



**GREEN
CLIMATE
FUND**

Meeting of the Board
27 February – 1 March 2018
Songdo, Incheon, Republic of Korea
Provisional agenda item 13

GCF/B.19/19

5 February 2018

Risk management framework

Proposal by the Risk Management Committee

Summary

In decision B.17/11, the Board adopted the first set of components of the risk management framework (“RMF”) and requested the Secretariat to continue with the development of the RMF and its remaining components in consultation with the Risk Management Committee and to present these for consideration of the Board at its eighteenth meeting.

Through the same decision at its seventeenth meeting, the Board also requested the Secretariat to further develop the risk dashboard and the underlying methodologies for consideration by the Board at its eighteenth meeting and to publish the risk dashboard every quarter thereafter.

At its eighteenth meeting, the Board took note of document GCF/B.18/05 titled “GCF risk management framework: Proposal by the Risk Management Committee”. However, no decision was taken under this item.

This document presents the Risk Management Committee proposal on the second set of components of the risk management framework and the update to the risk dashboard.

Table of Contents

I.	Introduction	1
II.	Actions taken	1
III.	Objective	1
IV.	Recommended action by the Board	2
	Annex I: Draft decision of the Board	3
	Annex II: Investment risk policy	4
	Annex III: Non-financial risk policy	10
	Annex IV: Funding risk policy	16
	Annex V: Risk dashboard - revised reporting on concentration	23

I. Introduction

1. Through decision B.17/11, the Board adopted the first set of components of the risk management framework (“RMF”) and requested the Secretariat to continue with the development of the RMF and its remaining components in consultation with the Risk Management Committee (“RMC”) and to present these for consideration of the Board at its eighteenth meeting.
2. The Board, in decision B.17/11, also requested the Secretariat to further develop the risk dashboard and the underlying methodologies for consideration by the Board at its eighteenth meeting and to publish the risk dashboard every quarter thereafter.
3. In addition, through the same decision at its seventeenth meeting, the Board requested the Secretariat to continue with the development of appropriate risk rating models with support from an external professional service provider and in consultation with the RMC and to present the risk rating models for consideration by the Board at its nineteenth meeting.
4. At its eighteenth meeting, the Board took note of document GCF/B.18/05 titled “Risk Management Framework – Proposal by the Risk Management Committee”; however, no decision was taken under this item.
5. Through decision B.18/01, the Board approved the work plan of the Board for 2018 and decided to postpone the presentation of the risk rating methodologies for consideration by the Board to its twentieth meeting.
6. This document presents the Risk Management Committee’s proposal on the second set of components of the risk management framework and the update to the risk dashboard.

II. Actions taken

7. To fulfil the risk-related mandate given by the Board, the Secretariat continued with the development of the remaining components of the RMF with the support of Oliver Wyman, an internationally reputable consulting firm.
8. In the process of developing the risk-related policies within the RMF, the Office of Risk Management and Compliance (“ORMC”), together with Oliver Wyman, gathered feedback on the risk-related policies from relevant divisions within the Secretariat. The risk policies and the revised reporting on concentration within the risk dashboard were developed under the guidance of the RMC.
9. The RMC reviewed the following documents:
 - (a) The investment risk policy;
 - (b) The non-financial risk policy;
 - (c) The funding risk policy; and
 - (d) The risk dashboard – revised reporting on concentration.
10. Following the review of the above components of the RMF, the RMC decided to present them to the Board for its consideration.

III. Objective

11. The purpose and use of the RMF is to provide:
 - (a) Greater clarity on the risks inherent in individual decisions and the day-to-day functioning of the GCF, enabling the Board to make appropriate trade-offs;

- (b) Greater consistency in decisions across the organization, tied together by the Board's views on what are the key risks, how much risk is acceptable and how the risks should be managed;
- (c) A more assured path towards achieving the mandate of the GCF (with well-understood likelihood and impact of risks); and
- (d) Faster decision-making enabled by clarity and consistency (e.g. the RMF provides clarity to accredited entities and the Secretariat on what funding proposals should include from a risk perspective, resulting in more comprehensive and higher quality funding proposals developed with less back and forth).

IV. Recommended action by the Board

12. It is proposed that the Board adopts the draft decision as set out in annex I.

Annex I: Draft decision of the Board

The Board, having reviewed document GCF/B.19/19 titled “Risk management framework: Proposal by the Risk Management Committee”:

- (a) Adopts the second set of components of the risk management framework as contained in annexes II to IV to this document as follows:
 - (i) Risk management framework component V – investment risk policy, as set out in annex II;
 - (ii) Risk management framework component VI – non-financial risk policy, as set out in annex III; and
 - (iii) Risk management framework component VII – funding risk policy, as set out in annex IV;
- (b) Decides to update component III of the risk management framework “Risk dashboard – revised reporting on concentration” as set out in annex V to this document;
- (c) Requests the Secretariat to publish the updated risk dashboard every quarter hereafter;
- (d) Recognizes that the risk management framework will evolve over time and shall be subject to reviews and revisions as stated in each individual component of the risk management framework and that any resulting revisions of a material and/or substantive nature shall be presented to the Board for its consideration and approval.

Annex II: Investment risk policy

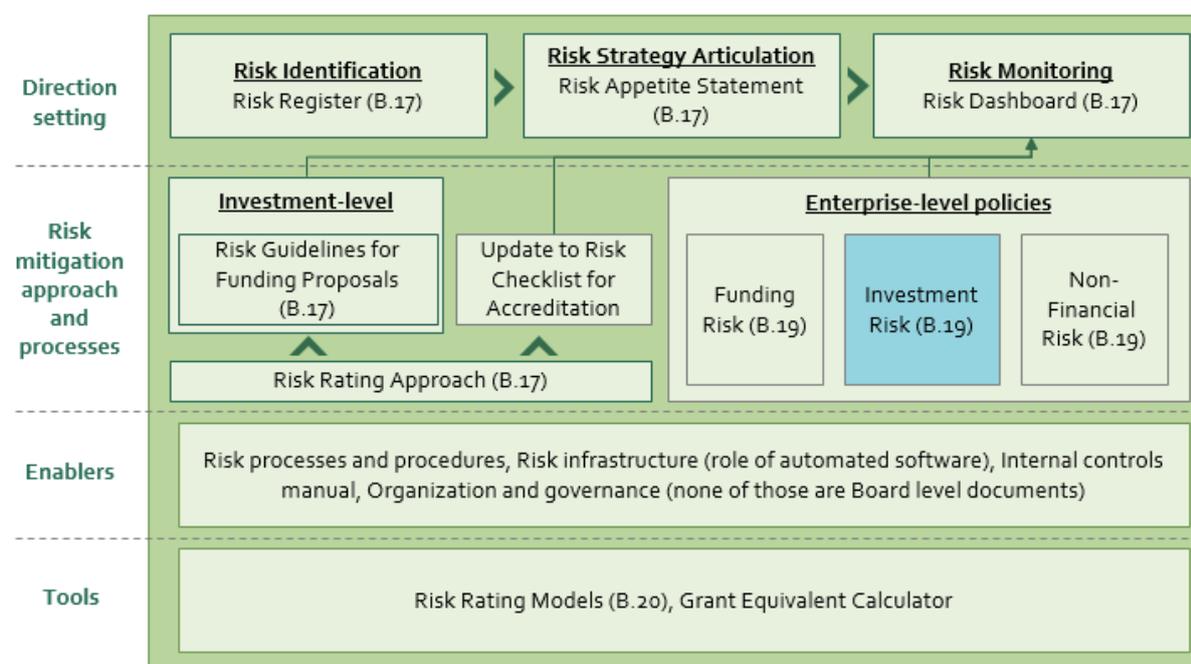
I. Introduction

1. This document presents a critical element of the Risk Management Framework (“RMF”), the policy governing investment risk management for the Green Climate Fund (“GCF”).

II. Objectives and scope

2. This document is a part of the comprehensive RMF – the components of the framework are presented below in Figure 1.

Figure 1: RMF components



3. The Investment Risk Policy (“Policy”) defines investment risk management requirements related to the risk of failure of a Funded Activity¹ or Readiness / Project Preparation Facility (“PPF”) Proposal to deliver the expected impact, or the risk of delay or shortfall of reflows² from these activities. This Policy is not intended to detail the operational processes in relation to Funded Activities or Readiness / PPF, as the operational processes will be specified in the GCF Operations Manual for the Funded Project Lifecycle³.

4. This Policy is based on the following core principles:

- (a) Ensuring sustainable financial viability for the Fund and enabling the Fund to meet its mission of promoting paradigm shift towards low-emission and climate-resilient development pathways;
- (b) Adherence to the GCF’s Risk Appetite Statement (part of the RMF) for investment risk;

¹ A Funded Activity is defined as a GCF-funded investment or payment for a climate project/programme.

² The risk of delay or shortfalls in reflows may originate from various sources – including loss in the counterparty’s willingness or ability to repay, convertibility and transfer risk, and foreign exchange losses from non-holding currency investments.

³ The GCF Operations Manual for the Funded Project Lifecycle is being drafted by the Secretariat.

- (c) Establishing fit for purpose controls and ensuring efficiency in risk management; and
 - (d) Roles and responsibilities allocated:
 - (i) **First Level of Responsibility (“First Level”)**: The first responsibility of risk management and control is with the accountable units who are the primary owners and managers of risk; there may also be multiple units within the Secretariat that form the First Level;
 - (ii) **Second Level of Responsibility (“Second Level”)**: For each risk, there is a Second Level of Responsibility, or a control function independent of the First Level, to ensure risks are managed given asymmetric incentives, short-termism, and optimism of risk takers; there may also be multiple units within the Secretariat that form the Second Level; and
 - (iii) **Third Level of Responsibility (“Third Level”)**: The Third Level of Responsibility focuses on review of the actions and interactions of the risk taker and risk controller, and assurance that the RMF is operating as intended.
 - (e) Recognizing the role of the Accredited Entity (“AE”) in risk management given GCF’s business model of investing through AEs. The presence of the AE has the following key implications:
 - (i) The AEs form a key part of the First Level of Responsibility within the scope of this policy;
 - (ii) The role of the First Level within the Secretariat (“Secretariat First Level”) is lighter, as part of the First Level responsibilities are with the AEs; and
 - (iii) An AE’s lack of ability or willingness to meet GCF’s expectations is a key source of investment risk. However, the management approach for this risk inherent to the AE is not described by this policy. This management approach is addressed in the Risk Checklist for Accreditation, Guiding Framework and Procedures for Accrediting National, Regional, and International Implementing Entities and Intermediaries, individual Accreditation Master Agreements (“AMAs”) and Funded Activity Agreements (“FAAs”).
5. The detailed roles and responsibilities of the First and Second Levels are set out in Sections III and IV below. The Third Level will develop and perform scheduled and ad-hoc audits, reviews, and assurance engagements, in order to gain assurance that the design and implementation of policies and procedures by the First and Second Levels are managing the GCF’s risks appropriately.
6. For roles and responsibilities defined in Sections III and IV of this policy, the Secretariat deems most appropriate that:
- (a) Secretariat First Level responsibilities should lie with Private Sector Facility (“PSF”), Division of Mitigation and Adaptation (“DMA”), or the Division of Country Programming (“DCP”) depending on which division originates the funding outlay. Some of these responsibilities may be given to the Portfolio Management Unit (“PMU”). The specific roles and responsibilities will be outlined in procedural documents developed by the Secretariat;
 - (b) Second Level responsibilities should lie with the Office of Risk Management and Compliance (“ORMC”) and the Office of the General Counsel (“OGC”). Some of these responsibilities may be given to PMU where they play a review or control role over First Level activities performed by the AE or Delivery Partner (“DP”);
 - (c) Third Level responsibilities should lie with the Office of the Internal Auditor (“OIA”); and

- (d) In order to ensure independence of the First and the Second Levels, the PMU may either be given some Secretariat First Level responsibilities or some Second Level responsibilities, but not both.
7. The Secretariat may re-allocate responsibilities to other divisions over time.

III. Investment risk management – Funded Activity

3.1 Initial approval of Funding Proposal

3.1.1 Risk assessment

8. The AE is responsible for conducting due diligence on the Funding Proposal (“FP”, “proposal”) prior to submitting it to the Secretariat. The AE must meet the standard of care, as defined in its AMA, when conducting its due diligence, and later through the life of the project.

9. The Secretariat First Level is responsible for co-drafting a risk assessment of the Funded Activity in the Secretariat Review with the Second Level as well as other relevant units/divisions, based on the Risk Guidelines for Funding Proposals (GCF/B.17/21, annex VIII) for investment risk. After reaching consensus, this assessment is shared with the SMT and, if recommended by the Secretariat and the Independent Technical Advisory Panel, to the Board. In addition, the Secretariat First Level is responsible for liaising with the AE, or with the Executing Entity (“EE”) via the AE, for necessary documents and information (including those requested by the Second Level, SMT, and the Board) required to complete the risk assessment⁴ of an FP.

3.1.2 Generating the risk ratings⁵ (including rating refresh)

10. The Second Level is responsible for generating a rating as defined in the Risk Rating Approach (part of the RMF)⁶ to be included in the Secretariat Review to the SMT and the Board. The rating is to be refreshed every year.

11. The Secretariat First Level is expected to collect the required information from the AE, and provide inputs for non-financial assessment required for generating the rating. Different First Level teams may be responsible for this activity before and after the first disbursement.

12. The Second Level is also responsible for tracking any delays in rating refreshes and reporting to the SMT. The SMT may approve a delay in rating generation of up to six months past its due date.

13. The rating may be considered by the SMT in its recommendation to the Board, and may be considered by the Board in taking a decision on an FP.

3.2 FAA administration

3.2.1 Activities leading up to FAA signing

⁴ Including term sheets.

⁵ Refer to Risk Rating Approach. The delineation of responsibilities will become effective after the rating models are adopted and implemented by the Secretariat.

⁶ Further development of appropriate risk rating models will be brought to the Board for consideration as requested in Decision B.17/11.

14. The First Level, in collaboration with the Second Level, is responsible for reviewing and approving the FAA and the set of documents received for completeness from a risk perspective and ensuring that all risk conditions have been met.

- (a) The AE is responsible for promptly collecting necessary documents for Funded Activities in a timely fashion and ensuring adequate maintenance of all documents related to individual Funded Activities.
- (b) The Secretariat First Level is responsible for collecting required documents and other information from the AE regarding the FAA.

3.2.2 Disbursements to the AE

15. The First Level, in collaboration with the Second Level, clears any conditions required to be met for disbursements to the AE. The Second Level is also responsible for providing legal advice on disbursements as requested by the Secretariat and taking safe custody of all legal documents.

16. The First Level initiates the checks for conditions tied to the disbursement of Funds.

3.3 Funded Activity monitoring

3.3.1 Individual Funded Activity monitoring

17. The AE is responsible for monitoring each Funded Activity in line with the AE's own internal rules, policies and procedures, and responsibilities set forth in the relevant FP and AMA/FAA with the standard of care as defined in the AMA. It also provides interim and final evaluation reports and other ad hoc reports for each Funded Activity to the Secretariat First Level as specified in applicable legal agreements.

18. The Secretariat First Level is responsible for the following activities:

- (a) Providing necessary inputs to the Second Level to populate the GCF Risk Dashboard, which the Second Level will share with the SMT, RMC and the Board on a quarterly basis; and
- (b) Reviewing interim and final evaluation reports and other ad hoc reports provided by the AE on the Funded Activity and monitoring compliance with the FP, AMA/FAA, and the GCF's own internal policies and guidelines.

19. The Second Level is responsible for the following activity:

- (a) Developing a recommendation, independent of the First Level, on any action required for improving the GCF's investment risk management for the project/programme and strengthening its adherence to the Risk Appetite Statement. This recommendation will be discussed with the First Level, reviewed and finalized with the Office of the Executive Director ("OED").

3.3.2 Portfolio monitoring

20. The Second Level is responsible for developing a recommendation, independent of the First Level, on any action required for improving the GCF's investment risk management at a portfolio level and strengthening its adherence to the GCF Risk Appetite Statement (GCF/B.17/21, annex VI). This recommendation will be discussed with the First Level, reviewed and finalized with the OED.

21. The Secretariat First Level is responsible for monitoring delinquent, non-performing loans and losses of Funded Activities, and providing necessary inputs to the Second Level to

populate the Risk Dashboard (the Second Level will share the Risk Dashboard with the SMT, RMC and the Board on a quarterly basis).

3.4 Annual review of Funded Activity

22. The AE is responsible for providing the Annual Performance Report for each Funded Activity to the Secretariat First Level, as specified in the AMA/FAA. It is also responsible for liaising with the EE for any information requests or issues raised during the review process.

23. The Secretariat First Level is responsible for reviewing the Annual Performance Report and other annual reports of Funded Activities provided by the AE, and raising identified issues in its annual Portfolio Performance Review (“PPR”). It is also responsible for liaising with the AE for any information requests or issues raised during the review process and working collaboratively with the Second Level in reviewing the PPR.

3.5 Funded Activity default situation

24. A Funded Activity is considered to be in a default situation if the “event of default” or equivalent as defined in the AMA/FAA has occurred.

3.5.1 **AMA/FAA default or non-compliance situation⁷**

25. The Secretariat First Level works collaboratively with the Second Level in reviewing the default situation, the remedial action plan, the step-in decision, the step-in plan and the implementation of the plans.

IV. Investment risk management – Readiness/PPF Project

4.1 Readiness/PPF Proposal Review

26. The GCF is taking a programmatic approach to Readiness/PPF Proposals. Given this programmatic approach, the Second Level need not approve every single proposal. However, the Second Level will review key parameters of the programme. The Second Level is also responsible for developing and maintaining the Risk Guidelines for Readiness/PPF.

27. The Secretariat First Level is responsible for leading the review of the Readiness/PPF Proposals. The proposals will be approved by the delegated authority levels for the Readiness/PPF projects (currently the Readiness Working Group (“RWG”) or the OED).

4.2 New Grant Agreement and Readiness Framework Agreement⁸ administration

28. The Second Level is responsible for ensuring the adequacy of all documents from a legal perspective.

29. The Secretariat First Level is responsible for collecting required documents and other information from the National Designated Authority (“NDA”)/DP/AE regarding Grant Agreement or Readiness Framework Agreement administration.

⁷ This section should be reviewed after the development of the Restructuring/Cancellation Policies by the Secretariat.

⁸ Refers to any legal agreement pertaining to the funding of Readiness and PPF projects, including Readiness Framework Agreements and Readiness Grant Agreements.

4.3 Readiness/PPF portfolio monitoring

30. The Second Level is responsible for conducting a check of monitoring results at a portfolio level and reviewing any issues or recommended actions by the Secretariat First Level, in consensus with the authority which originally approved the project based on the Endorsement and Approval Authority and Thresholds.
31. The Secretariat First Level is responsible for conducting monitoring activities (including collection of necessary information from the NDA/DP/AE).

4.4 Readiness/PPF Disbursement

32. The Second Level is responsible for providing legal advice on disbursements as requested.
33. The Secretariat First Level is responsible for initiating each disbursement, taking into account the latest monitoring results and holding back disbursements when deemed appropriate. The Secretariat First Level works collaboratively with the Second Level to clear the disbursements before the instructions are sent to Finance.

V. Foreign Exchange (“FX”) risk in reflows⁹

34. Non-holding currency reflows expose the GCF to FX risk. Recalling its ability to take on risks that other funds/institutions are not able or willing to take, the GCF will on occasions take such FX risks to meet its mandate. Otherwise, it will either pass on this risk to the counterparties through the FAA, or account for such FX risks in structuring the deal terms within the relevant FPs.

VI. Administrative provisions

35. This Policy will take effect on 2nd April 2018.
36. This policy shall be reviewed every two years, but earlier reviews and consequential revisions may occur upon recommendation by the Secretariat or following a request from the RMC or the Board. Any resulting revisions to this policy which are of a material and/or substantive nature shall be presented to the Board for its consideration and approval.

⁹ The FX risk on the liability side is covered by the Funding Risk policy.

Annex III: Non-financial risk policy

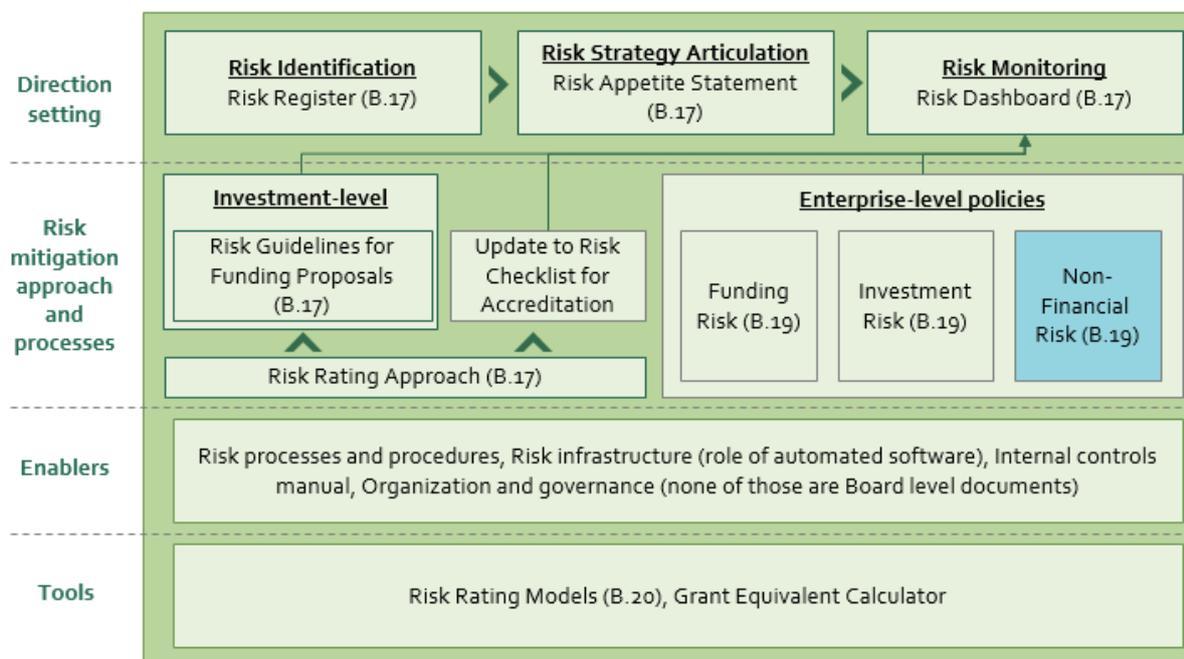
I. Introduction

1. This document presents a critical element of the Risk Management Framework (“RMF”), the policy governing non-financial risk management for the Green Climate Fund (“GCF”).

II. Objectives and scope

2. This document, the Non-financial Risk Policy (“policy”), is a part of the comprehensive RMF – the components of the framework are presented below in Figure 2.

Figure 2: RMF components



3. Non-financial Risk is defined as the potential for financial and non-financial losses arising from the failure of people, process, or technology or the impact of external events. It covers the following risk types defined in the Risk Register:

- (a) **GCF Operational Process Error Risk:** Failure to meet the GCF's internal operations standards or non-compliance with external requirements (such as country laws or international agreements) that affect operations activities;
- (b) **Staffing Risk:** Operational failures, losses and other disruptions arising from the staffing model of the GCF, including staff headcount level and external consultants, as well as from problems with recruitment, retention, succession planning, development, integrity and morale among the GCF staff;
- (c) **Disasters and Other Events Risk:** Disruption of business due to natural or man-made catastrophic disasters;
- (d) **IT Systems Failure Risk:** Disruption of business due to unavailability / inaccessibility of IT infrastructure and applications;

- (e) **Cyber Attack Risk:** Misappropriation of internal data and/or information by a third party through IT means¹⁰, such as system security breach, hacking, phishing attacks, cybercrime, and malware / virus attacks; and
- (f) **Reputation Risk:** Adverse perception which has a material effect on the credibility of the GCF (beyond the reputational damage which may be incurred due to one of the other risks in the Risk Register).
4. IT Systems Failure Risk and Cyber Attack Risk are hereinafter collectively referred to as “IT Risk”.
5. The management approach to Disasters and Other Events Risk is described under Business Continuity Management (“BCM”) in Section IV of this policy. BCM is a broader programme aimed at ensuring business continuity through the prevention and mitigation of Operational and IT Risk events.
6. This policy design is guided by the following principles:
- (a) Ensuring sustainable viability for the GCF and enabling the GCF to meet its mission of promoting paradigm shift towards low-emission and climate-resilient development pathways;
- (b) Adhering to the GCF’s Risk Appetite Statement (part of the RMF) for Operational and IT Risk and Reputation Risk;
- (c) Establishing fit for purpose controls and ensuring efficiency in risk management; and
- (d) Allocating roles and responsibilities:
- (i) **First Level of Responsibility (“First Level”):** The first responsibility of risk management and control is with the accountable units who are the primary owners and managers of risk; there may be multiple units within the Secretariat that form the First Level of Responsibility;
- (ii) **Second Level of Responsibility (“Second Level”):** For each risk, there is a Second Level of Responsibility, or a control function independent of the First Level, to ensure risks are managed given asymmetric incentives, short-termism, and optimism of risk takers; there may be multiple units within the Secretariat that form the Second Level of Responsibility; and
- (iii) **Third Level of Responsibility (“Third Level”):** The Third Level of Responsibility focuses on review of the actions and interactions of the risk taker and risk controller, and assurance that the RMF is operating as intended.
7. The detailed roles and responsibilities of the First and Second Levels are set out in sections III, IV, V, and VI below. The Third Level will develop and perform scheduled and ad-hoc audits, reviews, and assurance engagements, in order to gain assurance that the design and implementation of policies and procedures by the First and Second Levels are managing the GCF’s risks appropriately.

¹⁰ Cyber attack risk could include falsification of internal data and/or information through IT means. This risk could also be created by the actions of internal parties.

III. Roles and Responsibilities: GCF Operational Process Error Risks and IT Risks

8. Operational Process Error Risk arises from all GCF's activities. The following are the GCF's key activities and functions responsible (which the Secretariat deems most appropriate).¹¹ The Secretariat is responsible for nominating the Operational Risk Owners for all operational processes. The Operational Risk Owners are defined as the representatives of the First Level of Responsibility for operational process error risk:

- (a) Accreditation process: Division of Country Programming ("DCP");
- (b) Funding Proposal ("FP", "proposal") review process: Private Sector Facility ("PSF") and Division of Mitigation and Adaptation ("DMA"), for private and public proposals, respectively;
- (c) Interim processes between Funding Proposal approval and signing a Funded Activity Agreement ("FAA"): PSF, DMA or DCP with the Office of the General Counsel ("OGC");
- (d) Disbursement process: Chief Financial Officer ("CFO"); and
- (e) Monitoring and evaluation: Portfolio Monitoring Unit ("PMU").

9. Other processes requiring an Operational Risk Owner include: Review process for other proposal types (PPFs, Readiness),¹² Human Resources ("HR") processes, Procurement processes, and other Finance processes (such as cash flow management and FX hedging).

10. Operational Risk Owners for operational process error risks are responsible for the following:

- (a) Providing information to the Second Level required to populate the Operational Risk section of the Risk Dashboard, which the Second Level will share with the Secretariat's senior management team ("SMT"), RMC, and the Board on a quarterly basis;
- (b) Ensuring all material risks are identified, assessed, mitigated, and monitored (e.g. conducting a risk control self-assessment);¹³
- (c) Proposing and implementing control enhancements, in line with the GCF Risk Appetite Statement;
- (d) Reporting on monitoring metrics (identified in the risk control self-assessment) to the Second Level; and
- (e) Reporting each risk event to the Second Level together with a proposed assessment of impact level¹⁴ and a proposal for changes in controls (if required).

11. IT Risks arise from all IT systems used by the GCF. The Secretariat will nominate an IT Risk Owner¹⁵, defined as the representative of the First Level of Responsibility for IT risks. The IT Risk Owner is responsible for the following:

¹¹ The Secretariat may choose other divisions for these processes over time. The processes themselves may also change over time.

¹² Readiness includes National Adaptation Plans; PPF: Project Preparation Facility.

¹³ Risk Control Self-Assessment ("RCSA") as described in the Secretariat's internal controls manual (under development).

¹⁴ The impact levels "Low", "Somewhat non-disruptive", "Somewhat disruptive" and "High" have been defined in GCF's Risk Register.

¹⁵ The IT Risk Owner will likely belong to Information and Communications Technology ("ICT") within Division of Support Services ("DSS"), and will likely be nominated by the Head of ICT.

- (a) Providing information to the Second Level required to populate the IT Risk section of the Risk Dashboard, which the Second Level will share with the SMT, RMC and the Board on a quarterly basis;
 - (b) Ensuring all material risks are identified, assessed, mitigated, and monitored (e.g. conducting a risk control self-assessment);
 - (c) Proposing and implementing control enhancements, in line with the GCF Risk Appetite Statement;
 - (d) Reporting on monitoring metrics (identified in the risk control self-assessment) to the Second Level; and
 - (e) Reporting each risk event to the Second Level together with a proposed assessment of impact level and a proposal for changes in controls (if required).
12. A risk control self-assessment must be conducted annually for high priority processes and at least once in three years for lower priority processes.
13. The Second Level of Responsibility for Operational Process Error Risk and IT Risk is the ORMC, which has the following responsibilities:
- (a) Reviewing the Risk Dashboard results for Operational Risk and IT Risk;
 - (b) Prioritizing processes (annually) on which risk control self-assessments are conducted, and selecting the risk events posing the highest risk levels for further mitigation;
 - (c) Reviewing and confirming risk control self-assessment outputs, and the proposed control enhancements;
 - (d) Finalizing the impact level of risk events and reporting “High” and “Somewhat disruptive” impact events to the Office of the Executive Director (“OED”) together with recommendations for further action;
 - (e) Advising the SMT, OED and RMC on key risks, the effectiveness of mitigants and controls, and alignment of residual risks with the Risk Appetite; and
 - (f) The Second Level will develop a recommendation, independent of the First Level, on any action required for improving the GCF’s Operational Process Error Risk and IT Risk management and strengthening its adherence to the Risk Appetite Statement. This recommendation will be discussed with the First Level, reviewed and finalized with the OED.
14. The Third Level of Responsibility for Operational Process Error Risk and IT Risk is the Office of the Internal Auditor (“OIA”).

IV. Business Continuity Management

15. The Heads of all GCF divisions are responsible for reporting to the ORMC and OED without undue delay, after they become aware of it, any risk event covered by this policy that threatens the safety and security of the GCF’s overall operations.
16. The OED serves as the crisis director with the authority to confirm that the risk event occurring should be classified as a business disruption event and decide on the necessary measures and response plan upon the occurrence of that event.
17. The OED will notify all units of the GCF immediately upon occurrence and confirmation of a business disruption event. The ORMC will immediately report the business disruption event to the RMC. The crisis director is supported by a security task force, which shall be established by the Executive Director.

18. The security task force is responsible for developing and testing the business continuity plans to be executed upon occurrence of a business disruption event, and establishing a remote work model for the GCF operations during disruptions events.

V. Reputation Risk Management

19. Reputation Risk refers to the risk of adverse public perception which has a material effect on the credibility of the GCF.

20. Reputation Risk arises from not only GCF's activities, but also the public perception that may follow breaches in tolerance levels for all other risk types specified in the GCF Risk Register.

21. The Secretariat and the Independent Units of the GCF will jointly develop Protocols for identifying, managing and mitigating Reputational Risks arising out of or related to the implementation of the mandates of the Independent Units.

22. The Secretariat will nominate a Reputation Risk Owner. The Reputation Risk Owner is responsible for the following:

- (a) Providing information to the Second Level required to populate the Reputation Risk section of the Risk Dashboard, which the Second Level will share with the SMT, RMC and the Board on a quarterly basis;
- (b) Maintaining and implementing a Communications Plan that actively tries to mitigate reputation risk;
- (c) Monitoring various sources of information relevant to Reputation Risk;
- (d) Developing and implementing a Response Plan for high impact Reputation Risk threats (a Response Plan will be required for any reputation risk events stemming from underlying risks for which the GCF has zero risk tolerance, per the GCF Risk Appetite Statement); and
- (e) Collaborating with the Second Level to ensure that when developing controls for managing risks for which the GCF has zero risk tolerance per its Risk Appetite Statement, approaches to manage reputation risk arising from such risk events are also built in.

23. The heads of all GCF divisions are responsible for reporting to the Reputation Risk Owner any threats they foresee to the GCF's reputation. These threats will be taken into account by the Reputation Risk Owner in developing the Communications Plan and any Response Plan.

24. The ORMC plays the Second Level of Responsibility role, and is responsible for the following in mitigating reputation risk:

- (a) Finalizing the impact level of Reputation Risk threats, and reporting high impact events to the OED with recommendations for further action;
- (b) Reviewing the Risk Dashboard results for Reputation Risk; and
- (c) Reviewing and challenging the Communications Plan or Response Plan prepared by the Reputation Risk Owner from a risk perspective, and tracking the GCF's progress against the plan.

25. The Third Level of Responsibility for Reputation Risk is the Office of the Internal Auditor ("OIA").

VI. Staffing Risk Management¹⁶

26. Maintaining a Secretariat staff with appropriate skills and qualifications in line with the principles and guidelines set out in the Administrative Guidelines on Human Resources or any successor guidelines or policy is one of the main tenets of effective risk management at the GCF.
27. The Secretariat will nominate a Staffing Risk Owner. The Staffing Risk Owner is responsible for the following:
- (a) Working with other units within the Secretariat to assess current and future staffing and skills requirements;
 - (b) Providing information to the Second Level required to populate the staffing risk section of the Risk Dashboard, which the Second Level will share with the SMT, RMC, and the Board on a quarterly basis;
 - (c) Reviewing staff complaints to identify any systematic themes;
 - (d) Developing succession plans; and
 - (e) Taking into account the relevant human resources guidelines or policies in force when dealing with matters related to staffing risk.
28. The ORMC plays the Second Level of Responsibility role, and will be responsible for:
- (a) Reviewing the GCF Risk Dashboard results and succession plan; and
 - (b) Developing a recommendation, independent of the First Level, on any action required for improving the GCF's staffing risk management and strengthening its adherence to the Risk Appetite Statement. This recommendation will be discussed with the First Level, reviewed and finalized with the OED.
29. The Third Level of Responsibility for Staffing Risk is the Office of the Internal Auditor ("OIA").

VII. Administrative provisions

30. This Policy takes effect on 2 April 2018.
31. This policy shall be reviewed every two years, but earlier reviews and consequential revisions may occur upon recommendation by the Secretariat or following a request from the RMC or the Board. Any resulting revisions to this policy which are of a material and/or substantive nature shall be presented to the Board for its consideration and approval.

¹⁶ This section will be reviewed when the updated Administrative Guidelines on Human Resources is approved by the Board.

Annex IV: Funding risk policy

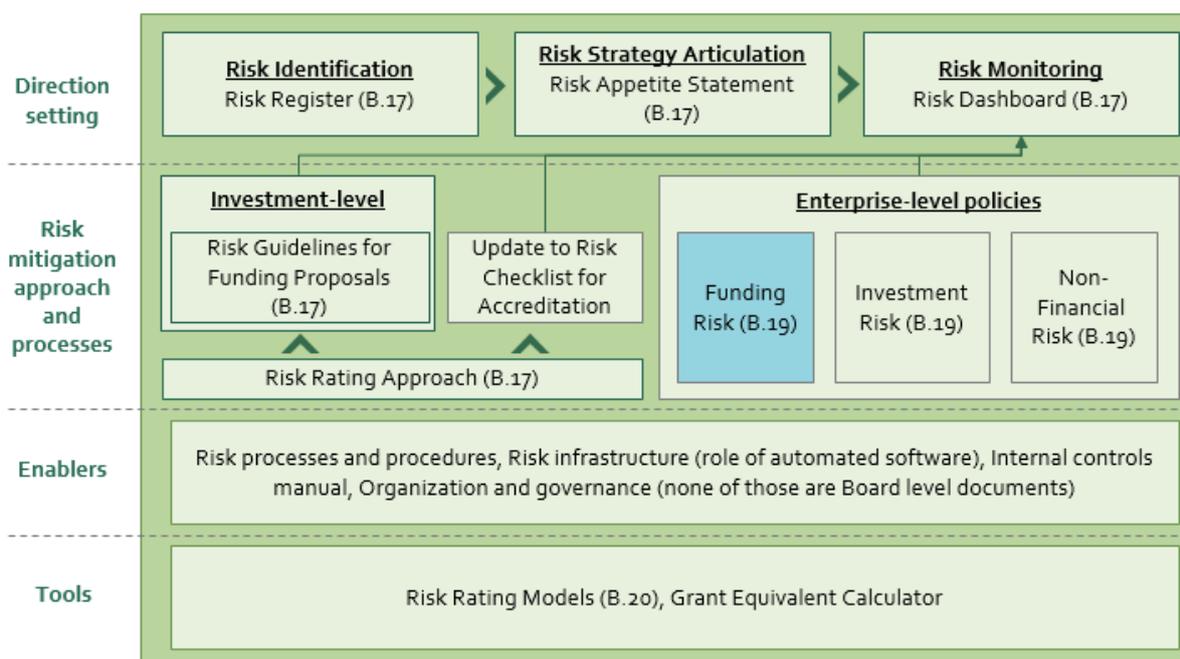
I. Introduction

1. This document presents a critical element of the Risk Management Framework (“RMF”), the policy which governs funding risk management for the Green Climate Fund (“GCF”).

II. Objective and scope

2. This document, the Funding Risk Policy (“policy”) is a part of the comprehensive RMF – the components of the framework are presented below in Figure 3.

Figure 3: RMF components



3. This document presents the policy governing funding risk management for the GCF. It covers the following risk types defined in the GCF’s Risk Register:

- (a) **Liquidity risk:** The risk of incurring a timing mismatch between cash inflows and cash outflows leading to shortages in the ability of the GCF to face its payment obligations.
- (b) **Contribution uncertainty risk:** The risk of failing to convert all pledges into contributions in total, or within the promised time frame.
- (c) **Foreign exchange (“FX”) risk on the liabilities side:**¹⁷ The risk of incurring losses in the value of contributions due to FX rate fluctuations.
- (d) **Funds held in Trust:** The risk of incurring losses in the value of investments of the GCF’s funds held with the Trustee due to market movements in the price of the securities, and failing to comply with the GCF’s policies on Funds Held in Trust.

4. The policy design is guided by the following principles:

¹⁷ The FX risk on the assets side (the risk of incurring losses in the value of reflows due to FX fluctuations) is covered by the Investment Risk policy.

- (a) Adherence to the GCF’s Risk Appetite Statement for funding risk.
- (b) Establishing fit for purpose controls and ensuring efficiency in Risk Management.
- (c) Roles and responsibilities are allocated:
 - (i) **First Level of Responsibility (“First Level”)**: The first responsibility of risk management and control is with the accountable units who are the primary owners and managers of risk; there may be multiple units within the Secretariat that form the First Level of Responsibility;
 - (ii) **Second Level of Responsibility (“Second Level”)**: For each risk, there is a Second Level of Responsibility, or a control function independent of the First Level, to ensure risks are managed given asymmetric incentives, short-termism, and optimism of risk takers; there may be multiple units within the Secretariat that form the Second Level of Responsibility; and
 - (iii) **Third Level of Responsibility (“Third Level”)**: The Third Level of Responsibility focuses on review of the actions and interactions of the risk taker and risk controller, and assurance that the RMF is operating as intended.

5. The detailed roles and responsibilities of the First and Second Levels are set out in Sections IV and V below. The Third Level will develop and perform scheduled and ad-hoc audits, reviews, and assurance engagements, in order to gain assurance that the design and implementation of policies and procedures by the First and Second Levels are managing the GCF’s risks appropriately.

6. The Secretariat deems most appropriate that First Level responsibilities should lie with the Chief Financial Officer (“CFO”) and Second Level responsibilities should lie with the Office of Risk Management and Compliance (“ORMC”). Third Level responsibilities should lie with the Office of the Internal Auditor (“OIA”). The Secretariat may choose other divisions for these responsibilities over time.

III. Definitions

7. The following are the definitions of the key terms applicable for this policy.

Term	Definition
Liquid asset portfolio	The liquid asset portfolio is defined as securities, cash or cash equivalents held in Trust or in the GCF’s bank accounts.
Liquidity reserve	The liquidity reserve, as specified in the Risk Appetite Statement, is the amount of funds the GCF needs to hold in cash, cash equivalents, or in securities with duration of less than one year, in order to meet its liquidity risk appetite.
Net funding requirement	Net funding requirements over a period of time are defined as the planned outflows over the period of time (including funding disbursements and Board and Secretariat (including independent units) expenses) net of the planned contribution encashments over the same period of time. It should be noted that at present, the GCF does not plan to use planned project reflows to reduce net funding requirements. This decision should be reviewed in the future once reflows become more than 20% of the GCF’s planned inflows over a one year period.

IV. Policy requirements and roles and responsibilities

4.1 Liquidity risk

8. The Fund's liquidity risk appetite in the Risk Appetite Statement requires the GCF's liquidity reserve (on any day) to be sufficient to sustain the GCF's net funding requirements for at least 1 year.

9. The First Level will be responsible for ensuring that the liquidity reserve of the GCF is monitored and managed within the level specified in the Risk Appetite Statement. The First Level's responsibilities will include:

- (a) Ensuring that the Fund's liquidity risk profile is maintained within tolerance levels defined in the GCF's Risk Appetite Statement and all requirements defined in this policy;
- (b) Monitoring the Fund's liquid asset portfolio (including necessary financial/cash flow analyses) on a regular basis and informing the Second Level and the SMT about any significant changes;
- (c) Monitoring adherence for the Funds held in Trust to the requirements in this policy, specifically the requirements specified in Section 4.4, and to the Risk Appetite Statement, and driving corrective action as required; and
- (d) Providing information on the Fund's liquid asset portfolio to the Second Level and the SMT. This information is needed by the Second Level to populate the Liquidity Risk section in the Risk Dashboard, which the Second Level will share with the SMT, RMC, and the Board on a quarterly basis.

10. The Second Level will review the liquidity reserve forecasts provided by the First Level for alignment with the GCF's Risk Appetite Statement and this policy, and will review the liquidity risk information provided by the First Level. The Second Level will develop a recommendation, independent of the First Level, on any action required for improving the Fund's liquidity risk management and strengthening its adherence to the Risk Appetite Statement. This recommendation will be discussed with the First Level, reviewed and finalized with the Office of the Executive Director ("OED").

11. In the event of a breach of the Liquidity Risk Appetite, the First Level will inform the Second Level, SMT, and the RMC immediately. The First Level will initiate the process of taking corrective action for the breach (such as increasing the Funds held as Liquidity Reserve, reducing or delaying planned expenses, expediting contributions and their encashment). The corrective action will be finalized collaboratively, taking inputs from the Second Level. The First Level will inform the SMT and the RMC of the corrective action.

4.2 Contribution uncertainty risk

12. Predictable funding is essential for the GCF to achieve its objectives. The GCF will take necessary actions to protect the predictability of its financial resources, including: diversifying sources of contributions across a range of contributors; managing cancellation or postponement of contribution commitments and other changes in cash payment and promissory deposit and encashment schedules; ensuring to convert the pledges or encashment of promissory notes in a timely manner; and preventing over-concentration of payments, deposited promissory notes, and contributions to be encashed.¹⁸

¹⁸ As per the Risk Appetite Statement.

13. The First Level will be responsible for ensuring that contribution uncertainty risk is monitored and managed as required in the Risk Appetite Statement. The First Level's responsibilities will include:
- (a) Monitoring and providing information on the Fund's contribution uncertainty to the Second Level and the SMT. This information is needed by the Second Level to populate the Contribution Uncertainty Risk section in the Risk Dashboard, which the Second Level will share with the SMT, RMC and the Board on a quarterly basis. The monitored metrics include:
 - (i) Total contributions received and their concentration levels by contributing country;
 - (ii) Total unpaid and unencashed contributions and their concentration levels by contributing country; and
 - (iii) Any changes from the original contribution agreements/arrangements and the agreed encashment schedules.
 - (b) In case of significant contribution uncertainty risk, developing a resource mobilization plan (consistent with this policy) and executing the plan. The plan will be developed collaboratively taking inputs from the Second Level. The plan may include, but is not limited to:
 - (i) Monitoring upcoming payments, promissory note deposits and encashments, and the conditions attached to future deposits, encashment, and preparing an action plan for the Secretariat to meet those conditions;
 - (ii) Communicating in advance with contributors about upcoming payments, promissory notes deposits and encashments; and
 - (iii) Monitoring the triggers for replenishment.
14. The resource mobilization plan, if needed, will be shared with the SMT and the RMC.
15. The Second Level will develop a recommendation, independent of the First Level, on any action required for improving the contribution uncertainty risk management and strengthening its adherence to the Risk Appetite Statement. This recommendation will be discussed with the First Level, reviewed and finalized with the OED.

4.3 Foreign exchange ("FX") risk

16. The First Level will be responsible for ensuring the Fund adheres to the following requirements from the Risk Appetite Statement:
- (a) Contributions already received and encashed will be held in holding currencies. Contributions in non-holding currencies will be converted into holding currencies on receipt of funds, at a proportion determined by the First Level based on their expectation of future cash outflows; and
 - (b) Future expected encashments of promissory notes, cash payments not yet received and promissory notes not yet deposited and unencashed in non-holding currencies are not required to be hedged; however, the First Level may decide to implement a hedging strategy for additional conservatism. Any such strategy will be developed collaboratively taking inputs from the Second Level, should consider recommendations from the RMC and will need to be agreed with the SMT and, where appropriate, the Board.

17. The First Level will be responsible for ensuring that FX risk of the GCF is monitored and managed within the level specified in the Risk Appetite Statement. The First Level's responsibilities will include:

- (a) Giving direction to the Trustee consistent with this policy, specifically the requirements specified in Paragraphs 16(a) and 16(b), and the Risk Appetite Statement, monitoring adherence to those parameters, and taking corrective action (e.g., conversion of contributions to holding currencies) as required; and
- (b) Providing information on the Fund's FX risk to the Second Level and the SMT. This information is needed by the Second Level to populate the FX Risk section in the Risk Dashboard, which the Second Level will share with the SMT, RMC and the Board on a quarterly basis.

18. The Second Level will build its view, independent of the First Level, on any action required for improving the Fund's FX risk management and strengthening its adherence to the Risk Appetite Statement. This view will be discussed with the First Level, reviewed and finalized with the OED.

4.4 Funds Held in Trust risk

19. Investment of the Fund's liquid asset portfolio will meet the following requirements as defined in the Risk Appetite Statement:

- (a) Liquid asset portfolio will only be invested in investment grade securities;
- (b) The Fund will target average credit rating of [AA] equivalent by international rating agencies, or an equivalent risk metric approved by the Board, for its liquid asset portfolio;
- (c) The funds earmarked for the GCF's liquidity reserve will only be invested in securities with duration no longer than one year. All other funds in the liquid asset portfolio (representing the Fund's excess liquidity) will only be invested in securities with duration no longer than five years and average duration no longer than two years; and
- (d) The GCF will refrain from making investments that go against the Fund's mission to promote paradigm shift towards low-emission and climate-resilient development pathways.

20. The First Level will be responsible for ensuring that Funds Held in Trust risk of the GCF is monitored and managed within the level specified in the Risk Appetite Statement. The First Level's responsibilities will include:

- (a) Developing and executing an investment plan that ensures that the Funds Held in Trust risk profile is maintained within tolerance levels defined in GCF's Risk Appetite Statement and all requirements defined in this policy. The First Level will develop this plan collaboratively, taking inputs from the Second Level;
- (b) Setting investment parameters for the Trustee consistent with this policy, specifically the requirements specified in Paragraph 18, and the Risk Appetite Statement, monitoring adherence to those parameters, and taking action (e.g., re-allocation of the assets in the liquid asset portfolio) as required;
- (c) Providing information on the GCF's Funds Held in Trust risk to the Second Level and the SMT. This information is needed by the Second Level to populate the Funds Held in Trust Risk section in the Risk Dashboard, which the Second Level will share with the SMT, RMC and the Board on a quarterly basis.

21. The Second Level will develop a recommendation, independent of the First Level, on any action required for improving the GCF's Funds Held in Trust risk management and strengthening its adherence to the Risk Appetite Statement. This view will be discussed with the First Level, reviewed and finalized with the OED.

22. In the event of a breach of the Funds Held in Trust Risk Appetite, the First Level will inform the Second Level, SMT, and the RMC immediately. The First Level will initiate the process of taking corrective action for the breach (such as rebalancing the liquid asset portfolio). The corrective action will be finalized collaboratively, taking inputs from the Second Level. The First Level will inform the SMT and the RMC of the corrective action.

V. Solvency concerns

23. Solvency risk refers to the Fund's inability to meet its financial commitments due to a shortfall in its available funds relative to its commitments. The Fund will take all necessary measures to avoid any solvency events during its operations.

24. The Fund only makes investment commitments when a matching source of funding is available (in the form of unmatched cash, cash equivalents, securities or promissory notes). Such matching of source of funds for each investment commitment helps reduce the Fund's exposure to solvency risk.

25. Investment commitments made where the matched funding sources are not in the same currencies as the investment commitment expose the Fund to solvency risk in case the investment currency appreciates against the currencies of the matched funding sources.¹⁹

26. Such solvency risk exposure arises in two kinds of situations – when the investment commitment is made in a holding currency, but the matched funding sources are in different currencies (partially, or wholly);²⁰ or when the investment commitment is made in a non-holding currency.²¹

27. To mitigate this solvency risk arising from currency differences between investment commitments and the matched funding sources, for investment commitments due in the immediate 12 months, the GCF will match the source of funds in the same currency as the investment commitments (through actions such as currency exchanges etc.).²² This approach will help manage the fund's exposure to solvency risk in the near term (the immediate 12 months).²³

¹⁹ FX depreciation of GCF investment commitments would not create solvency issues as defined in this Policy.

²⁰ Either in other holding currencies, or in promissory notes in non-holding currencies from a contributor country.

²¹ It should be noted that extent of solvency risk exposure arising from investment commitments in non-holding currencies is limited by the diverse set of currencies the GCF may invest in, which provides a natural hedge to the GCF against investment currency appreciation. An equally-weighted currency basket from low-income and lower-middle income countries (as defined by the World Bank) depreciated by 49% against the SDR basket from 1995 to 2016.

²² Conversion of funds to non-holding currencies may not be feasible within the Trustee account given the Interim Trustee Agreement. Hence either the GCF will hold non-holding currency assets in an alternative account, and if that is not feasible, then the strategy of immediate conversion will not be applicable for non-holding currency investment commitments until the Secretariat establishes appropriate currency-holding arrangements.

²³ 12 months has been chosen consistent with the GCF's liquidity reserve definition. As a result, this full currency matching will be relevant for sources of funds which are a part of the GCF's Liquid Asset Portfolio.

28. Beyond the immediate 12 months, where the matched source of funds is not in the investment currency but are available in cash or cash equivalents in another currency, the Fund will convert the matched source of funds to the investment currency.²⁴
29. For the remaining matched source of funds that are not available in cash or cash equivalents and which are not in the investment currency (e.g., matched source of funds in the form of promissory notes in another currency), the Fund will set aside an FX commitment risk buffer at an initial target amount of 20% of the Fund's nominal investment commitment amount for which the matched source of funds is not in the investment currency. This buffer is not intended to support individual projects from FX fluctuation losses that they may suffer, but to protect the GCF from solvency risk. Further, holding this buffer will result in a reduction in the GCF's commitment authority (which will then adjust as the size of the buffer is recalculated over time).
30. The Secretariat can review and modify the FX buffer amount over time as necessary. Furthermore, the Secretariat will report the status of the FX positions together with the FX buffer and amount of currency mismatch to the Second Level, the RMC, and the Board on a quarterly basis.
31. The GCF will monitor the sufficiency of the buffer versus the target level on a quarterly basis. If the buffer falls below the designated target level due to appreciation in some investment currencies, the Secretariat First Level will develop a plan to replenish the buffer back above the target level no later than one month from the day the breach of the target level was first identified.
32. The First Level will be responsible for maintaining the proposed FX commitment risk buffer and reporting on size of the buffers versus the target levels, and recommending any actions required (to replenish the buffer). The action will be finalized collaboratively, taking inputs from the Second Level. The actions should consider recommendations from the RMC and will need to be agreed with the SMT and, where appropriate, the Board.
33. The Second Level will develop a recommendation, independent of the First Level, on any action required for improving the Fund's solvency management. This recommendation will be discussed with the First Level, reviewed and finalized with the OED.

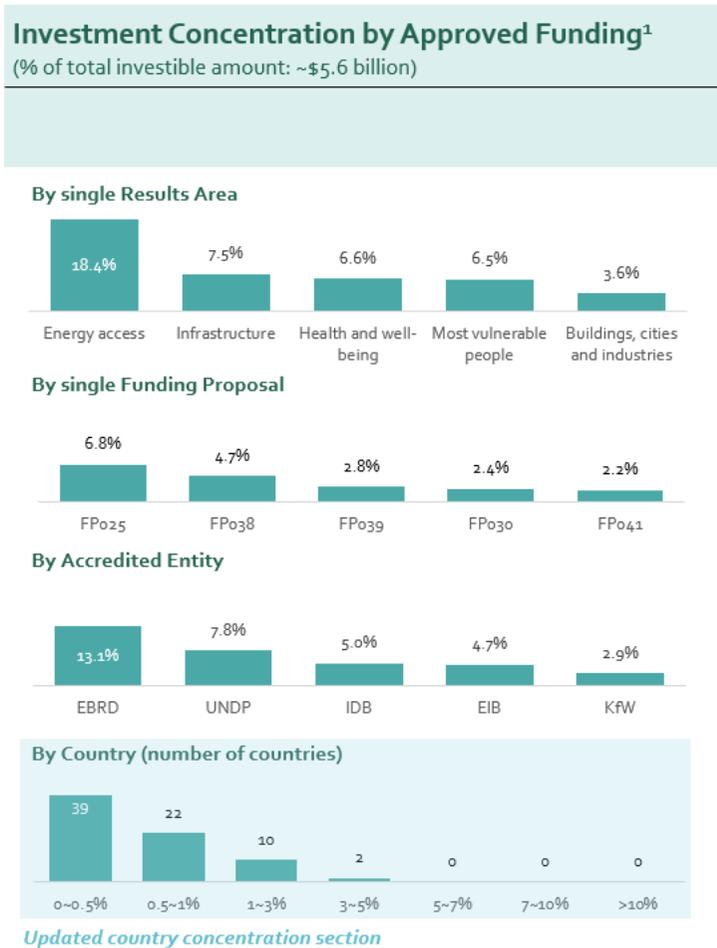
VI. Administrative provisions

34. The provisions of this policy will take effect on 2 April 2018. If the Interim Trustee is unable to implement the requirements in the policy, they will become applicable after the selection of the Permanent Trustee. Until that time, the GCF should monitor the Fund's adherence to these requirements to the extent possible under the current agreement.
35. This policy shall be reviewed every two years, but earlier reviews and consequential revisions may occur upon recommendation by the Secretariat or following a request from the RMC or the Board. Any resulting revisions to this policy which are of a material and/or substantive nature shall be presented to the Board for its consideration and approval.

²⁴ Conversion of funds to non-holding currencies may not be feasible within the Trustee account given the Interim Trustee Agreement. Hence either the GCF will hold non-holding currency assets in an alternative account, and if that is not feasible, then the strategy of immediate conversion will not be applicable for non-holding currency investment commitments until the Secretariat establishes appropriate currency-holding arrangements.

Annex V: Risk dashboard – revised reporting on concentration

DRAFT – DATA BEING VALIDATED



Source: iPMS (as of 22 January 2018), GCF Financial Report (as of 31 December 2017)

1. Ratios measured as (Notional amounts approved to Funding Proposals / total investible amount). As of 31 December 2017, the denominator is USD 5.6 billion (GCF). Numerators are collected from iPMS, as of 22 January 2018. Projects/programmes spanning across multiple countries are split equally among them, as specific allocation proportion is not available.

