

**GREEN  
CLIMATE  
FUND**

**Meeting of the Board**  
17- 20 October 2018  
Manama, Bahrain  
Provisional Agenda Item 17

**GCF/B.21/10/Add.21/Rev.01**

**27 September 2018**

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# Consideration of funding proposals – Addendum XXI

## Funding proposal package for FP099

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### **Summary**

This addendum contains the following three parts:

- a) A funding proposal summary titled “Climate Investor One” submitted by Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. (FMO)
- b) No-objection letters issued by the national designated authorities or focal points; and
- c) Environmental and social report(s) disclosure;

These documents are presented as submitted by the accredited entity and the national designated authority(ies) or focal point(s), respectively. Pursuant to the Comprehensive Information Disclosure Policy of the Fund, the funding proposal titled “Climate Investor One” submitted by Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. (FMO); is being circulated on a limited distribution basis only to Board Members and Alternate Board Members to ensure confidentiality of certain proprietary, legally privileged or commercially sensitive information of the entity.

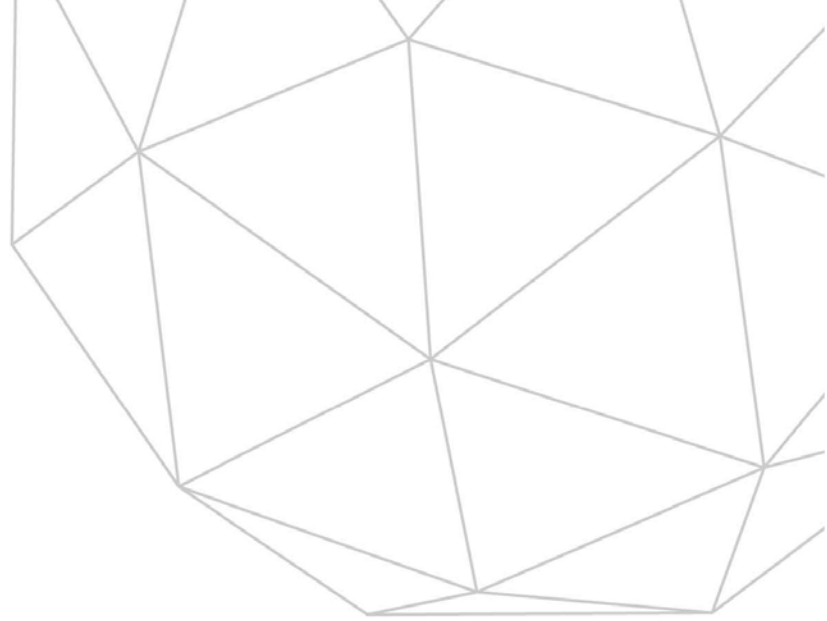
The funding proposal package for FP099 is being submitted for the first time for the Board's consideration at its twenty-first meeting.

## Table of Contents

Funding proposal submitted by the accredited entity	1
No-objection letters issued by the national designated authorities or focal points	94
Environmental and social report(s) disclosure	108



GREEN  
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FUND



# Funding Proposal

Version 1.1

**The Green Climate Fund (GCF) is seeking high-quality funding proposals.**

Accredited entities are expected to develop their funding proposals, in close consultation with the relevant national designated authority, with due consideration of the GCF's Investment Framework and Results Management Framework. The funding proposals should demonstrate how the proposed projects or programmes will perform against the investment criteria and achieve part or all of the strategic impact results.

Project/Programme Title: Climate Investor One

Country/Region: Burundi, Cameroon, Djibouti, Indonesia, Uganda, Kenya, Malawi, Madagascar, Mongolia, Morocco, Nigeria

Accredited Entity: FMO

Date of Submission: 13 February 2017 – 26 September 2018

## Contents

Section A	<b>PROJECT / PROGRAMME SUMMARY</b>
Section B	<b>FINANCING / COST INFORMATION</b>
Section C	<b>DETAILED PROJECT / PROGRAMME DESCRIPTION</b>
Section D	<b>RATIONALE FOR GCF INVOLVEMENT</b>
Section E	<b>EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA</b>
Section F	<b>APPRAISAL SUMMARY</b>
Section G	<b>RISK ASSESSMENT AND MANAGEMENT</b>
Section H	<b>RESULTS MONITORING AND REPORTING</b>
Section I	<b>ANNEXES</b>

### *Note to accredited entities on the use of the funding proposal template*

- Sections **A, B, D, E** and **H** of the funding proposal require detailed inputs from the accredited entity. For all other sections, including the Appraisal Summary in section F, accredited entities have discretion in how they wish to present the information. Accredited entities can either directly incorporate information into this proposal, or provide summary information in the proposal with cross-reference to other project documents such as project appraisal document.
- The total number of pages for the funding proposal (excluding annexes) is expected not to exceed 50.

#### **Please submit the completed form to:**

[fundingproposal@gcfund.org](mailto:fundingproposal@gcfund.org)

Please use the following name convention for the file name:

"[CIO]-[FMO]-[Date]-[Serial Number]"

A.1. Brief Project / Programme Information	
A.1.1. Project / programme title	Climate Investor One
A.1.2. Project or programme	programme
A.1.3. Country (ies) / region	Burundi, Cameroon, Indonesia, Uganda, Kenya, Malawi, Madagascar, Mongolia, Djibouti, Morocco, Nigeria
A.1.4. National designated authority (ies)	<p><b><u>Burundi</u></b> Ministry of Finances and Development Planning</p> <p><b><u>Cameroon</u></b> Ministry of Environment, Protection of Nature and Sustainable Development (MINEPDED)</p> <p><b><u>Uganda</u></b> Ministry of Finance, Planning and Economic Development</p> <p><b><u>Kenya</u></b> The National Treasury</p> <p><b><u>Malawi</u></b> Environmental Affairs Department</p> <p><b><u>Mongolia</u></b> Ministry of Environment, Green Development and Tourism</p> <p><b><u>Madagascar</u></b> Ministry of Environment, Ecology, Sea and Forests</p> <p><b><u>Djibouti</u></b> Ministry of Housing, Urban Development and Environment</p> <p><b><u>Morocco</u></b> Ministry of Energy, Mining and Environment</p> <p><b><u>Nigeria</u></b> Federal Ministry of Environment</p> <p><b><u>Indonesia</u></b> Fiscal Policy Agency, Ministry of Finance</p>
A.1.5. Accredited entity	Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. (FMO)
A.1.5.a. Access modality	<input type="checkbox"/> Direct <input checked="" type="checkbox"/> International
A.1.6. Executing entity / beneficiary	<p><b><u>Executing Entity:</u></b></p> <p><b>1. COÖPERATIEF CLIMATE FUND MANAGERS U.A.</b>, a cooperative with excluded liability (coöperatie met uitgesloten aansprakelijkheid) incorporated under the laws of the Netherlands having its registered offices at (2514 EM) 's-Gravenhage, the Netherlands, Kneuterdijk 13.</p> <p>CFM is the fund manager of the Stichting Development Fund and the Coöperatief Construction Equity Fund U.A, which together form Climate Investor One. It is an</p>

	<p>equal-joint venture between FMO and Sanlam InfraWorks with both parties holding a 50% equity interest in CFM.</p> <p><b>2. STICHTING DEVELOPMENT FUND</b>, a foundation (stichting) established under the laws of the Netherlands having its registered offices at (2593 HW) 's-Gravenhage, the Netherlands, Anna van Saksenlaan 71.</p> <p><b>3. COÖPERATIEF CONSTRUCTION EQUITY FUND U.A.</b>, a cooperative with excluded liability (coöperatie met uitgesloten aansprakelijkheid) incorporated under the laws of the Netherlands having its registered offices at (2514 EM) 's-Gravenhage, the Netherlands, Kneuterdijk 13.</p> <p>The Development Fund and the Construction Equity Fund are referred to collectively as Climate Investor One (CIO) throughout this Funding Proposal.</p> <p><b>4. Nederlandse Financierings - Maatschappij voor Ontwikkelingslanden N.V.(FMO)</b> FMO (the Accredited Entity) is The Netherlands Development Finance Company, or Dutch development bank, a bilateral private-sector international financial institution founded in 1970 having its registered offices at (2593 HW) Anna van Saksenlaan 71, Den Haag, the Netherlands. It is also an Executing Entity by virtue of being the sole board member of the Development Fund and exercising certain rights and obligations in respect of the GCF funding.</p> <p><b>Beneficiaries:</b></p> <p>Climate Investor One, which comprises of the Development Fund and the Construction Equity Fund, managed by Climate Fund Managers, seeks to benefit the peoples of 11 countries: Burundi, Cameroon, Uganda, Kenya, Malawi, Madagascar, Mongolia, Djibouti, Morocco, Nigeria and Indonesia. In addition to these countries, significant and extensive engagements have been had with the NDA's of Tanzania, Vietnam, Nepal, Mauritius and the Philippines. We expect these efforts to result into additional NOLs post submission of this FP. All of countries that already submitted NOL's are low-income or lower-middle income economies, with relatively low levels of electrification and existing renewable energy capacity.</p> <p>Aside from GCF funding, which alongside other donors will be invested in these 11 countries, CFM is a global asset manager with a mandate to invest in developing countries in climate related themes. A more detailed description of CIO's investment geography is provided in section A.2. A portion of CIO's funding from investors other than GCF will be invested into other developing countries.</p>	
A.1.7. Project size category (Total investment, million USD)	<input type="checkbox"/> Micro ( $\leq 10$ ) <input type="checkbox"/> Medium ( $50 < x \leq 250$ )	<input type="checkbox"/> Small ( $10 < x \leq 50$ ) <input checked="" type="checkbox"/> Large ( $> 250$ )
A.1.8. Mitigation / adaptation focus	<input checked="" type="checkbox"/> Mitigation <input type="checkbox"/> Adaptation <input type="checkbox"/> Cross-cutting	
A.1.9. Date of submission	13 February 2017 -26 September 2018	
A.1.10. Project contact details	Contact position <span style="float: right;">person,</span>	Mr. Idsert Boersma – Director, Funds, Syndications & Value Creation, FMO
	Organization	FMO
	Email address	
	Telephone number	

	Mailing address	Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. Anna van Saksenlaan 71 2593 HW The Hague   NL P.O. Box 93060 The Netherlands
Project contact details	Contact person, position	Mr. Georges Beukering, Director - Head Capital Raising & Business Development
	Organization	Climate Fund Managers
	Email address	
	Telephone number	
	Mailing address	Coöperatief Climate Fund Managers U.A. Kneuterdijk 13 2514 EM The Hague +31 (0) 70 204 52 05 2593 HW The Hague   NL P.O. Box 93060

**A.1.11. Results areas** (mark all that apply)

**Reduced emissions from:**

- Energy access and power generation  
(E.g. on-grid, micro-grid or off-grid solar, wind, geothermal, etc.)
- Low emission transport  
(E.g. high-speed rail, rapid bus system, etc.)
- Buildings, cities and industries and appliances  
(E.g. new and retrofitted energy-efficient buildings, energy-efficient equipment for companies and supply chain management, etc.)
- Forestry and land use  
(E.g. forest conservation and management, agroforestry, agricultural irrigation, water treatment and management, etc.)

**Increased resilience of:**

- Most vulnerable people and communities  
(E.g. mitigation of operational risk associated with climate change – diversification of supply sources and supply chain management, relocation of manufacturing facilities and warehouses, etc.)
- Health and well-being, and food and water security  
(E.g. climate-resilient crops, efficient irrigation systems, etc.)
- Infrastructure and built environment  
(E.g. sea walls, resilient road networks, etc.)
- Ecosystem and ecosystem services  
(E.g. ecosystem conservation and management, ecotourism, etc.)

**A.2. Project / Programme Executive Summary (max 300 words)**

*Please provide a brief description of the proposed project/programme, including the objectives and primary measurable benefits (see investment criteria in Section E). The detailed description can be elaborated in Section C.*

This section will cover the *Executive Summary* and a more comprehensive overview of the CIO facility, including (A) *How it Works?* (B) *Why CIO is an Important Initiative*, and (C) *CIO's Composition & Structure*.

**Executive Summary**

Climate Investor One (CIO) is a blended finance facility managed by Climate Fund Managers (CFM). CIO is mandated with delivering renewable energy at affordable prices in developing markets through its financial contribution to the early-

stage development, construction, and operational phases of an underlying project company's lifecycle. CIO is not a legal entity, but a facility that describes two funds which are separate legal entities.

CIO comprises two separate but operationally inter-linked funds. The first fund in the facility, the 'CIO Development Fund' ("DF"), is mandated to provide development loans to fund the early stage development of a project lifecycle. The second fund, the 'CIO Construction Equity Fund ("CEF")', is mandated to finance the construction stage of a project's lifecycle with an all equity solution. The funds are structured with a 15-year investment period with a mechanism to recycle capital. Cashflows received by the fund, whether via repayment of development loans with premiums by the DF or exits once CEF's project companies become operational will be reinvested in additional projects over the course of the 15-investment period. This recycling of capital mechanism enables a greater number of projects to become operational, in a faster time and through the same commitment of capital by investors, resulting in a greater global societal and environmental impact.

In the future a third and final fund will be raised by CFM to complete the lifecycle financing of renewable energy project companies. This fund, the 'Refinancing Fund' ("RF"), will, once raised, provide debt to CEF project companies once they have a proven operational track record. At the moment the RF is not being raised and, as such, is not part of the scope of the present Funding Proposal or the requested financing from GCF. Fundraising for RF will commence once a sufficient number of projects have reached the construction phase.

**The Development Fund and the Construction Equity Fund will be referred to as Climate Investor One (CIO) throughout this Funding Proposal at the exclusion on the Refinancing Fund.**

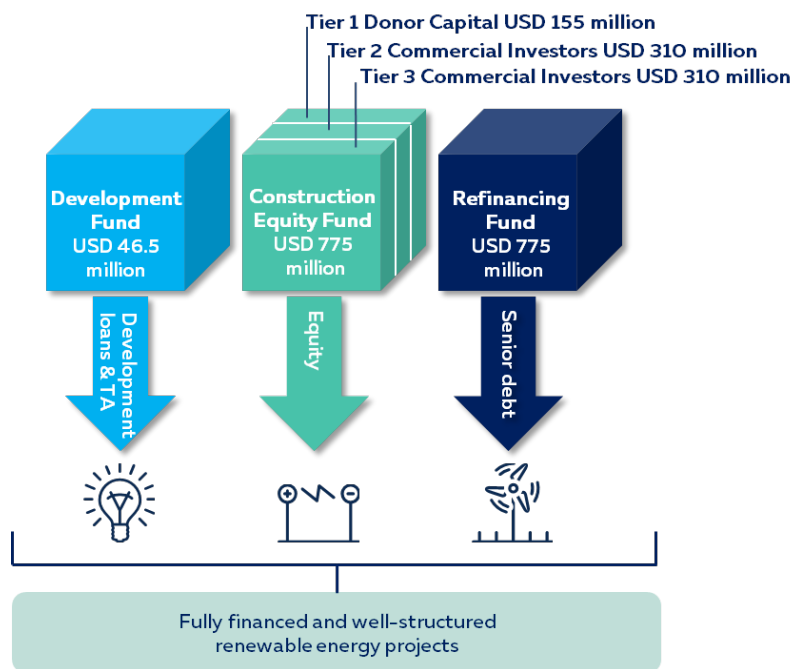


Figure 1: Climate Investor One concept & structuring

### A. How CIO works

The successfully developed, and therefore bankable, projects generated by the Development Fund (DF) act as proprietary deal flow (pipeline) for the Construction Equity Fund (CEF). The CEF pays the DF a premium to cover the cost of the development and then constructs the renewable energy project, through equity only financing. This process ensures that the DF remains evergreen with the ability to provide finance (in the form of development loans) to further projects. Once constructed and operational (with stable cashflows), the Refinancing Fund (RF) will provide debt (a partial refinancing) to the project company, which will release equity back to the CEF. This process ensures that the CEF is replenished and retains the ability to finance further projects. Remaining equity and outstanding loans will be directed back to the CEF and RF, respectively, upon sale of the asset. The RF, once raised, will complete the lifecycle financing concept of CIO,



however the CEF and DF funds remain viable as standalone funds without the RF, as the operational project companies of the CEF will also be able to raise debt in from banks and development finance institutions, thereby releasing equity back to the CEF.

### **B. The Importance of the CIO Initiative**

As an innovative whole-of-life financing solution, CIO is able to develop, construct and operate renewable energy projects in regions with significant power deficits, more expeditiously – and at reduced cost – translating into more additional MWs. In addition, CIO provides a simpler, more cost-effective solution for local (and international) developers. CIO will deliver significant environmental and societal impact in the countries, in which it invests by building clean energy capacity, reaching thousands of people, creating and supporting jobs and avoiding GHG emissions. Furthermore, in some countries CIO will build the first IPPs and plants of the particular technology and so kickstarting the renewables market. Most of all, CIO will deliver and demonstrate a new way of financing renewable energy and infrastructure, more broadly, projects in developing countries using private sector commercial and institutional capital.

Through the presence of highly additional donor capital in its structure, CIO is able to offer to mainstream commercial investors, such as pension funds – those generally reluctant to make these types of greenfield infrastructure investments - the opportunity to invest in CIO at a reduced risk to gain much needed comfortability with developing markets and renewable energy investments.

### **C. Climate Investor One Composition & Structure**

#### **Development Fund**

Climate Investor One's Development Fund is designed to finance the development stage of a project's lifecycle. The DF seeks to find early stage project development opportunities whereby finance at this stage is scarce to come by or expensive when available due to the high-risk characteristics of developing renewable energy projects in its target markets. Not only does the DF enable readily available capital for a project developer, it also reduces the complexity of the development phase by being able to fund up to 50% of the development costs of a project, enabling the developer to focus less on capital raising and more on project development. This methodology is designed to reduced complexity and timelines throughout the development stage.

Throughout the development stage, the CFM team along with 3<sup>rd</sup> party advisors will provide project development support / assistance, including commercial assistance and financial modelling, legal assistance, structural assistance, implementation of international best practice environmental, social & governance standards, Know Your Customer ("KYC") and anti-money laundering and counter-terrorist financing procedures with the objective to inform and influence the development process.

It is estimated that a Construction Equity Fund of USD 775 million will require a Development Fund of USD 46.5 million. This figure is the conclusion of several factors. Firstly, CFM estimates a failure rate for each dollar invested in projects in the development stage that will not be able to reach financial close and repay the development loan. Once a project is successfully developed and reaches financial close with the CEF, the investors in the project company (including CEF) will repay the development loan plus a premium sized to compensate for the failure rate. Secondly, even though capital lost from failed projects will be replenished by the premiums of successful projects, the size of the Development Fund should cover development loans to all 30 projects developed over the lifetime of CIO. This provides a buffer to guard against capital being locked into stalled or paused projects and enable the Fund to provide loans to attractive and impactful projects. For these reasons the size of the Development Fund has been set at USD 46.5 million to support approximately 30 projects being constructed by the CEF over the lifetime of CIO.

The goal of the development loan premium is to maintain the capital of the Development Fund meaning that the premium should compensate for failed projects. The premium is based on the estimated failure rate and may be adjusted over the investment period of the Development Fund if required.

### **Construction Equity Fund – Multiple Tranche Approach – Tier 1, Tier 2 & Tier 3**

Climate Investor One's Construction Equity Fund is designed to finance and expedite the construction phase of a project's lifecycle. CEF will provide up to 75% of construction costs in all-equity capital to projects developed with investments from the Development Fund. The CEF is appropriately divided into three tranches so as to attract multiple investor classes.

#### *Tier 1*

The first tranche, Tier 1, holds a junior equity position in the structure of the CEF, which absorbs a higher portion of risk throughout the CEF – acting as the principal enabler to attract commercial capital into the structure – by providing a 'first loss' buffer to the CEF. All Tier 1 funding is routed through the Development Fund, which is the sole investor in the Tier 1 tranche. The Development Fund is funded with donor capital in the form of reimbursable grants.

#### *Tier 2*

The second tranche, Tier 2, holds an ordinary equity position and targets commercial investors seeking commercial returns within the fund, at an acceptable risk profile. Tier 2 is supported by the first loss position of Tier 1 and affords a hurdle rate to investors on successful projects. This means that Tier 2 investors will receive their capital and the hurdle rate return after Tier 3 investors have been repaid their capital plus return. After Tier 1 investors receive the return of their capital the Tier 2 investors receive the remaining returns.

#### *Tier 3*

The third tranche, Tier 3, ranks in a senior equity position and provides investors a guaranteed return on the back of an Export Credit Agency (ECA) guarantee. This tranche is designed for investors with no or minimal prior developing markets investment track record, who invest in CIO with a more risk averse position than investors in Tier 2. Tier 3 returns are supported by the first loss position of Tier 1, as well as the greater risk exposure of Tier 2.

Dividing the CEF into three tranches enables an effect across the three tiers that de-risks the investment proposition for commercial investors in Tiers 2 & 3 while supporting their returns by utilising risk tolerant, highly additional donor capital in Tier 1. Without the provision of this type of donor capital, it is envisaged that the investment proposition would not be attractive enough to enable risk averse, OECD-provided commercial capital at scale into such an early stage of a project's lifecycle.

### **Capital Recycling**

After the project is constructed and reaches COD, it will be refinanced with debt to reduce the cost of capital and replenish CEF. There are no maximum refinancing limits, though CFM estimate that leverage will be between 50-70% on a project by project basis, depending on project structures, size & technology. At a certain point after refinancing CEF will exit its equity stake in the project company and recover all outstanding capital. All capital recovered either via refinancing with debt or exiting the project will be reinvested into new projects until the end of the investment period (15<sup>th</sup> anniversary of 1<sup>st</sup> Close) thus enabling the construction of more projects and the creation of greater impact in the target countries. CFM estimates that with a size of USD 775 million, CEF capital will be recycled and reinvested by a factor of 3.37 over the lifetime of the Fund. Development Fund capital is also recycled via the repayment of development loans at financial close, as explained in the section above. CFM estimates that Development Fund capital will be recycled and reinvested by a factor of 3.8 over the lifetime of the fund.

Refinancing will in part be provided by the Refinancing Fund, the third CIO fund to be raised in the short-term future. It is designed to 'gear' the project company with debt finance post construction, removing the need for complicated (and time exhausting) multi-party lending structures throughout the construction phase. The RF will comprise a combination of local and international lenders seeking to provide debt to well-structured and fully operating assets with stable cash-flows. CFM have received a letter of interest from FMO stating a soft commitment for an investment of USD 25 million in CIO's Refinancing Fund as well as an expression of interest from a large global insurance company investor. This Fund is not part of the scope of the present Funding Proposal or the requested financing from GCF.

### **CIO Investment Strategy**

Climate Investor One targets medium size renewable energy projects of between 25 MW – 75 MW. However, CIO may finance projects that are above (as well as below) the targeted size interval in order to fund e.g. a project's subsequent phase expansions or otherwise scale up CIO's investments, which would be made possible by a GCF contribution.

In order to achieve its investment objective to deliver clean energy at affordable prices across emerging markets, the strategy of Climate Investor One is to:

- target Project Companies expected to have sustainable and relatively predictable cash flows, limited exposure to demand and pricing risk and limited dependence on the economic cycle;
- target Project Companies which have the capacity to provide an appropriate risk adjusted return recognising that short-term yields on some investments may vary from the long-term target because of requirements for capital expenditure and resource availability;
- acquire positions of significant influence in order to ensure, as far as possible, that Climate Investor One's requirements are met during the development, construction and operational stages and for the duration of Climate Investor One's investment period;
- participate in the early development cycle of the Project Companies – i.e. in the planning and development phases; and
- target Project Companies that can benefit from Climate Investor One's expertise in areas such as project development, environmental and social risk management, financial engineering and structuring.

CFM screen partners for CIO based on (but not limited to) track record, financial resources, reputation & local connectedness, openness to CFM's ESG approach, as well as other factors. Projects are screened based on (but not limited to) commercial viability / return expectations, title to land, E&S impacts, energy off-take, renewable resource quality & governmental support.

### **CIO Investment Limits**

To ensure a diversified portfolio along geography and technology, in accordance with its investment strategy & restrictions (as further set out in section C.3) CIO must abide by fund limits outlined below:

#### **Technology Scope:**

Climate Investor One (Development Fund and CEF) will diversify across renewable energy technologies, with a primary focus on wind, solar and run-of-river hydro the following proportions:

- No less than 20% and no more than 45% of aggregate Fund capital<sup>1</sup> into Project Companies using wind as an energy resource;
- No less than 20% and no more than 45% of aggregate Fund capital into Project Companies using solar as an energy resource;
- No less than 10% and no more than 40% of aggregate Fund capital into Project Companies using run-of-river hydro as an energy resource; and,
- Not more than 10% of aggregate Fund capital into Project Companies using other forms of renewable energy resources, including biomass and geothermal.

#### **Geographic Scope:**

Climate Investor One will invest in a range of developing countries across Africa, Asia & Latin America achieving an optimal balance between risk, return and impact.

Investments are targeted based on the following geographical distribution, to a maximum of:

- 25% of aggregate Fund capital into one single country;
- 40% of aggregate Fund capital into Africa;
- 40% of aggregate Fund capital into South and South-East Asia;
- 40% of aggregate Fund capital into Middle and South America;

<sup>1</sup> Aggregate Fund Capital is total unlocked capital at any given point in time. Unlocked capital is all funding for which the tier proportions (20:40:40) hold.

- 10% of aggregate Fund capital in other regions and;
- No more than 30% of aggregate CEF capital in upper-middle-income countries across the above geographies.

These limits apply to CIO each time the DF and / or the CEF is fully committed, and is reported on regularly to the Fund IC's of which the GCF will have the right to appoint a member to.

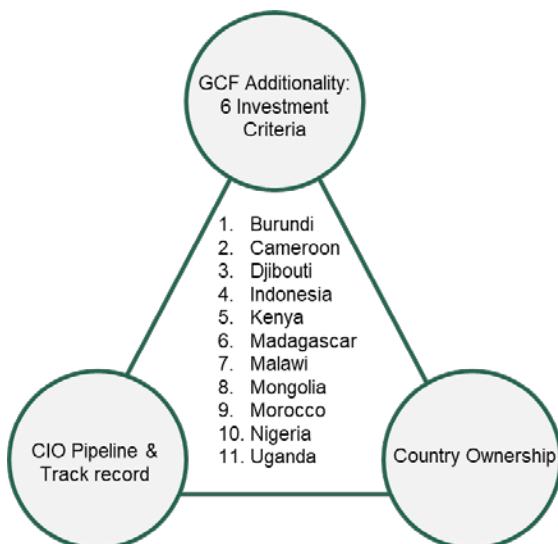
#### D. CIO's Programme for the Green Climate Fund

With a GCF participation of USD 100 million, the fund sizes are determined as: a USD 46.5 million DF; a USD 775 million CEF, and; a USD 775 million RF. A GCF intervention would enable both significant scalability to CIO and provide scarce, highly additional donor capital to the structure to help crowd in further private sector participation. In collaboration with GCF and taking into account its comments, CFM have narrowed down the number of investee countries, which will receive GCF funding for renewable energy projects via CIO. With GCF funding the majority of CIO's funding will flow into the 11 selected countries, defined in the section below. CFM estimates that approximately USD 500 million of total CEF capital will be committed to the 11 GCF earmarked countries in one investment cycle, with a minimum of USD 400 million.

#### Country Selection Strategy

CFM has analysed the countries in CIO's investment mandate countries to determine a list of twelve GCF target countries based on the nexus outlined below. Consequently, through GCF, CFM can position CIO to make a meaningful contribution to the climate change goals of these countries, as outlined by their Nationally Designated Contributions (NDCs).

The country selection process comprised three stages, which correspond to the three selection criteria: 1) Country Ownership, 2) CIO Pipeline & Track Record and 3) GCF additionality, with GCF additionality comprising of the six GCF Investment Framework criteria. In the first stage, CFM identified developing countries that have expressed renewable energy as a priority in their INDC and have a strong commitment to expanding the proliferation of renewable energy technologies in their respective jurisdictions. Secondly, CFM narrowed down the country list further by identifying the countries where shareholders and individual team members of CIO have the strongest track record and the most tangible projects in CIO's pipeline. In the third and last stage, CFM analysed the country list with respect to the six GCF Investment Framework criteria. The final list was determined based on how each country fits all of the six criteria; therefore, some countries fit all criteria equally well, while others are exceptionally good fits for a subset of criteria. This process resulted in the following country list:



CIO has initiated preparation for the implementation of the programme across these 11 countries. At this point we have identified significant pipeline in these countries and signed 2 Joint Development Agreements (JDA) for 4 projects in Morocco and Djibouti. Other projects include a solar farm in Nigeria, a solar project in Malawi, a run-of-river hydro project in Uganda and others indicated in sections B.1 and E.1. In two of the selected countries, namely Burundi, Madagascar, CIO does not have concrete projects at this point in time. However, due to significant potential for renewable energy and increasing market activity, CIO is expected to construct projects in those countries in the near to mid-term.

### A.3. Project/Programme Milestone

Expected approval from accredited entity's Board (if applicable)

The final investment approval from FMO's Board was obtained on 06/09/2016

Expected financial close (if applicable)	23 June 2017 (first close) - USD 412.6 million raised 22 December 2017 (second close) – USD 50.3 million raised 20 June 2018 (third close) – USD 75 million 23 June 2019 (final close) – date after which CIO fundraising will be closed.
Estimated implementation start and end date	Start: <u>19/04/2019</u> (estimated date of FAA effectiveness) First Closing: <u>23/06/2017</u> End: <u>23/06/2037</u>
Programme lifespan	20 years

## B.1. Description of Financial Elements of the Project / Programme

*Please provide:*

- an integrated financial model in Section I (Annexes) that includes a projection covering the period from financial closing through final maturity of the proposed GCF financing with detailed assumptions and rationale; and a sensitivity analysis of critical elements of the project/programme

This section will demonstrate (A) a financial and sensitivity analysis including model projections of the expected performance of CIO across its term length. This section will also serve (B) to demonstrate how Climate Investor One overcomes current prohibitive market barriers - considering CIO a necessary and important intervention – and provide (C) a Programme budget break down.

### A. Financial Analysis

#### A1. Introduction

The GCF participation in CIO constitutes an investment in the DF and T1 tranche of the CEF. The analysis in this section is based on its corresponding respective return expectations as outlined in the table below:

Table 1: CIO DF & CEF sizes

Fund/Tranche	Size (USD million)	Expected Returns
DF	46.5	Return of donor capital
CEF T1	155	Return of donor capital
CEF T2	310	Market equity return
CEF T3	310	Market loan return

The main investment goal of the **DF** is to maintain its capital throughout its life. This outcome is mainly driven by the success / failure rates of the development of the underlying projects. The premium that will be charged can be adjusted depending on the actual success rate of the development activities.

The **CEF** derives its income from the following activities at project level:

- Dividend income from a project company;
- Refinancing the equity investments by debt at project level once operational;
- Exit proceeds from the disposal of a project.

#### Base Case

In the Base Case it is assumed that 30 projects are successfully developed and constructed. A key factor is the timing of cash flows. Specifically, given that CEF capital is recyclable, the timing of cash outflows and inflows determines whether the tranches are sized sufficiently relative to each other and to the total size of the CEF. The relative sizing has been such that (i) cash inflows from refinancing and exits arrive on time to allow investment in new projects to continue uninterrupted, and (ii) that one tier does not run out of capital before the others. The outcome of the Base Case shows the investment outcome for Tier 1 donors of the return of all capital provided.

*Please provide a description of how the choice of financial instrument(s) will overcome barriers and achieve project objectives, and leverage public and/or private finance*

#### Overcoming Market Barriers

Climate Investor One was conceptualized and developed in order to overcome prohibitive barriers synonymous with project financed methods of financing. On the back of this, Climate Investor One was specifically designed to crowd in private sector financing to developing markets on the back of highly additional, enabling public sector funding.



Project finance is a widely used tool to finance infrastructure development; the technique is used successfully in many markets across different sectors. It is, however, a complex tool, as any underlying project goes through a series of different phases, each with a different risk profile, and success requires appropriate funding at each stage.

Simplistically, the project finance life-cycle can be broken down into three phases; project development, construction and the operational phase. As each stage has a distinct risk-return profile, levels of appetite vary from different providers of capital. There is also added complexity as successful projects require political support and enabling regulatory regimes.

The challenges are even greater in emerging markets where investors face not only greater political and regulatory risk, but also higher levels of credit risk. Nevertheless, finding financial solutions is vital for scalable infrastructure investments in emerging markets and is particularly vital for increasing investment in renewable energy infrastructure.

To date, various efforts have been made by governments, financial arrangers and DFIs in the development community to find solutions to this challenge. Some initiatives have focused on specific parts of the value chain - such as project development or refinancing. However, more recently there have been efforts to create more complete, holistic financing solutions. These facilities have sought to bring all the various parts of the financing structure under a single management structure and hence eliminate some of the uncertainties that exist with regards to a particular project being able to find investors as it progresses.

CIO was designed specifically with the aim of supporting infrastructure projects from development through to completion. Thus, CIO comprises two sub-funds which coincide with the key main phases of project finance: project development and project construction. These phases are financed by the CIO Development Fund and the CIO Construction Equity Fund.

CIO has been designed to overcome many of the perceived weaknesses in infrastructure investment into emerging markets that transpire into an overall lack of bankable projects.

In particular, CIO seeks to address the following barriers:

### **1) Slow Project Implementation Timelines**

#### Status Quo – Market Failure

Time is the biggest risk for a project developer. Processes always take longer than planned. In developing countries, a project developer typically commences development with his own capital and within a short period of time seeks grant and TA funding because the development stage is too early for institutional, private sector financiers to participate. As TA and grants usually only meet third party costs (e.g. consultancy fees and legal costs), and as the time line extends, the project developer needs to procure more capital to complete the development phase. If sufficiently advanced, the project developer can sometimes attract some commercial private sector interest. It is common that as timelines extend further, the process is repeated. The net result is that the project developer spends most of the time raising capital instead of developing the project. This results in an even further extension to the time line and in instances, a poor quality of development.

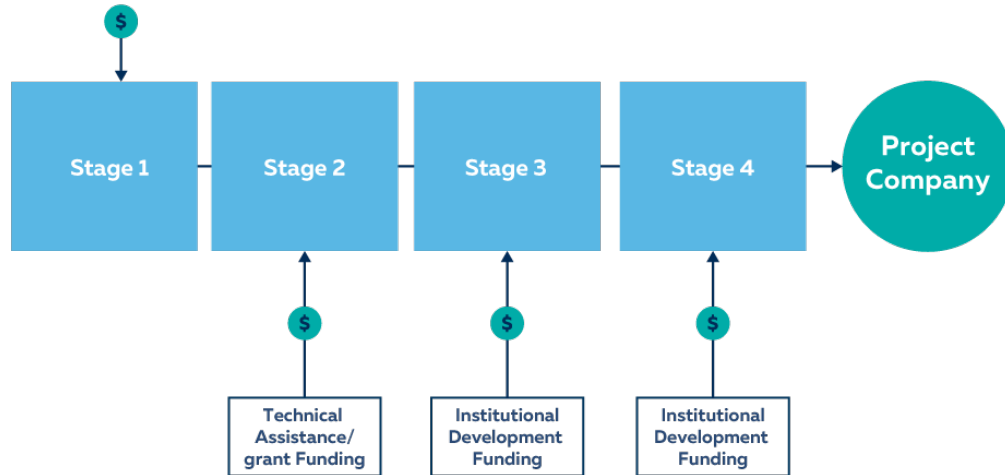


Figure 2: Typical project finance development phase structure

Climate Investor One's response to the Market Failure:

**(A) CIO's Development Fund**

Climate Investor One can mobilize development capital at scale, at a very early stage of the development of the project and has a broad mandate of costs that it can cover. This enables the Development Fund to provide financial support through to the end of the development period, relieving the project developer from a fund-raising orientation, enabling a greater focus on the development of the project to improve the rate of development as well as the quality of development.

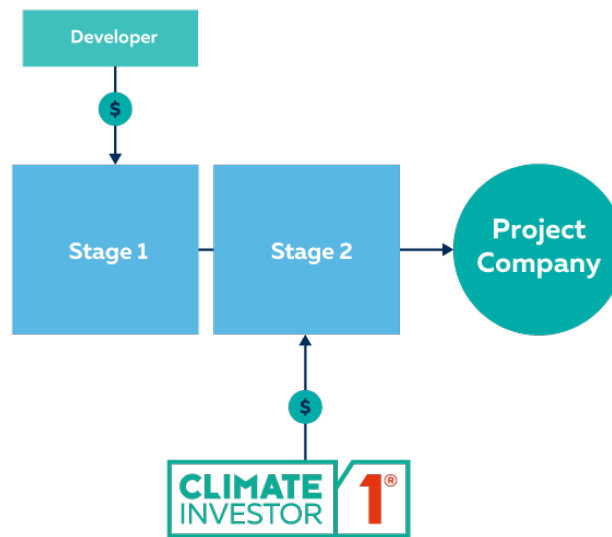


Figure 3: Climate Investor One development phase structure



**(B) CIO's Construction Equity Fund (CEF)**

The figure below shows a typical, rather complex project finance structure with its multi-party contracts and financing arrangements. CIO's CEF significantly reduces the complexity by removing the need for multi-party financing arrangements. A Project Finance Financial Close typically requires between 4-6 lenders who are bound both together and to the project company by an extensive suite of agreements. Reaching consensus with a large group is very time consuming. CIO's CEF replaces this source of funding with equity capital from the Construction Equity Fund, thereby reducing complexity, the number of parties involved, and cost of process and structure. This results in reduced timelines and projects being constructed faster, estimated to save multiple years, at a more affordable cost to the end user. Through having readily deployable equity, and less parties to negotiate with, Climate Investor One will be able to develop, construct and operate bankable projects faster than the current market practice.

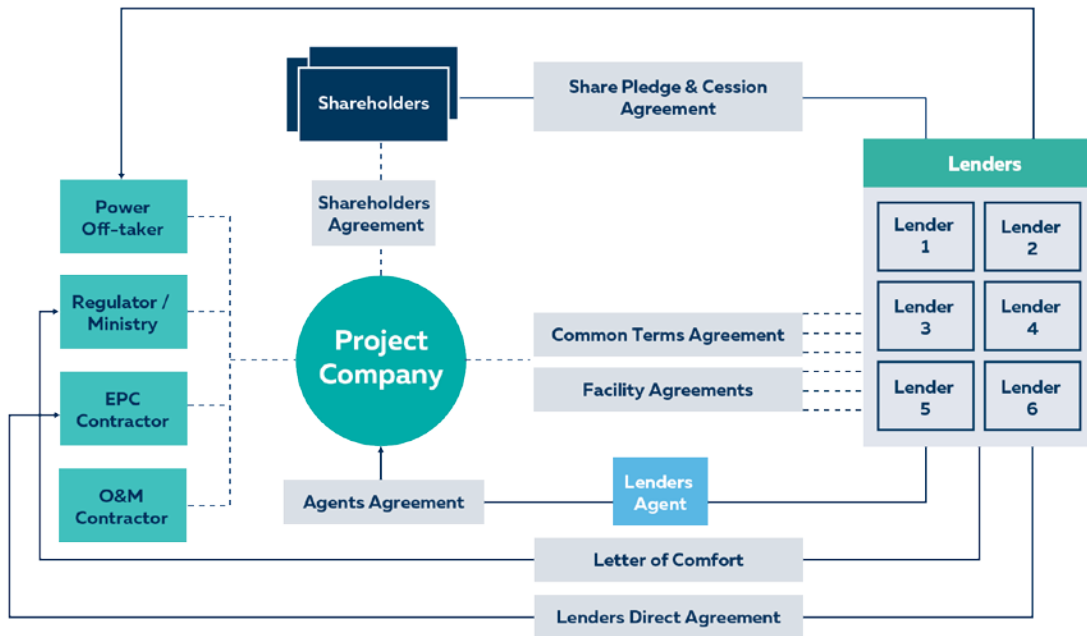
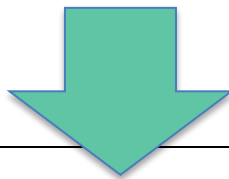


Figure 4: Typical project finance construction phase negotiation structure



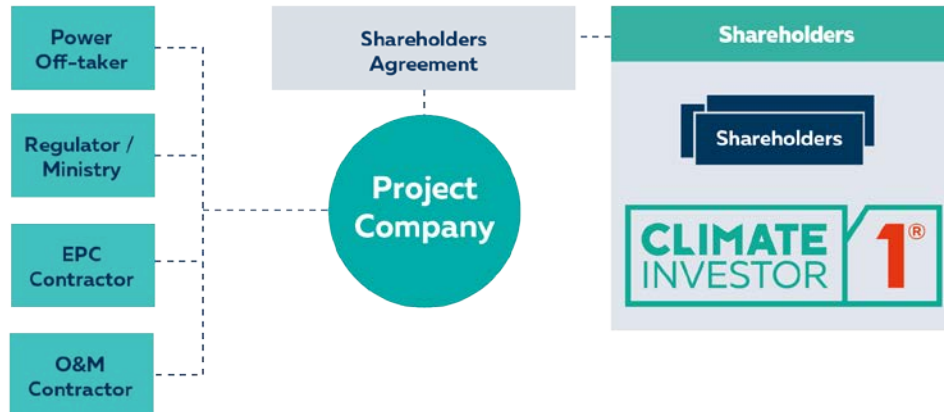


Figure 5: Climate Investor One construction phase negotiation structure

## 2) High Cost of Capital

Many of the target countries present a higher risk profile compared to more socio-economically developed markets, increasing the cost of capital for developers operating in these geographies. Innovative solutions are needed to ensure projects do not fail because of lack of timely access to capital and an over-exposure to political, financial and market risks;

CIO addresses this in the following ways:

1. Capital costs are reduced thanks to removal of certain project finance specific costs (debt service reserve accounts, interest during construction)
2. Shorter timelines and efficient processes are less costly
3. Lower costs thanks to a de-risked facility reduces the cost of the capital

## 3) Limited Exit / Refinancing Options for Investors

Banks and institutional investors take a largely opportunistic approach to infrastructure in emerging markets. The limited capacity of local capital markets and the high cost of structuring transactions means projects can be left without financial support. Even finance from DFIs can be cumbersome and take long periods of time to deploy.

CIO adds to additional exit options (CEF) and refinancing options (through RF) and therefore helps to improve the depth of local capital available for renewable energy projects.

Please provide a breakdown of cost estimates for total project costs and GCF financing by sub-component in local and foreign currency and a currency hedging mechanism: For example, under the component of drilling activity for a geothermal exploration project, sub-components would include civil engineering works, drilling services, drilling equipment and inspection test.

### Programme Budget Breakdown

This section provides (i) a project development budget (relevant for the DF) and (ii) a construction budget (relevant the CEF) of a representative project to be undertaken by CIO.

### Indicative Project Budget

The following project budget is for indicative purposes only, and budget item amounts may vary from project to project depending on technology, jurisdiction, geography and other factors.

Table 4: Indicative Individual Asset Development Budget:

Budget Item	Percentage of Total
-------------	---------------------

Subtotal Resource Assessment	7%
Subtotal Land	7%
Subtotal Stakeholder Engagement	7%
Subtotal E&S	5%
Subtotal Technical	23%
Subtotal Institutional & Financial	5%
Subtotal Legal	9%
Subtotal Project Management & Miscellaneous	12%
<b>Total NET Budget</b>	<b>75%</b>
Contingency	25%
<b>Total DEVEX</b>	<b>100%</b>

The 25% contingency is reserved due to the unpredictable nature of renewable energy project development in developing countries. It must be high enough in order to stay within the preapproved budget and avoid having to go back to the Investment committee (IC) for small variations in budgets. The contingency level of 25% has been set based on considerable experience in project development, to allow sufficient room for variation. Kindly note that a level of 25% is a conservative estimate

Table 5: Indicative Individual Asset Construction Budget:

Budget Item	Percentage of Total Budget
<i>Equipment Costs</i>	70%
<i>Balance of Plant<sup>2</sup></i>	30%
<b>Total Construction Cost</b>	<b>100.00%</b>

Table 6: Indicative Costs for Benchmark Projects in the Current Pipeline (All currency amounts are in USD millions)

Country	Capacity (MW)	Development Costs	Construction Costs	Costs per MW	DF funding	GCF DF	CEF funding	GCF CEF
<b>Total</b>	<b>588.6</b>	<b>40.9</b>	<b>816.1</b>	<b>1.4</b>	<b>15.7</b>	<b>10.4</b>	<b>440.8</b>	<b>70.5</b>

Table 7: Development Cost Financing Allocation

Country	Development Costs	DF funding	GCF DF Funding (66% of DF)	Third Party Sponsors	Other DF Donors
<b>Total</b>	<b>40.9</b>	<b>15.7</b>	<b>10.4</b>	<b>25.2</b>	<b>5.2</b>

Table 8: Construction Cost Financing Allocation

Country	Construction Costs	CEF funding	Third Party Sponsors	Other Tier 1 Donors	Tier 2	Tier 3	GCF CEF (80% of T1)
<b>Total</b>	<b>816.1</b>	<b>440.8</b>	<b>375.3</b>	<b>17.6</b>	<b>176.3</b>	<b>176.3</b>	<b>70.5</b>

CIO has significant pipeline in the targeted 11 countries. In order to construct all of the projects that are being pursued, more than the requested USD 80 million amount from GCF would be required, which provides a buffer. This strongly indicates that with GCF funding CIO will be able to construct quality renewable energy projects in these countries. Based

<sup>2</sup> All the supporting components and auxiliary systems of a power plant needed to deliver the energy, other than the generating unit itself, for example, ground preparation, concrete foundations, other civil works.

on the current pipeline around 800 MW of clean energy would be built with funds invested once. However, CIO is expected to recycle its capital and amplify it by a factor of 3.37 over the lifetime of CIO. The number of projects can vary depending on the capacity of each project and CIO's investment stake, but on the basis of the current pipeline, GCF funding would result in approximately 20 projects in GCF-earmarked countries and ca. 30 projects in CIO's total portfolio.

**B.2. Project Financing Information**

	Financial Instrument	Amount	Currency	Tenor	Pricing
<b>(a) Total project financing</b>	<b>(a) = (b) + (c)</b>	821.7	million USD (\$)		
<b>(b) Requested GCF Amount</b>	(i) Senior Loans (ii) Subordinated Loans (iii) Equity (Junior) (iv) Guarantees (v) Reimbursable Grants (vi) Grants	- - - - 100	million USD (\$)	20 years	Return of Capital
* Please provide economic and financial justification in <a href="#">section F.1</a> for the concessionality that GCF is expected to provide, particularly in the case of grants. Please specify difference in tenor and price between GCF financing and that of accredited entities. Please note that the level of concessionality should correspond to the level of the project/programme's expected performance against the investment criteria indicated in <a href="#">section E</a> .					
	Total requested (v)	100	million USD (\$)	Allocation: Reimbursable Grants: USD 20 million – Development Fund; Junior Equity: USD 80 million – Tier 1, Construction Equity Fund	
<b>(c) Co-financing Amount</b>	Table 9: Co-Financing Amount				
	<b>Investor/Donor</b>	<b>Commitment Type</b>	<b>Expected Return</b>	<b>Total</b>	
	<b>Development Fund</b>	Reimbursable Grant	Return of Capital	26.5	
	<b>CEF Tier 1</b>	Reimbursable Grant	Return of Capital	75	

<b>CEF Tier 2</b>	Ordinary Equity	Market equity return	310
<b>CEF Tier 3</b>	Senior Equity	Market loan return	310

The funding amounts provided in this table describe the full USD 775 million size of CEF and USD 46.5 million size of the Development Fund. An estimated USD 500 million of CEF and USD 30 million of Development Fund capital will be invested in GCF-earmarked countries as explained in section A.2. The co-financing amounts for the 11 GCF-earmarked countries is outlined below.

Table 10 Co-financing for 11 GCF-earmarked Countries

<b>Development Fund</b>	
<b>Total</b>	10
<b>Construction Equity Fund</b>	
<b>Tier 1</b>	
<b>Total</b>	20
<b>Tier 2</b>	
<b>Total</b>	200.00
<b>Tier 3</b>	
<b>Total</b>	200.00

**Scaling CIO & Mobilizing Private Sector Participation**

Donor capital is currently scarce within CIO, limiting the scalability and potential for impact.

GCF funding is required to (i) fill the gap in donor funding and (ii) enable CIO to double its entire investment portfolio, catalysing further private sector investment. Additional commercial funding in CIO is limited by the absence of further Donor capital due to the required Tier proportions in CIO's CEF (20% T1, 40% T2 and 40% T3).

Climate Investor One already has a pipeline of interested private sector investors to join the CEF upon scaling of the facility, leading to additional Foreign Direct Investment (FDI) in some of the poorest countries in Africa and developing Asia. The current investor pipeline includes two DFIs and a private foundation.

Table 11: Funds Raised and GCF Contribution to Fundraising Goal

Fund	Total Commitments	Target	Gap	GCF Commitment / Funds Catalysed	% Gap Closed by GCF
Development Fund	26.7	46.5	20	20	100%
CEF Tier 1	75	155	80	80	100%
CEF Tier 2	210	310	100	160*	100%
CEF Tier 3	235	310	75	160*	100%

\*Amounts Catalysed by GCF at Fund level

Lead financing institution: FMO

### B.3. Financial Markets Overview (if applicable)

There are many barriers in financing renewable energy projects in developing countries. The main factors are as follows<sup>3</sup>:

#### 1. Lack of Long-Term Financing

Renewable energy projects are normally characterized by high up-front costs and low ongoing operating costs, which makes long term funding for such projects necessary. This is a disadvantage compared to traditional and GHG emitting technologies, which are often viable with short-term loans. In many developing countries long-term financing is difficult and sometimes impossible to get. This is in part due to regulatory or other restrictions on long-term bank lending. Furthermore, investors are unfamiliar with the renewables market and perceive technology and country risk to be high and difficult to estimate and price. Hence, they are discouraged from investing. Long-term financing also depends on investors who are looking for long-term assets to match the profile of their liabilities such as pension funds. In developing countries, such funds either don't exist or limit investment activities largely to the purchase of government debt owing to its low risk.

<sup>3</sup> Adapted from a World Bank report, 2013.

As shown in the chart below (World Bank, 2015) domestic credit to the private sector as a percentage of GDP in the selected 11 countries is well below that of OECD countries. This indicates that there isn't nearly sufficient domestic capital available to support renewable energy projects and that foreign funding is required.

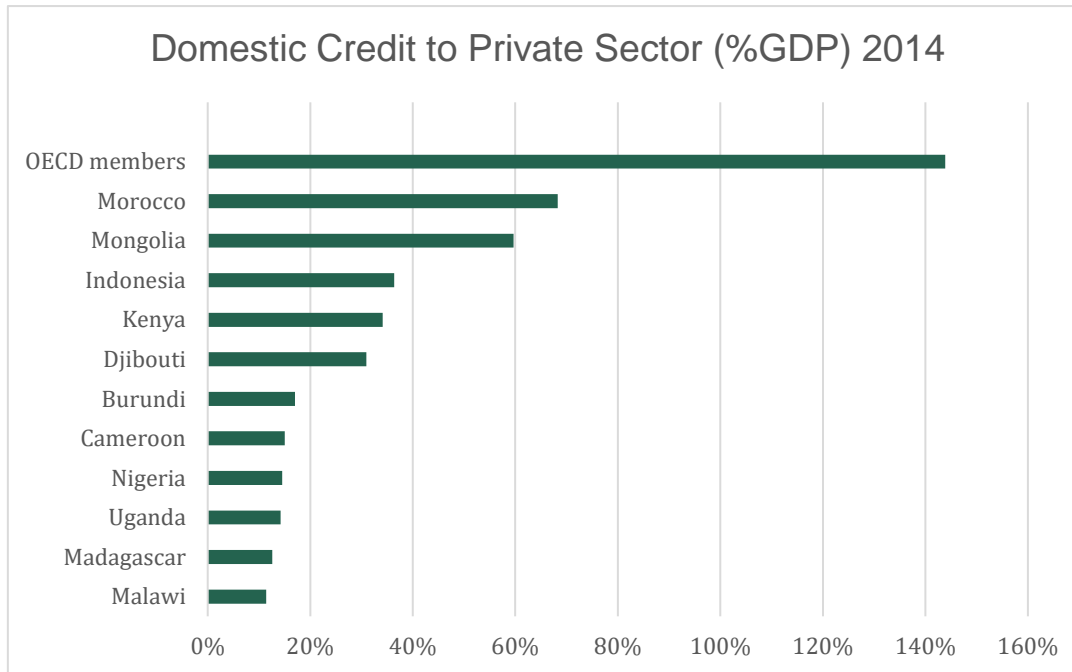


Figure 6: Domestic Credit to the Private sector as %GDP (Source: World Bank)

## 2. Lack of Project Financing

Renewable energy technology projects also seek to access funds on a project finance basis. With project finance the security for the loan comes from future project cashflows and little/no up-front collateral is required. There is still however, the need for a share of the project to be funded from equity. This type of funding allows renewable energy technology projects to spread their costs over the project lifetime, funding the high upfront cost from the positive cashflows generated during operations. The alternative to this would be to rely heavily on equity funding, payments to which can be delayed until the later years of the project.

Renewable energy technologies are more exposed to the limited availability of project financing than most conventional technologies as the share of capital costs in their total cost is much greater

## 3. High and Uncertain Project Development Costs

Renewable energy technologies projects are quite vulnerable to changes in the regulatory framework. Due to their lack of cost competitiveness, these projects are dependent on a supportive regulatory framework to proceed—including commitments to pay premium prices, priority access to electricity grids including support for the necessary infrastructure investments and guarantees of purchases of their output. Severe problems for project viability can arise where the regulatory framework changes.

Furthermore, such projects are often located in environmentally and socially sensitive areas. For example, with larger solar and wind projects, land use requirements can be very significant. All these factors make it necessary for renewable energy project sponsors to have access to significant amounts of funds to cover the costs of project development prior to reaching financial close. Generally, such funds come from their own resources or from sources of risk capital. In developing countries, the small size of potential renewable energy technology project sponsors means that this route of funding is limited. Generally, there is little availability of risk capital in developing countries financial markets

## 4. Lack of Equity Finance

While large numbers of renewable energy project developers exist, there are only limited numbers of large-scale project sponsors, particularly among those operating in low-income countries, with the ability and willingness to fund renewable

energy projects on a corporate finance basis. Renewable energy projects are generally smaller than conventional generation projects and this is reflected in the size of developers. The high risks of investment in many LICs, whether inside or outside the energy sector, will also tend to deter many larger energy companies based in more developed economies leading to a lack of equity.

This lack of equity capital means that project sponsors are often unable to cover the costs of development activities without external assistance. But, as highlighted above, access to risk capital of the type required is limited in LICs. The lack of equity capital also increases the dependence on project financing, as sponsors are unable to provide collateral for loans or to put up large amounts of equity. As a result, loans have to be secured against future cash flows, given the absence of alternatives.

#### **5. High financial cost relative to other technologies**

The high costs of renewable energy relative to conventional generation technologies are a key risk to their success. These higher costs are exacerbated by the high cost of funds in many underdeveloped financial markets. The high up-front capital costs of many renewable technologies compared to conventional technologies further worsen their commercial position and make costs a concern.

For grid-connected projects, the high cost of renewable energy can be overcome, at least in part, through priority rights to dispatch and/or must-take obligations on off-takers. This means that these projects are effectively removed from having to compete for dispatch with other lower-cost conventional technologies. The higher costs imposed on off-takers of purchases from renewable energy projects are generally recovered from electricity customers as a whole either through the monopoly power of the off-taker or, where the electricity market is competitive, through some form of levy or universal charge.

But if costs are too high relative to alternatives, affordability concerns may mean that such priority treatment is not given. There may also be concerns whether renewable energy projects that are more expensive than conventional alternatives will have commitments to pay them honoured, whether governments will continue to make the necessary funds available to cover the obligations of publicly owned off-takers, or whether attempts will be made to renegotiate these commitments on the grounds of affordability.

In 2015-2016 USD 8.8 billion of global renewable energy financing, across all investors and financial instruments, went into Africa, with only USD 4.8 billion going into Sub-Saharan Africa (USD 4 billion in MENA). Institutional investors contributed about 1% of global financing (IRENA, 2018)<sup>4</sup>. This shows that in order to expand the renewable energy sector in developing countries, especially in Africa, new ways of attracting funds and optimising project finance have to be developed. CIO is designed to overcome renewable energy project financing barriers and attract commercial capital to renewable energy projects, especially institutional capital. Through a successful demonstration effect CIO could help proliferate similar structures and blended finance facilities more broadly into climate related programmes.

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<sup>4</sup> IRENA and CPI (2018), Global Landscape of Renewable Energy Finance, 2018, International Renewable Energy Agency, Abu Dhabi



Please fill out applicable sub-sections and provide additional information if necessary, as these requirements may vary depending on the nature of the project / programme.

### C.1. Strategic Context

Please describe relevant national, sub-national, regional, global, political, and/or economic factors that help to contextualize the proposal, including existing national and sector policies and strategies.

All of the 11 countries have both a need and desire for renewable energy as well as a regulatory environment that makes CIO projects possible. Firstly, we see from the Nationally Determined Contributions (NDCs) that the countries have expressed a willingness to reduce emissions and indicated renewable energy as a priority in achieving the targeted reductions. All countries have set a conditional target for CO2 reduction that they could achieve, if new sources of financing are facilitated. Some countries have indicated that they will also be able to achieve an unconditional target with existing funds. It is very important for CIO that its investee countries would approve of and want CIO's projects, therefore the NDCs are consulted. In Table 11, which summarizes NDC targets, renewables prioritisation and need for financial support to achieve the conditional targets, we see that GCF funding through CIO is in alignment with government goals and can help achieve the conditional targets for emissions reduction by providing a new source of financing.

Table 12: Nationally Determined Contributions

Country	CO2 Emissions Reduction Targets		RE is a Priority	Financial Support Needed (USD billions)
	Unconditional	Conditional		
Burundi	3%	17%	Yes	1.49
Cameroon	N/A	32%	Yes	N/A
Djibouti	40%	60%	Yes	1.6
Indonesia	41%	12%	Yes	N/A
Kenya	N/A	30%	Yes	40*
Madagascar	N/A	14%	Yes	42.1
Malawi	N/A	47%	Yes	N/A
Mongolia	14%	>14%	Yes	N/A
Morocco	13%	32%	Yes	45
Nigeria	20%	45%	Yes	N/A
Uganda	7%	22%	Yes	5.74

All targets are set for 2030. The point of reference for emissions reduction is BAU.

\*This target includes adaptation efforts.

It is important that each country would have an enabling regulatory environment that would allow for CIO's projects to be developed. Key points that describe each country's energy sector regulation are provided in the list below. Some regulatory frameworks are more developed than others, but each country has laws that support the establishment of IPPs, which already have been successfully constructed in most countries. In others, such as Djibouti, CIO with GCF funding would have the opportunity of building the country's first IPP and kickstart the private energy provider market.

#### 1. Burundi

- Very low electrification rate, with only the cities of Gitega and Bujumbura that have a municipal electricity service.
- Households are the main consumers of energy in the country, accounting for 94% of total consumption. Their needs are almost exclusively met by traditional biomass (99%). Electricity (0.3%), and oil products (0.4%) play an insignificant role.
- The country's electrical power sector is traditionally state owned, Electricity generation and supply in Burundi is managed and administered by Régie de Production et Distribution d'Eau et d'Electricité (REGIDESO).
- The Government of Burundi is very supportive of renewable energy expansion, especially of hydroelectricity. It plans to increase electrification to 35% by 2030 by building 3 hydro power plants.

- The Government is also developing policy to stimulate the private sector development of small-scale hydro plants.

## **2. Cameroon**

- Cameroon was one of the first countries in Africa to open the energy sector to private investment. The Electricity Law of 1998 resulted in the entry of AES as a majority shareholder of Sonel, the national utility, in 2001. In 2014 it was acquired by PE fund Actis and rebranded as Eneo.
- A new phase of reform in the power sector started in 2011, with the promulgation of a new Electricity Law which paves the way for unbundling generation, transmission and distribution.
- The 2011 law also opened the door to independent power generators and distributors in rural areas outside the concession of Eneo, but only one independent power generation and distribution license has since been awarded
- The Government of Cameroon supports renewable energy and has set a target of 25% of the total energy mix coming from renewables by 2035.

## **3. Uganda**

- Under the Electricity Act of 1999, the Electricity Regulatory Authority (ERA) was established as an independent sector regulator; the resulting enabling environment opened up the sector to private sector investment and participation.
- Distribution is regulated, and cost-reflective tariffs are utilized, with 54% of power generation coming from independent power producers (IPPs).
- Has introduced a Feed-in-Tariff.

## **4. Kenya**

- Kenya's energy market offers reasonably independent regulation, cost-reflective tariffs, and a functional market design: Kenya has completed the vertical unbundling of its energy sector
- Kenya Power is partially-owned by private investors and is one of the continent's most financially viable distribution & supply companies.
- Kenya Power operates profitably, provides transparent financial reporting, and has not been late on an energy payment for six years.
- Kenya Power's financial stability and access to capital markets allows investors to invest without reliance on sovereign guarantees, although IPPs require a letter of comfort from the government that covers political risk in order to obtain financing for projects.
- Kenya's track record of completing ten commercially viable Independent Power Producer (IPP) projects validates the ease and attractiveness of the business environment.

## **5. Malawi**

- Until recently, the Electricity Supply Corporation of Malawi Limited (ESCOM), the national electricity utility, was in a weak financial situation.
- ESCOM has been reformed by:
  - Tariff reforms to bring revenues more in line with costs, resulting in ESCOM's improved financial position.
  - Stronger operational practices to improve maintenance planning and execution, with ESCOM increasing spending on things like replacing faulty utility poles and critical repairs at hydropower plants.
  - Technical assistance and new accounting policies to adhere more closely to international financial standards and implement information technology solutions to better manage inventories.
  - Installation of pre-paid meters and removal of illegal connections to reduce non-collection and non-technical losses from electricity theft.
- Key reforms and technical assistance have helped ESCOM deliver better service and become a more viable business partner for the private sector,
- In December 2016, ESCOM achieved an investment-grade credit rating (BBB) from the South Africa-based Global Credit Rating Co., an independent credit rating agency focused on emerging markets.

## **6. Madagascar**

- Madagascar's government is working to expand its electricity supply and encourage investment in the energy sector to stimulate the economy.
- The majority of its existing capacity comes from hydroelectric and diesel power plants in limited and poor condition.
- Has one utility, the State Power Authority (JIRAMA).
- More than 10 independent power producers (IPPs) account for an increasing percentage of the total electricity production.
- Has introduced a Feed-in-Tariff.

### **7. Djibouti**

- The government of Djibouti has set a goal of achieving universal access to electricity by 2035.
- Electricity supply services are provided through the vertically integrated utility Electricité de Djibouti (EDD).
- Djibouti has wind and geothermal generation potential and is actively studying these options.
- In 2015 the Government enacted Independent Power Producer (IPP) and energy efficiency laws relating to large and small-scale IPP power projects, as well as for captive power.
- The law provides that the State remains the exclusive purchaser (Single Buyer) of power produced from IPPs in Djibouti.

### **8. Morocco**

- The national utility Office National de Electricité et de l'Eau Potable (ONEE) operates throughout the whole value chain (generation, transmission and distribution).
- There exist several ways to generate electricity in the Moroccan market: a) electricity directly generated by ONEE, b) IPPs selling electricity to ONEE with individually negotiated PPAs, c) self-production, and d) IPPs selling renewable energy-based electricity to large consumers via PPAs.
- Numerous sectoral strategies, plans and programs have been initiated over the last decade in order to achieve poverty-reducing sustainable development whilst taking steps to preserve the environment.
- The national strategic objective of Morocco is to safeguard the security of the energy supply by reducing dependence on energy imports.
- With consistent sun and strong winds, Morocco has strong potential in renewable energy, with a long-term goal of becoming an energy exporter to European and African markets.

### **9. Nigeria**

- The National Renewable Energy and Energy Efficiency Policy (NREEP) for Nigeria entered into force in 2016, which provides a general legislative framework for renewable energy and energy efficiency sectors in Nigeria.
- The government of Nigeria approved the Feed-in tariff regulation in November 2015.
- According to the new regulation, the electricity distribution companies (Discos) will be obliged to source at least 50% of their total procurement from renewables.
- The new feed-in tariff regulation already determines the procedure for auctions for the larger projects.
- First project-financed IPP reached financial close in 2015.

### **10. Mongolia**

- In June 2014, the Green Development Policy was adopted. The policy serves as a guideline for transition to green development.
- In 2002, the power sector was unbundled resulting into 18 independent companies, which are still wholly owned by the State.
- The Energy Regulatory Commission launched the single-buyer model where the National Electricity Transmission Grid purchases all the energy output of energy producers (five State owned CHPs and one privately owned wind power plant which are all located in the central region) and then sells to distribution companies.
- The Mongolian Parliament aims to reform the energy sector and transition to a market economy. Recently, the Parliament announced the partial privatization of State-owned power plants.
- Approved first ever IPP in 2012.

- To incentivize renewable energy development, the Mongolian government has mandated feed-in tariffs of 8 to 9.5 U.S. cents per kWh for wind energy and 15 to 18 U.S. cents per kWh for solar energy.

### 11. Indonesia

- State-owned enterprise PLN is responsible for transmission and distribution of electricity in Indonesia
- strong commitment to implement the planned climate change mitigation and adaptation activities to be led and co-ordinated among various stakeholders including governmental institutions and the newly established Directorate General of Climate Change, under the Ministry of Environment and Forestry
- Regulation No. 21/2008 addresses emission regulations in Indonesia, such as the requirement for thermal power plants to install emissions monitoring systems and prepare an emission inventory.
- The establishment of MEMR Regulation No. 31 in 2009 provided PLN with a legal basis for buying renewably generated power from IPPs.
- Regulation No. 4 in 2012 superseded this regulation, setting specific feed-in tariffs for bioenergy power (biomass, municipal solid waste and landfill gas) and hydropower projects up to 10 MW that vary based on the region where the project was installed.
- Since then, more detailed regulations have been implemented for various renewable energy technologies
- For larger-scale projects, such as hydropower and more recently wind power, PLN negotiates directly with project developers for a PPA.
- For most small-scale renewable energy projects (up to 10 MW), feed-in tariffs are the policy mechanism of choice in Indonesia, although auctions for small-scale solar PV projects also were used in the past.

In tables 13 and 14 electricity generation is described by country. We can see that on average countries have 47% of renewable capacity. This is a relatively high share; however, it includes large hydroelectric plants, which are often assumed not to emit GHG, however in reality they do have GHG emissions due to the decay of flora in the flooded reservoir. Furthermore, they are not environmentally sustainable due to the negative effects on biodiversity and local communities. Excluding hydroelectricity, the renewable energy capacity as a percentage of total capacity drops down to only 11%. This is a low share considering that all of these countries have a comparative advantage for renewable energy, because of an abundance of natural renewable resources.

In conclusion, the 11 countries in which CIO would invest GCF funding have the desire to increase their renewable energy capacity and have developed and/or are refining the regulatory environments to support its expansion. However, the share of renewable energy is not representative of the large amount of renewable resources, which is mainly due to the financial barriers described in the previous section. CIO, with GCF support, could greatly increase renewable energy in these countries and create positive impact on both climate change mitigation and the economic development.

According to an IRENA<sup>5</sup> report, in order to achieve the Paris Agreement goal of limiting temperature rise below 2°C the share of renewables in primary energy supply has to rise from 15% (2015) to about 65% by 2050 alongside greatly improved energy efficiency. This is a large increase that would require the tripling of current global investments and cannot be achieved without additional sources of funding. CIO aims to increase the global share of renewable energy by targeting some of the countries, where financing such technology is most difficult.

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<sup>5</sup> IRENA and CPI (2018), Global Landscape of Renewable Energy Finance, 2018, International Renewable Energy Agency, Abu Dhabi

Table 13: Installed total and renewable capacity (EIA 2015)<sup>6</sup>

Country	Installed Capacity (MW)	Generation (GWh/year)	Renewable Capacity (MW)	Renewables (% Installed Capacity)	Non-Hydroelectric Renewables (MW)	Non-Hydroelectric Renewables (% of Capacity)
Burundi	68	230	59	87%	2	3%
Cameroon	1,545	6,610	728	47%	721	47%
Djibouti	130	405	0	0%	0	0%
Indonesia	57,345	221,306	8,559	15%	3,154	6%
Kenya	2,301	9,568	1,567	68%	747	32%
Madagascar	668	1,508	174	26%	10	2%
Malawi	375	2,120	373	99%	23	6%
Mongolia	1,106	5,192	56	5%	56	5%
Morocco	8,040	27,967	2,145	27%	839	10%
Nigeria	10,478	29,830	2,060	20%	20	0%
Uganda	922	3,235	786	85%	80	9%
<b>Total/Average %</b>	<b>82,978</b>	<b>307,971</b>	<b>16,507</b>	<b>44%</b>	<b>5,652</b>	<b>11%</b>

Table 14: Renewable Energy Technology as a % of total installed capacity (EIA 2015)<sup>6</sup>

Country	Hydroelectricity	Geothermal	Solar	Wind	Biomass and Waste
Burundi	84%	0%	3%	0%	0%
Cameroon	47%	0%	1%	0%	0%
Djibouti	0%	0%	0%	0%	0%
Indonesia	9%	2%	0%	0%	3%
Kenya	36%	26%	1%	1%	4%
Madagascar	25%	0%	1%	0%	0%
Malawi	93%	0%	2%	0%	5%
Mongolia	0%	0%	0%	5%	0%
Morocco	16%	0%	1%	10%	0%
Nigeria	19%	0%	0%	0%	0%
Uganda	77%	0%	2%	0%	7%
<b>Average</b>	<b>32%</b>	<b>3%</b>	<b>1%</b>	<b>1%</b>	<b>2%</b>

## C.2. Project / Programme Objective against Baseline

*Describe the baseline scenario (i.e. emissions baseline, climate vulnerability baseline, key barriers, challenges and/or policies) and the outcomes and the impact that the project/programme will aim to achieve in improving the baseline scenario.*

CIO's primary goal is climate change mitigation via increasing the proliferation of renewable energy in developing countries. Therefore, its main objective is to reduce GHG emissions by constructing ca. 30 projects during the entire

<sup>6</sup> U.S. Energy Information Administration, International Energy Statistics  
[https://www.eia.gov/beta/international/data/browser/#/?pa=00000000000000000000000007vo70000fvu&c=4100000002000060000000000000000000g000200000000000000001&tl\\_id=2-A&vs=INTL.2-7-AFRC-MK.A&vo=0&v=H&end=2015](https://www.eia.gov/beta/international/data/browser/#/?pa=00000000000000000000000007vo70000fvu&c=4100000002000060000000000000000000g000200000000000000001&tl_id=2-A&vs=INTL.2-7-AFRC-MK.A&vo=0&v=H&end=2015)

program and 20 projects in the 11 countries, where GCF funding will be deployed. At the moment such an expansion of renewable energy in the 11 countries is not possible, mainly due to the financial barriers, described in section B.3, even though they have the desire and regulations to do so as described in the previous sections. In order to achieve significant reductions in emissions new sources of funding have to be made available, as expressed in the 11 countries NDCs. Table 11 and the accompanying figures describe the trend in CO<sub>2</sub> emissions for the 11 countries. Here we can see clear upward trajectories, which will become steeper due to increase in energy demand resulting from economic growth. The average growth rate of CO<sub>2</sub> emissions over the 10-year period in table 15 was 3.4%, which is high relative to the OECD group, where emissions have been decreasing. In the past few years, we can also see that the rate of emissions growth has been accelerating, as can be predicted by economic growth. Without the provision of renewable energy, as these countries grow, the energy sector will likely expand by more fossil fuel power production that will further worsen climate change. Also without a rapid expansion of the energy sector the countries' economic growth will be stifled.

CIO will contribute to the avoidance of CO<sub>2</sub> emissions by developing renewable energy, low-emissions, power plants as well as creating a new tool in the climate finance tool box that will be replicable in the energy as well as other climate and development related sectors. A successful CIO demonstration effect would cause a paradigm shift that would accelerate the use of blended finance structures and significantly increase the flow of private sector funds into developing countries.

Based on CIO's current pipeline in the 11 countries, an estimated total of 2.69<sup>7</sup> million tons of CO<sub>2</sub> emissions would be avoided annually over the lifetime of the Fund.

Table 15: CO<sub>2</sub> Emissions from Energy Consumption in millions of tons (EIA)

Country	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Burundi	0.4	0.3	0.4	0.2	0.2	0.2	0.3	0.2	0.2	0.2
Cameroon	7.4	7.9	7.7	8.4	8.6	8.1	6.5	8.1	8.4	9.7
Djibouti	1.7	1.6	1.7	1.2	1.2	1.4	1.8	1.0	1.0	1.0
Indonesia	348.6	387.4	378.6	401.1	447.7	464.6	479.2	485.3	493.0	502.0
Kenya	11.5	11.4	11.4	11.4	12.6	12.9	12.8	13.9	14.9	16.6
Madagascar	2.5	2.5	2.8	1.8	1.9	2.1	3.5	3.2	3.1	3.1
Malawi	1.1	1.1	1.2	0.9	0.9	1.0	1.9	1.1	1.1	1.2
Mongolia	6.8	7.2	7.2	7.6	8.1	8.4	9.5	13.2	13.8	14.2
Morocco	36.6	35.8	37.4	41.5	47.8	43.0	39.0	46.7	52.1	52.3
Nigeria	103.1	100.5	100.9	69.5	79.8	98.2	95.2	95.6	97.2	97.5
Uganda	1.9	2.0	2.0	3.3	3.4	3.4	2.5	3.9	4.0	3.9
<b>Total</b>	<b>521.6</b>	<b>557.7</b>	<b>551.3</b>	<b>546.9</b>	<b>612.2</b>	<b>643.3</b>	<b>652.2</b>	<b>672.2</b>	<b>688.8</b>	<b>701.7</b>
<b>Growth Rate</b>	-	<b>6.92%</b>	<b>-1.14%</b>	<b>-0.80%</b>	<b>11.94%</b>	<b>5.09%</b>	<b>1.37%</b>	<b>3.07%</b>	<b>2.47%</b>	<b>1.87%</b>
<b>OECD</b>	<b>13,759.4</b>	<b>13,882.5</b>	<b>13,568.2</b>	<b>12,775.1</b>	<b>13,158.5</b>	<b>13,077.0</b>	<b>12,869.4</b>	<b>12,660.7</b>	<b>12,540.3</b>	<b>12,425.8</b>
<b>Growth Rate</b>	-	<b>0.89%</b>	<b>-2.26%</b>	<b>-5.85%</b>	<b>3.00%</b>	<b>-0.62%</b>	<b>-1.59%</b>	<b>-1.62%</b>	<b>-0.95%</b>	<b>-0.91%</b>

<sup>7</sup> Please see Annex 9 for calculation





### C.3. Project / Programme Description

*Describe the main activities and the planned measures of the project/programme according to each of its components.*

This section highlights key features and objectives of CIO and subsequently zooms into its different components that fit together to achieve the goals of CIO with GCF's involvement. All investments made by CIO, whether through the Development Fund or through the Construction Equity fund are made in accordance with the Investment Strategy and Restrictions as well as CIO's Responsible Investment Code.

- CIO will build more projects faster by servicing the financing needs of projects at different stages of their evolution
- The Development Fund will increase the quality and reduce development timelines of a project
- The Construction Equity Fund will provide scarce equity capital during the construction phase of the project
- GCF's involvement can scale the size of the facility and can increase the number of projects delivered by 3X from current levels

#### **Role in the market: "Build more, Faster"**

Climate Investor One is a blended finance facility mandated to deliver renewable energy infrastructure projects in developing markets by contributing to each of the respective development, construction, and operational phases in a project's lifecycle. CIO was designed to address the lack of private financing options in developing markets for such projects and offers an encompassing whole-of-life project financing solution. To finance each stage of a project, CIO has established two independent funds operating at arms' length – the Development Fund and the Construction Equity Fund.

Climate Investor One aims to deliver clean energy at affordable prices to the most energy deprived countries. Furthermore, CIO aims to capture value and deliver investor returns by addressing certain financing related market barriers synonymous with investing in renewable energy technologies in developing markets through the application of a whole-of-life funding solution. CIO will fulfil this objective by deploying capital into greenfield renewable energy project assets effectively and expeditiously to achieve medium to long-term returns to the providers of such capital. CIO will target the developing markets and focus on projects which use wind, solar PV and run-of-river hydro technologies to generate electricity. Other renewable energy technologies may be considered in light of projects that offer attractive returns and create significant environmental and societal impact. These technologies include, but are not limited to, biomass/bio-waste-to-energy, waste-to-energy, and geothermal.

Climate Investor One has been designed to target medium size renewable energy projects of between 25 MW – 75 MW. However, CIO may finance projects that are above (as well as below) the targeted size interval in order to fund e.g. a project's subsequent phase expansions or otherwise scale up CIO's investments, which would be made possible by a GCF contribution. In order to create a diversified portfolio, CIO's funding allocation is subject to geographical and technology limits set out in section A.2.

CFM screen partners on (but not limited to) track record, financial resources, reputation & local connectedness, openness to CFM's ESG approach, as well as other factors. Projects are screened based on (but not limited to) commercial viability / return expectations, title to land, E&S, energy off-take, renewable resource quality & governmental support.

CFM screens and selects projects and partners employing the extensive renewable energy and infrastructure development and investing experience as well as abides by the Development Fund and Construction Equity Fund Investment Strategy and Restrictions. The restrictions include geographical, technology and quantum of investment restrictions as outlined in section A.2. In addition, the Investment Strategy and Restrictions specify that in the due diligence phase projects must be evaluated by an independent reputable technical adviser, who will provide an opinion on capex contingencies, site, grid and resource quality and quantity as well as regime risk. Key screening is on PPAs whereby no less than 75% of the CEF portfolio by value must have a long term, fixed price & quantum PPA in place. Furthermore, projects must also be evaluated by reputable and independent E&S, legal and insurance advisors and legal



opinions have to be obtained with respect to relevant documentation, permits and licenses. Lastly, each project must have a financial model developed and certain sensitivities tested.

### **CIO Responsible Investment Code Environmental & Social Principles**

CIO and its project companies will commit to continuous improvements with respect to the governance and management of environmental, social matters (including health and safety) (hereafter referred to as 'E&S') and work over time to apply relevant good international industry practices (hereafter referred to as 'GIIP') with appropriate targets and timetables for achieving them. Therefore, CIO and its project companies, will implement management systems which effectively address E&S risks and realize E&S opportunities as a fundamental part of a project company's value and in accordance with the following principles:

- Achieve compliance with all relevant legal requirements, regulations, and industry-specific codes of practice relating to E&S governance and management.
- Minimize adverse impacts and enhance positive effects on the environment and all stakeholders (including employees and the affected communities) as relevant and appropriate, of the Project Companies.
- Encourage the Project Companies to make efficient use of natural resources and to protect the environment wherever possible.
- Encourage the Project Companies to work within a defined timeframe towards full compliance with the International Labor Organization ("ILO") Core Labor Standards and ILO Basic Terms and Conditions of Work and to respect the International Bill of Human Rights (which includes the United Nations ("UN") Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights) in line with the UN Guiding Principles on Business and Human Rights as reflected on [www.business-humanrights.org](http://www.business-humanrights.org).
- Encourage the operation of the Project Companies to be carried out in accordance with GIIP such as in the IFC Performance Standards, the World Bank Group Environmental, Health and Safety Guidelines or other internationally recognized sources.
- Recognize and, as appropriate, promote the social development impact from the Investments.
- Consider the potential for positive impacts and opportunities from business activities.
- Provide relevant E&S training and support employees involved in the investment process enabling them to work in accordance with the above principles

#### **A. Development Fund**

#### **Role in CIO: "Reduce development costs and timelines and increase development quality"**

The objective of the Development Fund ("DF") is to provide development loans, accompanied by development support / assistance provided by CFM and 3<sup>rd</sup> parties, to project companies in order to fast-track qualifying development projects to financial close by reducing the development timeline and improving the ultimate bankability of renewable energy projects in emerging markets. The Development Fund will increase the implementation rate of projects which, through reducing the reliance on energy derived from fossil fuels and other non-renewable fuel sources, will promote the production of renewable energy. As part of Climate Investor One, DF will seek to enable an increased number of projects to commence development by providing developers and promoters of qualifying projects with:

- **Financial assistance** of up to 50% of development costs in the form of development loans, thereby reducing the number of financiers required to complete the development phase;

- **Development support / assistance** provided by CFM and 3<sup>rd</sup> parties in the development phase, including commercial assistance, legal assistance, structural assistance, implementation of best practice international environmental, social & governance standards, Know Your Customer (“KYC”) and anti-money laundering and counter-terrorist financing procedures with the objective to inform and influence the development process so that it yields a project which is appropriate for implementation and construction-stage funding by Climate Investor One; and
- **Financing comfort**, that as part of Climate Investor One the project will have access to a simplified and complete funding solution to support the project through construction and, later, refinancing.

The DF will not seek to be a sole developer or to compete with developers, but will deploy capital into a project in the form of development loans, thereby positioning the Development Fund as the provider of choice of risk tolerant capital to developers and promoters – it aims to be regarded by the market as a source of funding willing to accept risk.

DF bears up to 50% of the development costs, on average USD 1.5 million per project, leading to an aggregate funding need of USD 46.5 million. The remaining 50% is to be provided by the project developer. Development costs include, but are not limited to, feasibility studies, scoping studies, renewable resource assessments, financial modelling, legal support and Environmental & Social Impact Assessments..

Capital in the Development Fund is recycled through the repayment of development loans with a premium. The size of the development loan premium is set in order to recuperate funding from failed projects. It is estimated that through the continuous deployment and repayment of development loans, the Development Fund capital will be recycled by a factor of 3.8.

In order to ensure portfolio diversification, DF will support the development of projects that will vary in size, geography, technology, vintage, and stakeholder composition. DF will furthermore support the development of projects across a broad spectrum of the aforementioned factors to both enhance its risk-mitigation strategy, as well as alleviate potential conflicts of interest.

## **B. Construction Equity Fund**

### **Role in CIO: “Reduce construction costs, complexity and time line”**

The objective of CEF is to increase the number of renewable energy projects implemented in developing markets by providing a single source of equity financing for up to 75% of the construction funding required to construct and commence operation for approved renewable energy projects. As part of Climate Investor One, the Construction Equity Fund will seek to reduce the overall cost and time of getting projects operational by:

- Providing financing for the construction of qualifying projects;
- Reducing the complexity and cost of financing at project level through an equity only construction funding strategy;
- Establishing and operating projects that allow for optimisation of the balance sheet at a later stage;
- Reducing the construction timeline and thereby reducing the exposure period for investors;
- Reducing the overall construction costs by elimination of certain project finance related debt costs including Interest During Construction and Debt Service Reserve Accounts (which may take up 10-15% of a construction budget); and
- Recycling capital from completed projects to new projects, thereby improving the development productivity of capital and reducing the non-productive time typically associated with fundraising.

The Construction Equity Fund is designed to hold an equity interest in each project Company, which it will acquire in two tranches:

- An initial equity holding acquired for a nominal amount at the commencement of Climate Investor One’s participation in the project, at the same time as the Development Fund provides the development loan.

- Provision of additional equity finance during the construction period of up to 75% of total project construction costs.

### **Fund Investment Targets and role of GCF Funding**

The size has been determined by an estimated construction of ca, 30 projects, with a total funding requirement of circa USD 3,482 million. Based on the assumption that the CEF takes up to a 75% equity share in each of the projects that it constructs, CEF's funding requirements will be circa USD 775 million in the CIO structure and an additional approximately USD 260 million (a third of USD 775 million) coming from third parties or project sponsors.

Capital in the Construction Equity Fund is recycled via refinancing and exiting of projects. After a period of time post construction, when the project has reached COD, a portion of all equity will be refinanced with debt to reduce the cost of capital and replenish CEF. Furthermore, after refinancing CEF will exit its equity stake in the project and recuperate its remaining capital to be re-invested in other projects. It is estimated that through continuously investing, refinancing and exiting the projects CEF capital will be recycled by a factor of 3.37.

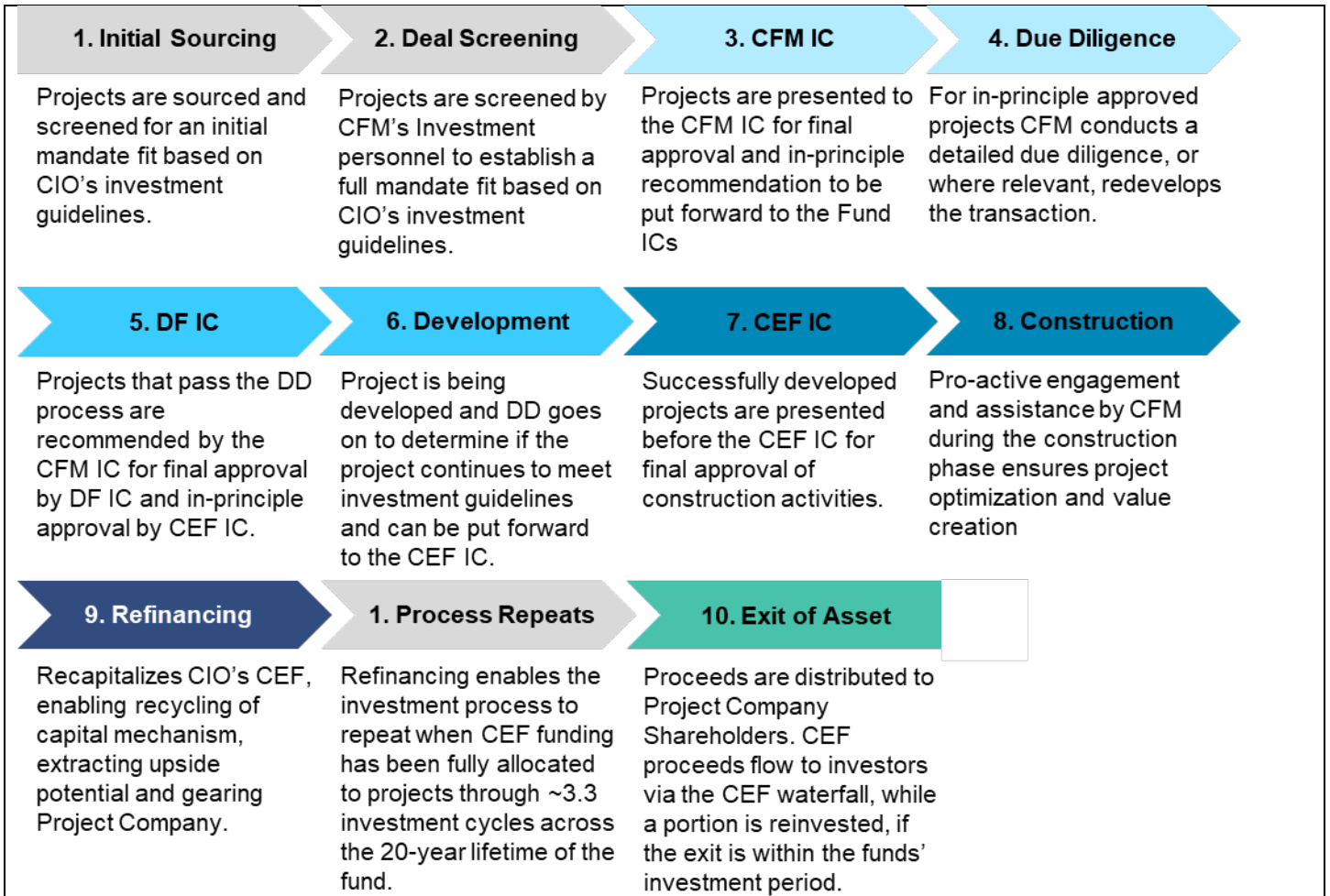
The structure of the fund allows for the ranking of cash flow entitlements in a way that appeals to the different investor types and their risk-return requirements. The CEF capital tiers represent different risk/return positions and the current size of CEF is:

- Tier 1 USD 75 million capital recovery return, **junior equity tranche** from CEF donor investors (20%)
- Tier 2 USD 210 million market equity return, **ordinary equity tranche** from development finance institutions (DFIs) and private equity / commercial investors (40%)
- Tier 3 USD 222 million market loan return, **senior equity tranche** from commercial investors comfortable with construction risks, benefiting from a cover for commercial and political risk provided by an Export Credit Agency (40%)

Given the required 20 / 40 / 40 proportions in the CEF, further T2 investment cannot be fully utilized due to lack of available T1 capital, and T3 capital cannot be fully utilized in the structure due to the lacking T2 and T1 capital. Thus, a GCF participation in the T1 tranche would be highly catalytic as it would 'unlock' the structure for necessary and further commercial investment in T2 and T3 tranches.

With GCF's participation, the CEF can be increased in size to deliver more projects which will amplify impact. The size of CEF would then be as follows:

- Tier 1 USD 155 million capital recovery return, **junior equity tranche** from CEF donor investors (20%)
- Tier 2 USD 310 million market equity return, **ordinary equity tranche** from development finance institutions (DFIs) and private equity / commercial investors (40%)
- Tier 3 USD 310 million market debt return, **senior equity tranche** from commercial investors comfortable with construction risks, benefiting from a cover for commercial and political risk provided by an Export Credit Agency (40%)



Provide information on how the activities are linked to objectives, outputs and outcomes that the project/programme intends to achieve. The objectives, outputs and outcomes should be consistent with the information reported in the logic framework in section H.

**Key Objectives of Climate Investor One**

Table 16 below encapsulates the ethos of CIO. The output of CIO's activities results in a catalytic outcome. The table shows impact in GCF-earmarked countries only, not CIO's entire investment portfolio.

Table 16: CIO objectives, activities, outcomes and outputs in the 11 GCF-earmarked countries

<b>CIO's Key Objectives</b>	<b>Key Activities and Expected Outputs/Outcomes</b>
<b>Deliver Clean Energy</b> – Providing clean energy at affordable prices and to tackle the problem of climate change is the most important objective of CIO.	CIO will develop approximately 20 renewable energy projects by leveraging proven technologies – wind, solar, run-of-river hydro. The projects developed will cumulatively add ~1,620 MW and produce ~4,360 GWh of clean energy annually. Clean energy produced will have a positive environment impact - reducing ~2.69 million tonnes of carbon emissions per annum.
<b>Societal Impact</b> – Equality is the bedrock of society and inclusive growth is paramount in reducing economic	CIO's projects will create significant societal impact to local communities by employing and training local talent with best industry practices. In particular, through CIO's Gender Integration Action Plan (Annex 3), CIO projects will

<p>inequality and instating gender equality in societies.</p>	<p>intentionally impact women as stakeholders, workers, and end-users by both identifying and mitigating potential risks as well as proactively enhancing their benefit from increased access to renewable energy. CIO's projects have the potential to directly create 26,460 jobs in the 11 countries of its operations. Of these, it is expected that there will be meaningful employment opportunities for women. Employment and training will develop local communities and improve lives of nearby inhabitants. The employment of female staff will contribute to the reduction of gender inequalities in the targeted countries.</p>
<p><b>Address energy deficit in Developing Markets</b> – Economic and demographic resurgence of developing markets has increased the energy demand and supply gap. This presents an attractive opportunity for CIO to add clean energy capacity and supply energy.</p>	<p>CIO will identify opportunities in developing markets with high energy demand and deficit and partner with local developers with a proven track record to co-develop projects in the respective markets. CIO's project will catalyse the renewable energy landscape in the respective markets – through knowledge transfer – spurring the interest of other stakeholders to actively participate in the growth of the industry. Energy generated from projects will be connected to the grid providing uninterrupted energy supply. It is estimated that 8.15 million people will benefit from the clean energy produced by CIO's projects. Clean and affordable energy will further galvanise industrialization whilst adhering to the best interests of the environment.</p>
<p><b>Mobilising Private Capital</b> – opportunity for commercial investors to capitalize on the economic resurgence in emerging markets.</p>	<p>CIO will actively raise funds from risk averse commercial investors to invest in emerging markets through structured blended finance investments in de-risked assets. Proceeds from the sale of investments will be reinvested in two to three additional investment cycles. CIO's experienced team will generate returns with downside protection, which will encourage apprehensive commercial investors to gain renewable energy exposure in developing markets. Increased commercial investor participation will galvanise the interest of peer investors to invest in renewable energy in developing markets by setting up CIO comparable facilities, leading to a fertile investment landscape.</p>
<p><b>Fast delivery of projects</b> – Project finance tends to be complex and cumbersome. Often, projects are delayed due to financial and structural constraints. CIO will simplify the traditional project financing approach by adopting a whole-of-life funding concept</p>	<p>CIO will simplify project finance structures by funding the entire life cycle of the project. This will reduce the number of parties involved enabling speedy development, construction and operation of projects. In reducing complexities in structures and expediting delivery timelines, more projects are delivered faster; creating more assets and more impact. This innovative model can be scaled up across developing markets with GCF's participation.</p>

**Application of GCF Investment Criteria in the Project Approval and Implementation Process**

Apart from the key CIO objectives outlined above, CFM will consider and apply the 6 GCF Investment Criteria throughout the project's lifecycle as indicated in the table below. Before a project is contracted, in the sourcing and DD phase, CFM will evaluate the investment opportunity against the GCF criteria among other CIO investment criteria and restrictions. As the project progresses into development and construction, the criteria will be included in periodic reporting to investors. In the operational phase, CFM will report on realised impact indicators as well as continue to address the GCF criteria.



Table 17: GCF Investment Criteria in each Stage of a Project's Lifetime

GCF Criteria	Project Phase			
	Project Sourcing, DD and IC Approval	Development Phase	Construction Phase	Operations Phase
<b>1. Impact Potential</b>	Impact indicators are estimated, baseline is determined and impact potential is taken into consideration in the approval process	Ex-ante estimates are firm up and reported	Ex-ante estimates are reported	Ex-post results are reported at least annually
<b>2. Paradigm Shift Potential</b>	Paradigm Shift Potential indicators are assessed and impact potential is taken into consideration in the approval process	Ex-ante estimates are firm up and reported at least annually	Ex-ante estimates are reported at least annually	Ex-post results are reported at least annually
<b>3. Sustainable Development Potential</b>	Sustainable Development Potential indicators are estimated and impact potential is taken into consideration in the approval process	Ex-ante estimates are reported, Do Good programme is prepared and (partially) planned	Ex-ante estimates are reported, Do Good programme is implemented	Ex-post results are reported at least annually. Do Good programme is continued/fully implemented
<b>4. Needs of the Recipient</b>	Needs of the recipient are evaluated and taken into consideration in the approval process	Needs of the local community are assessed	Needs of the local community and recipient country are addressed as agreed. Financial and power generation needs are materialised.	Contribution to the needs of the recipient is reported a least annually, stakeholder engagement is continued
<b>5. Country Ownership</b>	Country Ownership is assessed and confirmed	Compliance with all relevant laws and regulations is ensured, PPA with the off-taker is negotiated and signed, stakeholder engagement is carried out	Compliance with relevant laws and regulations is ensured	Compliance with relevant laws and regulations is ensured
<b>6. Efficiency and Effectiveness</b>	Financial viability and returns on investment are estimated and analysed and considered in the approval process	Financial project estimates are updated. Ex-ante estimates are firm up and reported	Financial project estimates are updated. Ex-ante estimates are reported	Ex-post financial results are reported at least annually

#### C.4. Background Information on Project / Programme Sponsor (Executing Entity)

Describe the quality of the management team, overall strategy and financial profile of the Sponsor (Executing Entity) and how it will support the project/programme in terms of equity investment, management, operations, production and marketing.

Climate Fund Managers, which was co-founded by FMO (Accredited Entity) and Sanlam InfraWorks (FMO's implementation partner), is one of three Executing Entities together with the two funds that it manages: the Development Fund and the Construction Equity Fund. Please note that FMO, in its capacity of the sole Board member of the DF, is also considered an Executing Entity for purposes of the Programme. Both co-founders of CFM have a long history of successfully executing renewable energy infrastructure projects and programmes in developing markets.

- Accredited Entity FMO with a strong track record is a co-founder and investor in CIO.
- Second co-founder and investor in the facility, Sanlam InfraWorks, is a joint venture between a premium infrastructure firm, Phoenix InfraWorks, with a profound track record of delivering renewable energy infrastructure projects across developing markets and Sanlam: Africa's second largest financial services firm with on the ground experience in Africa and the Energy sector.
- Collectively, the founders have committed USD 168.4 million to CIO.

Climate Fund Managers (CFM), is a separate legal entity set up for fund raising and implementation of the investment strategy on behalf of its shareholders. CFM is the Fund Manager of the Climate Investor One funds. CFM is an equal joint venture co-founded by FMO and Sanlam InfraWorks. Furthermore, CFM has been established to implement and manage innovative climate financing platforms in developing markets. Climate Investor One is CFM's maiden renewable energy platform.

CFM has been established on the strong belief that successfully managing the development, construction and operations of renewable energy projects in the target regions requires an innovative, complete lifecycle funding solution. Climate Investor One builds on a track record of previous successful partnerships between FMO and Sanlam InfraWorks, which includes two renewable energy funds and three assets. The partnership track record between FMO and Sanlam InfraWorks is elaborated in section E.5.2 of this application.

##### **FMO (Accredited Entity)**

FMO is the Dutch development bank and has invested in the private sector in developing countries and developing markets for more than 45 years. FMO invests in sectors with the highest long-term impact: financial institutions, energy, agribusiness and infrastructure. FMO is a profitable financial institution owned 51% by the Dutch State, 42% by Dutch banks and 7% by employers' associations, trade unions and individual investors.

Each of FMO's investments aims to generate an attractive financial return and meaningful development impact. FMO's profitable track record proves that these two can go hand in hand. Based on a proprietary impact model, FMO measures the impact using two key metrics: jobs created and supported (including indirect jobs), and greenhouse gas emissions avoided. These metrics allow FMO to keep track of progress towards its goal to double the impact and halve the footprint by 2020. FMO's track record is elaborated in section E.5.2

##### **Sanlam InfraWorks BV**

Sanlam InfraWorks (InfraWorks) BV is an investment & development company targeting infrastructure and climate related investments in global emerging markets. The company was formalized in February 2018 and combines the renewable energy investment expertise of Phoenix InfraWorks (Phoenix) – headed by former African Infrastructure Investment Managers (AIIM) CEO, Mr. Andrew Johnstone – with Africa on the ground know how of one of Africa's largest financial institutions company, Sanlam.

Phoenix has in excess of 40 years emerging markets infrastructure and renewable energy investment experience, including the structuring and raising of investment funds and management of one of Africa's largest infrastructure platforms. Sanlam, established almost 100 years ago, currently has approximately USD 80 billion in assets under management (AUM).

### Commitment of FMO & Sanlam InfraWorks

The commitment of CFM's members, FMO and Sanlam InfraWorks, to the success of Climate Investor One is demonstrated by their investments in CIO. FMO and Sanlam InfraWorks are aligned to a successful outcome of CIO through their cumulative investments in excess of US 75 million in CIO.

## C.5. Market Overview (if applicable)

Describe the market for the product(s) or services including the historical data and forecasts.

The market for Renewable Energy investments is driven by the following three factors:

- A. Climate change is expected to be a major influencer of capital flows
- B. Economic growth in developing markets is highly energy intensive, expected to result in a major power deficit
- C. The global use of renewable energy is expanding rapidly

### A. Climate change expected to be a major influencer of capital flows

The world is at a critical juncture in its efforts to combat climate change. Governments are increasingly recognizing that, in the absence of fully committed and urgent action, climate change will have a severe and irreversible impact across the world. In December 2010, the 196 Parties to the United Nations Framework Convention on Climate Change (UNFCCC) agreed to a long-term global objective to keep the increase in long-term global average temperatures to below two degrees Celsius. In order to meet this objective, it is of key importance for countries around the world to proactively manage and reduce Greenhouse Gases (GHG) emitted through human activity<sup>9</sup>. To facilitate this an estimated USD 2.3 trillion will need to be directed at low carbon technologies and energy efficient solutions by 2035.

Since 1995, annual global GHG emissions have risen by more than one-quarter. Energy production and use accounts for around two-thirds of global GHG emissions today, of which carbon dioxide (CO<sub>2</sub>) forms the great majority of trace gases. Of all energy-related CO<sub>2</sub> emissions, electricity consumption accounts for around 45%. Effective action in the electricity sector is, consequentially, essential to tackling the climate change problem.

In the beginning of the 20<sup>th</sup> century, energy related increases in CO<sub>2</sub> emissions originated almost exclusively from Europe and the United States. However, emissions in developing countries have increased rapidly, led by strong industrialization, economic and population growth. As of 2015, OECD countries account for around 40% of global CO<sub>2</sub> emissions with non-OECD countries accounting for around 60%. By 2040, it is expected that developing countries' CO<sub>2</sub> emissions will grow by 150% and account for around 68% of global CO<sub>2</sub> emissions. As a result, climate change and the willingness to reduce CO<sub>2</sub> emissions are playing an increasingly important role in the political agendas of developing markets.

<sup>9</sup> GHG emissions include: CO<sub>2</sub>, Methane (CH<sub>4</sub>) and Nitrous Oxide (N<sub>2</sub>O)



### CO<sub>2</sub> Emissions in Select Regions

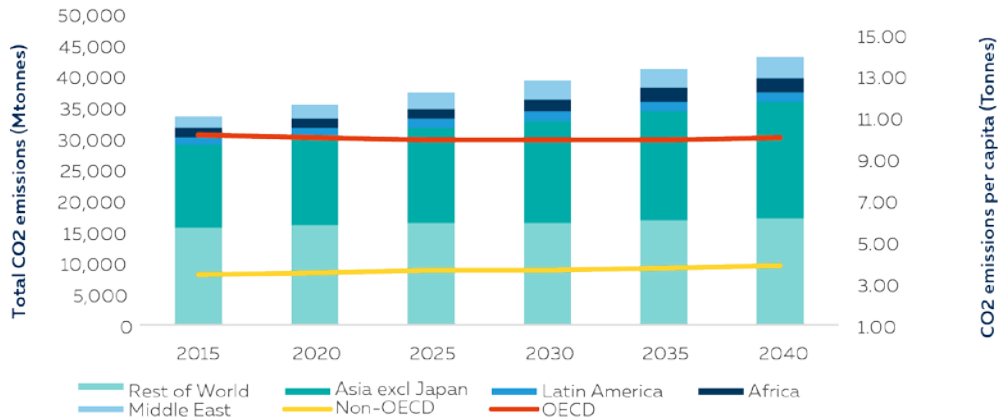


Figure 8: CO<sub>2</sub> emissions outlook in selected regions (Source: EIA)

#### B. Energy intensive growth of developing markets

Over the past decade, developing countries in Africa, Latin America, Asia and the Middle East have experienced strong growth in GDP, population, urbanization and industrialization. GDP growth in these regions has consistently outpaced that of developed countries, averaging 6.2% over the past 15 years. The size of developing markets' population is now approximately 6 billion, making up 83% of the world total. Strong GDP growth has also resulted in a rapid increase in demand for energy, although supply in many developing countries has not been sufficient to account for such increase in demand. Worldwide, 1.1 billion people continue to live without sufficient access to electricity, of which 99.9% live in developing markets. This is equivalent to approximately 16% of the global population.

Going forward, demand for energy is set to increase at a strong pace. In particular, global electricity consumption is seeing significant levels of growth, estimated at approximately 40% by 2040. The largest share of this growth in consumption is expected to be driven by developing markets, which will see an increase of 60% over the same period.

#### Developing Markets Historic GDP

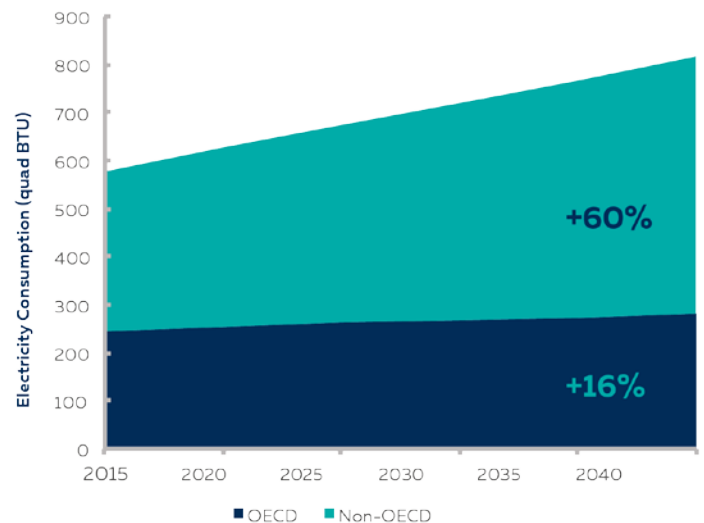
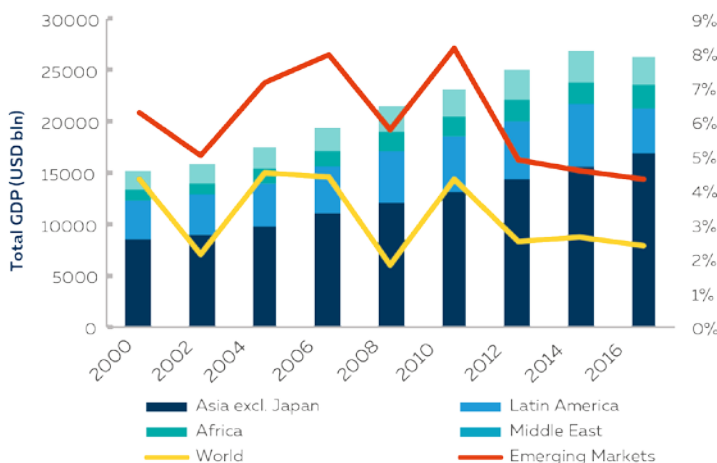


Figure 9: Developing markets historic GDP growth (2010 USD (\$)) (Source: EIA) Figure 10: Electricity consumption outlook (Source: EIA)

### C. The increasing importance of renewable energy

Due to the threat of climate change and the persistent demand for energy, global use of renewable energy is increasing rapidly. Global renewable energy installations have now reached a cumulative total of 1,850 GW and in 2015 renewable energy investments accounted for more than 45% of new, global power generation capacity, with investments totalling USD 290 billion. 2015 was a record year for both wind and solar energy, largely due to a continual decline in technology costs. In 2015, investments in renewable technologies included of USD 110 billion invested in wind amounting to 63 GW of additional capacity, driven by declines in onshore turbine prices of up to 45% since 2010. Investments in solar PV amounted to USD 161 billion or 47 GW due to price drops of up to 80% for solar photovoltaic modules since 2010. Small-scale hydro investments saw an increase of 4 GW of additional capacity, amounting to USD 4 billion. The remaining 35 GW of additional capacity in 2015 can be attributed to 28 GW of large-scale hydro, 5 GW of biomass and approximately 1.5GW of geothermal capacity. Renewable energy capacity now accounts for 23.7% of global electricity production. At the recent rate of increase, renewables - excluding large hydro - are expected to become a leading source of electricity with an average global investment need of USD 260-300 billion per year until 2030.

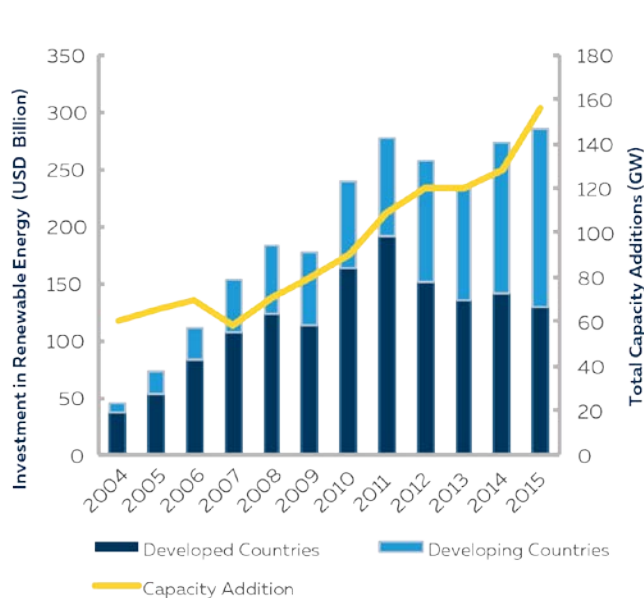


Figure 11: Global new investment in renewable energy (UNEP & Bloomberg New Energy Finance)

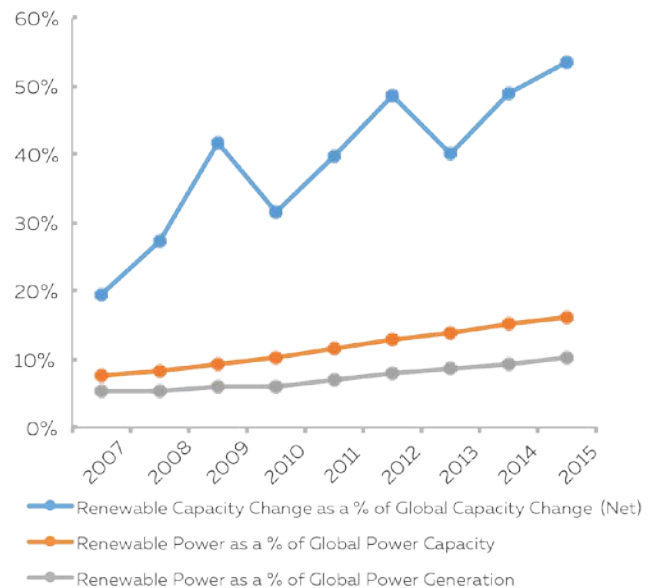


Figure 12: Renewable energy power generation and capacity as a % of global power (Source: BNEF, EIA, IEA, UNEP)

Describe the competitive environment including the list of competitors with market shares and customer base and key differentiating factors (if applicable).

#### CIO's Competitive Edge

- Consolidates fragmented roles of different market players into one hybrid facility
- Introduces whole-of-life funding concept to the renewable energy infrastructure market
- Simplifies project finance structure by reducing the number of stakeholders in each project

As CIO is a whole of life funding concept for infrastructure project financing, there are multiple competitors depending on the stage of the project. In the figure above, indicatively, CFM have identified some of CIO's competitors at various stages of a project's life.

Figure 2 in section B.1 represents the structure of a typical project finance transaction. Multiple party involvement reflects in a complicated and cumbersome financing structure.

CIO's uniqueness lies in the innovative whole-of-life funding of renewable energy infrastructure projects. This structure de-clutters the complex project finance process and enables a faster delivery of projects on a large scale. Traditional approaches to project financing can often be time consuming and the involvement of multiple stakeholders can extend timelines for project delivery.

CIO's intervention saves an estimated 2-3 years combined for development and construction of a project. Hence, more projects can be delivered, faster. Figures 3 and 5 in section B.1 demonstrates CIO's competitive edge in project financing.

Table 18: GCF Approved Private Sector Mitigation Projects and Programmes in the 11 CIO Countries

Country	GCF Approved Mitigation Projects and Programmes
Burundi	None
Cameroon	None
Djibouti	None
Indonesia	None
Kenya	<ul style="list-style-type: none"> <li>• GEEREF Next</li> <li>• KawiSafi</li> <li>• UGEAP</li> </ul>
Madagascar	<ul style="list-style-type: none"> <li>• Sustainable Landscapes in Eastern Madagascar</li> <li>• GEEREF Next</li> </ul>
Malawi	None
Mongolia	<ul style="list-style-type: none"> <li>• GCF-EBRD Sustainable Energy Financing Facilities</li> <li>• Business loan programme for GHG emissions reduction</li> <li>• Renewable Energy Program #1 - Solar</li> </ul>
Morocco	<ul style="list-style-type: none"> <li>• GCF-EBRD Sustainable Energy Financing Facilities</li> </ul>
Nigeria	<ul style="list-style-type: none"> <li>• UGEAP</li> </ul>
Uganda	<ul style="list-style-type: none"> <li>• GEEREF Next</li> </ul>

### C.6. Regulation, Taxation and Insurance (if applicable)

*Provide details of government licenses or permits required for implementing and operating the project/programme, the issuing authority, and the date of issue or expected date of issue.*

Currently, neither CFM nor any of the CIO Funds are required to hold any license or permit to conduct their activities in offering to and accepting commitments from (potential) investors. When required, licences and permits will be obtained on a project by project basis.

*Describe applicable taxes and foreign exchange regulations.*

CFM and the CIO Funds are domiciled in the Netherlands and are registered for corporate income tax, dividend withholding tax and VAT purposes in the Netherlands.

*Provide details on insurance policies related to project/programme.*

CEF and the CIO Funds will at first closing have Directors & Officers and Professional Indemnity insurance cover in place at industry standard levels and provided by industry leading insurance brokers. Also, CFM have appropriate insurance cover in place with respect to its employees and similar personnel, such as health / disability and travel insurance.

At project level all required insurances for the asset class and activities conducted will be obtained, including business interruption insurance and third-party liability insurance.

Such cover in place will be reviewed periodically to be in line with industry standards.

## C.7. Institutional / Implementation Arrangements

*Please describe in detail the governance structure of the project/programme, including but not limited to the organization structure, roles and responsibilities of the project/programme management unit, steering committee, executing entities and so on, as well as the flow of funds structure. Also describe which of these structures are already in place and which are still pending. For the pending ones, please specify the requirements to establish them.*

- **Section A** below shows that CFM has designed a strong organisational structure spread across four continents to deliver and monitor projects
- **Section B** below shows that CFM has designed strong governance and administrative processes to maintain premium operational quality of projects
- **Section C** below shows that CFM has hired seasoned professionals with a solid track record of delivering high quality projects in developing markets
- **Section D** below shows that CFM has bestowed accountability within all key stakeholders of a project by creating an obligation via contractual agreements
- **Section E** below shows the contractual arrangements between GCF, FMO, CFM, CEF and the Development Fund

### A. Organizational Structure

CFM is organised along regional and functional lines which combines; (i) a strong investment and operational focus with industry and local expertise and (ii) solid middle and back office skills in operations, finance and strategy (iii) sound risk management, coordinated legal / tax structuring and robust compliance functionalities.

CFM will operate from its offices in the Hague, the Netherlands (head office), Nairobi, Kenya, Singapore, and Latin America (regional offices) as follows:

**The Head Office:** has and manages functional responsibilities that are deployed across the regional markets in the following areas: (i) fund management, administration and fund operations, (ii) investor relations, (iii) finance, (iv) legal, tax, compliance and risk management, (v) environmental, social & governance management and (vi) human resources.

**The Regional Offices:** are led by regional heads with strong networks as well as specific skills and experience over discrete geographies and sectors, thereby providing the regional teams with regional intelligence. So far CFM has opened two regional offices in Nairobi and Singapore. Following closing of the Funds, a third office in Latin America will be opened.

Regional offices are responsible for deal origination, due diligence and execution support and operational management of portfolio companies. Teams consist of staff with complementary and specific skills and experience required, which includes the following: sourcing expertise, deal execution experience, financing expertise, operational asset management experience, proven buy-and build track record in renewable energy and/or developing markets, exit know-how, industry knowledge and environmental and social expertise. Recognising that project development skills go beyond commercial, investment and financial engineering skills, the regional executive teams focussed on the CIO Development Fund also have strong renewable energy project development skills (including resource assessments, negotiating power purchase agreements, land negotiations, permitting and licensing procedures).

**Project Offices** will be established once a transaction has been approved and development can commence. The office will be located in the local jurisdiction in which the project is domiciled. The project office will manage & supervise the

development activities of the project. Oversight of the project office will be from both the CFM HQ & CFM Regional Offices.

### **B. Governance**

The Governance structure of Climate Investor One has been designed to ensure appropriate supervision and investor representation to each Fund, to guarantee adequate expertise is procured into each forum, as well as to create alignment of interest and control. The governance structure proposed is one of a non-discretionary manager. This means CFM will make recommendations regarding investments to each Fund, and the Investment Committee of the respective Fund will decide whether to proceed or not. In this model each Fund and the members of the Investment Committee assume the overall responsibility and liability of such investment decisions. Note that the two different ICs have been established (one for the Development Fund and one for the CEF) for the alignment of interest.

### **C. Climate Fund Managers' Team**

Climate Fund Managers are a specialist team of highly experienced infrastructure and emerging markets professionals with a common goal of delivering the investment outcome of Climate Investor One.

The team currently consists of 25 employees, approximately half of which are responsible for investments and project development and are based in HQ (The Hague), Nairobi, Kenya and Singapore.

Aside from an extensive and strong track record in project finance in emerging markets, financial engineering, asset management and fundraising; the team combines features of energy investment, fund management expertise and strong interest to develop blended finance as an investment technique to mobilise commercial capital into the climate finance sector in pursuit of attractive risk adjusted returns with significant developmental and environmental impacts.

Climate Fund Managers have an entrepreneurial spirit that is guided by a common culture and desire to deliver financial investment results whilst improving the lives of others. In the case of CIO this is pursued by providing access to affordable energy in power deficient regions of the world; mitigating GHG emissions to ensure a better, cleaner future, and; replacing old ways of thinking and structures with innovative solutions – all, without compromising superior, risk adjusted returns on investment.

### **Team Track Record**

CFM's multidisciplinary team has a stellar track record. Whilst Climate Investor One is the first fund of Climate Fund Managers, several of the team members have an extensive history of working together in other capacities over the past decade. This includes the raising of four funds, the establishment of two fund management companies, the development of two large wind farms and one solar farm, the disposal of four large assets in Africa, with investment returns in excess of 15% per annum over twenty years delivered to investors.

### D. Project Structures

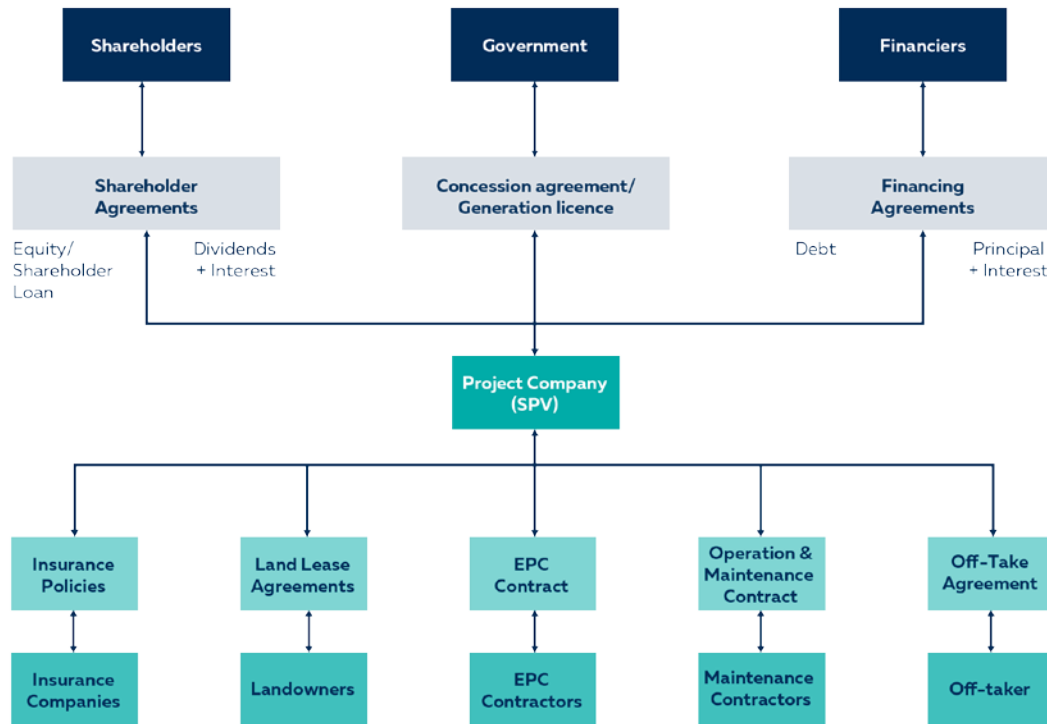


Figure 13: Typical project structure

Key responsibilities and agreements defining the project's parameters include; implementation agreements with the government, project capacity and elements such as the required environmental & social impact studies summarizing obligations to the developer. Typically, project SPV's in which CEF holds shares (directly or indirectly) will be domiciled in the countries in which the projects are based, with or without the use of interposed entities, as applicable.

Revenues for the project are generated through an off-taker Agreement, which for renewable energy projects is typically arranged within a Power Purchase Agreement. Next to the rates and payment structure, risk allocation is arranged for items such as resource risk, interconnection/grid availability, and political and natural force majeure. Normally both the Off-taker and the Independent Power Producer (IPP) have to provide certain performance obligations.

The construction works are arranged through an Equipment Supply Agreement (ESA) and a Balance of Plant (BoP) agreement, usually combined into an Engineering, Procurement & Construction (EPC) Contract. The number of EPC contractors used differs per sector e.g. typically within the hydro sector construction works are done under a single EPC contractor whilst for wind projects multiple EPC parties can be used. The EPC Contract contains scope of work, price and payment schedules including advance payment guarantees. Other key elements include the risk allocation on certain construction risks (e.g. geotechnical risk, adverse weather conditions), performance bonds, warranty periods, liquidated damages and limitation of liability.

The Operations & Maintenance (O&M) Contract deals with the activities for maintaining the project at a certain performance level. The performance or availability level that the O&M contractor guarantees is one of the critical components next to the scope of work, price and limitation of liability. Insurance policies and Land Lease Agreements also form part of the suite to key documents.



The Financing and Shareholders' Agreements are a set of legal documents that deal with the terms and conditions of the debt and equity finance, sponsor support, cash waterfall and security.

Financing for renewable energy projects can take a number of forms but are typically either financed through an owner's balance sheet by way of corporate finance or on a limited or non-recourse basis through project finance. A key difference between the two approaches lies in how debt is structured. Both project and corporate finance often include a debt component (to leverage or preserve the owners' equity, among other reasons) alongside the equity owned by the shareholders. In project finance, the project company borrows against the cash flow generated by the project alone (additionally secured by available assets and guarantees), while corporate finance leverages the companies' balance sheet, not the cash flows.

A key point in project finance is that the cash flows from the project alone must be sufficient to service the debt i.e. to repay the debt without corporate guarantees. The magnitude of the cash flow that is deemed sufficient depends on the risk profile of the project. The process of structuring debt is complex, time consuming and often costly. In addition, the covenants imposed by lenders put a degree of inflexibility into the financing structure, which makes it difficult for the project company to withstand variances from forecasts in the early years. The use of equity only from the CIO Construction Equity Fund is designed to remove this complexity time lag and rigidity, and thereby increase the probability of a project reaching successful operations.

### **Project Sustainability & Contracting**

Each SPV or Project Company will be staffed by experienced and capable staff consisting at a minimum of a CEO, a CFO with the necessary background in the financial running of a similar project vehicle, a CTO with the necessary background and understanding of the project technology and operations and an E&S manager. The SPV or Project Company will enter into a robust Full Service Agreement (with the necessary guarantees) with the suppliers of the equipment or a company which is fully accredited by the equipment provider to execute the service and maintenance of the plant.

For non-equipment maintenance (Balance of Plant), a service contract will be executed with a company with the necessary background and track record to execute such services. In the CAPEX of the project a full set of spares will be included meeting standard operational requirements for the designated technology. These spares will be under warranty and the Full Service provider must guarantee that such spares remain under warranty during their storage period and that when such spares are utilized they are replaced by others with full warranties attached.

The term of the Full Service Agreement (FSA) will equal at a minimum 50% of the life of the project, which is 20 – 30 years depending on the off-take agreements and technology used, with an option to extend such agreement by 2 extensions of 25% of project lifetime. Depending on the technology used, the Full Service Agreement may after termination be substituted by in-house personnel trained by the Full Service Provider during the term of the FSA.

### **E. Contractual Arrangements and Flow of Funding**

For the financing of the Programme, the GCF and the Accredited Entity will enter into a Funded Activity Agreement ("FAA"), in the form of a reimbursable grant.



### C.8. Timetable of Project/Programme Implementation

COMPONENTS/OUTPUTS	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Target	2030	2031	2032	2033	2034	2035	2036	2037	2038	Target	
<b>Component 1: the Development Fund</b>																							
Output 1.1 Renewable energy projects successfully developed and reached financial close												13 projects											20 projects
Activity 1.1.1 Capital raising for the Development Fund																							
Activity 1.1.2 Project Sourcing, due diligence and approval by CFM and the Fund IC																							
1.1.3 Providing development loans																							
1.1.4 Project development and project development support																							
Output 1.2 Accelerated installation of renewable energy capacity and development of new markets for renewable energy												-											-
Activity 1.2.1 Accelerating Project Development Process																							
<b>Component 2: the Construction Equity Fund</b>																							
Output 2.1 Increased number of small, medium and large low-emission power suppliers												13 IPPs / 1,053 MW / 56,650 GWh										20 IPPs / 1,620 MW / 87,160 GWh	
Output 2.2 Construction and Operational & Maintenance Stage Jobs												17,200 jobs											26,460 jobs
Activity 2.1.1 Capital raising for the Construction Equity Fund																							
Activity 2.1(2).2 Project Investment and Construction																							
Activity 2.1(2).3 Project Refinancing and Exit																							
<b>Milestones</b>	Effective Date 19 April								Drawdown Period End 23 June							Investment Period End 23 June						Completion Date 23 June	
<b>Project Monitoring*</b>	Inception Report	APR	APR	APR	APR	Interim Evaluation	APR	APR	APR	APR	Interim Evaluation		APR	APR	APR	APR	Interim Evaluation	APR	APR	Completion Report	Final Evaluation		

\*In addition to this monitoring requirements, the Funded Activity is also subject to financial reporting per the AMA/FAA, such as Unaudited/Audited Financial Statements, Financial information reports, and other reports as defined in the FAA.

§ In addition to the Annual Reports, CIO will also provide Quarterly Reports as per the Development Fund Donors Agreement and the Construction Equity Fund Members Agreement, as outlined in the Funding Proposal

## D.1. Value Added for GCF Involvement

*Please specify why the GCF involvement is critical for the project/programme, in consideration of other alternatives.*

### **The Importance of GCF in Blended Finance**

Blended finance acts as the glue to mobilize private sector capital off the strategic use of public sector financing – by means of de-risking structures – targeting investment opportunities with social and environmental purpose, where major capital flows are still lacking.

### **GCF Additionality**

As outlined during discussions with CFM and FMO, GCF additionality is foundational to its investment decisions.

CFM identifies the following ways to demonstrate GCF additionality in respect of an USD 100 million investment in Climate Investor One:

- A) Investment by GCF will narrow CIO's investment focus to a selected subset of countries that have ambitious climate change targets, sizeable energy deficits and / or an over reliance on fossil fuels with particular focus on African/LDC countries;
- B) A GCF intervention in CIO's Development Fund will catalyse a facility that offers scarce early-stage funding for project development;
- C) A meaningful GCF contribution in CIO's Construction Equity Fund (Tier 1) will enable Climate Investor One to scale beyond a successful pilot initiative, increasing the overall impact potential of the facility.

In addition, CFM highlights the following:

- ✓ An USD 20 million investment in CIO's Development Fund (DF) mobilizes a pool of capital targeted for high-risk early-stage funding (the DF) that is scarcely available in the market. Access to development capital is one of the main unique selling points of CIO. By providing scale to the DF facility, GCF will enable CIO to facilitate the successful development of a significantly greater number of projects (ca.30), all of which offer CIO's Construction Equity Fund a preferential financing opportunity. At present, CIO's DF has USD 26.5 million committed, which is almost fully committed to projects.
- ✓ CIO's Construction Equity Fund (CEF) is the 'engine room' of CIO and consequently CIO's most effective instrument for project developers. As the CEF accommodates multiple investors' risk / return preferences, the CEF structure is tranching accordingly with strict 'blending' proportions to minimise concessionality:
  - Tier 1 makes up 20% of CEF and is comprised of junior equity.
  - Tier 2 makes up 40% of CEF and is comprised of ordinary equity.
  - Tier 3 makes up 40% of CEF and is comprised of senior equity.

Public sector investors catalyse those of the private sector through their participation in the Tier 1 (T1) tranche. In this regard, T1 offers the most 'additionality' in the structure. All private sector participation in this structure is

contingent on the T1 tranche. The 20% of CEF donor funding share is the minimal needed amount in the first-loss position, required to generate a market equity return for CEF Tier 2 investors. This return is needed to attract sufficient funding from commercial investors.

**GCF Leverage**

Table 19 shows the catalytic effect of GCF funding. As shown over one investment cycle GCF would catalyse USD 473 million in commercial capital to be invested in project development and construction. Over the lifetime of CIO, GCF would catalyse USD 845 million of commercial capital for project development and construction.

Table 19: Funds Catalysed in GCF Countries (USD millions)

Investor/ Donor	Contribution	Catalysed in CIO	Catalysed 3rd Party 1 cycle	Total Invested 1 cycle	Catalysed 3rd Party Fund Life	Total Invested Fund Life
<b>GCF DF</b>	20	0	20	40	76	152
<b>GCF CEF</b>	80	320	133	533	449	1,797
<b>Other DF</b>	10	0	10	20	38	76
<b>Other CEF T1</b>	20	80	33	133	112	449
<b>Total</b>	130	400	197	727	676	2,475
<b>Assumptions</b>	1. Funding Catalyzed within CIO is USD 2 of Tier 2 and Tier 3 funding each for every USD 1 of Tier 1 capital. 2. Over the fund's life, CEF capital will be recycled 3.37 times. 3. Over the fund's life, Development Fund capital will be recycled 3.8 times. 5. 3 <sup>rd</sup> party sponsors provide 50% of development costs and 25% of construction equity. These are minimum amounts as per CIO's investment restrictions. 6 The difference between catalyzed and invested capital is that within CEF capital is considered to be catalyzed once, however is recycled and re-invested, explaining why those numbers are higher. 7. The Total Funds Invested only include the development and construction phases.					

CFM request a total contribution of USD 100 million, whereby GCF have the opportunity to become the largest donor in the CIO structure with the highest additionality & impact potential. Notably, a sizeable investment by GCF is a necessary requirement to ensure that CIO is sufficiently capitalised to invest in each of the countries on its GCF target list.

## D.2. Exit Strategy

Please explain how the project/programme sustainability will be ensured in the long run, after the project/programme is implemented with support from the GCF and other sources, taking into consideration the long-term financial viability demonstrated in E.6.3. This should include a description of strategies for longer term maintenance of physical assets (if applicable).

*In this section we will outline Project Sustainability & Contracting as well as the Exit Strategies for CIO funded projects.*

### Exit Strategies

Each Fund shall have its own designated exit strategy tailored to match its respective investment thesis. CFM believe that the projects incubated in the CIO programme will be an attractive acquisition target for potential buyers because CIO incubated projects future-proof renewable energy infrastructure assets, use proven technologies (wind, solar, run-of-river hydro), involve de-risked brownfield assets (once operational), generate long-term stable cash flows and create long-term societal and environmental impact.

The CIO Development Fund shall exit its investments to the CIO Construction Equity Fund using a pre-determined set of exit criteria charging a development premium. In the event of no exit to CEF, attempts will be made to sell the project to a 3<sup>rd</sup> party, if unsuccessfully the development loan will be written off. All exit proceeds will be recycled by the CIO Development Fund into the development of new projects, making the DF evergreen.

The CIO Construction Equity Fund will exit its investments at a time considered appropriate, but not later than end of the Fund's life. CFM will actively look for suitable buyers for the CIO Construction Equity Fund's interest in the project. Those buyers will have an interest to continue to operate the assets for the medium to long term.

CFM have a long-standing relationship with some of the prospective acquirers. CFM have broadly distinguished these acquirers by the following:

- **Pension Funds** – local and/or international pension funds looking for stable long-term cash flow generating assets to add to their portfolio. There is a growing trend of direct investments in the pension fund management industry. Pension funds are very risk averse and de-risked brownfield assets prove to be an attractive investment proposition for this investor class.
- **De-fossilisation of large Institutional portfolios** – large institutions that have portfolios comprised of investments in traditional fossil fuel generating investments (oil, gas and coal) motivated to shift their focus onto green investments. Acquisition of operational assets prove to be a better option for this investor class vis-à-vis developing and constructing new assets.
- **Private Equity Funds** – local and/or international private equity /infrastructure funds with secondaries mandates typically look for brownfield assets with a good track record. CIO's projects, characterized by stable cash flows, will be an attractive target for such funds.
- **Buyout Funds** – Local and/or international buyout funds look for unlevered assets. Prior to the refinancing event, CIO's projects are fully funded by equity which will make the projects attractive to bids from such funds. Buyout funds will introduce debt capital into the projects, which would enable projects to expand their MW capacity resulting in more impact than before.

- **Utility Companies** – local and/or international utility companies actively scout the market for attractive acquisition targets. Since CIO’s projects will be located in developing markets with high energy demands, utility companies would absorb these assets to add more MWs to their portfolios.
- **Large multinational corporates** – large multinational corporates wishing to increase their corporate social responsibility activities typically look for projects with high societal and environmental impact quotients. CIO’s projects conform to this investment criterion.
- **Large Local Industries** – large locally domiciled industries look for captive energy generation to serve their energy requirements will be attracted towards CIO’s projects as the costs of energy can potentially be cheaper than fossil fuel generated energy available on the grid.

In this section, the accredited entity is expected to provide a brief description of the expected performance of the proposed project/programme against each of the Fund's six investment criteria. Activity-specific sub-criteria and indicative assessment factors, which can be found in the Fund's [Investment Framework](#), should be addressed where relevant and applicable. This section should tie into any request for concessionality made in [section B.2](#).

## E.1. Impact Potential

Potential of the project/programme to contribute to the achievement of the Fund's objectives and result areas

### E.1.1. Mitigation / adaptation impact potential

Specify the mitigation and/or adaptation impact, taking into account the relevant and applicable sub-criteria and assessment factors in the Fund's [investment framework](#).

When applicable, specify the degree to which the project/programme avoids lock-in of long-lived, high emission or climate-vulnerable infrastructure.

CIO is a climate mitigation vehicle that delivers clean energy to developing countries. By virtue of its investment philosophy, CIO contributes to shifting low-emission sustainable development pathways across a set of jurisdictions identified as compelling investment cases as per GCF's Investment Framework. These countries include: Burundi, Cameroon, Djibouti, Indonesia, Kenya, Madagascar, Malawi, Mongolia, Morocco, Nigeria and Uganda.

CIO's key impact indicators are the amount of electricity it can produce, the number of people it can serve and the amount GHG emissions it can avoid. The potential for these indicators depends on country characteristics, such as the quality of utility grid, the rate of electrification, the amount of renewable resources, such as intensity of irradiation or wind speed, and the energy mix. To determine the investment suitability in respect of CIO's impact potential, GCF target jurisdictions are primarily identified by having less than favourable: Electrification (%), Rural Electrification (%), Non-Hydroelectric Renewables Share of Energy Sector (%), Total Installed Capacity (GW), Clean Energy Investments (USD Billion), and Emissions (GHG tCO<sub>2</sub>). The current state of the target countries regarding these indicators is described in Table 20.

Table 20: Current State of the Electricity Sector<sup>10</sup>

Country	Access to electricity % (2014)	Rural Access to Electricity % (2014)	Installed Capacity MW (2015)	Non-Hydroelectric Renewables (% of Capacity) (2015)	CO2 Emissions from Energy Consumption 2015 (millions of tons)	Cumulative clean energy investments 2011-2015 (USD billions)
Burundi	7%	2%	68	3%	0.2	0.1
Cameroon	57%	22%	1,545	47%	9.7	N/A
Djibouti	47%	10%	130	0%	1	N/A
Indonesia	97%	94%	57,345	6%	502.0	4.45
Kenya	36%	13%	2,301	32%	16.6	3.56
Madagascar	17%	11%	668	2%	3.1	N/A
Malawi	12%	5%	375	6%	1.2	0.10
Mongolia	86%	51%	1,106	5%	14.2	0.29
Morocco	92%	85%	8,040	10%	52.3	N/A
Nigeria	58%	39%	10,478	0%	97.5	0.32
Uganda	20%	10%	922	9%	3.9	0.27

<sup>10</sup> Access to electricity data is taken from the World Bank databank, Clean energy investments are taken from Climatescope, capacity and emissions are from the EIA.

CIO selected its target countries based on overall impact, which means that some countries perform well in all categories, while others excel in one. For example, Burundi has very low electrification rates and needs energy investment, yet the existing energy mix in the country is almost all large-scale hydro. Even though large-scale hydro is not considered a clean technology, it is still renewable. Such a large share of renewables in the energy mix will reduce the estimated GHG avoidance; however, the impact in terms of providing electricity is great, because the country has so little of it. The same can be said of Uganda and Malawi: these countries have relatively high shares of renewable technology in their power sectors, mainly due to large-scale hydro power, but are in desperate need of electrification. Furthermore, large hydroelectric plants do emit GHG, through the decay of flora in the reservoir and harm the local environment. Conversely, Morocco has high electrification rates, but comparatively low share of renewables in their power generation mix. Djibouti has a lot of impact potential in all categories, due to the country's low electrification rates as well as lack of renewable power. All the target countries could benefit from clean electricity investment, however as indicated in Table 20. none receive adequate clean energy financing.

Table 21: CIO's Current Project Pipeline Impact Estimates

	Capacity (MW)	GWh/year	People Reached	GHG avoided/year (tCO <sub>2</sub> eq/year)
<b>Total</b>	<b>588.6</b>	<b>1,583</b>	<b>2,962,000</b>	<b>976,000</b>

Table 21 indicates the expected impact of **one or more projects** in each of the target countries. The numbers are based on benchmark projects in CIO's pipeline. The table (21) is closely related to Table 20. Since CIO's potential impact depends on the current state of the country's electricity sector. The Sub-Saharan African countries will benefit mostly in terms of people served, due to their low electrification rates. Morocco, Nigeria, Indonesia and Uganda will benefit exceptionally in GHG avoidance. Even though all countries have a geographical advantage for renewable technologies, some of the target countries will benefit exceptionally in terms of electricity production due to their abundance of renewable resources, such as Morocco (solar and wind) and Djibouti (wind).

Table 22 shows estimated GCF and CIO impact in the 11 countries, calculated on the basis of the current pipeline.

### E.1.2. Key impact potential indicator

Table 22 (a,b): Impact in the 11 selected countries

GCF Funding (Direct & Catalysed)			
	1 cycle (Medium Term)	3.37 cycles (Long Term)	Total during lifetime of all technologies
<b>MW Installed</b>	380	1,300	1,300
<b>Electricity Produced</b>	1,030 GWh/year	3,490 GWh/year	69,730 GWh
<b>GHG Avoided</b>	640,000 tCO <sub>2</sub> eq/year	2,150,000 tCO <sub>2</sub> eq/year	42,990,000 tCO <sub>2</sub> eq
<b>People Reached</b>	1,940,000	6,520,000	6,520,000
<b>Jobs Created MCI<sup>11</sup></b>	6,200	20,900	20,900
<b>Jobs Created O&amp;M<sup>12</sup></b>	70	220	220
<b>Jobs Created Total</b>	6,280	21,160	21,160

<sup>11</sup> Manufacturing, Construction and Installation. Please note that the equipment is not manufactured in the country of the project, hence only a portion of these jobs are created in the 12 selected countries.

<sup>12</sup> Operations and Maintenance.



GCF + Other Donor Funding (Direct & Catalysed)			
	1 cycle (Medium Term)	3.37 cycles (Long Term)	Total during lifetime of all technologies
<b>MW</b>	480	1,620	1,620
<b>Electricity Produced</b>	1,290 GWh/year	4,360 GWh/year	87,160 GWh
<b>GHG Avoided</b>	800,000 tCO <sub>2</sub> eq/year	2,690,000 tCO <sub>2</sub> eq/year	53,730,000 tCO <sub>2</sub> eq
<b>People Reached</b>	2,420,000	8,150,000	8,150,000
<b>Jobs Created MCI</b>	7,800	26,200	26,200
<b>Jobs Created O&amp;M<sup>12</sup></b>	80	280	280
<b>Jobs Created Total</b>	7,850	26,460	26,460

*Describe the detailed methodology used for calculating the indicators above.*

Table 23: Cost Estimates Based on Current Pipeline

<b>MW per USD 1 million</b>	0.72
<b>GWh/year per USD 1 million</b>	1.94
<b>GHG/year avoided (tCO<sub>2</sub>eq) per USD 1 million</b>	1,195.82
<b>People Reached per USD 1 million</b>	3,629.23
<b>MCI Jobs per USD 1 million</b>	11.65
<b>O&amp;M Jobs per USD 1 million</b>	0.12

Table 24: Total estimated funds invested in 11 GCF-earmarked countries

Investor/ Donor	Contribution	Catalysed in CIO	Catalysed 3rd Party 1 cycle	Total Invested 1 cycle	Catalysed 3rd Party Fund Life	Total Invested Fund Life
<b>GCF DF</b>	20	0	20	40	76	152
<b>GCF CEF</b>	80	320	133	533	449	1,797
<b>Other DF</b>	10	0	10	20	38	76
<b>Other CEF T1</b>	20	80	33	133	112	449
<b>Total</b>	130	400	197	727	676	2,475

<b>Assumptions</b>	<ol style="list-style-type: none"> <li>1. Funding Catalyzed within CIO is USD 2 of Tier 2 and Tier 3 funding each for every USD 1 of Tier 1 capital.</li> <li>2. Over the fund's life, CEF capital will be recycled 3.37 times.</li> <li>3. Over the fund's life, Development Fund capital will be recycled 3.8 times.</li> <li>5. 3<sup>rd</sup> party sponsors provide 50% of development costs and 25% of construction equity. These are minimum amounts as per CIO's investment restrictions.</li> <li>6 The difference between catalyzed and invested capital is that within CEF capital is considered to be catalyzed once, however is recycled and re-invested, explaining why those numbers are higher.</li> <li>7. The Total Funds Invested only include the development and construction phases.</li> </ol>
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For the purpose of calculating the impact indicators only construction phase funding is considered, because some of the Development Fund financing catalysed and invested will fail, hence have no impact. Also, even though the Development Fund is crucial for the project and without it construction would not be possible, only construction financing is assumed to finance the MW of capacity that will cause impact.

Describe how the project/programme's indicator values compare to the appropriate benchmarks (i.e. the indicator values for a similar project/programme in a comparable context).

The indicator values delivered by Climate Investor One are comparable to other, business as usual projects at the project level. Where CIO excels however, is in its ability to bring *scale* through the programme level ensuring greater overall impact.

In addition, CFM anticipate that CIO will be able to deliver more projects, at a faster rate, and more economically than current market practice through its ability to reduce project timelines and costs throughout the development and construction phases. Furthermore, the recycling of capital feature that CIO utilises enables greater impact per USD invested in the programme as compared with individual investments at the project level.

## E.2. Paradigm Shift Potential

Degree to which the proposed activity can catalyze impact beyond a one-off project/programme investment

### E.2.1. Potential for scaling up and replication (Provide a numerical multiple and supporting rationale)

Describe how the proposed project/programme's expected contributions to global low-carbon and/or climate-resilient development pathways could be scaled-up and replicated including a description of the steps necessary to accomplish it.

Climate Investor One has the potential to cause a paradigm shift at two levels: (i) the global development finance sector level, and (ii) the investee country. The first shift arises from the novelty and innovation of CIO itself, because it introduces a new catalytic tool into the development and climate finance toolbox, which will potentially be used by other Development Finance Institutions and impact investors. The second shift is bespoke to each country and arises due to the impact CIO causes in terms of electricity provision, pioneering the private energy market and new forms of infrastructure finance.

#### Paradigm shift in development finance

As described in Section A 'The Importance of Climate Investor One', at programme level, CIO is a new and innovative solution to financing renewable energy assets in developing countries. CIO's significance lies in 'how' it finances projects. This model enables a greater contribution to poverty alleviation, sustainable development and low carbon development pathways through a more expeditious process and end-to-end financing, consistent with the goal of keeping global temperature increases to less than 2 degrees Celsius as set out under the Paris Agreement.

A proven blended finance concept, the CIO structure can be scaled and/or replicated across other climate and sustainable development related themes, including water infrastructure, ocean preservation, bio-diversity protection, sustainable cities, etc. It is the intention of CFM to raise a platform of climate finance programmes based on the model of CIO, advocating the blended finance approach to global sustainable development problems.

In addition, CIO will offer the potential for knowledge transfer and learning, contributing to the creation or strengthening of knowledge, collective learning processes, and institutions. CIO is actively represented in the development finance and renewable energy infrastructure development communities through various international forums, conferences and

summits. By globally engaging its peers CFM fosters discussion and debate on topics in blended finance, impact investing, developing country infrastructure and financial innovation, thus changing the very way country development is funded.

### Paradigm shift in individual countries

At country level, CIO may itself re-invest in subsequent projects should the potential funding opportunities arise, and previous projects perform as per expectation. Also, CIO itself may create a replication effect, whereby other prospective developers seek all-equity financing solutions as offered by other investors when markets mature. Furthermore, in some of the target jurisdictions CIO will cause a paradigm shift that is specific to the country. These countries have nascent IPP markets and, in some cases, they do not have IPPs yet, nor the appropriate regulation for a private IPP market. The potential for bespoke paradigm shift is listed in Table 25. below.

Table 25: Bespoke paradigm shift

Country	Bespoke Paradigm Shift Potential
Burundi	Primarily by virtue of introducing a new financing concept to the market.
Cameroon	Primarily by virtue of introducing a new financing concept to the market.
Djibouti	Opportunity for CIO to finance the first IPP and contribute to the IPP regulations, which are currently being developed. At the moment one of the most actively pursued projects in CIO's pipeline is a 110 MW wind farm in Djibouti. Phase 1 (61MW) of the project alone will increase installed capacity in the country by 61%, causing a paradigm shift by massively increasing the availability of power.
Indonesia	Primarily by virtue of introducing a new financing concept to the market.
Kenya	Primarily by virtue of introducing a new financing concept to the market.
Madagascar	Primarily by virtue of introducing a new financing concept to the market.
Malawi	Primarily by virtue of introducing a new financing concept to the market.
Mongolia	Primarily by virtue of introducing a new financing concept to the market.
Morocco	Opportunity for CIO to kickstart the nascent private PPA market for medium sized corporates in the medium voltage space.
Nigeria	Opportunity for CIO to kickstart the mid-sized IPP market and finance the first utility scale solar power plant.
Uganda	Primarily by virtue of introducing a new financing concept to the market.

From an early stage, CFM will equip stakeholders with project development and project management skills, as well as by providing financial skill and institutional capacity building skills. In addition, CFM will transfer skills pertaining to E&S management – central to CIO's investment philosophy, and project sustainability.

In jurisdictions that have limited / no private sector renewable energy investment, CIO will set precedence, contributing to enhanced regulatory framework and policy development, assisting with climate responsible planning.

Lastly, by starting or expanding the power sector and engaging with the local government, CIO will advocate and incentivize the government to invest more in the expansion and improvement of the utility grid and connect more people to CIO's clean power plants.

CIO's paradigm shift potential can be summarized by its Theory of Change. It clearly outlines CIO's core features and CFM's core activities in managing CIO. CIO's action plan and scope of activities is new in the market and will result in concrete outcomes, which will create an impact that will not only improve the environment and boost sustainable development, but will change the very way in which developing country infrastructure is financed and developed.

### Theory of Change

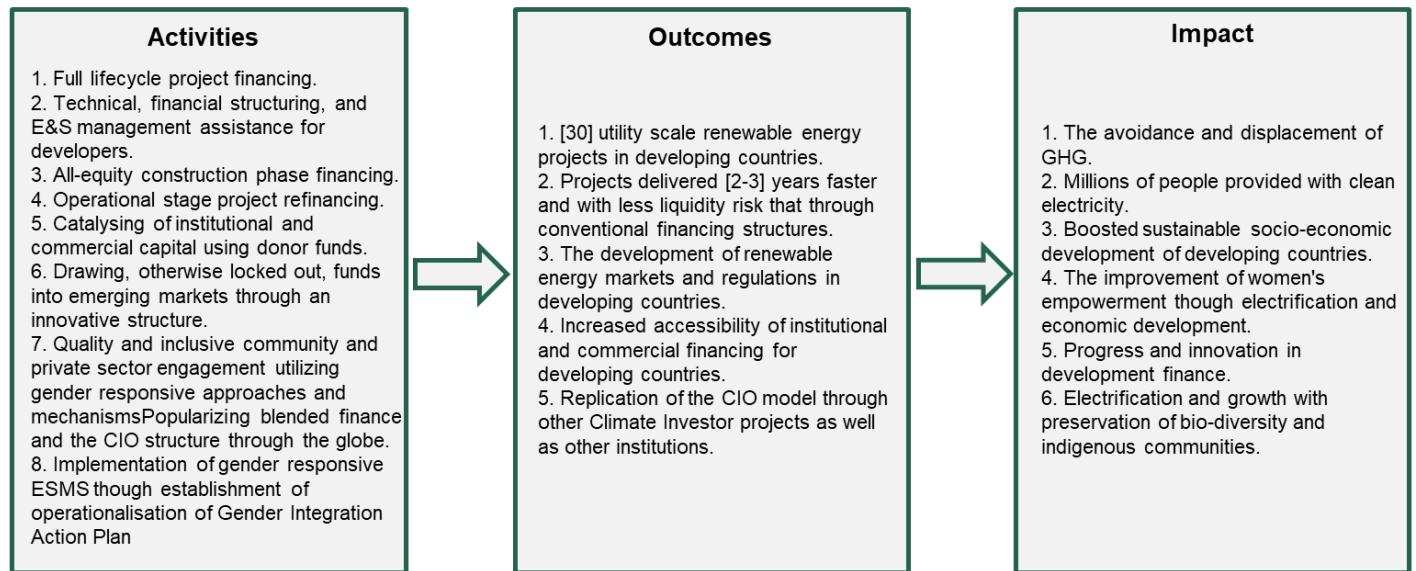


Figure 14: CIO Theory of Change

#### E.2.2. Potential for knowledge and learning

Describe how the project/programme contributes to the creation or strengthening of knowledge, collective learning processes, or institutions.

The strengthening of knowledge and collective learning processes is an important objective of Climate Investor One. Specific outputs and impacts delivered by CIO pertain to the creation and strengthening of knowledge, ensuring that relevant capacity rests within local and national institutions post CFM / CIO involvement in its project companies.

Skills and knowledge used to implement project companies in the national jurisdictions in which CIO invests will be replicable for various stakeholders across other renewable energy projects within these jurisdictions and the regions more broadly, with certain skills and knowledge having cross sector / inter-disciplinary applications as well.

Aside from CIO contributing to improved knowledge on climate change solutions and mitigation, the delivery of renewable energy projects to the regions will help contribute to increased project development, financial, project management, institutional capacity building (at local, national and regional levels), stakeholder engagement and E&S implementation skills.

### *Project Development Skills*

Project development requires a multitude of technical and inter-personal competencies – often gained through previous experience with the processes involved. With the hands-on approach of CFM, first time and inexperienced co-developers will gain valuable and replicable experience in this aspect of project implementation, which will prove to be transferrable and highly valuable for future project development processes.

### *Financial Skills*

As CFM will lead the financial structuring of a project company, developers / sponsors will gain valuable experience with structuring all equity solutions for construction phases of a project lifecycle, with post construction gearing for optimization of time and cost.

### *Project Management Skills*

Beneficiaries including project developers and operations & maintenance staff will be trained in project management best practices to develop, build and run the renewable energy assets optimally during and after construction. O&M staff will be trained in reporting, stakeholder engagement, risk awareness and technical skills pertaining to the maintenance and sustainability of the projects.

### *Institutional Capacity Building Skills*

Institutional engagement forms the basis of any successfully project. Throughout the development, construction and operational phases of a project, local, national and regional (where applicable) institutions are consulted and engaged over IPPs and PPAs, capital procurement and E&S issues. Where institutions have lacked engagement to date, CFM will help pave the way for parties seeking to implement renewable energy projects in the targeted jurisdictions.

### *E&S Skills*

As an E&S approach consistent with international best practices is central to CFM's investment philosophy, and paramount to the success of an underlying project, implementation of CFM's ESMS shall help guide not only the success of CIO, but also lay precedent for its partner developers whom may go on to develop and implement future projects in other capacities. CFM's ESMS is freely available online for anyone to use as a guideline or for learning.

CFM will often take the lead on managing E&S aspects of projects and will provide the opportunity for co-developers/sponsors of projects within its portfolio to strengthen their knowledge and approach to the management of E&S issues. CFM will support co-developers/sponsors with E&S training of project staff and contractors to ensure that the E&S requirements are met, thus transferring knowledge to the local workforce wherever possible.

### **E.2.3. Contribution to the creation of an enabling environment**

Describe how proposed measures will create conditions that are conducive to effective and sustained participation of private and public sector actors in low-carbon and/or resilient development that go beyond the program.

Describe how the proposal contributes to innovation, market development and transformation. Examples include:

- Introducing and demonstrating a new market or a new technology in a country or a region
- Using innovative funding scheme such as initial public offerings and/or bond markets for projects/programme

At the programme level CFM will contribute to the creation of an enabling environment in the following ways:

- **Environmental and social sustainability:** All projects in which CFM invests have to conform to the requirements of CFM's Responsible Investment Policy and the Environmental and Social Management System, which has been developed in accordance with good international industry practices and is aligned with the IFC Performance Standards (IFC PS) and GCF Standards. Therefore, all the host communities of the projects in which CIO invests will benefit from projects established to the highest standards and this will help to set the standard for local regulators and developers of other projects.
- **Local Content and Building Local Capacity:** CFM will encourage all projects in which CIO invests to source local goods and services to the extent practicable. This will include but not be limited to sourcing of local labour as well as local services and materials. A typical 40MW solar project is likely to employ 250 people during construction, the majority of which unskilled or semi-skilled, and therefore will provide employment for local communities. Indirect employment opportunities will also result associated with transport, supplying camps and the provision of goods and services. CFM will encourage the management teams of project companies to take action where feasible to build local capacity so that suppliers and the labour market can develop their skills and competencies as needed to be included in the supply chain.
- **Stakeholder Engagement:** Effective community engagement is central to the successful management of risks and impacts on communities affected by the Project, as well as central to achieving enhanced community benefits. CFM will ensure that all projects establish and implement a gender responsive Stakeholder Engagement Plan (SEP) which is designed in accordance with the IFC PS and which will be comprised of the following elements:
  - Identification of international and national regulations and best practice governing stakeholder engagement;
  - Identification and analysis of the stakeholders relevant to the Project;
  - Development of a methodology and programme of engagement activities during the construction process;
  - Establishment of a gender responsive Grievance Mechanism in accordance with international good practice; and
  - Establishment of effective mechanisms of monitoring and reporting.CFM will ultimately be responsible for all external engagement related to the CIO Funds and its assets.
- **Disclosure of E&S Information:** Linked to engagement with communities is the disclosure of Project-related E&S information. In accordance with CFM's ESMS, disclosure is conducted in accordance with local legal requirements where they exist, as well as in accordance with standards established by the IFC. The extent and specific nature of the disclosure is also determined by the E&S risk categorisation of the Project. For all projects, E&S information that will be disclosed will include a summary of the E&S impacts and risks of the project; ongoing reporting to communities on the Project's progress with the E&S management and monitoring plans; the Project's stakeholder engagement plan; and the grievance mechanism. Access to the environmental and social impact assessment (if this has been required for the Project) will also be provided.
- **Access to Energy:** CFM is also committed to maximizing the opportunities for environmental and social benefits, including positive gender considerations, particularly to local communities in the area of influence of CIO's project investments. These benefits go above and beyond what is required from any project to obtain and maintain its 'social license to operate'. All projects will consider the potential for wider community benefits, which will be incorporated into the project design. Of particular focus will be the opportunity to provide host communities with access to energy, for example through the installation of solar panels on community buildings. Such opportunities concerning host communities will be identified through the ESIA conducted during project development and will be implemented in line with the Gender Integration Action Plan, which seeks to promote, where practically feasible, gender equitable access to energy to ensure that women and men equitably benefit from access to such resource.

In some geographies where CFM / CIO will be active, it will be introducing new and renewable technologies to the country, which it is hoped will promote further investment and reliance on renewable energies in these countries.

The CIO programme will construct approximately 30 projects in developing markets. Countries that have a skewed energy demand and supply gap will be made primary targets for investment. CIO will develop, construct and operate renewable energy projects in these countries using proven technologies such as wind, solar PV and run-of-the-river



hydro to produce affordable clean energy. The technology and the equipment used for the projects are in the most advanced state and the equipment will be sourced from leading OEMs. CFM believe that by introducing latest technology and technique in the market, CIO will attract collaboration with leading local stakeholders to tackle the energy shortfall problem in these markets.

CIO will introduce a first of its kind, whole-of-life funding concept in developing markets. This innovative funding scheme will make capital readily available for projects at different stages of a project – development, construction and operation. By doing this, projects can progress at faster pace compared to more prevalent fragmented funding schemes. Furthermore, projects are funded using equity instead of debt in the initial phases (development and construction), reducing cash flow pressure on projects during its non-operational years. This unique funding approach de-risks the project making it more attractive to lenders for subsequent introduction of debt into the capital structure of projects. The introduction of such a funding scheme will develop the capital markets in the targeted countries and encourage other private commercial investors and lenders to follow a similar approach.

#### E.2.4. Contribution to regulatory framework and policies

Describe how the project/programme strengthens the national / local regulatory or legal frameworks to systematically drive investment in low-emission technologies or activities, promote development of additional low-emission policies, and/or improve climate-responsive planning and development.

CFM's activities are expected to support and strengthen local, regional and national regulatory/legal frameworks level in terms of (i) how to structure and accommodate Independent Power Producers, (ii) increasing private sector investment flows and (iii) adapting to increasing amounts of (volatile) renewable energy fed into national electricity grids. Given that most of the energy offtake is dealt with through government institutions, and in many countries there will be limited IPPs and bankable PPAs implemented, CFM's continuous dialogue with relevant national and local government institutions will offer ample opportunities to contribute to the development of regulatory frameworks and policies.

CFM further aims to lead by example in all its relationships and communications with regulators, local governments and stakeholders. CIO's projects will adhere to IFC's Performance Standards and GCF Standards, which may go beyond local / national requirements. Where relevant, and where it is able, CFM will work with local governments to further promote renewable energy solutions.

CFM's activities may also impact upon the following:

- Increasing the share of a country's renewable energy capacity in respect of national energy mix and / or electrification targets.
- Promoting healthy competition between project developers to optimize project solutions and technological mix.
- A reduction in a country's requirement to import / produce fossil fuels, thereby reducing existing trade deficits caused by importation of refined oil products.
- Investments in local businesses (particularly throughout construction) that create revenue and employment opportunities, as well as increased government revenues resulting from increased household incomes and taxation.



### E.3. Sustainable Development Potential

#### Wider benefits and priorities

##### E.3.1. Environmental, social and economic co-benefits, including gender-sensitive development impact

Access to affordable, sustainable energy is an enabling factor for economic development, poverty reduction and the facilitation and promotion of more gender inclusive societies. CIO's main goal is to mitigate climate change through the development of renewable energy in developing countries. However, CIO's projects will have some co-benefits listed below.

Through the record of accomplishment of its shareholders and a Responsible Investment Policy (<http://www.climateinvestorone.com/files/170922-responsible-investment-policy.pdf>) comprised of 'Do No Harm' and 'Do Good' pillars, CIO will produce positive environmental & social externalities through each of its underlying investments, in each of the targeted countries. Below are brief descriptions of CIO's co-benefits and positive externalities. The full analysis of the co-benefits in each country will be provided at request.

#### Environmental Co-benefits

Whilst CIO's focus is climate change mitigation through the reduction in GHG emissions, the renewable energy projects that will result from CIO's financing will have other environmental externalities, depending on the country in question. For example, many of CIO's target populations use fuel wood for cooking and heating, which contributes to deforestation. CIO's projects would contribute to alleviating this problem. Furthermore, CIO follows strict environmental and social responsibility guidelines, which ensures the preservation of biodiversity and indigenous species.

#### Economic Co-benefits

The economic benefits of providing developing countries with clean energy are unquestionable. Electricity allows businesses to grow faster and can be used to increase labour productivity. Energy is necessary for developing countries to reach the economic developmental level of high-income countries. CIO brings clean energy faster than other financing structures, hence allowing countries to grow faster. Some of CIO's countries have specific energy related economic issues, such as dependence on imports. For example, Morocco imports over 90% of its energy, which makes it vulnerable to price fluctuations and exposes it to a fiscal deficit risk.

#### Social Co-benefits

All of CIO's projects are subject to guidelines on social governance, which ensure the most benefit for local communities. The positive social externalities of providing clean energy are numerous, especially, if the population did not have electricity before. Some of the social externalities will be particularly beneficial to some countries. For example, Morocco ranks as the country highest in pollution, which serves as a severe health hazard causing a variety of respiratory diseases and contributing to the country's mortality rate.

#### Gender Co-benefits:

CFM recognise that the energy shortfall in many developing countries is a gendered issue, as women are typically more vulnerable to the negative consequences of energy poverty, and men often disproportionately benefit by increased access to energy when compared to women. In many of these jurisdictions, women are often solely responsible for household and community energy provision.

CIO's intervention in its GCF target countries will seek to help reduce the exposure that women have to energy poverty through the implementation of the Gender Integration Action Plan, which is designed to help benefit women as renewable energy stakeholders, workers, and end-users.

## E.4. Needs of the Recipient

Vulnerability and financing needs of the beneficiary country and population

### E.4.1. Vulnerability of country and beneficiary groups (Adaptation only)

*Describe the scale and intensity of vulnerability of the country and beneficiary groups, and elaborate how the project/programme addresses the issue (e.g. the level of exposure to climate risks for beneficiary country and groups, overall income level, etc).*

N/A – Climate Investor One is a mitigation only platform.

### E.4.2. Financial, economic, social and institutional needs

*Describe how the project/programme addresses the following needs:*

- *Economic and social development level of the country and the affected population*
- *Absence of alternative sources of financing (e.g. fiscal or balance of payment gap that prevents from addressing the needs of the country; and lack of depth and history in the local capital market)*
- *Need for strengthening institutions and implementation capacity.*

GCF target countries align directly with CIO's primary focus on LIC / LMIC countries, that indicate a need for intervention, as outlined below:

Table 26: Country Socio-Economic Development Indicators (World Bank 2016)

Country	World Bank Income Group Classification	Population in millions	GDP (current USD billions)	5-year GDP growth	GDP per capita, PPP (current international USD)	FDI, net inflows (% of GDP)	Poverty gap at USD 3.20 a day (2011 PPP) <sup>13</sup>
Burundi	LIC	23	32	5%	778	0	19%
Cameroon	LMIC	11	3	2%	3,609	2	52% (2013)
Djibouti	LMIC	1	2*	5%	3,349	7	18 % (2013)
Indonesia	LMIC	26	932	5%	3,570	0.5	8.3% (2016)
Kenya	LMIC	48	71	6%	3,161	1	N/A
Madagascar	LIC	25	10	3%	1,509	5	58% (2012)
Malawi	LIC	18	5	4%	1,171	6	53% (2010)
Mongolia	LMIC	3	11	7%	12,276	-37	1% (2014)
Morocco	LMIC	35	104	3%	7,838	2	N/A
Nigeria	LMIC	186	405	3%	5,872	1	40% (2009)
Uganda	LIC	41	24	4%	1,823	2	28% (2012)
OECD	N/A	1,289.94	47,552.62	1.76	41,871.15	3.06	0

\*2015 data

<sup>13</sup> Poverty gap at \$3.20 a day (2011 PPP) is the mean shortfall in income or consumption from the poverty line \$3.20 a day (counting the non-poor as having zero shortfall), expressed as a percentage of the poverty line. This measure reflects the depth of poverty as well as its incidence. (World Bank, 2018)

All the chosen economies have a great need of investment. As indicated in the table above, all countries have low levels of GDP and GDP per capita, when adjusted to Purchasing Power Parity. The GDP per capita adjusted to PPP in high income countries about USD 47,500, whereas the highest GDP per capita within the GCF target countries is just over USD 21,000 with Burundi, Uganda, Malawi and Madagascar not even reaching USD 2,000. This, combined with the poverty gap indicator, reveals living standards that are very low. Indeed, the GCF target countries from the Sub-Saharan region have very large poverty gaps, which indicate that poverty is both prevalent and deep. These macro-level aggregates represent an everyday reality for the citizens of the target countries that involves a lack of basic life necessities, such as proper nutrition and housing, basic education and healthcare, adequate public amenities and, most of all, clean affordable power. Though the economic growth rates represented are well above those of developed economies, it is estimated that countries need to grow at least 7 percent a year to put a dent in poverty, specifically in order to double per capita income in one generation. Only Mongolia has reached this target in the previous year, which indicates that the other target countries will remain impoverished for longer than a generation. CIO addresses these economic needs by virtue of catalysing commercial capital into these countries and constructing additional electricity capacity to spur growth and development.

There is no doubt that CIO's target countries, although heterogeneous, are all in a developmental stage that creates great potential for additionality of investment. Furthermore, the data on FDI inflows as well as cumulative clean energy investments from the impact potential section show that these economies do not receive nearly enough investment to spur their development or a domestic clean energy sector. Even though FDI inflows as percentage of GDP are high in some countries, relatively to OECD economies, due to the small GDP values the real FDI amounts are small. Furthermore, in section B.3 we elaborate on the lack of funding for such renewable energy projects in these countries, which combined with the country expressed needs for financing as shown in table below, makes clear that a significant expansion of renewable energy will not be funded unless additional capital is made available. One of CIO's main objectives is to solve this problem by attracting commercial capital to these projects by virtue of CIO's innovative fund structure.

Table 27: Country Power Undersupply and INDC Needs

Country	SAIDI <sup>14</sup> (Hours)	SAIFI <sup>28</sup> (#)	INDC Emissions Unconditional Target	INDC Emissions Conditional Target	INDC Financial Support Needed (USD billions)
Burundi	660	330	3%	17%	1.49
Cameroon	103	26.4	N/A	32%	N/A
Djibouti	N/A	N/A	40%	60%	1.6
Indonesia	4.2	2.8	41%	12%	N/A
Kenya	80.9	16.9	N/A	30%	40*
Madagascar	N/A	N/A	N/A	14%	42.1
Malawi	N/A	N/A	N/A	47%	N/A
Mongolia	16.2	9.6	14%	>14%	2.5
Morocco	0.6	2.3	13%	32%	45

<sup>14</sup> The System Average Interruption Duration Index (SAIDI) is the average total duration of outages over the course of a year for each customer served, while The System Average Interruption Frequency Index (SAIFI) is the average number of service interruptions experienced by a customer in a year. Annual data (covering the calendar year) are collected from distribution utility companies and national regulators on SAIDI and SAIFI. Both SAIDI and SAIFI estimates should include planned and unplanned outages, as well as load shedding. (World Bank, Doing Business, 2018 (for Burundi 2016))

<b>Nigeria</b>	2,557.7	485.7	20%	45%	N/A
<b>Uganda</b>	50.2	27.8	7%	22%	5.74

Access to electricity is a critical precondition for the development of every sector of society, including business, industry, education, healthcare and governance. In the table above, we see that the 11 countries have severe power shortages, expressed in the SAIDI and SAIFI indexes, which negatively affect the development of the private sector. We see that power outages are frequent and last a long period. Therefore, businesses cannot perform efficiently and experience financial losses due to outages. Since CIO projects will provide power to the electricity grid, the power generated will reduce outages and their duration

### E.5. Country Ownership

Beneficiary country(ies) ownership of, and capacity to implement, a funded project or programme

E.5.1. Existence of a national climate strategy and coherence with existing plans and policies, including NAMAs, NAPAs and NAPs

*Please describe how the project/programme contributes to country's identified priorities for low-emission and climate-resilient development, and the degree to which the activity is supported by a country's enabling policy and institutional framework, or includes policy or institutional changes.*

#### Country Ownership & Priorities

On the back of discussions held with GCF, CFM acknowledge that the point of departure for selecting a target / focus country is whether Country Ownership is encapsulated, specifically through the following three elements: 1) Nationally Designated Contribution (NDC) commitments, 2) Positive Stakeholder Engagement, and, 3) No Objection Letter (NOL) support.

#### Nationally Designated Contribution (NDC) commitments

The countries selected by CFM all recognise their mitigation and adaptation requirements, vocalising these within their NDC, as highlighted in table (28) below. The short-listed countries cite specific targets to combat climate change across various short, medium and long-term periods.

Table 28: Country Engagement and Nationally Determined Contributions

Country	NDC				CIO	
	Emissions Targets		RE is a Priority	Financial Support Needed (USD billions)	NDA/Government Engagement	NOL Received
	Unconditional	Conditional				
<b>Burundi</b>	3%	17%	Yes	1.49	Yes	Yes
<b>Cameroon</b>	N/A	32%	Yes	N/A	Yes	Yes
<b>Djibouti</b>	40%	60%	Yes	1.6	Yes	Yes
<b>Indonesia</b>	41%	12%	Yes	N/A	Yes	Yes
<b>Kenya</b>	N/A	30%	Yes	40*	Yes	Yes
<b>Madagascar</b>	N/A	14%	Yes	42.1	Yes	Yes
<b>Malawi</b>	N/A	47%	Yes	N/A	Yes	Yes
<b>Mongolia</b>	14%	>14%	Yes	2.5	Yes	Yes

Morocco	13%	32%	Yes	45	Yes	Yes
Nigeria	20%	45%	Yes	N/A	Yes	Yes
Uganda	7%	22%	Yes	5.74	Yes	Yes

\* This amount includes funding needed for climate change adaptation efforts.

All of the above countries outline GHG reduction priorities in excess of 10%, with Morocco, Djibouti, Nigeria and Malawi setting ambitious targets almost or above 50% BAU scenario. To achieve these targets all 11 countries will require increased Foreign Direct Investment (FDI) in renewable energy projects through initiatives like CIO. As Djibouti currently has ~0% of its energy mix coming from renewable technologies, its ambitious target of 60% reduction in GHG emissions per BAU seems achievable given the need for greater electrification and a political will to open the country to FDI in the renewable energy sector. Though the targets for Madagascar and Mongolia are smaller than the others, this, however, does not detract from the importance of further renewable investment in these countries, as they are still heavily reliant on fossil fuel importation to fulfil its remaining energy needs.

Positive Stakeholder Engagement:

To demonstrate Country Ownership further at project level, CFM have engaged with governments, local communities and the private sector.

No Objection Letter (NOL) support:

CFM and FMO have sought governmental support in the form of a No Objection Letter (NOL), granting approval at the political level to receive GCF financing through CIO.

In addition, CFM will always include a local partner in each of its underlying project investments; engage with civil society organisations and other relevant stakeholders & pay due attention to Environmental & Social Safeguards, including gender equality.

For more information, see CFM's Environmental & Social Management System for Climate Investor One: <https://www.climatefundmanagers.com/files/180301-esms-v-2e-clean.pdf> or a Summary of the ESMS in Annex 2.

By outlining country priorities and governmental engagements, CFM have identified suitable jurisdictions that have ambitious climate change targets, of which CIO can help contribute to their national strategies. In addition, CFM have already engaged with the governments of these countries, testing the CIO concept and its ability to assist with these INDC priorities.

**E.5.2. Capacity of accredited entities and executing entities to deliver**

Please describe experience and track record of the accredited entity and executing entities with respect to the activities that they are expected to undertake in the proposed project/programme.

CFM is an equal joint venture between FMO and Sanlam InfraWorks. CFM has been established to implement and manage innovative climate financing platforms in developing markets. Climate Investor One is CFM's maiden renewable energy platform. CFM has been appointed on market standard terms, and will act as an independent, non-captive fund manager at arm's length of its shareholders. Furthermore, as the Accredited Entity it will monitor the capacity of CFM's performance in the management of the CIO funds, including the application of CFM's anti-corruption and AML/CFT policy and require CFM and the CIO Funds to support FMO in the fulfilment of FMO's rights and obligation under the AMA and FAA including its reporting obligations towards the GCF. FMO will ensure that any Subsidiary Agreement it enters into with CFM, the DF or the CEF will reflect the relevant provisions under the FAA and/or AMA and will take appropriate

action and/or exercise remedies available to it under the CIO Fund documentation to avoid or remedy a (pending) breach of the applicable provisions under the AMA and/or FAA to protect the interests of GCF.

### **1. FMO's Track Record**

With an investment portfolio of EUR 9.2 billion spanning over 85 countries, FMO is one of the larger bilateral private sector development banks in the world. FMO has debt and private equity teams dedicated to energy finance, consisting of 46 energy professionals, including 6 dedicated environmental and social specialists. The team has grown the organization's energy portfolio to a current committed level of ca. EUR 2.4 billion - of which 77% is in renewable energy across a range of technologies (solar PV, solar CSP, run-of-river hydro, onshore wind, biomass, landfill gas-to-energy, geothermal) – in over 40 countries. As of 2015, FMO had invested in over 40 wind, hydro and solar projects, of which 32% of the energy portfolio was in hydro, 29% in wind, 7% in solar PV and 9% (200 MW) in other renewable technologies. This depth of experience has allowed FMO to build a solid understanding of the key risks and opportunities faced by any particular category of renewable energy projects. This knowledge, applied to future investment opportunities and development stage projects facilitates the optimisation of project development, planning, financial structuring and risk management to help deliver better projects, faster and with better investment metrics.

FMO has been initiator and co-founder of several fund initiatives and general partners including Emerging Africa Infrastructure Fund (EAIF), The Currency Exchange (TCX), Africa Invest and Arise. In 2015, FMO Investment Management (FMO IM) reached a EUR 153 million final close for the Actiam-FMO SME Finance Fund (investor base: European pension funds and insurance companies). FMO IM is currently fund raising for the NN-FMO Emerging Markets Loans Fund with a target size of up to USD (\$) 750 million (which is designed for institutional investors) and the retail focussed, open ended FMO Privium Impact Fund with committed amounts of over USD (\$) 45 million within the first 6 months after its start. Further, FMO has established partnerships with other fund managers, DFIs, commercial banks, export agencies and re-insurers, making catalysing funds an important and growing part of its business.

FMO may provide strategic shareholder services to CFM in the areas of KYC / compliance, tax, fundraising capability and investor relationship management. However, it has been agreed with FMO that CFM will outsource certain KYC / AML CFT & Compliance requirements to reputable & specialised firms (SGG), at both fund and project level, while keeping supervision. While CFM is responsible for outsourcing these services, FMO supervises and adopts the KYC-AML policy through its participation in the CFM Supervisory Board.

### **2. Sanlam InfraWorks BV Track Record<sup>15</sup>**

Sanlam InfraWorks BV is an investment & development company targeting infrastructure and climate related investments in global emerging markets. The company was formalized in February 2018 and combines the renewable energy investment expertise of Phoenix InfraWorks (Phoenix) – headed by former African Infrastructure Investment Managers (AIIM) CEO, Mr. Andrew Johnstone – with the capital raising & asset management expertise plus on the ground know how of one of Africa's largest financial institutions company, Sanlam.

Phoenix has extensive experience in mobilising private sector capital, establishing and growing fund management organisations, implementing disciplined investment processes and managing a highly successful infrastructure investment platform. Phoenix principals comprise 40+ years infrastructure investment experience which includes: (i) structuring and raising four funds of more than USD (\$) 1.3 billion, (ii) raising and managing Africa's largest infrastructure fund, (iii) managing a world leading project finance advisory and lending team overseeing 174 assets in 20 countries, (iv) execution of transactions in Africa, Asia, Europe, North America and South America, (v) establishment and governance of a successful renewable energy development business and (vi) completion of 33 renewable energy transactions.

<sup>15</sup> This was during the period that Mr. Andrew Johnstone was the CEO of Africa Infrastructure Investment Managers, a role he held for 10 years.<sup>16</sup> Over the funds' lifetime in 3.37 investment cycles in the construction phase.



Phoenix brings best-in-class fund structuring, fundraising, investment analysis, asset management as well as fund management experience and expertise. The combination of a private sector infrastructure partner (Phoenix) and a development finance institution (FMO) provides a complementary business balance across the objectives of donors, DFIs and private sector institutional investors.

Founded in 1918, Sanlam is now South Africa's second largest financial services group. Over the years, Sanlam's focus gradually shifted from traditional life insurance to providing a broader range of financial products and services. Sanlam has its shares listed on both the Johannesburg and Namibian Stock Exchanges. Sanlam's ownership consists of: 65.27% Public Shareholders, 13.5% Ubuntu-Botho Investments (Pty) Ltd, 12.24% Public Investment Corporation, 7.62% Subsidiaries, remaining balance other. It has a presence in more than 47 countries globally, including 34 African countries and across six sectors: financial Institutions, energy, agribusiness and infrastructure, manufacturing, services. Sanlam holds a zaA rating from Standard & Poor's.

Table 29: FMO, Phoenix InfraWorks and Sanlam Track Record

Country	FMO Investments (#)	Total Value (USD million)	CFM Team Track Record (#)
Burundi	0	0	0
Cameroon	1	1.00	1
Djibouti	0	0.00	0
Indonesia	10	128.59	0
Kenya	13	194.29	4
Madagascar	2	0.14	0
Malawi	2	6.90	0
Mongolia	10	236.24	0
Morocco	2	11.50	1
Nigeria	16	526.67	6
Uganda	16	213.50	1
<b>Total</b>	<b>72</b>	<b>1,318.83</b>	<b>13</b>

**E.5.3. Engagement with NDAs, civil society organizations and other relevant stakeholders**

*Please provide a full description of the steps taken to ensure country ownership, including the engagement with NDAs on the funding proposal and the no-objection letter.*

**Engagement with NDAs**

Pursuant to the funding application requirements and protocol as set by the Green Climate Fund (GCF), FMO via its direct shareholding in Climate Fund Managers, have since November 2016, appointed a dedicated internal resource at CFM who has actively engaged with all of the 11 country NDAs.

Green Climate Fund shared a list of NDA contact names and departments for each of these 11 countries, and CFM has officially corresponded with each of these NDA representatives, either via e-mails or direct phone calls. Also, CFM has visited most of the NDA representatives to share with them in person the reason for such NOL request as well as explaining the FMO / CFM business proposition and the benefits that such NOL could hold for each respective country.



In addition to all correspondence, CFM have also created and are continuously updating a secure register of all communication with each NDA to ensure transparency of all communications.

*Please also specify the multi-stakeholder engagement plan and the consultations that were conducted when this proposal was developed.*

### **Multi-Stakeholder Engagement Plan**

Each of the individual projects/investments will develop and implement a Stakeholder Engagement Plan (SEP) as part of the International Standard Environmental and Social Impact Assessment that will be undertaken. All relevant stakeholders will be identified through a stakeholder mapping exercise, and will include national, regional and local stakeholders including government, non-governmental organisations (NGOs), civil society organisations (CSOs) and local communities. Consultation will include focus groups with women (as well as other traditionally vulnerable groups) to ensure that they are given an opportunity to contribute to baseline data gathering, but also to be involved in consultations and decision-making where relevant. All relevant stakeholder groups will be included in the SEP with engagement activities scaled accordingly.

## **E.6. Efficiency and Effectiveness**

Economic and, if appropriate, financial soundness of the project/programme

### **E.6.1. Cost-effectiveness and efficiency**

*Describe how the financial structure is adequate and reasonable in order to achieve the proposal's objectives, including addressing existing bottlenecks and/or barriers; providing the least concessionality; and without crowding out private and other public investment.*

CIO will construct ~30 renewable energy infrastructure projects in developing markets which will have significant environment and societal impact. GCF's contribution enables CIO to construct 3x more projects than is currently possible.

The development, construction and operations of these projects can be very complex and are often delayed. This is fairly typical across geographies and even more so in developing markets. In a traditional project finance approach, there are multiple stakeholders involved at all stages, which results in significant delays in decision making. For each stage, the developer has to go through a lengthy process of multiple fund raisings. Availability of capital is scarce in developing countries increasing the cost of financing a project. Furthermore, the CAPEX of these projects in developing markets tend to be higher due to logistical nuances, due-diligence costs, statutory costs etc.

High financing and CAPEX costs inflate the overall input costs, making margins slimmer for developers. This outcome hinders local equity investor or local lender participation. CIO's innovative whole-of-life funding facility addresses a multitude of issues. Firstly, with funding made available by CIO at different stages of the project, the developer saves time on the lengthy fundraising process. Secondly, CIO makes equity only investment in the construction phase of the project. This eliminates cash flow and financial distress from the project during construction. Thirdly, CAPEX of CIO projects is leaner as CFM have exclusive technology partnership agreements with OEMs. These partnerships unlock economies of scale for equipment sourcing, installation and maintenance. With a whole-of-life funding concept, CIO projects have fewer stakeholders that require liaising with during decision making. To sum, the financing structure of CIO facilitates faster delivery of more efficient projects, making clean energy accessible and affordable.

*Please describe the efficiency and effectiveness, taking into account the total project financing and the mitigation/adaptation impact that the project/programme aims to achieve, and explain how this compares to an appropriate benchmark. For mitigation, please make a reference to E.6.5 (core indicator for the cost per tCO<sub>2</sub>eq).*

Climate Investor One will deliver projects to the market more expeditiously than classic project finance approaches (See section B.1 – Overcoming Market Barriers). In doing so, Climate Investor One will deliver significant climate mitigation

impact – faster – to the jurisdictions in which it invests. Aside from the expeditiousness of CIO in the construction and operationalization of projects, the facility will also create a greater overall volume of impact through its ability to deliver scale, through a portfolio of ~20 assets (across GCF countries only).

**E.6.2. Co-financing, leveraging and mobilized long-term investments (mitigation only)**

*Please provide the co-financing ratio (total amount of co-financing divided by the Fund's investment in the project/programme) and/or the potential to catalyze indirect/long-term low emission investment.*

Table 30: Capital Catalysed and Invested

		A	B	C	D	E	F
	Investor/ Donor	Contribution	Catalysed in CIO	Catalysed 3rd Party 1 cycle	Total Invested 1 cycle	Catalysed 3rd Party Fund Life	Total Invested Fund Life
1	GCF DF	20	0	20	40	76	152
2	GCF CEF	80	320	133	533	449	1,797
3	Other DF	10	0	10	20	38	76
4	Other CEF T1	20	80	33	133	112	449
5	<b>Total</b>	130	400	197	727	676	2,475
<b>Assumptions</b>		1. Funding Catalyzed within CIO is USD 2 of Tier 2 and Tier 3 funding each for every USD 1 of Tier 1 capital. 2. Over the fund's life, CEF capital will be recycled 3.37 times. 3. Over the fund's life, Development Fund capital will be recycled 3.8 times. 4. 3 <sup>rd</sup> party sponsors provide 50% of development costs and 25% of construction equity. These are minimum amounts as per CIO's investment restrictions. 5. The difference between catalyzed and invested capital is that within CEF capital is considered to be catalyzed once, however is recycled and re-invested, explaining why those numbers are higher.					

**1. Catalysed Financing Ratios**

1.1 Total Financing Catalysed / Total GCF Investment (1 cycle):

$$\frac{2B + 2C + 1C}{1A + 2A} = \frac{473}{100} = 4.7$$

1.2 Total Financing Catalysed / Total GCF Investment (Fund Life):

$$\frac{2B + 2E + 1E}{1A + 2A} = \frac{845}{100} = 8.5$$

**2. Co-Financing Ratios**

2.1 Total Co-Financing / Total GCF Investment (1 cycle):

$$\frac{3A + 4A + 5B + 5C}{1A + 2A} = \frac{627}{100} = 6.3$$

2.2 Total Co-Financing / Total GCF Investment (Fund Life):

$$\frac{3A + 4A + 5B + 5E}{1A + 2A} = \frac{1,106}{100} = 11.1$$

### E.6.3. Financial viability

Please specify the expected economic and financial rate of return with and without the Fund's support, based on the analysis conducted in F.1.

#### Financial Rate of Return

A GCF participation within Climate Investor One will not alter the financial return for investors on an individual project return basis; the mechanics and proportions of donor capital vs. commercial capital remain the same regardless of further donor commitments. However, GCF investments in DF and Tier 1 of CEF are crucial in order to achieve attractive returns for commercial investors and create a flow of private capital into developing country infrastructure projects.

A GCF participation in the Development Fund helps to:

- Reduce the financial risk for private sector developers associated with the development phase as the CIO DF can absorb up to 50% of the costs
- Reduces the development risk and increase the likelihood of reaching financial close thanks to the development support / assistance provided by CFM and 3<sup>rd</sup> party advisors in the development phase.

A GCF participation helps to:

- De-risk the Construction Equity Fund by absorbing potential losses at project level in priority to the losses exposed to the private sector
- Attract more private sector investors including pension funds.
- Unlock investments from the Export Credit Agencies (ECA) of the Netherlands to provide a guarantee to the Tier 3 Investors. Given the perceived risks, the ECA could not offer their products to CIO without the support of donors such as the GCF.

The appealing feature of the way CIO is financed is that it:

- Combines several investment products made available by donors, development agencies, the Dutch Export Credit Agency and private sector actors into one, effective investment platform
- While this introduces complexity at the Fund level (CIO), it reduces complexity at the project level as the DF and CEF (and, eventually, RF) are able to offer one integrated, lifecycle funding solution to investee projects

Please describe financial viability in the long run beyond the Fund intervention.

**Please refer to Section E.2.1 for the long run financial viability of GCF's intervention**

Please describe the GCF's financial exit strategy in case of private sector operations (e.g. IPOs, trade sales, etc.).

**GCF Exit from CIO**

GCF's Exit from CIO Development Fund and CEF T1 is structured as follows:

- GCF's entire USD 100 million investment is routed through the DF (via FMO) in the form of reimbursable grants, of which USD 80 million will be invested by the DF in CEF as T1 junior equity in project companies and USD 20m is provided directly to the DF for the provision by the DF of development loans to project companies.
- Starting from year 15, the DF will distribute all cash received to donors as it becomes available, subject to the cash being available, the DF will make distributions until the donors receive capital back.
- Upon the dissolution of the DF (20th anniversary of 1<sup>st</sup> Close) any surplus funds in the DF will be distributed as decided by the Donors Meeting in accordance with the applicable laws in the Netherlands for foundations.

**E.6.4. Application of best practices**

*Please explain how best available technologies and practices are considered and applied. If applicable, specify the innovations/modifications/adjustments that are made based on industry best practices.*

To ensure seamless operations and longevity of the project, CFM purchases best-in-class quality equipment from OEMs. Each project is deeply analysed on its potential to harness renewable resources to efficiently produce clean energy. The CFM team have installed numerous renewable energy projects in developing markets and have the know-how of best practices developed from past project operations and experiences.

CFM will build beneficial relationships with local and international developers, co-sponsors, suppliers, manufacturers and other key partners to ensure robust and optimized project implementation, economics and operations. To this extent, CFM extensively scouted for high calibre experienced partners with similar values and integrity

To conform to industry best practices and to bestow technical capabilities, CFM have recently appointed a Chief Technical Officer (CTO) with more than 30 years' emerging markets renewable energy development, construction and operations experience, who will lead all development and construction management processes.

Similar partnerships are in the process of being established for technologies used by CFM in the solar, wind and run-of-the-river hydro segments, with CFM currently scouting the market globally to find suitable partners. Partners will not only provide best-in-class equipment but also share technical knowledge and best industry practices with CFM for projects.

**E.6.5. Key efficiency and effectiveness indicators**

<i>GCF core indicat ors</i>	Estimated cost per tCO <sub>2</sub> eq, defined as total investment cost / expected lifetime emission reductions (mitigation only)
	(a) Total project financing: USD 2,475 million (Development Phase: USD 228 million, Construction Phase: USD 2,247 million) <sup>16</sup>
	(b) Requested GCF amount: USD 100 million
	(c) Expected lifetime emission reductions over time: 2.69 million tCO <sub>2</sub> eq/year x 20 = 53.73 million tCO <sub>2</sub> eq
	(d) Estimated cost per tCO <sub>2</sub> eq: USD 46.06
	(e) Estimated GCF cost per tCO <sub>2</sub> eq avoided: USD 1.86
	Expected volume of finance to be leveraged by the proposed project/programme and as a result of the Fund's financing, disaggregated by public and private sources (mitigation only)
<b>Public Finance Leveraged by GCF within CIO</b>	

<sup>16</sup> Over the funds' lifetime in 3.37 investment cycles in the construction phase.

*Nil.* With a contribution of USD (\$) 100 million from GCF, all donor (public) capital will be secured within the CIO CEF structure and no further public sector capital will be catalysed.

**Private Sector Finance Leveraged by GCF within CIO (USD million)<sup>17</sup>**

The table below provides private sector capital leveraged by GCF's contribution to the Development Fund and Tier 1 of the construction Equity Fund. GCF would leverage 4x its Tier 1 commitment within CEF and third party commitments of USD 525 million over the lifetime of CIO (USD 76 million in the development phase and USD 449 million in the construction phase).

Table 31: Private Sector Finance Leveraged

Leveraged in CIO Tiers 2 & 3	320
Leveraged from 3 <sup>rd</sup> parties over the life time of CIO	525
<b>Total Leveraged</b>	<b>845</b>

Other relevant indicators (e.g. estimated cost per co-benefit generated as a result of the project/programme)  
The following numbers are based on CIO's current pipeline. Please refer to section E.1.

Table 32: Costs per Unit of Impact<sup>18</sup>

USD per 1 MW	1,386,510
USD per 1 GWh/year	515,537
USD per 1 tCO <sub>2</sub> eq of GHG/year avoided	836
USD per 1,000 people reached	276
USD per 1 MCI Job Created	85,825
USD per 1 O&M Job Created	8,069,811

<sup>17</sup> Here we include the funding of all investors seeking a commercial return leveraged by GCF capital. Please refer to section E.6.2 for calculation.

<sup>18</sup> Please refer to Annex 9 for calculation

## F.1. Economic and Financial Analysis

Please provide the narrative and rationale for the detailed economic and financial analysis (including the financial model, taking into consideration the information provided in [section E.6.3](#)).

Please see section B.1. for detailed financial analysis on CIO.

Based on the above analysis, please provide economic and financial justification (both qualitative and quantitative) for the concessionality that GCF provides, with a reference to the financial structure proposed in section B.2.

GCF participation in CIO enables significant scaling of the facility. Without such participation, CIO will remain at its current scale, deliver ~66% fewer projects and proportionally less impact. As donor capital within the structure enables private sector involvement, further private sector participation (thus scale) is hindered by the present insufficient levels of donor funding.

## F.2. Technical Evaluation

Please provide an assessment from the technical perspective. If a particular technological solution has been chosen, describe why it is the most appropriate for this project/programme.

CFM will install best in class future proof equipment for all CIO projects. **Proven technologies** such as solar PV, on-shore wind, and run-of-the-river hydro will form the core technologies of projects. CFM will purchase premium quality equipment from leading OEMs for all projects. A brief narration on the technology is provided below:

### Solar PV

Solar photovoltaic (PV) devices generate electricity directly from sunlight via an electronic process that occurs naturally in certain types of material, called semiconductors. Electrons in these materials are freed by solar energy and can be induced to travel through an electrical circuit, powering electrical devices or sending electricity to the grid.

Solar PV technology works as follows. Photons (light particles) strike and ionize the semiconductor material on the solar panel, causing outer electrons to break free of their atomic bonds. Due to the semiconductor structure, the electrons are forced in one direction creating a flow of electrical current.

Solar cells are not 100% efficient. In part, this is because some of the light spectrum is reflected, some is too weak to create electricity (infrared) and some (ultraviolet) creates heat energy instead of electricity.

A typical crystalline silicon solar cell, which is the most used PV technology, are wafers of high-purity silicon coated with various impurities and are fused together. The resulting structure creates a pathway for electrical current within and between the solar cells.

### Run-Of-The-River Hydro

The run-of-the-river hydroelectric concept uses the natural flow of water from a river to produce electricity. Run-of-the-river hydroelectric projects are dramatically different in design, appearance and impact from conventional (impounded) hydroelectric projects. There are two main differences. First, there are no large water storage dams or reservoirs required. Second, there is no or limited alteration of downstream flows, since all diverted water is returned to its natural watercourse below the powerhouse.

Climate Investor One focuses solely on the run-of-the-river technology as this offers the least technology risk and the impact on the natural and social environment is limited in comparison to conventional impounded hydro projects, which require a significant reservoir and/or often alter the downstream flows.

## Wind Power

Wind turbines generate electricity by harnessing the natural force of the wind in order to power an electrical generator. The most commonly used technology is based on the gearbox technology (although there are increasing numbers with direct drives) whereby a low speed shaft is turned through the rotation of the blades. The shaft goes into a gearbox, which increases the rotation speed. The generator that is linked with the gearbox converts the mechanical energy into electrical energy. A transformer converts the electricity from low voltage to the appropriate voltage for distribution.

Wind turbines typically have one, two or three rotor blades and range between 30 and 90 metres in diameter. The power of wind turbines installed on land varies from 10 kW up to several MWs, with the crucial parameter being the diameter of the turbine: the greater the length of the blade, the greater the area swept and the energy produced. Currently, the most powerful turbine is rated at 8 MW and has a rotor diameter of 164m.

Large modern wind turbines are typically equipped with a yaw mechanism that actively controls the turbine to face the wind direction measured by a wind vane. By minimizing the yaw angle (the misalignment between wind and turbine pointing direction), the power output is maximized.

The energy produced by a wind turbine varies in terms of the actual potential of the site itself (function of the wind speed), the availability of the machine itself (ability to operate in the presence of wind: with the standard being above 98%) and the arrangement of the devices in the wind farm (wake effect: negative effect on each other).

### *Why Solar PV, Wind & Run-of-River Hydro?*

Relative to traditional forms of energy production, energy generation through renewable resources is now in a post nascent stage, and for some technologies, is reaching maturity. A sustainable and generally unlimited supply of wind, sunlight and water specifically make wind plants, solar PV plants and hydro plants a central source for harnessing energy. These renewable energy technologies are becoming increasingly cost competitive and are fully operationally reliable. Technological sophistication and increased production scale have reduced pricing, order lead-times and overall time to project revenues across the board. Global generation costs of wind and solar projects are continuing to fall with a reduction of 61% in solar PV and 14% in onshore wind costs over the past five years. Wind pricing has reduced threefold in the past three decades and various studies predict at least a 20-35% reduction in the next two decades. Resultantly, the costs of many renewable energy technologies have become competitive with fossil fuel generation costs and in some cases are lower than conventional generation options already (on a levelized cost basis). The further cost reductions expected in future will make it increasingly difficult to motivate the introduction of conventional generation options with a heavy carbon footprint in nearly all jurisdictions.

From a risk perspective CFM's technology and investment team will concentrate on proven technologies that are mature and understood, especially as CFM will be operational in less developed jurisdictions with limits in the capacity of governments, utilities, regulators and financial institutions to absorb unfamiliar technologies. Thus, CFM concentrates on wind, solar and hydro as proven and mature technologies with a downward cost-of-energy trend. CFM does however allocate a small percentage of its investments to other renewable technologies, such as bio-mass, waste-to-energy or green fuels. These will however be the exception rather than the rule and will be judged on a project by project basis. Fundamental to CFM's approach is a cross technology platform with mature technologies to de-risk the portfolio. In all cases, each project will be thoroughly examined as to which of the mentioned technologies can best harness the available renewable resources to mitigate carbon emissions whilst supplying affordable energy and diversifying a given country's energy mix.

## F.3. Environmental, Social Assessment, including Gender Considerations

Describe the main outcome of the environment and social impact assessment. Specify the Environmental and Social Management Plan, and how the project/programme will avoid or mitigate negative impacts at each stage (e.g. preparation, implementation and operation), in accordance with the Fund's Environmental and Social Safeguard (ESS)



standard. Also describe how the gender aspect is considered in accordance with the Fund's Gender Policy and Action Plan.

In accordance with CIO's Responsible Investment Code and Responsible Investment Policy, CIO strives to achieve positive sustainable development outcomes through its investments through two pillars: a 'Do No Harm' and a 'Do Good' pillar. By application of these pillars, CFM is committed to:

- Avoiding and otherwise minimizing and mitigating the impacts of its investments on local communities;
- Safeguarding the environment and sustainably managing natural resources;
- Minimizing CIO's contribution to climate change through its own operations and through investments in the renewable energy sector;
- Protecting the health and safety of all those working on the projects in which CIO invests; (this and the previous three commitments are in CFM's Do No Harm pillar); and
- Maximizing opportunities for positive environmental and social benefits to be realized (the Do Good pillar).

In order to achieve these commitments, CIO is committed to complying with all legislation and applicable Environmental and Social (E&S) requirements for all investments. CIO will invest only into projects when they are expected to be designed, constructed, operated, and maintained in a manner consistent with applicable E&S Requirements. If, at the time of making an investment decision, a project poses a potential reputation risk for the Fund or its investors due to unacceptable Environmental and Social management practices, it will be rejected.

Through the implementation of CFM's Environmental and Social Management System (ESMS), CFM will assess every potential project to determine its E&S risk classification. An assessment will be conducted at the earliest stage of a deal using a checklist to make a rapid assessment of the likely environmental and social impacts of the proposed investment. This high-level screening will also help to identify any activities that are included in the Exclusion Lists of the Development Fund and the Construction Equity Fund. If any excluded activities are included in the proposed investment, the prospective Project Company will be informed that the investment will not be considered further. Based on the results of the deal screen, the investment will be categorized as either A (high or very high); B+ (medium high); B (medium to low); and C (low). These categories align with the IFC's E&S project categorisation (i.e. A; B and C) with the exception of CFM's B+ category which would fall within IFC Category A. Using IFC's categorisation for financial institutions, respectively GCF categorisation, FMO (as an accredited entity) has categorised CIO as category A (IFC PS), respectively I-1 (GCF). This reflects the fact that CIO's portfolio may in future include business activities with significant and adverse environmental and/or social impacts that may be irreversible. This is likely to form only a limited part of CIO's portfolio with CIO's focus being on investments that have limited adverse environmental and social impacts.

The E&S risk categorization and the type of fund being considered will determine the nature and extent of ongoing due diligence activities that will be conducted to further assess the project's E&S risks. These will vary from a desk-based review of information through to a visit of the project location(s) and interviews with relevant stakeholders. It will also determine further E&S requirements, including the need for an international-standard Environmental and Social Impact Assessment (ESIA) and other specialist studies. There is a requirement for each project to develop and implement an Environmental and Social Management Plan (ESMP), which sets out the mitigation measures and management procedures to ensure that negative impacts, as identified in the ESIA, are avoided or mitigated. CFM's ESMS has monitoring and reporting procedures in place to check the implementation of the ESMP throughout the construction and operation phases of each project. Through the Do Good element of CFM's Responsible Investment Framework, CIO will identify opportunities to deliver environmental and social benefits. CFM's approach is focused on aspects including gender equality; affordable and clean energy; industry, innovation and infrastructure; and climate action (See Section E.3 for more information).

The CIO Gender Integration Action Plan exemplifies CFM's commitment, outlined in its Responsible Investment Code and Responsible Investment Policy, to its pillars of 'Do No Harm' and 'Do Good'. This plan outlines five components to

operationalise CIO commitment to gender and social inclusive access to renewable energy specifying the policy and gender infrastructure framework to realise these pillars within each project as well as collectively.

#### F.4. Financial Management and Procurement

*Describe the project/programme's financial management and procurement, including financial accounting, disbursement methods and auditing.*

The CIO Funds will be administered by CFM including drawdowns from and distributions to investors, as well as all fund related accounting will be instigated, overseen and performed by CFM (as asset manager). CFM has an Authorisation and Payments Policy in place, which details the process of authorising and making payments to external parties, including the various levels of internal authorisations required in order to ensure a sound control environment. CFM has controlled access to the CIO Fund bank accounts and is responsible for initiating and releasing payments according to the Authorisation and Payments Policy and generally in accordance with the CIO Funds' governing documentation.

All investor reporting is controlled and managed by CFM. A monthly review of the trial balance is performed by the CFM Finance Manager and quarterly and annual reports are prepared by CFM.

The CIO Funds' and CFM's accounts will be audited annually by PwC. Accounts will be prepared according to the International Financial Reporting Standards (IFRS) and will consist of, among others, a balance sheet, profit and loss account, explanatory notes, auditor's report, overview of project turnover activity, breakdown of management fees paid, breakdown of fund operating costs etc.

CFM will require the project companies to prepare accounts in accordance with appropriately recognised financial reporting standards and each project company is required to appoint an Auditor. CFM's financial reports will be subject to FMO review and approval through FMO's participation on CFM's supervisory board & CFM's Audit, Risk and Compliance Committee.

### G.1. Risk Assessment Summary

As Climate Investor One is a financing facility mandated with the delivery of renewable energy projects in developing countries, the CIO Funds and the portfolio companies in which they seek to invest may face a degree of risks and challenges associated with the strategy and the geographies operated in.

Climate Fund Managers believes that these investment risks and challenges can be broadly summarized across six categories: 1) Implementation; 2) Economic; 3) Financial; 4) Political, Environmental & Social; 5) Technology, and; 6) Governance / Rule of Law.

Other than identified investment risks, CFM has also identified potential enterprise risks normally associated with the business conducted. These enterprise risks include: 1) Counterparty, 2) Legal and regulatory, 3) Reputation, 4) Compliance.

The risk management framework employed by CFM will seek to identify, monitor, and exclude/mitigate perceived risks. Risks so identified will be classified in accordance with their likelihood and scale of impact and the measures put in place to mitigate/exclude such risk materializing. To ensure sufficient executive oversight, risks and procedures in place to prevent such risks occurring will periodically be evaluated and reported to the CFM board of directors and, where relevant, to investors in accordance with proper fund governance procedures.

CFM has an elaborate, internal compliance manual and framework, which includes a number of policies and procedures designed to provide employees guidance on perceived areas of risk and assigning responsibility internally for proper resolution of queries or issues arising, which include (but are not limited to) the financial management & procurement policies and guidelines will be applied to the selected SPV's.

### G.2. Risk Factors and Mitigation Measures

*Please describe financial, technical and operational, social and environmental and other risks that might prevent the project/programme objectives from being achieved. Also describe the proposed risk mitigation measures.*

#### Selected Risk Factor 1

Description	Risk category	Level of impact	Probability of risk occurring
<p><b><u>Implementation</u></b></p> <p><b>Investment Risk</b></p> <p>The risk that the assets in the CFM managed assets' portfolio underperform investment expectations and decline in value.</p>	Technical and operational	Medium (5.1-20% of project value)	Low

#### Mitigation Measure(s)

#### Managed by:

- Robust asset selection processes in accordance with defined investment criteria, including Investment Committee approval
- Comprehensive due diligence procedures
- Oversight by way of representation on project company board

<ul style="list-style-type: none"> <li>- Involvement in asset strategy decisions</li> <li>- Monitoring of asset performance and revenue-drivers</li> <li>- Assessment of risk management framework in place at the asset.</li> <li>- Regular site visits to assets to remain updated on management and operational activities and progress</li> </ul>			
<b>Selected Risk Factor 2</b>			
Description	Risk category	Level of impact	Probability of risk occurring
<p><b><u>Implementation</u></b></p> <p><b>Regulatory Risk</b></p> <p>The risk that changes in the regulatory environment or regulator's attitude will have adverse impact on CFM and the CFM managed assets' operations and/or strategy.</p>	Other	Medium (5.1-20% of project value)	Low
Mitigation Measure(s)			
<p>Managed by:</p> <ul style="list-style-type: none"> <li>- Continual dialogue with regulators and governments</li> <li>- Strong contractual position in the project documents</li> <li>- Dedicated legal and compliance staff</li> <li>- Continued evaluation, review of legislation</li> </ul>			
<b>Selected Risk Factor 3</b>			
Description	Risk category	Level of impact	Probability of risk occurring
<p><b><u>Implementation</u></b></p> <p><b>Operational Risk Including Offshore Operations</b></p> <p>Risk that financial loss may occur through errors, omissions or inadequacy of processing, people, infrastructure and systems of CFM and the relevant CFM managed assets.</p>	Technical and operational	Low (<5% of project value)	Low
Mitigation Measure(s)			
<p>Managed by:</p> <ul style="list-style-type: none"> <li>- Adequate segregation of duties</li> <li>- Documented policies and procedures (updated as required)</li> <li>- Continuous training policy</li> </ul>			
<b>Selected Risk Factor 4</b>			
Description	Risk category	Level of impact	Probability of risk occurring
<p><b><u>Implementation</u></b></p> <p><b>Compliance Risk</b></p>	Other	Medium (5.1-20% of project value)	Low

The risk that CFM and CFM managed vehicles' compliance obligations (regulatory or internal) are not met, including reporting requirements.			
Mitigation Measure(s)			
Managed by: <ul style="list-style-type: none"> <li>- Dedicated legal and compliance staff</li> <li>- Quarterly compliance reporting and testing</li> <li>- Continuous training policy</li> <li>- Formal staff induction training</li> <li>- Documented policies and procedures (periodically updated as required)</li> </ul>			
<b>Selected Risk Factor 5</b>			
Description	Risk category	Level of impact	Probability of risk occurring
<b><u>Implementation</u></b>  <b>Conflicts of Interest Risk</b>  The risk that a conflict of interest occurs in an area of CFM's service provision to its Managed Vehicles, their investors and its relationship with all of its stakeholders whereby CFM (or an investor or other stakeholder of CFM) may benefit whilst possible tangible loss may be caused to (another) investor to whom CFM provides a service.	Technical and operational	Medium (5.1-20% of project value)	Low
Mitigation Measure(s)			
Managed by: <ul style="list-style-type: none"> <li>- CFM has a comprehensive policy established to manage conflicts of interest</li> <li>- Following the identification of a potential conflict, the manager will implement measures to manage and mitigate the identified conflict will be implemented promptly through three basic mechanisms to manage a conflict, namely controlling, avoiding and disclosing.</li> <li>- The appropriate mechanism to manage a conflict will depend on the circumstances and nature of any given conflict.</li> </ul>			
<b>Selected Risk Factor 6</b>			
Description	Risk category	Level of impact	Probability of risk occurring
<b><u>Economic</u></b>  <b>Interest Rate Risk</b>  Risk that cost of borrowing increases (and CEF Tier 2 returns decrease) due to changes in interest rates post refinancing event	Financial	Low (<5% of project value)	Medium
Mitigation Measure(s)			
Managed by:			

- Changes to debt facilities or hedging policy approved by the board.
- Borrowing restrictions within the trust deed and prospectus or information memorandum, investment policy, regulatory requirements, considered when selecting debt facilities.
- Fund board to be advised of the selection process and in the negotiation of terms and conditions of any debt package.
- Where considered appropriate (and authorized by the fund agreements) derivatives used to manage interest rate exposure.
- Calculations confirming adherence to borrowing limits, financial covenants under lending documentation and hedging policies tabled at board meetings

**Selected Risk Factor 7**

Description	Risk category	Level of impact	Probability of risk occurring
<p><b><u>Economic</u></b></p> <p><b>Currency Risk</b></p> <p>The risk that future cash receipts/payments will decrease/increase due to adverse movement in exchange rates.</p>	Financial	Medium (5.1-20% of project value)	Medium

Mitigation Measure(s)

Managed by:

- Most Power Purchase Agreements (PPA's) contracted by CIO at asset level are directly or indirectly denominated in USD leading to an influx of USD (or equivalent) amounts.
- It is therefore estimated that most of Power Purchase Agreements will be indexed to USD currencies. If deemed desirable / necessary, CIO has the option to explore hedging opportunities made available by local markets or by TCX (the Currency Exchange, a hedging mechanism that enjoys wide support from the DFI community including EBRD and KfW)
- In principle, CFM may only enter into futures, options or other derivative transactions for the purpose of, and only to the extent required for, hedging currency positions on non-USD Investments. CFM are not obliged to do this, however
- A hedging policy may be adopted in respect of non-USD currency commitments for imminent acquisitions or divestments, considered on a project-by-project basis or hedging of short-term distributions
- Distributions and other cash flows from assets are not hedged

**Selected Risk Factor 8**

Description	Risk category	Level of impact	Probability of risk occurring
<p><b><u>Financial</u></b></p> <p><b>Financial Close Risk</b></p> <p>Limited access to finance and protracted timelines to agree terms prevent projects reaching financial close and subsequently refinancing</p>	Financial	Low (<5% of project value)	Low

Mitigation Measure(s)

Managed by:

- Providing a one-stop-shop for finance at development, construction and refinance phases to avoid protracted negotiations with multiple parties.
- Match-making projects with suitable local, international or public finance.

**Selected Risk Factor 9**

Description	Risk category	Level of impact	Probability of risk occurring
<p><b><u>Financial</u></b></p> <p><b>Exit Risk</b></p> <p>The risk that CFM is not able to dispose of all of its assets in full .</p>	Financial	Low (<5% of project value)	Low

Mitigation Measure(s)

Managed by:

- Development of high quality projects
- M&A activity in investment regions shows appetite for greenfield renewable energy infrastructure.
- Active divestment opportunity screening throughout the lifetime of a project

**Selected Risk Factor 10**

Description	Risk category	Level of impact	Probability of risk occurring
<p><b><u>Financial</u></b></p> <p><b>Counterparty / Credit Risk</b></p> <p>The risk that a counterparty (the other party with whom an investment or borrowing transaction is made) will fail to perform contractual obligations and default in either whole or part under a contract.</p>	Financial	Low (<5% of project value)	Medium

Mitigation Measure(s)

Managed by:

- Risk assessed as part of due diligence process, preparing the underlying investment proposal and reviewed on an ongoing basis
- International credit ratings checked where relevant

**Selected Risk Factor 11**

Description	Risk category	Level of impact	Probability of risk occurring
<p><b><u>Financial</u></b></p> <p><b>Liquidity Risk</b></p> <p>The risk that CFM and a CFM managed asset does not have sufficient cash to meet forward commitments.</p>	Financial	Medium (5.1-20% of project value)	Low



Meaning that revenues on the manager or project levels are below expenses and there is a lack of liquidity.			
Mitigation Measure(s)			
<p>Managed by:</p> <ul style="list-style-type: none"> <li>- Detailed 5-year cash forecast updated monthly</li> <li>- "Forward commitments test" and liquidity limits under which available liquidity must not fall.</li> </ul>			
<b>Selected Risk Factor 12</b>			
Description	Risk category	Level of impact	Probability of risk occurring
<p><b><u>Political</u></b></p> <p><b>Political Risk</b></p> <p>Risk that sovereign rights exercised by governments are contrary to the rights of the Fund, or project company under the relevant agreements.</p>	Other	High (>20% of project value)	High
Mitigation Measure(s)			
<p>Managed by:</p> <ul style="list-style-type: none"> <li>- Virtue of donor as Official Development Assistance (ODA) providers and DFI funding</li> <li>- Acquiring Political Risk Guarantee (World Bank, MIGA) when specific events heighten the political risk in a project company</li> <li>- Government Letter of Support</li> <li>- Put Call Option Agreement's (PCOA)</li> <li>- Offtake Agreement</li> </ul> <p>GCF funding would be complimentary to already established ODA providers (USAID, Dutch Government) in the Development Fund and T1 Construction Equity Fund of CIO, in providing additional political risk mitigation capabilities on the back of being established under the framework of the UNFCCC.</p>			
<b>Selected Risk Factor 13</b>			
Description	Risk category	Level of impact	Probability of risk occurring
<p><b><u>Environmental &amp; Social</u></b></p> <p><b>Environmental and Social Risk</b></p> <p>Impact on natural resources, employees, investors, customers and community by the business activities of CFM or a CFM managed asset fund and its investments.</p>	Social and environmental	High (>20% of project value)	Medium
Mitigation Measure(s)			
<p>Managed by:</p> <ul style="list-style-type: none"> <li>- The application of FMO's emerging markets experience in the design of CFM's Environmental and Social Management System, which will apply to all CIO investments</li> <li>- Adherence to international Environmental and Social standards as well as local legal requirements.</li> </ul>			

- Disclosure of project-related information in accordance with local legal requirements as well as the IFC Performance Standards (PS).
- FMO reputation management and stakeholder engagement experience
- Dedicated E&S specialist to implement CFM ESG due diligence processes at all stages.
- Monitoring of implementation of the ESMS throughout the lifecycle of any project.
- Implementation of GIAP with particular focus on gender responsive stakeholder engagement and consultation as well as gender responsive grievance mechanisms

**Selected Risk Factor 14**

Description	Risk category	Level of impact	Probability of risk occurring
<p><b><u>Technology</u></b></p> <p><b>Technology Risk</b></p> <p>Risk of technology underperforming through inadequate natural resources, and / or inadequate maintenance.</p>	Other	Low (<5% of project value)	Low

Mitigation Measure(s)

Managed by:

- Risk assessed as part of due diligence and preparing the underlying investment proposal
- Investing in proven technologies from known / trusted manufacturers
- Contracting independent experts to assess viability of resource potential of project sites
- Securing EPC contracts
- Securing OEM maintenance contracts

**Selected Risk Factor 15**

Description	Risk category	Level of impact	Probability of risk occurring
<p><b><u>Technology</u></b></p> <p><b>Construction Risk</b></p> <p>Risk that there are significant issues during project construction and potential delays and construction overruns.</p>	Technical and operational	Medium (5.1-20% of project value)	Low

Mitigation Measure(s)

Managed by:

- High quality planning and project management
- Appropriate contractual arrangements and risk allocation mechanisms (including guarantees and liquidated damages)
- Securing high quality EPC and Balance of Plant contractors with appropriate track record

**Selected Risk Factor 16**

Description	Risk category	Level of impact	Probability of risk occurring
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<p><b><u>Governance / Rule of Law</u></b></p> <p><b>Good Governance / Rule of Law / Corruption</b></p> <p>Risk of failed governance at the project company level; a counterparty or employee acting corruptly or fraudulently or in breach of law.</p>	<p>Other</p>	<p>Low (&lt;5% of project value)</p>	<p>Low</p>
<p>Mitigation Measure(s)</p>			
<p>Managed by:</p> <ul style="list-style-type: none"> <li>- A focus on good governance at both the fund and project level which will benefit local counterparties through strict adherence to the rule of law and in mitigating corruption risk</li> <li>- Existence of robust and clear compliance policies and procedures including KYC, Anti Money Laundering and Counter-Terrorist Financing and Anti-Corruption</li> <li>- Ensuring appropriate fraud insurance cover</li> <li>- Ongoing KYC, internal sanctions list and anti-money laundering and counter-terrorist financing checks and verifications</li> </ul>			
<p><b>Other Potential Risks in the Horizon</b></p>			
<p><i>Please describe other potential issues which will be monitored as “emerging risks” during the life of the projects (i.e., issues that have not yet raised to the level of “risk factor” but which will need monitoring). This could include issues related to external stakeholders such as project beneficiaries or the pool of potential contractors.</i></p>			

## H.1. Logic Framework.

Please specify the logic framework in accordance with the GCF's [Performance Measurement Framework](#) under the [Results Management Framework](#).

### H.1.1. Paradigm Shift Objectives and Impacts at the Fund level<sup>19</sup>

#### Paradigm shift objectives

<i>Shift to low-emission sustainable development pathways</i>	<p>CIO seeks to create a paradigm shift in the way renewable energy projects in developing countries are funded by catalysing private sector, commercial and institutional capital into such projects by virtue of CIO's innovative structure. CIO is able to attract capital into renewable energy expansion in emerging markets that would not otherwise be invested. This is necessary to meet the large funding needs to reach the Paris Agreement goal of keeping temperature rise below 2°C.</p> <p>Furthermore, CIO accelerates and increases the success probability of renewable energy projects by providing a simplified whole-of-life funding solution to Project Companies along with CFM's active management and development support / assistance to Project Companies. Hence CIO's transformational impact is both in the way capital for climate change mitigation projects is raised and the way projects are funded. CIO will not only create a significant amount of clean energy capacity by virtue of its investments but also add a new instrument to the development and climate finance toolbox.</p>
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Expected Result	Indicator	Means of Verification (MoV)	Base line	Target		Assumptions
				Mid-term (end of 2027)	Final (end of 2037)	
						<b>All Mid-targets are based on approximately 65% of capital invested</b>

#### Fund-level impacts in the 11 GCF-earmarked countries

M1.0 Reduced emissions through increased low-emission energy access and power generation	1.1Tonnes of carbon dioxide equivalent (tCO <sub>2</sub> eq) reduced or avoided	Annual Report	0	34.92 million tCO <sub>2</sub> eq	53.73 million tCO <sub>2</sub> eq	<ul style="list-style-type: none"> <li>Target(s) based on FMO Energy Impact Scoring Tool calculations</li> <li>Baseline change as estimated by the IFI Harmonized Emissions Factor at year of project contracting.</li> <li>Annual GHG avoided is 2.69 million tCO<sub>2</sub>eq/year for all projects, assuming all CEF capital invested and recycled 3.37 times.</li> </ul>
Volume of finance leveraged (or mobilized) by CIO & co-	Total Co-financing leveraged at final close of CIO	Annual Report	0	USD 430 million	-	<ul style="list-style-type: none"> <li>USD 400 million in Tiers 2&amp;3</li> <li>USD 20 million in Tier 1</li> <li>USD 10 million in the Development Fund</li> </ul>

<sup>19</sup> Information on the Fund's expected results and indicators can be found in its Performance Measurement Frameworks available at the following link (Please note that some indicators are under refinement): [http://www.gcfund.org/fileadmin/00\\_customer/documents/Operations/5.3\\_Initial\\_PMF.pdf](http://www.gcfund.org/fileadmin/00_customer/documents/Operations/5.3_Initial_PMF.pdf)

financiers at project level	Total capital leveraged at end of fund life	Annual Report	0	-	USD 2,129 million	<ul style="list-style-type: none"> <li>• USD 1,453 million in CIO <ul style="list-style-type: none"> <li>◦ Development Fund USD 38 million</li> <li>◦ CEF USD 1,415 million</li> </ul> </li> <li>• USD 676 million from 3<sup>rd</sup> parties in the development and construction phases.</li> </ul>
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H.1.2. Outcomes, Outputs, Activities and Inputs at Project/Programme level						
Expected Result	Indicator	Means of Verification (MoV)	Base line	Target		Assumptions
				Mid-term (if applicable)	Final	
<b>Project/programme outcomes</b>	<b>Outcomes that contribute to Fund-level impacts</b>					
M6.0 Increased number of small, medium and large low-emission power suppliers	6.1 Number of IPPs constructed	Annual Report	0	13	20	<ul style="list-style-type: none"> <li>• Projects constructed in the 11 GCF-earmarked countries</li> <li>• Total size of CEF is USD 500 million</li> <li>• Capital is recycled with a factor of 3.37</li> <li>• CEF invests USD 85 million on average per project</li> </ul>
	6.2 Number of individuals and households with improved access to low-emission energy sources	Annual Report	0	5.30 m. individuals; 1.20 m. households	8.15 m individuals; 1.85 m. households	<ul style="list-style-type: none"> <li>• Individuals served per USD 1 million invested is based on current pipeline</li> <li>• Household size is assumed at 4.4 members per household.</li> <li>• The same number of male and female beneficiaries is assumed.</li> </ul>
	6.3 Additional MW's delivered to grid	Annual Report	0	1,053 MW	1,620 MW	<p>CEF investment of 75% of total equity is assumed.</p> <ul style="list-style-type: none"> <li>• Capital recycled with a factor of 3.37</li> </ul>
<b>Project/programme outputs</b>	<b>Outputs that contribute to outcomes</b>					
<b>Component 1</b>	<b>Development Fund</b>					
Output 1.1 Renewable energy projects	Number of renewable energy	Annual Report	0	13	20	<ul style="list-style-type: none"> <li>• Average development loan of USD 1.5 million per project</li> </ul>

successfully developed and reached financial close	projects reached Financial Close					<ul style="list-style-type: none"> <li>Development Fund loan at 50% of development costs.</li> <li>Projects identified, financed and successfully developed.</li> </ul>
Output 1.2 Accelerated installation of renewable energy capacity and development of new markets for renewable energy	Time saved in comparison to comparable transactions in similar region	Annual Report	0	25% per project in days, *13 projects	25% per project in days, *20 projects	<ul style="list-style-type: none"> <li>20 projects developed over the lifetime of the Development Fund</li> <li>Time saved for each project</li> <li>Project specific benchmarks per country and per technology will be developed, as per iTAP review discussion</li> </ul>
<b>Component 2</b>	<b>Construction Equity Fund</b>					
Output 2.1. Increased number of small, medium and large low-emission power suppliers	Number of renewable energy projects reached COD	Annual Report	0	13	20	<ul style="list-style-type: none"> <li>Projects constructed in the 11 GCF-earmarked countries</li> <li>Total size of CEF is USD 500 million</li> <li>Capital is recycled with a factor of 3.37</li> <li>CEF invests USD 85 million on average per project</li> </ul>
	Green energy produced	Annual Report	0	56,650 GWh	87,160 GWh	<ul style="list-style-type: none"> <li>Production per USD 1 million invested is based on current pipeline</li> <li>CEF investment assumptions as above</li> <li>Indicators is for full lifetime of all assets, assumed to be 20 years</li> <li>Yearly production of all assets combined is 4,360 GWh/year</li> </ul>
Output 2.2 Construction and Operational & Maintenance Stage Jobs	Number of people employed	Annual Report	0	17,200	26,460	<ul style="list-style-type: none"> <li>Jobs created per 1 MW installed based on IRENA data</li> <li>CEF investment assumptions as above.</li> <li>Includes MCI and O&amp;M jobs.</li> <li>Please note that the equipment is not manufactured in the country of the project.</li> <li>The indicator will be further refined throughout the implementation period.</li> </ul>
<b>Activities</b>	<b>Description</b>		<b>Inputs</b>		<b>Description</b>	
<b>Component 1</b>	<b>Development Fund</b>					

1.1.1 Capital raising for the Development Fund	CFM raising concessional donor capital for the Development Fund	1.1.1.1 Donor capital raised on the 1 <sup>st</sup> and 3 <sup>rd</sup> close of the Fund.	Raising donor capital to provide scarce development funding for the highest risk stage of a renewable energy project. Activity Completed.
		1.1.1.2 Fundraising completed at the final close of the fund.	Completing fund raising and scaling the Development Fund to provide funding for more renewable energy projects.
1.1.2 Project Sourcing, due diligence and approval	CFM identifies investee projects	1.1.2.1 Identifying potential investment opportunities	The CFM Investments Team identifies project opportunities and carries out an initial assessment, which is presented to the CFM IC.
		1.1.2.2 Due diligence	The CFM Investments Team carries out extensive DD on the project opportunity and third-party co-developers and sponsors
		1.1.2.3 Project approval	Projects are approved by the Development Fund IC
1.1.3 Providing development loans	Providing development loans to Project Companies	1.1.3.1 Providing the loan to fund a development budget	The Development Fund provides development loans as agreed upon in the JDA to fund the project development budget alongside 3 <sup>rd</sup> party co-developer(s)
1.1.4 Project development and project development support	CFM Team co-develops the project alongside other (local) project co-developers and co-sponsors	1.1.4.1 Establishing an SPV at the project's location and development support / assistance	Once a Joint Development Agreement is signed a SPV is established in the country of the project. CFM manages the SPV via a seat(s) in the SPV Board. CFM deploys the expertise of its team to aid project development
		1.1.4.2 Further project assessment	The resource, terrain and other factors are assessed further to plan project construction. An Environmental and Social Impact Assessment is conducted
		1.1.4.3 Obtaining permits and land	Land and various legal and regulatory permits are obtained
		1.1.4.4 Signing a PPA	A Power Purchase Agreement is signed with the off-taker
		1.1.4.5 Stakeholder engagement and Do Good	Local stakeholder engagement is conducted and a Do Good programme for the local community is developed



		programme development	
		1.1.4.6 Contracting EPC and OEM contractors	Contractor proposals are evaluated and the contractors are selected.
1.2.1 Accelerating Project Development Process	By providing development loans and future equity financing (subject to successful development and CEF IC approval) project timelines are reduced	1.2.1.1 Providing whole-of-life financing solution	<p>By providing a whole-of-life funding solution project developers do not have to inefficiently spend their time and resources on fundraising for construction capital and can focus on development. Furthermore, complex multi-lender negotiations are not needed with CIO's financing, which reduces development timelines.</p> <p>In so doing CIO expects to develop projects faster than otherwise possible and observed in comparable markets and projects. Also In some of the target countries CIO expects to construct the first renewable energy projects of their kind and the first IPPs thus kickstarting sector development and accelerating the expansion of renewable energy in developing countries.</p>
<b>Component 2</b>	<b>Construction Equity Fund</b>		
2.1.1 Capital raising for the Construction Equity Fund	To provide construction equity capital to projects CFM will raise CEF Tier 2 and Tier 3 capital from commercial and institutional investors to add to the GCF and other Tier 1 Donor commitments in a 20:40:40 proportion between Tier 1: Tier 2: Tier 3: respectively.	2.1.1.1 CEF capital raised during first through third fund close	Raising capital in the three tiers of CEF and in so providing the CIO concept and being able to invest in renewable energy projects
		2.1.1.2 CEF capital raised on final fund close	Scaling CEF to invest in more renewable energy projects and fortify the CIO concept as a new tool in the development and climate finance toolbox.
2.1(2).2 Project Investment and Construction	The CEF will provide all-equity financing to construct the project alongside 3 <sup>rd</sup> party co-developer(s) and sponsors. CFM manages the construction of the project along with co-developer(s)	2.1(2).2.1 Equity capital is invested	CEF provides Equity capital to construct the project
		2.1(2).2.2 Project is constructed	CFM and the co-developer co-manage the construction process

<p>2.1(2).3 Project Refinancing and exit</p>	<p>Post-construction the project is refinanced with debt to replenish CEF capital and reinvest into other projects. Eventually CEF exits its equity stake in the project.</p>	<p>2.1(2).3.1</p>	<p>After a period of time post construction the all-equity funded project will be refinanced with debt to reduce cost of capital. It is estimated that 50 – 80% of equity will be replaced with debt. This will allow CEF to replenish its undrawn capital and reinvest into more projects, creating more capacity and impact. After a period post refinancing CEF will exit its equity position, adding more capital back to CEF and reinvesting it into more projects.</p>
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## H.2. Arrangements for Monitoring, Reporting and Evaluation

Besides the arrangements (e.g. semi-annual performance reports) laid out in AMA, please provide project/programme specific institutional setting and implementation arrangements for monitoring and reporting and evaluation. Please indicate how the interim/mid-term and final evaluations will be organized, including the timing.

### Monitoring & Evaluation

The midterm(s) and final evaluation will be outsourced to an independent evaluator after 5, 10, 15 and 20 years, respectively.

#### *Midterm Evaluations*

At the moment of the first midterm evaluation (5 years), it is not expected that significant development results will have been achieved, since the portfolio will not have reached full maturity at this point. Therefore, the implementation of the investment strategy will be the focus of the evaluation at this point.

Subsequent midterm evaluations thereafter will focus on the extent to which CIO is achieving its goals with regards to number of projects developed & implemented, GHG avoidance, energy production, installed capacity, private sector capital catalysed and amount of people served.

#### *Final Evaluation*

For the final evaluation (20 years) it is expected that development effects will have been fully realized. Therefore, an ex-post effectiveness study will be outsourced for the CIO Construction Equity Fund. The evaluation will be based on the DAC criteria which focuses on relevance, effectiveness, efficiency, impact and sustainability.

- **Relevance:** the extent to which the investments are suited to the priorities and policies of CIO
- **Effectiveness:** the extent to which the objectives of CIO were achieved
- **Efficiency:** the extent to which activities were cost-efficient and timely
- **Impact:** determining the positive and negative changes produced by CIO, directly or indirectly, intended or unintended.
  - The focus will be on local social, economic, environmental and other development indicators as mentioned in the previous section (at output, outcome and impact level).
  - Baseline and end line data will be used.
  - It will be evaluated to the extent that these results can be attributed to CIO. There will be other factors which influence the results which need to be mapped.
  - If applicable, investments might be benchmarked against other similar investments in the region.

- **Sustainability:** the extent to which the investments of CIO are likely to continue operating after CIO has exited its investments.

#### *Ex-Post Effectiveness Study*

The study will include several case studies. Modelled result data used for the case study will be verified and compared with existing data for the indicator 'total people reached' (e.g. amount of people and to what extent these relate to those earning below the poverty lines). Special attention will be given to unintended effects (e.g. was there opposition from surrounding communities and how was this dealt with, were there issues with resettlement, etc.).

For the case studies' demonstration effects (examples of scaling up and replication) will be evaluated with qualitative methods. Finally, the final evaluation will look at the extent to which CIO has been additional in the field of energy finance as a whole.

#### **Reporting**

Selected monitoring reports will be provided on a quarterly basis to all Donors, including information on the investments done and financial performance. On an annual basis a report will be provided to the Donors including audited financial accounts and detailed information on investments, investment valuations, fees and the impact indicators.

#### *Financial Reporting*

The financial year of the Fund shall begin on 1 January and end on 31 December of each year. The first financial year of the Fund will begin at First Closing and will end on 31 December 2016.

Within sixty (60) calendar days after the end of each calendar quarter ended 31 March, 30 June and 30 September, CFM shall prepare and provide all Investors with a quarterly report consisting of, inter alia:

- An unaudited profit and loss account, balance sheet and cash flow statement of the programme for the preceding quarter;
- Explanatory notes;
- An overview of the investment activity undertaken by the programme within the reporting period;
- An overview of each project company, including:
  - i. A description of the Project Company's business;
  - ii. The economic interest of the programme in the Project Company;
  - iii. The percentage of the Project Company owned by the Fund;
  - iv. A discussion of recent key events;
  - v. Selected financial information;
  - vi. If the Investment has been repaid or realized, the realized liquidation or disposal proceeds; and,
- Quarterly capital account statements.

Within one hundred and twenty (120) calendar days after the end of each financial year the Manager shall prepare and provide all Investors with an annual report (the "Annual Report") consisting of, inter alia:

- The annual accounts of the programme, comprising at least a balance sheet, a profit and loss account and explanatory notes thereto, as audited by the Auditor;
- A report of the Auditor on its findings resulting from its audit of the annual accounts;
- An overview of each Project Company acquired, sold or otherwise disposed of during the reporting period;
- A valuation of each Investment;
- A report on KPI's;

- A breakdown of fees received by CFM during the reporting period;
- A breakdown of the programme's operating costs during the reporting period;
- A schedule of Drawdowns and distributions effectuated during the reporting period;
- The total amount of the Undrawn Commitments as per the end of the reporting period; and,
- A report detailing the activities of the programme during the reporting period.

### *Environmental & Social Reporting*

An important aspect of CFM's risk management process is the ongoing monitoring and review of each investment. Depending on which Fund that an investment is drawing from (Development or Construction Equity), different monitoring requirements will be applied. Monitoring is commensurate with the risk categorisation, with physical visits to the location(s) of higher risk projects during construction.

All project companies drawing from the Construction Equity Fund are also required to monitor the performance of any contractors employed at the project site(s) and to participate in a Management Review held by CFM on a periodic basis during the lifecycle of the Fund to review overall E&S performance.

In addition, CFM will also ensure that any legal requirements for monitoring, for example that may be included in permits and licences for development, construction and operation, are incorporated into the project monitoring and evaluation plan. CFM requires all projects in receipt of Construction Equity Fund are to report in accordance with defined key performance indicators (presented below). In addition, the performance measurement framework indicators presented in H1.1 and H1.2 will be incorporated into fund-level and project-level monitoring and evaluation activities that will be managed by CFM.

### *Calculation and Verification of Numerical Impact Indicators for GCF*

CIO has four main numerical impact indicators: GHG emissions avoided, people reached, private sector funding leveraged and jobs created. These indicators will be calculated, verified and reported as follows:

#### *Additional Clean Energy Capacity Installed:*

This will be reported ex-ante according to estimates in Final Investment Proposals, Project Contracts and ex-post after construction according to project company report.

#### *Additional Clean Energy Suppliers:*

The number of additional suppliers and therefore projects will be reported as they are contracted and constructed as well as aggregate numbers at least annually.

#### *GHG Emissions Avoided & People Reached:*

**Calculation:** The numbers will be calculated using the FMO Energy Impact Scoring Tool, inputting electricity production estimates from the time the project is approved by the Development Fund Investment Committee to the time construction is completed. The estimates of electricity production can change as the development and construction process progresses and will be updated annually. Once the project is operational actual electricity produced will be used to estimate the indicators.

**Verification:** The electricity production estimates will be provided by the relevant technical employee in the project company to CFM. CFM will then calculate the impact indicators using the FMO Energy Impact Scoring Tool and report them to FMO's Development Impact and Sustainability team of the Strategy department. FMO will then be requested to verify that the model is used correctly and that the numbers are accurate.

#### *Private Sector Funding Catalysed and Jobs Created*

**Calculation:** Ex-ante estimates of these indicators will be done at CFM level for private sector funding catalysed and at project company level for jobs created. Annual reports include commitments of DF and CEF for contracted and Development Fund Investment committee approved projects as well as any disbursements from both funds to projects under development or construction. The reports will include the shares of the three tiers of CEF as well as funding contributed by private third-party sponsors and banks. It is often not possible to provide accurate job estimates prior to contracting the project hence ex-ante estimates of jobs created per project will be made available as soon as the project company can provide that information. Ex-post, the number of people hired (and the gender proportions) will be reported to GCF annually.

**Verification:** Private sector funding catalysed will be provided in the Final Investment Proposal document of each investment as well as the Joint Development Agreement and Shareholding Agreements between the developer and CIO. The number of people employed in the project company at all stages of the projects' lifecycle will be provided and verified by the relevant staff in the project company.

Performance will be reported to its various stakeholders, including investors, donors, the CIO investment committees and the CI One Funds Advisory Board.

#### *Key Performance Indicators & Performance Reporting*

CFM has established requirements for performance reporting, at both the programme level and for individual projects. The content of these reports is defined below.

### **1. Programme-Level Annual Environmental and Social Performance Report**

- Name of the responsible E&S Manager;
- Status / changes in E&S Management System;
- Difficulties and/or constraints related to the implementation of E&S Management System;
- Overview of current pipeline, status and expected categorisation;
- Performance against leading and lagging indicators as detailed in Section 8 of this ESMS;
- E&S trainings undertaken/planned; and
- Exclusion List: confirmation that no investments are undertaken in any of the activities listed in the Exclusion List (or, in cases where a Project Company is found to be partly active in activities included on the Exclusion List, submit a plan to phase out such activities).

### **2. Project-Level Annual Environmental and Social Performance Report**

- Categorisation of each investment and rationale behind that categorisation;
- Summary assessment of E&S risks identified;
- For High Risk Activities (category A and B+), summary of qualified external E&S assessment undertaken and reference to qualification of external expert undertaking assessment;

- Status of E&S performance to date (including performance against the above referenced KPIs), implementation of E&S Management System and agreed E&S Action Plan (if applicable);
- CO<sub>2</sub> equivalent emissions (generated and / or avoided, reported in accordance with requirements set out in IFC PS 3);
- Number of People served by the power generated by the project;
- Employment data, as follows:
  - Total number and breakdown of staff employed
  - Direct Employment (total number)
  - Permanent number of males
  - Permanent number of females:
  - Details of any retrenchment of employees in the reporting period in terms of number of employees affected and retrenchment plan (copy to be provided with report).
- Date of the last site visit for E&S purposes.
- Optional information that can also be reported by each Project Company:
  - Any improvements in performance with a clear environmental benefit; and
  - Any improvements in performance with a clear social benefit.

### 3. Construction Equity Fund Quarterly Environmental and Social Performance Report

All of CFM's Construction Equity Fund projects are required to monitor and report against the following key performance indicators on a quarterly basis.

<u>Health &amp; Safety</u>	<u>Environment</u>	<u>Social / Labour</u>
<ul style="list-style-type: none"> <li>- Number and severity of injuries</li> <li>- Number and nature of incidents involving damage to plant or property</li> <li>- Number and nature of near misses</li> <li>- Number of hazardous situations/safety observations</li> <li>- Number of persons inducted;</li> <li>- Number of E&amp;S training sessions</li> <li>- Lost time injury frequency, incidence, and severity rates</li> </ul>	<ul style="list-style-type: none"> <li>- Number and nature of environmental incidents</li> <li>- Energy and water consumption</li> <li>- Volume of solid waste disposal</li> <li>- Liquid effluents discharge</li> <li>- Emissions to air</li> <li>- Improvements in performance with a clear environmental benefit</li> </ul>	<ul style="list-style-type: none"> <li>- Numbers of complaints and grievances received by internal and external stakeholders</li> <li>- Improvements in performance with a clear social benefit</li> <li>- Average working hours and wages paid</li> <li>- Incidences of child labour;</li> <li>- Incidences of disciplinary and discrimination complaints</li> <li>- Employee demographics matching access to training, jobs, and wages</li> </ul>

#### Reporting from FMO (the Accredited Entity) to GCF:

##### *Annual Performance Report*

On the status of CIO throughout the relevant reporting period, including a narrative report on implementation progress based on the logical framework submitted in the Funding Proposal and considerations on the ongoing performance of the

CIO against the GCF investment framework criteria, including updates on the indicators as per the guidance provided by the GCF results management framework, and a report on ESS as well as gender. The APR shall be submitted to the Secretariat on an annual basis for the period ending on 31 December within sixty (60) days after the end of the relevant annual period, with the first APR required to be submitted following the end of the calendar year after the Effective Date, and the final APR (project completion report) will be submitted within six (6) months after the end of the relevant reporting period;

The Annual Performance Report should also provide the relevant breakdowns of CIO investments in GCF earmarked countries by energy sector and countries benefited, specifying the amount of funding provided (GCF and total) and progress towards the relevant indicators (such as GHG emissions reduction by country and sector, capacity installed by sector and country, electricity generated by sector and country, jobs created by sector and country, among other indicators./

#### *Interim and Final Evaluation Reports*

The Interim and Final Evaluations reports will set out any necessary corrective measures (in the case of interim reports), an assessment of the performance of CIO against GCF investment framework criteria, including financial/economic performances as part of the efficiency and effectiveness criterion, as well as the sustainability and scalability of results and impacts and lessons learned, during the relevant period. The Interim and Final Evaluation Reports shall be prepared by an independent evaluator selected by FMO (the Accredited Entity) or by an independent evaluation unit/office of FMO. The reports will be submitted on the dates or according to the preset schedule and copies of these reports shall be forwarded by the FMO to relevant NDAs or Focal Points for information.

#### *Annual Self-Assessment Report*

A self-assessment of the AE's compliance with the Fund's Fiduciary Principles and Standards, ESS and Gender Policy; and a report on any action carried out or planned to be carried out in relation to the same.

#### *Financial Reporting*

FMO will provide to GCF copies of all financial statements and annual audited reports of the CIO received by FMO from CFM, which shall not be later than three (3) months after the end of the Fiscal Year for unaudited financial statements and five (5) months after the end of the Fiscal Year for audited reports. FMO shall also make available to GCF, in accordance with its policies and procedures, copies of all relevant financial information of CIO, which shall not be later than three (3) months after the end of the Fiscal Year for unaudited financial statements and five (5) months after the end of the Fiscal Year for audited reports.



## I. Supporting Documents for Funding Proposal

- NDA No-objection Letter – *Annex 1*
- Feasibility Study
- Integrated Financial Model that provides sensitivity analysis of critical elements (xls format, if applicable)
- Confirmation letter or letter of commitment for co-financing commitment (If applicable)
- Project/Programme Confirmation/Term Sheet (including cost/budget breakdown, disbursement schedule, etc.)
- Environmental and Social Impact Assessment (ESIA) or Environmental and Social Management Plan (If applicable) – *Annex 2*
- Appraisal Report or Due Diligence Report with recommendations (If applicable)
- Evaluation Report of the baseline project (If applicable)
- Map indicating the location of the project/programme
- Timetable of project/programme implementation included in section C.8.

**Annexes:**

Annex 1: NDA No-Objection Letters (11)

Annex 2: CIO Environmental & Social Management System Disclosure

Annex 3: Gender Integration Action Plan

*\* Please note that a funding proposal will be considered complete only upon receipt of all the applicable supporting documents.*



## Green Climate Fund – Funding Proposal Annexes

### Annex 1: NDA No-Objection Letters (11)

Annex 1: NDA No-Objection Letters (11)

Annex 2: CIO Environmental & Social Management System Disclosure

Annex 3: Gender Integration Action Plan

12 Avril 2018

To: The Green Climate Fund ("GCF")  
Songdo International Business District  
175, Art Center-daero  
Yeonsu-gu, Incheon 406-840  
Republic of Korea

**Re: Funding proposal for the GCF by Nederlandse Financierings-Maatschappij voor  
Ontwikkelingslanden N.V. ("FMO") regarding Climate Investor One.**

Dear Madam, Sir,

We refer to the programme Climate Investor One in Burundi as included in the funding proposal submitted by Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. ("FMO") to us in March 2017.

The undersigned is the duly authorized representative of NTAHORWAMIYE Aimé Claude focal point, the National Designated Authority / focal point of Burundi.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The government of Burundi has no-objection to the programme as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with the Burundi national priorities, strategies and plans;
- (c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

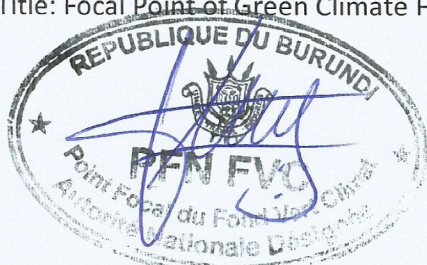
We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

\_\_\_\_\_  
Name: NTAHORWAMIYE Aimé Claude

Title: Focal Point of Green Climate Fund





8 June 2018

To: The Green Climate Fund ("GCF")  
Songdo International Business District  
175, Art Center-daero  
Yeonsu-gu, Incheon 406-840  
Republic of Korea

**Re: Funding proposal for the Green Climate Fund by NederlandseFinancierings-  
MaatschappijvoorOntwikkelingslanden N.V. ("FMO") regarding Climate Investor One.**

Dear Madam, Sir,

We refer to the programme **Climate Investor One** in Cameroon as included in the funding proposal submitted by NederlandseFinancierings-MaatschappijvoorOntwikkelingslanden N.V. ("FMO") to us in June 2018.

The undersigned is the duly authorized representative of the Ministry of Environment, Protection of Nature and Sustainable Development (MINEPDED) and the National Designated Authority of Cameroon.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The government of Cameroonhas no-objection to the programme as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with the Cameroon national priorities, strategies and plans;
- (c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of theprogramme.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,



Name:Mr. Valentin WagnounTchonkap

Title:Inspector No. 1, General Inspection

REPUBLIQUE DE DJIBOUTI  
UNITE – ÉGALITE – PAIX

MINISTÈRE DE L'HABITAT,  
DE L'URBANISME ET DE  
L'ENVIRONNEMENT

LE SECRÉTAIRE GÉNÉRAL

N° 391 / SG/2018  
Djibouti, le 12.0 SEPT 2018



جمهورية جيبوتي  
الوحدة - المساواة - السلام

وزارة الإسكان والتعمير والبيئة

الأمين العام

رقم  
جيبوتي في

To: The Executive Director  
Green Climate Fund ("GCF")  
Songdo International Business District  
175, Art Center- Daero  
Yeonsu-gu, Incheon 22004  
Republic of Korea

Re: Funding proposal for the GCF by Nederlandse Financierings-Maatschappij Voor Ontwikkelingslanden N.V.(FMO) regarding Climate Investor One (CIO)

Dear Madam, Sir,

We refer to the programme Climate Investor One in Djibouti project as included in the funding proposal submitted by Nederlandse Financierings-Maatschappij Voor Ontwikkelingslanden N.V.(FMO) to us on January 2017.

The undersigned is the duly authorized representative of Ministère de l'Habitat, de l'Urbanisme et de l'Environnement, the National Designated Authority/focal point of Djibouti.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the project as included in the funding proposal.

By communicating our no-objection, it is implied that:

- The government of Djibouti has no-objection to the project as included in the funding proposal;
- The project as included in the funding proposal is in conformity with Djibouti's national priorities, strategies and plans;
- In accordance with the GCF's environmental and social safeguards, the project as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the project as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,



The image shows a handwritten signature in blue ink over a circular official stamp. The stamp is blue and contains the text: "MINISTÈRE DE L'HABITAT, DE L'URBANISME ET DE L'ENVIRONNEMENT" around the top edge, "SECRETARIAT GÉNÉRAL" in the center, and "REPUBLIQUE DE DJIBOUTI" around the bottom edge. There are two stars on either side of the center text.

**Dini Abdallah Omar**

**Secrétaire Général**

**Ministère de l'Habitat, de l'Urbanisme et de l'Environnement**

**GCF Focal Point-Djibouti**





MINISTRY OF FINANCE OF THE REPUBLIC OF INDONESIA  
FISCAL POLICY AGENCY

R.M. NOTOHAMIPRODJO BUILDING 2<sup>ND</sup> FLOOR JALAN DR. WAHIDIN RAYA NOMOR 1 JAKARTA 10710  
TELEPHONE (+62 21) 3441484; FACSIMILE (+62 21) 3848049; WEBSITE www.fiskal.depkeu.go.id

Ref. : S-400/KF/2018

21 September 2018

Executive Director  
Secretariat of the Green Climate Fund  
175, Art center-daero  
Yeonsu-gu, Incheon 406-840  
Republic of Korea

Attn. Javier Manzanares, GCF Deputy Executive Director

Subject: Funding proposal for the GCF by Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. (FMO) regarding Climate Investor One

Dear GCF Executive Director,

We refer to the programme Climate Investor One in Indonesia as included in the funding proposal submitted by FMO to us on 12 September 2018.

The undersigned is the Chairman of Fiscal Policy Agency, Ministry of Finance, the National Designated Authority of Indonesia.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The government of Indonesia has no-objection to the programme as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with Indonesia's national priorities, strategies and plans;
- (c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

We acknowledge that this letter will be made publicly available on the GCF website.

Yours faithfully,

Suahasil Nazara  
Chairman





REPUBLIC OF KENYA  
THE NATIONAL TREASURY

Telegraphic Address: 22921  
FAX NO. 310833  
Telephone: 2252299

THE NATIONAL TREASURY  
P O BOX 30007 – 00100  
NAIROBI

When Replying Please Quote

Ref: CONF/MOF/36/021/ (35)

Date: 16<sup>th</sup> March, 2017

**Mr. Howard Bamsey**  
Executive Director  
Green Climate Fund  
G-Tower, 24-4 Songdo-dong  
Yeonsu-gu  
Incheon City, Republic of Korea

Dear

*Mr. Bamsey*

**Re: Funding proposal for the GCF by Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. (“FMO”) regarding Climate Investor One (CIO)**

We refer to the programme Climate Investor One in Kenya as included in the funding proposal submitted by Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. (“FMO”) to us in January 2017.

The undersigned is the duly authorized representative of the National Treasury, the National Designated Authority of Kenya.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the project as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The Government of Kenya has no-objection to the project as included in the funding proposal;
- (b) The project as included in the funding proposal is in conformity with Kenya’s national priorities, strategies and plans;
- (c) In accordance with the GCF’s environmental and social safeguards, the project as included in the funding proposal is in conformity with relevant national laws and regulations.

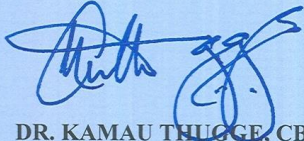


We also confirm that our national process for ascertaining no-objection to the project as included in the funding proposal has been duly followed. Further, we confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

We acknowledge that this letter will be made publicly available on the GCF website.

Yours

*Sincerely*



**DR. KAMAU THUGGE, CBS**  
**PRINCIPAL SECRETARY/NATIONAL TREASURY**  
**GCF FOCAL POINT-KENYA**



REPUBLIKAN'I MADAGASIKARA  
Fitriavane - Tanindrazana - Fandrosoana

15<sup>th</sup> April 2017

To: The Green Climate Fund ("GCF")  
Songdo International Business District  
175, Art Center-daero  
Yeonsu-gu, Incheon 406-840  
Republic of Korea

Re: Funding proposal for the GCF by Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. ("FMO") regarding Climate Investor One.

Dear Madam/ Sir,

We refer to the programme Climate Investor One in Madagascar as included in the funding proposal submitted by Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. ("FMO") to us in March 2017.

The undersigned is the duly authorized representative of Madagascar, RAMAROSON Nivohary, the GCF focal point of Madagascar.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

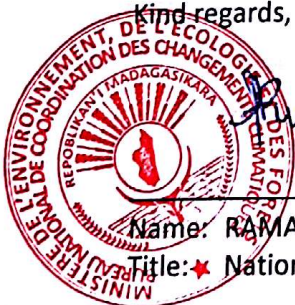
- (a) The Government of Madagascar has no-objection to the programme as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with the Madagascar national priorities, strategies and plans;
- (c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,



Name: RAMAROSON Nivohary  
Title: ★ National Focal Point, Madagascar

B.P 3948, Rue Toto RADOLA – Antsahavola, Antananarivo 101  
[sp.ministre@ecologie.gov.mg](mailto:sp.ministre@ecologie.gov.mg) - <http://www.ecologie.gov.mg>



Telephone: +265 1 771111  
Tele fax No: +265 1 773379

Our Reference No: EAD/99/06/04L  
Your Reference No: .....

Communications should be addressed to:  
The Director of Environmental Affairs



ENVIRONMENTAL AFFAIRS DEPARTMENT  
CITY CENTRE  
PRIVATE BAG 394  
LILONGWE 3  
MALAWI. Page 103

03<sup>rd</sup> September 2018

The Green Climate Fund ("GCF")  
G-Tower, 24-4 Songdo-dong  
Yeonsu-gu, Incheon City  
Republic of South Korea

**Re: FUNDING PROPOSAL FOR THE GREEN CLIMATE FUND BY NEDERLANDSE  
FINANCIERINGS MAATSCHAPPIJ REGARDING CLIMATE INVESTOR ONE FUNDING  
PROPOSAL**

Dear Sir,

We refer to the Climate Investor One programme in Malawi as included in the funding proposal submitted to the Malawi NDA by the Nederlandse Financierings Maatschappij in March 2017.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The Government of Malawi has no-objection to the programme as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with Malawi's national priorities, strategies and plans;
- (c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

  
Tawonga Mbale Luka  
**DIRECTOR AND MALAWI'S GCF NDA/FOCAL POINT**





**MINISTRY OF ENVIRONMENT,  
AND TOURISM**

**NATURE CONSERVATION FUND**

7th floor, 22 building, Amar street, 8th micro-district,

Sukhbaatar district, Ulaanbaatar, Mongolia

Tel: (976-11) 310753, Fax: (976-11) 310743

E-mail: [contact@nct.mn](mailto:contact@nct.mn), <http://www.nct.mn>

Date Feb. 13, 2017 No 31

To: The Green Climate Fund ("GCF")

Re: Funding proposal for the GCF by the Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. (FMO) regarding the Climate Investment One Programme

Dear Madam, Sir,

We refer to the Climate Investment One programme in Mongolia as included in the funding proposal submitted by FMO to us on 03 February 2016.

The undersigned is the duly authorized representative of the Ministry of Environment and Tourism, Dr. Batjargal Zamba, the National focal point of Mongolia.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The government of Mongolia has no-objection to the programme as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with Mongolia's national priorities, strategies and plans;
- (c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

Dr. Batjargal Zamba

National Focal Point of Mongolia for the GCF





Secrétariat d'Etat auprès du Ministre de l'Energie,  
des Mines et du Développement Durable,  
Chargé du Développement Durable

كتابة الدولة لدى وزير الطاقة والمعادن  
والتنمية المستدامة المكلفة بالتنمية المستدامة  
ⵍⵔⵓⵎⵏ ⵍⵔⵓⵎⵏ ⵍⵔⵓⵎⵏ ⵍⵔⵓⵎⵏ ⵍⵔⵓⵎⵏ ⵍⵔⵓⵎⵏ  
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To: The Green Climate Fund ("GCF")

Rabat, ..... 11 MAI 2018

Re: Funding proposal for the GCF by FMO regarding financing Climate Investor One.

Dear Madam, Sir,

We refer to the financing Climate Investor One as included in the funding proposal submitted by FMO to us on March, 2018.

The undersigned is the duly authorized representative of M. Rachid Firadi, the focal point of Morocco.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the project as included in the funding proposal.

By communicating our no-objection, it is implied that:

- The government of Morocco has no-objection to the project as included in the funding proposal;
- The project as included in the funding proposal is in conformity with Morocco's national priorities, strategies and plans;
- In accordance with the GCF's environmental and social safeguards, the project as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the project as included in the funding proposal has been duly followed.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

Directeur du Partenariat, de la  
Communication et de la Coopération

  
Rachid FIRADI



# FEDERAL MINISTRY OF ENVIRONMENT

HEADQUARTERS, MABUSHI, ABUJA.

FMENV/DCC/GCF/01/63

Ref No.....

31 March 2017  
Date:.....

The Green Climate Fund ("GCF")  
Songdo International Business District,  
175, Art Center-daero,  
Yeonsu-gu, Incheon 406-840  
Republic of Korea.

Dear Sir,

**Re: Funding Proposal for the GCF by the Nederlandse Fiancierings-Maatschappij voor Ontwikkelingslanden N.V. (FMO) regarding the "Climate Investor One"**

We refer to the programme, "Climate Investor One" in Nigeria as included in the funding proposal submitted by the Nederlandse Fiancierings-Maatschappij voor Ontwikkelingslanden N.V. (FMO) to us on February 24, 2017.

The undersigned is the duly authorized representative of the Federal Ministry of Environment, the National Designated Authority/Focal Point of Nigeria.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate Nigeria's no-objection to the programme "Climate Investor One" as included in the funding proposal.

By communicating our no-objection, it is implied that:

- a) The government of Nigeria has no-objection to the programme as included in the funding proposal;
- b) The programme as included in the funding proposal is in conformity with Nigeria's national priorities, strategies and plans;
- c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

**Dr. Yerima P. Tarfa**

GCF Focal Person Nigeria/Director, Department of Climate Change  
Federal Ministry of Environment, Nigeria



Telephone : 256 41 4707 000  
 : 256 41 4232 095  
 Fax : 256 41 4230 163  
 : 256 41 4343 023  
 : 256 41 4341 286  
 Email : [finance@finance.go.ug](mailto:finance@finance.go.ug)  
 Website : [www.finance.go.ug](http://www.finance.go.ug)



THE REPUBLIC OF UGANDA

Ministry of Finance, Planning &  
 Economic Development  
 Plot 2-12, Apollo Kaggwa Road  
 P.O. Box 8147  
 Kampala  
 Uganda

In any correspondence on  
 this subject please quote No. EDP 79/251/03  
 141/324/01

April 26, 2017

The Executive Director  
 The Green Climate Fund  
 Songdo International Business District  
 175, Art Center-Daero  
 Yeonsu-gu, Incheon 22004  
**Republic of Korea**

Dear Sir/Madam,

**Subject: The proposal for the GCF by Nederlandse Financierings-Maatschappij Voor Ontwikkelingslanden N.V. (FMO) regarding Climate Investor One (CIO)**

We refer to a funding proposal for the GCF by Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. (FMO), regarding Climate Investor One.

The undersigned is the duly authorized representative of the Ministry of Finance, Planning and Economic Development, the National Designated Authority/focal point of Uganda. Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the above programme, as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The Government of the Republic of Uganda has no-objection to Climate Investor One, as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with Uganda's national priorities, strategies and plans;
- (c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to CIO as included in the funding proposal has been duly followed. We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

We acknowledge that this letter will be made publicly available on the Green Climate Fund website.

  
 PERMANENT SECRETARY / SECRETARY TO THE TREASURY

*Mission*

*"To formulate sound economic policies, maximize revenue mobilization, ensure efficient allocation and accountability for public resources so as to achieve the most rapid and sustainable economic growth and development"*

## Environmental and social report(s) disclosure

Basic project/programme information	
Project/programme title	Climate Investor One
Accredited entity	Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. (FMO)
Environmental and social safeguards (ESS) category	Intermediation 1 (I1)

Environmental and Social Impact Assessment (ESIA) (if applicable)	
Date of disclosure on accredited entity's website	Not Applicable
Environmental and Social Management Plan (ESMP) (if applicable)	
Date of disclosure on accredited entity's website	Not Applicable
Resettlement Action Plan (RAP) (if applicable)	
Date of disclosure on accredited entity's website	Not Applicable
Any other relevant ESS reports and/or disclosures (if applicable)	
Description of report/disclosure	Environmental and Social Management System (ESMS)
Date of disclosure on accredited entity's website	2018-03-02
Language(s) of disclosure	English, French, Vietnamese, Mongolian and Amharic
Link to disclosure	<p>FMO's Climate Investor One Web page: <a href="https://www.fmo.nl/project-detail/52284">https://www.fmo.nl/project-detail/52284</a></p> <p>Climate Investor One Website:  <a href="http://www.climateinvestorone.com/nl/">http://www.climateinvestorone.com/nl/</a>            English: <a href="http://www.climateinvestorone.com/files/180301-esms-v-2e-clean.pdf">http://www.climateinvestorone.com/files/180301-esms-v-2e-clean.pdf</a>            French: <a href="http://www.climateinvestorone.com/files/180301-esms-v-2e-francais.pdf">http://www.climateinvestorone.com/files/180301-esms-v-2e-francais.pdf</a>            Vietnamese: <a href="http://www.climateinvestorone.com/files/180301-esms-v-2e-vietnamese.pdf">http://www.climateinvestorone.com/files/180301-esms-v-2e-vietnamese.pdf</a>            Mongolian: <a href="http://www.climateinvestorone.com/files/180301-esms-v-2e-mongolian.pdf">http://www.climateinvestorone.com/files/180301-esms-v-2e-mongolian.pdf</a>            Amharic: <a href="http://www.climateinvestorone.com/files/180301-esms-v-2e-amharic.pdf">www.climateinvestorone.com/files/180301-esms-v-2e-amharic.pdf</a></p> <p>Climate Fund Managers Website:  <a href="http://www.climatefundmanagers.com/nl/">http://www.climatefundmanagers.com/nl/</a>            English: <a href="http://www.climatefundmanagers.com/files/180301-esms-v-2e-clean.pdf">http://www.climatefundmanagers.com/files/180301-esms-v-2e-clean.pdf</a></p>

	<p>French: <a href="http://www.climatefundmanagers.com/files/180301-esms-v-2e-francais.pdf">http://www.climatefundmanagers.com/files/180301-esms-v-2e-francais.pdf</a></p> <p>Vietnamese: <a href="http://www.climatefundmanagers.com/files/180301-esms-v-2e-vietnamese.pdf">http://www.climatefundmanagers.com/files/180301-esms-v-2e-vietnamese.pdf</a></p> <p>Mongolian: <a href="http://www.climatefundmanagers.com/files/180301-esms-v-2e-mongolian.pdf">http://www.climatefundmanagers.com/files/180301-esms-v-2e-mongolian.pdf</a></p> <p>Amharic: <a href="http://www.climatefundmanagers.com/files/180301-esms-v-2e-amharic.pdf">http://www.climatefundmanagers.com/files/180301-esms-v-2e-amharic.pdf</a></p> <p><i>Climate Fund Managers (CFM) is the fund manager for the Climate Investor One (CIO) fund. As co-founder and initiator of CIO, FMO has also taken a significant ownership stake in CFM. In light of (i) the status of FMO being a 50 percent shareholder of CFM, as well as (ii) the fact that all previous E&amp;S safeguards-related information on CIO has been published on the CIO and CFM websites, the present ESMS disclosure is being done via the CIO and CFM websites instead of the FMO website. Links to the CIO and CFM websites may be found on FMO's CIO web page.</i></p> <p><i>For further details on the ownership role of FMO in relation to CFM, as well as on the overall involvement of FMO in CIO as an initiator and investor, please refer to the below link to the FMO website:</i></p> <p><a href="https://www.fmo.nl/news-detail/d5cd9d98-884a-4dd6-bc6a-6c01b310037d/first-close-of-a-new-global-climate-fund-at-usd-412-million">https://www.fmo.nl/news-detail/d5cd9d98-884a-4dd6-bc6a-6c01b310037d/first-close-of-a-new-global-climate-fund-at-usd-412-million</a></p>
Other link(s)	N/A