

Green Climate Fund

Financial Risk Management Framework

GCF/B.07/05

07 May 2014

Meeting of the Board
18-21 May 2014
Songdo, Republic of Korea
Agenda item 9

Recommended action by the Board

It is recommended that the Board:

- (a) Take note of the information presented in document GCF/B.07/05 *Financial Risk Management Framework*; and
- (b) Adopt the draft decision presented in Annex I to this document.

Financial Risk Management Framework

I. Introduction

1. At its June and October 2013 meetings, the Board took a number of important decisions relating to the financial risk management framework of the Green Climate Fund. Taking these decisions into account, this document sets out the conceptual foundations for this framework, and proposes an initial financial risk management framework for the Fund (Annex II) a categorization of financial risks and set of risk management tools (Annex III).

II. Linkages with other documents

2. This document intends to present the basis of a comprehensive financial risk management system within the Fund's governance and structure. It has linkages with and addresses matters that cut across the following documents:

- (a) *Guiding Framework and Procedures for Accrediting National, Regional and International Implementing Entities and Intermediaries, including the Fund's Fiduciary Principles and Standards and Environmental and Social Safeguards (GCF/B.07/02);*
- (b) *Initial Results Management Framework of the Fund (GCF/B.07/04);*
- (c) *Initial Modalities for the Operation of the Fund's Mitigation and Adaptation Windows and its Private Sector Facility (GCF/B.07/08);*
- (d) *Investment Framework (GCF/B.07/06); and*
- (e) *Initial Proposal Approval Process, Including the Criteria for Programme and Project Funding (GCF/B.07/03).*

III. Prior Board decisions

3. The recommendations in this document will operationalize decisions B.04/08, paragraph (j), and B.05/04, paragraph (e), and assist the Risk Management Committee, as well as the Investment Committee to a different degree, in the performance of their duties.

IV. Purpose of the initial financial risk management framework

4. The overarching purpose of the Fund's initial financial risk management framework is to:
- (a) Establish over time the overall level of financial risk the Board is willing to assume for the Fund in pursuit of its objectives (the Fund's risk appetite or risk limit), to be reflected in the Fund's investment framework that sets out the criteria for the process of funding approval for projects and programmes, as well as in the Fund's financial policies relating to resource mobilization;
 - (b) Ensure that the risks assumed by the Fund lie within the Board-approved ceiling for the risk appetite at any given time, by monitoring, assessing and reporting the actual level of financial risk;
 - (c) Provide an analytical framework in which the Fund's portfolio will be reviewed and managed, and a feedback mechanism for the Board to adjust its approval criteria for

funding proposals from time to time on the basis of the Board-determined risk appetite and the level of actual risk assumed by the Fund; and

- (d) Define the roles and responsibilities of the different actors involved in, as well as the procedures for, the Fund's financial risk management.

4.1 Fund's risk appetite

5. The Governing Instrument defines the purpose of the Fund as follows:

"... the Fund will promote the paradigm shift towards low-emission and climate-resilient development pathways by providing support to developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change..."¹

6. In order to achieve a paradigm shift, the Fund needs to finance new and unconventional projects and programmes and/or the scaling-up of conventional technologies that are new to a location. The projects, programmes and technologies would normally not be financed on the market because of perceived or real risk, or a lack of economic and financial viability due to their cost or insufficient revenue. By their nature, these activities and technologies would at times assume a higher level of risk than conventional investments undertaken on the market.

7. The actual level of risk that the Fund will adopt will involve a trade-off between:

- (a) **Excessive risk** in undertaking climate-related investments, which, by funding an excessive amount of non-viable projects, would endanger the long-term viability and sustainability of the Fund (and therefore its mission); and
- (b) **Insufficient risk** in undertaking climate-related investments, which would mean that the Fund would not achieve its stated objective of promoting a paradigm shift in developing countries and would not be truly catalytic in relation to its partners and stakeholders.

8. One of the roles of the Board will be to determine the 'right' level of risk and set the overall risk management framework within which the Fund will operate. Based on the experience of other climate funds, notably the Clean Technology Fund (CTF), the process of determining the risk appetite for the Fund will be a complex process of convergence over time. In the case of the Fund, the Board may wish to set initial values for key risk parameters based on recommendations from the Risk Management Committee (e.g. a ceiling for non-performing loans (NPLs) of 10 or 20 per cent of the outstanding loan portfolio volume over a long period²). By periodically reviewing the risk monitoring data prepared by the Secretariat that shows the actual level of financial risk assumed by the Fund, the Board will then be able to make the necessary course corrections in its funding approvals. Based on this feedback loop, the Board will also be able to refine the values of the Fund's key risk parameters over time.

9. In order to understand the implications of and help determine the Fund's risk appetite, the Board may wish to request the Secretariat to develop an analysis of the Fund's potential risk appetite scenarios, such as a ceiling for NPLs or an overall shadow credit risk rating. These scenarios would be based on appropriate assumptions for risk parameters, such as total proportion of grants received by the Fund, amount of grants received as a proportion of loans for the capital cushion, and assumptions for the write-down rates of loans.

¹ Paragraph 2 of the Governing Instrument (annex to decision 3/CP.17 of the United Nations Framework Convention on Climate Change).

² The lower the ceiling, the more risk-averse the Fund will have to be.

V. Financial risks borne by the Fund³

5.1 Identification and management of risk factors and sources

10. The financial risks assumed by the Fund will be threefold:

- (a) **Asset-side risk.** The Fund's balance-sheet assets will be grants, concessional loans and other financial instruments as may be approved by the Board, channelled through accredited implementing entities (IEs) and intermediaries, to fund climate mitigation and adaptation projects and programmes implemented by executing entities (EEs). All financial risks associated with such funding will be considered as asset-side risk. In practice, asset-side risk needs to be reviewed on an aggregate or portfolio basis in order to obtain an overall picture of the risk assumed:
- (i) At the portfolio level, the high-risk projects and programmes financed by the Fund will be offset by other, lower-risk projects and programmes. Therefore, in order to obtain a comprehensive picture of risk, the entire portfolio will need to be reviewed;⁴
 - (ii) Initially, as the Fund will not operate directly and rather relies on other entities for project implementation, the appraisal, management and mitigation of risks at the project level will be the responsibility of intermediaries and IEs/EEs. Therefore, the Fund will need to monitor and manage financial risk at the portfolio level.⁵ The Fund will also have to ensure that intermediaries and IEs/EEs are adequately monitoring and managing the risks of the projects for which they are responsible;
- (b) **Liability-side risk.** The Fund's balance-sheet liabilities will initially be constituted from grants, capital contributions and concessional loans and any other types of input the Fund has received from public contributors. Other contributors such as foundations and private sector entities may contribute grants, subject to the policies for contributions that are to be developed. At a later stage, there may also be other forms of contributions, to be decided by the Board.
- (c) Liability-side risks include *inter alia* the non-honouring of pledges by contributing partners or arrears in contributions, and risks relating to foreign exchange and interest rate movements (as contributions may be in the form of concessional loans in different currencies);
- (d) **Asset-liability mismatch risk.** A third type of risk relates to mismatch between the Fund's assets and liabilities in terms of total grants received versus grants provided, borrowing and lending maturity, borrowing and lending interest rate, liquidity, and the NPL rate. They will be managed through an asset-liability management process within the Secretariat. In particular, the average maturity of the Fund's outstanding grants and loans (and other financial instruments) may not, in aggregate, exceed those of overall liabilities, as the Fund would otherwise face a liquidity risk. Similarly, the assessed NPL rate of the Fund's overall loan portfolio must not exceed the total capital and grants received from loan contributors to avoid taking on undue levels of financial risk and to

³ This document is based on the financial risk management frameworks of the World Bank, the International Finance Corporation and the Multilateral Investment Guarantee Agency, the emerging risk management framework of the CTF as well as best practices in corporate banking and investment funds. The document notes where it departs from the best practices of these institutions.

⁴ At the portfolio level, the expected loss (i.e. riskiness) is the average of expected losses of each project, weighted by the financial volume of each.

⁵ Including, *inter alia*, exposure to interest rate and currency risk.

avoid the possibility that certain contributors' grant contributions serve to cross-subsidize loan repayments to other partners. Three potential scenarios are as follows:

- (i) If the average maturity of grants and loans provided by the Fund exceeds that of the funding received from contributors, the Fund will run into cash flow problems (i.e. reimbursing contributors at a faster rate than it receives reflows from its borrowers);
- (ii) If the average interest rate of loans provided by the Fund is lower than that of the funding received from contributors, the Fund will generate a negative net income and eventually become insolvent (or require an injection of new funding to avoid insolvency);
- (iii) If the total volume of NPLs and grants awarded exceeds the total volume of grants received from contributors, the Fund will generate a negative net income and eventually become insolvent.

11. **Implications for the structure of funding received.** The rule contained in paragraph 10 (d) (iii) has important implications for the structure of funding (grants, capital or loans) the Fund receives from contributors. As a significant proportion of the financial support the Fund will provide through IEs and intermediaries will take the form of grants – notably for non-revenue generating activities, such as strategies and studies, but also for many adaptation activities as well as some mitigation activities – it will be important for the financial viability of the Fund that it receive a significant proportion of its own funding from contributors in grant form and as capital. It is reasonable to expect that the Fund will be providing close to half of its support through IEs and intermediaries in the form of grants. This implies that the grant financing from contributors should be more than half of total funding received.

12. **Cross-subsidization.** By its nature and irrespective of the risk appetite set by the Board, the Fund will take on a certain degree of financial risk, some of which might result in NPLs. In the broader financial sector, financial entities cover their NPLs and other financial risks through a capital cushion constituted by shareholder equity and retained earnings.

13. In the case of the Fund, there are three possible ways to initially cover NPL risk:

- (a) Providers of grants to the Fund could take on all NPL risk (in effect, cross-subsidizing the providers of loans that would be assured of loan repayments). This situation would not be acceptable to the contributors to the Fund;
- (b) Lenders to the Fund could accept the possibility of a write-down of the value of their loans to compensate for potential NPLs; or
- (c) The Fund could be endowed with a capital cushion to cover NPL risk.

14. In practice, the potential providers of grants have signalled their unwillingness to consider cross-subsidization. In order to avoid such cross-subsidization, the Fund will require a policy relating to loans accepted, either through:

- (a) Appropriate arrangements with contributors regarding the possible write-down of loan contributions (hereinafter referred to as option 1);⁶
- (b) The provision of a sufficient capital cushion by the loan provider (hereinafter referred to as option 2); or
- (c) The ring-fencing of grants and loans (hereinafter referred to as option 3).

15. Experience with other funds has demonstrated that option 3 introduces significant rigidities into the management of the Fund's resources, but does not on its own resolve the core

⁶ If loan providers accept a write-down of the value of their loans, the write-down rate would be an important parameter to consider when determining the Fund's risk appetite.

issue of how to deal with NPLs. While ring-fencing does prevent cross-subsidization between the providers of grants and providers of loans, it is still necessary to implement one of the other two options (option 1 or option 2), as otherwise the NPL level would have to be kept at zero and the Fund would not be able to make use of the loan contributions.

16. The Board may wish to determine which of the two viable solutions (option 1 or option 2) is the most appropriate means to avoid cross-subsidization risk. A more flexible option would be to allow each provider of loans to determine which of the two options they would wish to adopt to cover the NPL risk of their loan.

17. It should be noted that over the long term, it is expected that the net financial reflows to the Fund (over and above the repayment obligations to loan contributors) will further strengthen the Fund's buffer that covers NPL risk.

VI. Components of the initial financial risk management framework

18. The Fund's initial financial risk management framework will be made up of the following three components (see also Annex II):

- (a) Financial risk policies;
- (b) Financial risk monitoring and reporting; and
- (c) Financial risk governance.

6.1 Financial risk policies

19. The Fund's initial financial risk policies are:

- (a) All resources received and extended by the Fund will be accounted for in grant-equivalent terms based on a standard methodology, to be developed by the Fund based on best international practices⁷;
- (b) The Fund will in aggregate seek to maximize grant contributions, taking into account its theme-based allocation. This will ensure that grants (excluding grant contributions received to cover non-performing loan (NPL) risk) exceed a lower bound set by the Board based on recommendations from the Risk Management Committee⁸. Initially, it is set at 50 per cent of the total contributions to the Fund in nominal terms;
- (c) The Fund will initially provide grants and loans through implementing entities (IEs) and intermediaries as per the financial terms and conditions to be approved. IEs and intermediaries will be permitted to blend grants and loans received from the Fund with their own sources of financing or with third-party financing;
- (d) In order to avoid any cross-subsidization risk, the Fund will monitor incoming and outgoing flows and incorporate a conservative hypothesis with respect to possible financial losses in order to ensure that actual reflows from outgoing loans will always exceed repayments due to contributors. The modalities of loan contributions, both at the collective and at the individual contributor level, in terms of concessionality and other modalities (including the possibility of associated grant or capital provision and appropriate arrangements with contributors regarding the possible write-down of loan contributions) to ensure that loan contributions do not entail any risk in this respect will

⁷ See IMF, "Concessionality and the design of debt limits in IMF-supported programs in low-income countries", October 2013. Available from <http://www.imf.org/external/np/pdr/conc/>. The IMF also hosts a concessionality calculator on its website at <http://www.imf.org/external/np/pdr/conc/calculator/default.aspx>

⁸ The lower bound would be established following stress tests carried out by the Secretariat and reviewed by the Risk Management Committee.

be defined. Overall, these provisions will ensure that the average concessionality level of outgoing loans will be less than the average concessionality level of incoming contributions with a sufficient margin to cover expected NPL loss;

- (e) To further avoid cross-subsidization between providers of grants and providers of loans, future financial losses will be borne by all contributors, which will require one of the following arrangements be taken with each loan contributor:
 - (i) Appropriate arrangements with contributors regarding the possible write-down of loan contributions; or
 - (ii) The associated provision of a grant or capital contribution by the contributor to the Fund;
- (f) While maximizing effectiveness, the Fund will seek diversity in its asset portfolio on the basis of the Board-determined allocation criteria, geography, results areas, and accredited entities, keeping in mind prudent risk limits from a portfolio diversification perspective where relevant for loans and instruments that entail possible losses.

6.2 Financial risk monitoring and reporting.

20. The quantification and measurement of financial risk exposure is the key responsibility of the Fund's Chief Financial Officer (CFO) and the Risk Manager in her/his team, under the guidance of the Operational Support Services Director and the Executive Director. The Risk Management Committee is responsible for overseeing the monitoring of risk. The most important set of tools are the Fund's accounting and financial management systems (those managed in-house as well as those managed by the Trustee for its delegated responsibilities). These include:

- (a) **Financial risk management dashboard:**⁹ In order to enable close monitoring and management of the Fund's financial risks, the CFO will prepare a financial risk management dashboard that brings together into one succinct report the quantification of the most important risks, with Board-imposed ceilings if appropriate. The summary should be prepared and submitted to the Board not less frequently than quarterly, within 10 working days after the end of the reporting period;
- (b) **Financial risk register:** In addition to the summary of the Fund's financial risks presented quarterly, a more detailed risk register will be prepared to present specific financial risks. The risk register will be presented and reviewed by the Board on a yearly basis, along with annual financial statements;
- (c) **Financial statements:** (e.g. balance sheet, income statement, funds-flow statement) will be prepared and reviewed not less frequently than semi-annually and are an important tool for monitoring financial risk. The comparison of key financial ratios over time provides an indication of the overall financial health of the institution and allows for timely course correction.
- (d) **Annual portfolio review** will be based on the periodic submission of information from intermediaries and IEs, as outlined in the grant or loan agreements. This review will seek to identify leading indicators of financial risk within the portfolio, both to respond proactively and to adjust the Fund's grant and lending practices in consequence.
- (e) An **annual external audit** of the Fund's financial statements can, in addition to confirming the veracity of the financial information submitted, provide some elements

⁹ The financial risk management dashboard proposed in this section draws heavily on the ongoing work in the Climate Investment Funds (CIFs) (notably the CTF) to establish an enterprise risk management dashboard.

of the financial risk profile as viewed by a third party, although this is not the principal purpose of the external audit.

- (f) **The Committee of Sponsoring Organizations of the Treadway Commission (COSO) risk monitoring self-evaluation.** In addition to the explicit financial risk areas and indicators outlined in this report and reviewed by the Board at the level of the financial risk management summary and the financial risk register, a self-assessment of the risk control environment will be undertaken on a regular basis (every second year) using the COSO Internal Control Integrated Framework.¹⁰

6.3 Financial risk governance

21. Each of the different actors (the Board's Risk Management Committee, the CFO and Risk Manager, and the Secretariat's Risk Working Group) will have the following roles to play:
- (a) The **Board's Risk Management Committee** will provide overall oversight for the risk management of the Fund, including oversight of a certain number of key Fund elements, such as financial instruments. Its primary role is to recommend risk ceilings to the Board (the Fund's risk appetite or risk limit) and the minimum share of grants of total contributions that should be received; review compliance with these ceilings and minimums; oversee the risk monitoring system managed by the Secretariat; and report back to the Board;
 - (b) The **CFO's** core responsibilities will be to maintain financial reporting systems and asset-liability management processes, supervise the Risk Manager and liaise with the Trustee to ensure the accurate and timely monitoring of financial risk. S/he will also be responsible for the preparation of the regular annual portfolio review for consideration by the Secretariat's Risk Working Group and the Board's Risk Management Committee; and
 - (c) The **Secretariat's Risk Working Group** will review the Fund's level of financial risk compared to the ceilings set by the Board's Risk Management Committee and, as part of the Fund's approval process for specific funding decisions, take account of any misalignment of risk in the Fund's second stage due diligence of project and programme proposals. (see document GCF/B.07/07)

VII. Next steps and recommendations

22. The Board may wish to adopt the decision contained in Annex I to this document.

¹⁰ COSO is a joint initiative of five private sector organizations and is dedicated to the development of frameworks and guidance on enterprise risk management, internal control and fraud deterrence. See also <http://www.aicpa.org/interestareas/businessindustryandgovernment/resources/corporategovernanceriskmanagement/internalcontrol/pages/coso_integrated_framework_project.aspx>.

Annex I: Draft decision of the Board

The Board, having reviewed document GCF/B.07/05 *Financial Risk Management Framework*:

- (a) Adopts the Fund's initial financial risk management framework as contained in Annex II to this document;
- (b) Takes note of the Fund's financial risk categorization and management as contained in Annex III to this document;
- (c) Decides that the set of risk monitoring and reporting tools listed in table 1 of Annex II to this document will be made operational before the Fund approves funding proposals;
- (d) Requests the Secretariat, in consultation with the Risk Management Committee, to prepare an analysis of the Fund's potential risk appetite scenarios and undertake a stress test for these scenarios under different key risk assumptions, for consideration at the second Board meeting of 2015;
- (e) Decides to undertake a review of the initial financial risk management framework no later than three years after the initial capitalization of the Fund.

Annex II: Initial financial risk management framework

1. The Fund's initial financial risk management framework consists of the following components:

- (a) Financial risk policies;
- (b) Risk monitoring and reporting; and
- (c) Risk governance.

I. Financial risk policies

2. The Fund's initial financial risk policies are:

- (a) All resources received and extended by the Fund will be accounted for in grant-equivalent terms based on a standard methodology, to be developed by the Fund based on best international practices;
- (b) The Fund will in aggregate seek to maximize grant contributions, taking into account its theme-based allocation. This will ensure that grants (excluding grant contributions received to cover non-performing loan (NPL) risk) exceed a lower bound set by the Board based on recommendations from the Risk Management Committee¹. Initially, it is set at 50 per cent of the total contributions to the Fund in nominal terms;
- (c) The Fund will initially provide grants and loans through implementing entities (IEs) and intermediaries as per the financial terms and conditions to be approved. IEs and intermediaries will be permitted to blend grants and loans received from the Fund with their own sources of financing or with third-party financing;
- (d) In order to avoid any cross-subsidization risk, the Fund will monitor incoming and outgoing flows and incorporate a conservative hypothesis with respect to possible financial losses in order to ensure that actual reflows from outgoing loans will always exceed repayments due to contributors. The modalities of loan contributions, both at the collective and at the individual contributor level, in terms of concessionality and other modalities (including the possibility of associated grant or capital provision and appropriate arrangements with contributors regarding the possible write-down of loan contributions) to ensure that loan contributions do not entail any risk in this respect will be defined. Overall, these provisions will ensure that the average concessionality level of outgoing loans will be less than the average concessionality level of incoming contributions with a sufficient margin to cover expected NPL loss;
- (e) To further avoid cross-subsidization between providers of grants and providers of loans, future financial losses will be borne by all contributors, which will require one of the following arrangements be taken with each loan contributor:
 - (i) Appropriate arrangements with contributors regarding the possible write-down of loan contributions; or
 - (ii) The associated provision of a grant or capital contribution by the contributor to the Fund;
- (f) While maximizing effectiveness, the Fund will seek diversity in its asset portfolio on the basis of the Board-determined allocation criteria, geography, results areas, and

¹ The lower bound would be established following stress tests carried out by the Secretariat and reviewed by the Risk Management Committee.

accredited entities, keeping in mind prudent risk limits from a portfolio diversification perspective where relevant for loans and instruments that entail possible losses.

II. Financial risk monitoring and reporting tools

3. Table 1 provides an overview of the Fund's risk monitoring and reporting tools.

Table 1: Fund's risk monitoring and reporting tools

RISK MONITORING AND REPORTING TOOL	FREQUENCY OF USE	PURPOSE
Financial risk management summary	Quarterly	Track key financial risk indicators in real time.
Financial risk register	Annually	Perform an annual in-depth review of key risk events, management response and residual risk.
Financial statements	Semi-annually	Gain an overview of the institution's financial situation and its trend over time.
Portfolio review	In real time, with an annual portfolio report	Identify leading indicators of financial risk within the portfolio based on the submission of information from intermediaries and implementing entities; perform stochastic portfolio analyses and sensitivity analyses.
External audit report	Annually	Confirm the accuracy of financial statements as well as obtain a third-party view of the financial health of an institution
Self-evaluation by the Committee of Sponsoring Organizations of the Treadway Commission	Every two years	Scan possible risk gaps not covered by the above-mentioned monitoring instruments.

III. Financial risk governance: roles and responsibilities

4. Table 2 provides an overview of the roles and responsibilities related to the Fund's financial risk governance.

Table 2: Fund's financial risk governance: roles and responsibilities

	Chief Financial Officer (and Risk Manager)	Secretariat's Risk Working Group	Board's Risk Management Committee
Role and responsibility	<ul style="list-style-type: none"> • Preparation of financial statements • Preparation of annual portfolio reviews • Management of external audit processes • Review of the financial reporting from the trustee (and implementing entities and intermediaries) • Preparation of periodic financial risk management summaries • Development of asset-liability management process 	<ul style="list-style-type: none"> • Review of financial statements, portfolio review and risk summary • Integration of portfolio-level risk data into Secretariat's due diligence as part of the approval process for project and programme funding • Management of the annual Committee of Sponsoring Organizations of the Treadway Commission (COSO) risk self-assessment for the Secretariat 	<ul style="list-style-type: none"> • Overall oversight of the Fund's risk management • Review of financial statements, portfolio review and risk summary • Recommendation of risk ceilings (the Fund's risk appetite or risk limit) for the Board's approval • Assessment of compliance of the Fund's financial risk levels with the ceilings • Provision of guidance to the Secretariat on portfolio risk • Reporting on financial risk to the Board • Management of the annual COSO risk self-assessment for the Board

Annex III: The Fund's financial risk categorization and management*

	ASSET-SIDE RISK	LIABILITY-SIDE RISK	ASSET-LIABILITY MISMATCH RISK
Aspect of the Fund's business	<p>Funding extended to developing country entities to fund climate mitigation and adaptation projects and programmes</p> <ul style="list-style-type: none"> • Grants • Concessional loans • Other financial instruments, as may be approved by the Board 	<p>Financial contributions pledged or received from partners</p> <ul style="list-style-type: none"> • Grants • Capital contributions • Loans • Any other input received by the Fund 	Mismatch between the Fund's assets and liabilities
Key nature of risks (non-exhaustive list)	<ul style="list-style-type: none"> • Counter-party risk: counter-party evaluation, etc. • Implementation risk (non-performing borrower/intermediary or implementing entity (IE), as appropriate) • Technical risk (risky technology) • Market risk (price movements) • Foreign exchange risk, as may be approved by the Board (exchange rate risk, currency availability) • Country risk (war and civil disturbance, expropriation, breach of contract) 	<ul style="list-style-type: none"> • Arrears in contributions • Foreign exchange movements in currencies held • Interest rate movements • Liquidity risk • Counter-party risk relating to the Trustee 	<ul style="list-style-type: none"> • Maturity and tenor: mismatch in duration of funding received and funding granted • Interest rate: mismatch in pricing of funding received and granted • Currencies: mismatch in currencies of funding granted and received • Liquidity mismatch between assets and liabilities • Non-performing loan (NPL) rate: aggregate NPLs and grants provided exceed grants received • Cross-subsidy risk: grants from certain contributors serve to cross-subsidize loan repayments to other partners

*Excludes global financial and political risks.

	ASSET-SIDE RISK	LIABILITY-SIDE RISK	ASSET-LIABILITY MISMATCH RISK
	<p>Asset-side risks need to be monitored and managed in aggregate at the portfolio level</p> <p>At the project level, risks will be managed and mitigated by the IE or intermediary, as appropriate:</p> <ul style="list-style-type: none">• Risk assessment: technical and financial appraisal to evaluate the overall risk profile of the project/programme• Implementation risk: borrower/ implementer accreditation, third-party guarantees of performance• Technical risk: independent engineering review• Market risk: hedging, contractual terms (e.g. take-or-pay)• Foreign exchange risk: foreign exchange hedging, swaps• Country risk: political risk insurance	<ul style="list-style-type: none">• Arrears in contributions pledged: mitigated through contracts and/or backstop guarantees• Foreign exchange risk: mitigated through institutional exchange policies, hedging and/or swaps• Interest rate risk: mitigated through hedging such as swaps• Liquidity risk: mitigated by the Trustee through cash management• Counter-party risk: counter-party evaluation and/or performance guarantees/bonds	<ul style="list-style-type: none">• Monitoring of asset/liability match in real time to avoid exceeding Board-established ceilings on maturity and tenor; interest rate; currencies; and NPL rate• Ongoing asset-liability management process to track asset-liability mismatch