example against Paris aligned benchmarks.
Reporting on climate risks: scenarios, assumptions, results

MDBs finance projects in a wide range of geographies and sectors that are subject to varying degrees of climate risk. As they hold a mandate to support sustainable development, it is imperative that climate risks are incorporated into strategic planning and project appraisal to ensure the long-term viability of projects and their mitigation or adaptation impact. By adopting a rigorous and harmonized framework for climate-related financial disclosure, MDBs will also be providing important signals for other financial actors and affiliated entities.

1. Banks should disclose (i) metrics and tools used to assess climate-related financial risks under Building Block 1 and Building Block 2, (ii) results from risk assessments, and (iii) strategies to address the risks identified by the scenario analysis, including stress tests.

2. MDBs should disclose which scenarios and stress tests are used to assess climate-related financial (transition and physical) risks in the short, medium and long term. This should include main assumptions.

3. MDBs should derive and disclose which investments would be affected under these scenarios. Metrics provided may relate to credit exposure, equity and debt holdings, or trading positions. They could be further broken down by (i) industry, (ii) geography, (iii) credit quality (eg, investment grade or non-investment grade, internal rating system) and (iv) average tenor. The TCFD also recommends provision of the amount and percentage of carbon-related assets relative to total assets as well as the amount of lending and other financing connected with climate-related opportunities. In a Paris-alignment context this can be done by reporting ratios of misaligned-to-total-assets or brown-to-green energy.

4. MDBs should disclose the results of scenario analysis and stress tests in publicly available documents. Metrics provided could be “expected loss” or “net present value” of investments when (stress) scenarios are applied. This should include the results of stress tests of critically large investments to show their sustainability in low-carbon scenarios in line with Nationally Determined Contributions and 1.5°C-oriented scenarios as well as in >2°C scenarios.

5. Lastly, MDBs should describe strategies to address identified risks at activity level (describing risk managing activities in project documents) as well as at portfolio level (in annual financial reporting, for example under TCFD). This could include disclosure of cost and expected impacts of mitigation and adaptation measures. As part of these strategies, MDBs can implement and should also disclose targets and tools to assess whether new commitments or entire portfolios are Paris aligned.
Reporting on tools and targets

**Tools, benchmarks and assumptions used in Paris-alignment assessment**
Project-level climate tools applied during the approval process can have a critical influence on financing decisions, ultimately shaping the banks’ portfolios. Apart from the harmonized approach to GHG accounting, to date MDBs have not developed methodologies that could govern the concerted implementation of climate tools and support Paris-aligned decision making. Taking GHG accounting as the underlying metric, the application of benchmarks, such as emission performance standards or shadow carbon price, could inform best practice debates and allow for the analysis of trends across the financial sector. Their implementation and disclosure are, moreover, important prerequisites for rigorous science-based and believable targets to advance Paris alignment.

1. MDBs should report all tools/benchmarks and underlying assumptions used in Paris alignment assessment as part of their annual reporting. They should disclose whether and how they use GHG accounting, sectoral benchmarks or shadow carbon prices and should reference the documents where the methodologies can be found.

2. MDBs should disclose levels and future increases of shadow carbon prices, to which sectors and for which scopes they are applied and which thresholds are used. Those levels of future shadow carbon prices should be correlated with 1.5°C-related scenarios. MDBs should also disclose levels and decreases over time of emission performance standards and other benchmarks, as well as the sectors, activities and scopes to which they are applied.

**Targets used in Paris-alignment assessment**
Metrics and tools for climate impacts – negative and positive – enable the use of targets to track progress in aligning MDBs’ operations with the Paris Agreement. They can guide investment decisions and incentives at bank strategy level or at country/sector level. If targets are science based, the use of targets can ensure that near-term activities contribute to long-term goals. Not least, their disclosure establishes benchmarks and best practices, and facilitates Paris alignment among MDBs and other financial institutions.

1. MDBs should utilize impact metrics to create targets, eg, aligned projects as a share of portfolio/sector. Similarly, they could use these metrics to assess the proportions of those projects that are counterproductive/harmful to the goals of the Paris Agreement (such as fossil fuel finance) and set targets to reduce them. Targets could also include gross GHG emission targets at country, sector or portfolio level. MDBs could, for example, set the target that absolute emissions of project financed by MDBs (in tCO$_2$/million $) in the infrastructure sectors (electricity, building, transport) should progressively decrease towards zero by around 2050.

2. MDBs should also disclose and describe key climate-related targets concerning all operations, including information on progress towards a Paris-aligned project pipeline and portfolio by 2050. They should also disclose how the target aligns with the goals set out in the Paris Agreement.

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\textsuperscript{iii} Shadow carbon prices are applied internally, generally during the economic and/or financial analysis of projects, to internalize the negative externality of GHG pollution or to indicate the mitigation costs of each avoided metric ton of carbon. Reflecting the cost of mitigating emissions to Paris-aligned levels where no pricing mechanism exists can crucially inform investment decisions.
1. MDBs should disclose their assessment of climate-related risks and opportunities as well as climate impacts of all activities. The TCFD provides a useful structure to disclose climate-related financial risks and opportunities. It recommends reporting on climate-related financial risks with regard to thematic areas (governance, strategy, risk management and metrics). Similarly, climate impact reporting should address governance, strategy and management of negative climate impacts and metrics.

2. Scenario analysis and strategy: MDBs should conduct scenario assessments and stress tests using 1.5°C climate scenarios as well as >2°C climate scenarios to identify individual activities and entire portfolios that could be financially affected by a changing climate and transforming economies. To establish best practice, facilitate mutual learning and comparability of results, the scenarios used and assumptions made should be successively harmonized between MDBs (see section 2.2.)

3. Risk and impact management: From scenarios, banks can determine which investments could be affected by physical and transition risks, and also disclose the volume of assets exposed to risks. They should further disclose the results of stress tests, such as expected loss under given scenarios. Lastly, MDBs should disclose how they aim to address and mitigate these risks and how they manage the impacts of their projects (see section 2.3. and 2.4)

4. Section 2.4 provides detailed recommendations on metrics to disclose in addition to the scenarios used.

In sum, MDBs should report, at activity level:

a. Metrics that reflect climate impacts, such as gross GHG emissions per year and over an asset's lifetime (and methodologies used for GHG accounting) and indicators of alignment under Building Block 1, 2, 3 or 4 (including disclosure of assessment results) as well as indicators that reflect transformational impacts, eg, on the decarbonization of a sector

b. Financial risks (physical risks and transition risks) relevant to the project

c. Tools applied to address and mitigate risks and manage impacts (eg, Paris alignment assessment criteria, emission benchmarks, adaptation options applied).

And at portfolio level:

a. Portfolio-level impacts, such as gross portfolio emissions, average sector emissions and average energy intensity, and the ratios of misaligned-to-total-assets or brown-to-green energy investments

b. Portfolio-level exposure to transition and physical risks derived from scenario analysis

c. Expected loss under different scenarios

d. How aggregate financial risks are managed and mitigated. MDBs should disclose strategies and tools to address and mitigate risks, which could, for example, include portfolio or sector-wide targets, including 5-year milestones

e. Portfolio-level tools, such as a sector or portfolio-level GHG target, net-zero-CO₂-by-latest-2050 target or portfolio emissions pathway, a climate finance target or a target to reduce misaligned activities in the portfolio.

5. In addition, MDBs should report on key indicators that measure alignment of internal operations (eg, transport emissions per full time employee) under Building Block 6.


4. Ibid


7. Various organizations and initiatives are currently working to standardize robust guidelines for climate disclosures, including the Sustainability Accounting Standards Board and the Principles for Responsible Investment.

8. Ibid, p. 5.


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This series also includes the following memos:

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2. Enhancing Adaptation and Climate-Resilient Operations within Multilateral Development Banks
3. Climate Finance: Accelerating the Transition to Carbon Neutrality and Climate Resilience
4. Advancing Paris Alignment through Multilateral Development Banks’ Engagement and Policy Development Support
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