

CASE STUDY | DECEMBER 2021

Climate Investor One (CIO)



AUTHOR(S):

Nicholas Zelenczuk, Senior Associate, Content, at Convergence

SUGGESTED CITATION:

Convergence Blended Finance (2021). Climate Investor One (CIO). Convergence Case Study.

ACKNOWLEDGEMENTS:



Convergence would like to thank Climate Investor One for their valuable input during the development of this case study.



This case study was made possible by the support of the John D. and Catherine T. MacArthur Foundation

© CONVERGENCE 2023.

All rights reserved. You may reproduce and distribute the material in this document for non-commercial purposes, subject to following credit: (i) Source: Convergence © and (ii) a link to the original source on the Convergence website. It should only be reproduced or distributed as a part of wider materials created by you.

Unless you have received prior written consent from Convergence, you may not reproduce or distribute this document on a standalone basis or use this document for commercial purposes.

DISCLAIMER:

This document is provided for information purposes only. It does not constitute an offer to sell or a solicitation to any person in any jurisdiction. Any investment terms described herein are purely informational. This document should not form the basis of or be relied upon relating to any investment. The information set out herein may be subject to updating, completion, revision, verification and amendment and such information may change materially.

Table of Contents

Executive Summary	1
Introduction	2
Design and Fundraising	3
Structure and Governance	7
Operations	10
Follow-On Structure — Climate Investor Two	14
Key Insights	15

Executive Summary

Climate Investor One (CIO) is an \$850 million blended vehicle designed to accelerate the development, construction, and implementation of renewable energy infrastructure projects in emerging markets. Comprised of three inter-linked investment funds, CIO provides fit-for-purpose financing across the project finance lifecycle. The Fund aims to support ~30 projects over its 15-year investment term and will target a variety of renewable energy technologies.

CIO's pioneering design addresses inherent challenges associated with project finance in developing countries. By using a three-phase sequential financing approach to align project capital needs with the appropriate investors, CIO maximizes private investment, while also ensuring access to finance for early-stage renewable energy projects. The Fund provides a replicable model to increase capital flows to the renewable energy sector in developing countries and demonstrates a series of insights to facilitate this growth:

- Aggregation structures are critical to attract institutional investors to developing countries at scale
- Aligning investment instruments to the distinct project risk periods in the project lifecycle lowers the cost of capital and accelerates timelines
- Balancing innovation with proven approaches can scale private investment to alternative sectors
- Flexibility in transaction design can prove critical to a successful fundraising
- Blended finance plays a pivotal role in introducing private investors to new sectors, regions, and asset classes

SYNOPSIS

Fund Manager	Climate Fund Managers (CFM)
Fund Vintage	2017
Fund Size	\$850 million
Mandate	To accelerate privately owned renewable energy infrastructure projects in emerging markets while providing an attractive entry point into the sector for large scale institutional investors.
Priority Regions	Africa, Asia and Latin America and the Caribbean
Capital Structure	<p>Development Fund</p> <ul style="list-style-type: none"> • Reimbursable loans (\$45M) <p>Construction Equity Fund</p> <ul style="list-style-type: none"> • Tier 1 First-loss Equity (\$160M) • Tier 2 Subordinated Equity (\$320M) • Tier 3 Senior Equity (\$320M) <p>Refinancing Fund (Prospective)</p> <ul style="list-style-type: none"> • Senior debt (\$500M)
Investment Instruments	<ul style="list-style-type: none"> • Development Fund – Reimbursable loans • Construction Equity Fund – Equity
Fund Term	20-year
Impact Targets	<ul style="list-style-type: none"> • Support ~30 projects • 1.9M tCo2eq avoided • 1.7K MW added energy generation

Introduction

Increasing renewable energy capacity worldwide is a central tenet in the fight against climate change. Yet, only a fraction of global renewable energy financing from institutional investors flows to emerging markets; **less than 25%** (~\$72 billion) of climate financing from OECD countries was directed to developing countries in 2019.

A **project financing approach** is typically applied to private sector, long-term infrastructure projects in developed countries. However, high perceived country risk and challenges in the project finance model obstruct many renewable energy projects from launching in emerging markets. Investors have limited appetites to participate in a project's early phases (e.g., development and construction), often forcing developers to organize complex consortiums of investors across multiple fundraising rounds. Project implementation timelines are routinely extended because prolonged negotiations with financiers diverts time and resources away from project-related activities. This reduces project bankability and further dampens private investor interest in the sector.

In 2015, Climate Fund Managers (CFM) was established as a joint venture between the Dutch development bank FMO and the infrastructure specialist Phoenix Infracore. In the same year, Climate Fund Managers founded Climate Investor One (CIO, "The Fund"), a blended finance structure intended to simplify and accelerate project financing for private sector

renewable energy projects in developing countries. The Fund targets wind, solar, hydropower, and other forms of renewable energy projects, owned and operated by independent power producers (IPPs) across Africa, Asia, and Latin America. CIO employs a "whole-of-life" financing approach via three separate sub-funds to finance a project in three phases of project maturity:

- 1. A Development Fund (DF)**
funded by donor equity to progress the project through the development phase to the construction phase;
- 2. A Construction Equity Fund (CEF)**
funded by multiple investor types to progress the project through construction phase to project completion and;
- 3. A Refinancing Fund (RF)**
to finance the project during the operation phase when the asset is earning revenues (currently fundraising).

CIO demonstrates the value of blended finance to both streamline the fundraising process for large-scale renewable energy projects in emerging markets and provide an in-road to developing economies for international investors.

Design and Fundraising

FUND IMPETUS AND INITIAL DESIGN

CFM established CIO recognizing a limited deal flow of private sector renewable energy infrastructure projects in emerging markets, particularly in Sub-Saharan Africa. Specifically, CIO was designed to respond to three central market barriers; (i) protracted project development and construction phases due to lack of appropriate financing; (ii) high cost of capital because of high perceived market risk; and (iii) limited exit or refinancing options for private investors.

“...the Fund became among the **first instruments** to receive endorsement from the Global Innovation Lab for Climate Finance”

An early milestone for CIO came in 2015, when the Fund became among the first instruments to receive endorsement from the Global Innovation Lab for Climate Finance (“The Lab”), for its inaugural 2014-15 cycle. The Lab, established by the Climate Policy Initiative (CPI), is a public-private network that incubates and accelerates innovative financing structures dedicated to unlocking scaled financing to climate mitigation and adaptation endeavours.

Ideas selected for each cohort receive instrument design support, with the most promising ideas receiving endorsement from the Lab to launch piloting activities and begin fundraising for implementation.

CIO intended to address the aforementioned market barriers by achieving two main outcomes:

- i. creating an investment setting where institutional investors feel comfortable participating in a “high-risk” asset class at scale; and
- ii. allowing private investors to commit to projects at phases in which they are traditionally reluctant to engage (i.e. pre-operations).

Blended finance plays a key role in reaching these objectives, both at the facility level (across its three sub-funds), as well as at the sub-fund level (the CEF).

CIO’s first sub-fund, the Development Fund, acts as a proprietary deal pipeline for the CEF and RF. As the only sub-fund fully capitalized by concessional financing, the DF helps mobilize private sector investment into the CEF and RF by mitigating early-stage risks of underlying projects through the provision of concessional development loans. The reimbursable loans, which cover up to 50% of development costs (not to exceed ~\$1.5 million per project) and are repaid once construction financing is secured, are used for a range of activities, such as financial modelling and legal structuring.

Second, the Construction Equity Fund blends three separate tiers of capital, including a first-loss tranche, to provide a risk cushion that mobilizes institutional investors at scale to finance project construction. Equity disbursed by the CEF finances up to 75% of project construction costs and is used to repay the development loan, removing the need to source multiple finance providers during the construction phase.

Third, the RF (once launched) will raise debt capital from institutional debt investors, that will be disbursed through senior loan facilities to individual projects when they commence commercial operations. This is traditionally the phase where project risk-return profiles meet private investor requirements. Proceeds from sales of project assets to the RF creates an exit path for the CEF.

CIO enables IPPs to tap into a singular, project financing entity, accelerating both fundraising and project activities. CFM estimates that with CIO support each project phase will take about two years. The whole-of-life financing method also allows CIO to recycle invested capital. As a project progresses through its development lifecycle and receives refinancing, capital is replenished to each sub-fund, whether in the form of development loan repayment, or equity exits once working loans are secured. This self-contained and end-to-end project finance structure allows CIO to maximize the number of projects it supports.

FUNDRAISING

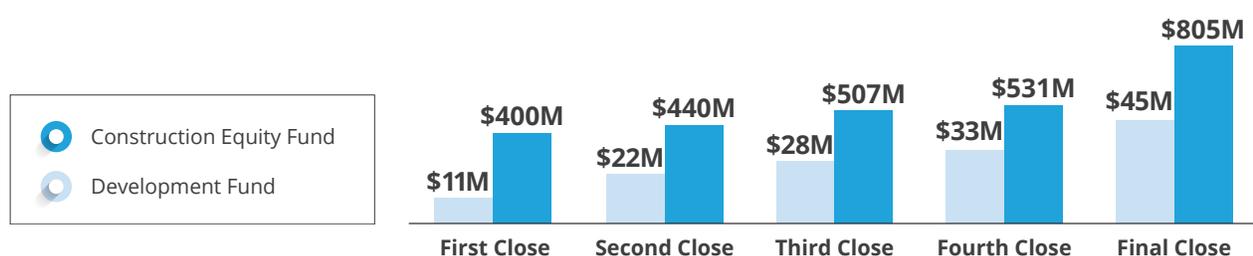
CIO has demonstrated a strong fundraising track record to date, raising \$850 million against an initial target size of \$530 million. The fundraising process took place over 2017-19 and has undergone five interim closes (*outlined in Figure 1*). At the time of publication, fundraising efforts for the RF are ongoing.

First close – Attracting donor investors

CFM began fundraising in 2017, first prioritizing the capitalization of the DF. This was done for two reasons: (i) to address the scarcity of concessional capital available to opportunities in the renewable energy infrastructure sector, and (ii) to account for the longer negotiating timelines with donor governments. Funding project development activities still remains beyond the risk remit of most private investors given the extended and uncertain time period between investment and revenue generation. Securing donor commitments early on would also enable the DF to commence investing activities and establish a project pipeline for the other sub-funds.

At first close, CFM raised ~\$11 million in donor capital for the DF from two development funders; USAID and FMO. For FMO, CIO was well aligned with the Dutch government's commitment to climate change and directly coincided with the bank's goals to mobilize private sector investment into developing markets using blended finance. The Dutch bank

Figure 1: The progressive capitalization of the Development and Construction sub-funds



served as an anchor funder, investing \$5.56 million into the DF and \$50 million into Tier 1 of the CEF on behalf of the Dutch Ministry of Foreign Affairs (DGIS). Moreover, FMO also provided CIO with \$5.56 million for its own account, participating in the subordinated, Tier 2, of the CEF.

With Tier 1 commitments secured, CIO now had a sufficient risk cushion to attract institutional investors. For many investors, CIO represented the first exposure to a blended structure, resulting in longer diligence and negotiation processes. Two factors in particular attracted private investment to the Fund: (i) an attractive risk-return profile made possible by the presence of concessional capital; and (ii) the Fund's contribution to climate change mitigation, which resonated with the environmental, social and governance (ESG) commitments of investors. A group of Dutch institutional investors, including NWB Bank and Aegon Asset Management invested in Tier 3 of the CEF, together with global partners; the Royal Borough of Windsor & Maidenhead Pension Fund, and KLP. At first close in June 2017, CIO totaled \$411 million in commitments.

“For many investors, CIO represented the **first exposure** to a blended structure, resulting in longer diligence and negotiation processes...”

Interim closes

CIO achieved a second close in December 2017, with participation from the European Union (EU). As it had been for DGIS, Tier 1 of the CEF was an attractive opportunity for the EU given its potential to unlock considerable private sector capital. The expansion of the DF and the first-loss tranche of the CEF attracted investors to the more senior tiers. Subsequent rounds saw commitments from development finance institutions (DFIs), including FinDev Canada, bringing the total committed capital to \$564 million by the end of 2018 .

Final close – Expanding CIO's size

Encouraged by the traction from private investors, CFM increased CIO's final target size of the fund to \$850 million. However, to mobilize more private capital, additional concessional capital would be required.

CFM approached the Green Climate Fund (GCF) early in its fundraising efforts, seeking risk-bearing capital. GCF was attracted by CIO's GHG emission reduction potential and multi-sub-fund structure, which recycled invested capital and minimized subsidization of donor dollars. However, GCF's support was contingent on CIO positioning itself as a meaningful enabler of target countries' Nationally Designated Contributions (NDCs). Given this objective, CFM and GCF identified a sub-set of eleven countries – determined following three selection criteria: 1) country ownership; 2) CIO pipeline and track record; and 3) adherence to GCF's own investment criteria – to which GCF funds would be earmarked, and a minimum of ~\$400 million invested by CIO. In 2019, GCF committed \$100 million to CIO, parceled into a \$20 million reimbursable grant to the DF and \$80 million in junior equity to Tier 1 of the CEF. GCF's commitment propelled CIO to its final close in June 2019, mobilizing new investments from the

African Development Bank (CEF Tier 2) and Dutch Triodos Bank (CEF Tier 3). Every dollar of donor capital in the CIO structure was multiplied four-fold with commercial commitments.

Fundraising for the Refinancing Fund (RF)

CFM is currently fundraising for the Refinancing Fund. CFM chose to hold a separate fundraiser for the RF, ~3 years after launch, to ensure that an ample pipeline of projects would be ready for private debt refinancing. Originally, CIO was designed to have its own dedicated refinancing fund, of approximately equal size to the CEF (\$800 million) and comprised wholly of private sector capital. The model was anticipated to be replicated over subsequent Climate Investor initiatives (2, 3 and so on). CFM has instead opted to raise a single credit fund to support all the Climate Investor Construction Funds, called the Climate Credit Fund. This fund is targeted to be ~\$500 million, which matches current CIO deal flow, with the intention to grow to a multi-billion-dollar fund overtime. The RF intends to turn to debt capital markets to raise financing, issuing plain and convertible bonds and will likely take on a blended structure, where junior and subordinate capital will credit enhance senior debt to attract institutional investor participation.

Structuring the RF as a tiered capital pool would create; (i) investment grade equivalent investments for private investors; (ii) investments of high financial and development additionality for DFIs and multilateral development banks (MDBs) matched to their credit appetite (e.g., non-investment grade); while (iii) maximizing the leverage of scarce donor funds. However, the ambition to target DFIs, MDBs and/or donors to invest subordinate capital may face two challenges: (i) an apprehension of DFIs and MDBs to rank junior to institutional investors; and (ii) the targeted funders tend to invest in new projects, as opposed to refinancing of existing assets.



Structure and Governance

CAPITAL STRUCTURE

As detailed above, CIO employs blended finance at two levels; (i) the overall facility level, where the wholly concessional DF aims to mobilize private capital into the Construction and Refinancing sub-funds; and (ii) within the structure of the CEF itself, tranching into three distinct tiers, each offering its own unique risk-return profile to appeal to different investor types. This layering creates a revenue distribution waterfall whereby senior investors receive returns first, before remaining gains “cascade” down to more junior investors. The proportional size of the DF, and sizing of the first-loss tier in the CEF, was determined by the estimated internal rate-of-return (IRR) figures for the ~30 underlying projects to be financed by CIO. The three sub-funds are outlined in turn below.

Development Fund

The DF is a \$45 million wholly concessional capital pool that aims for capital preservation rather than return on investment.

The DF's target size of approximately ~\$50 million was based upon the estimated rate of failure of investees during the development phase. While a fully capitalized DF was designed to absorb the disbursement of all 30 development loans (30 projects being the upper end of total projects targeted), CFM also devised an “insurance plan”. This took the form of a premium payment paid by the CEF to the DF when an underlying project secured construction financing. Project developers

use the equity financing provided by the CEF to repay the development loan, including a premium. The purpose of the premium is to achieve two objectives: 1) reimburse the DF for any accrued losses from other failed development projects; and 2) prevent the vital pool of concessional capital from being stalled or locked into slow-moving projects.

Construction Equity Fund:

The CEF is capitalized by three tranches:

Tier 1 - “First-loss equity”

CIO raised \$160 million in first-loss equity capital from donors and development agencies. By absorbing any initial losses, Tier 1 provides downside coverage to senior ranking investors, enabling CIO to overcome the high perceived risks of construction-phase investment. Tier 1 investors are entitled to a reimbursement of the principal portion of their commitments once Tier 3 and 2 returns targets have been satisfied.

Tier 2 - “Subordinated equity”

The second tier of the CEF comprises about 40% of the sub-fund's total capital (\$320 million), raised from investors seeking commercial returns with moderately higher risk-tolerances than senior investors. The tranche is designed to appeal to DFIs and MDBs, who are willing to accept high-risk exposure to boost the financial additionality of their investments. Tier 2 investors are provided an 8% hurdle rate after Tier 3 investors are made whole, plus interest. Tier 2 capital is also eligible

Figure 2: Tranched structure of the CEF



to receive additional returns in an “outperformance” scenario. This is triggered in the event there are any remaining profits following the full repayment of each tier. The surplus returns are split between Tier 2 and CFM at a ratio of 80:20.

Tier 3 – “Senior equity”

Tier 3 makes up the remaining 40% (\$320 million) of the CEF. This tranche was targeted for large-scale institutional investors with little or no prior investment experience in either emerging markets or the renewable energy infrastructure sector. Participating investors range from pension funds, such as MP Pensjon and KLP, to financial institutions including NWB Bank. CFM was able to align Tier 3’s risk profile with investor tolerances by securing a full guarantee from Atradius Dutch State Business, the Export Credit Agency (ECA) of the Netherlands. Together with the additional downside-protection provided by the first-loss equity of Tier 1, the ECA guarantee elevated Tier 3 to a AAA credit rating. CEF’s capital structure is presented in Figure 2.

Refinancing Fund

High private investor interest in Tier 3 of the CEF demonstrated the importance of concessional capital to align CEF’s risk-profile with private investor criteria. CFM is currently considering the inclusion of a first-loss tranche in the RF, to backstop senior debt investors, as well as sourcing another guarantee to wrap the senior tranche. CFM expects many of the CEF Tier 3 investors to also commit to the new sub-fund. An overview of the three sub-funds and flow of capital is provided in Figure 3 below.

LEGAL AND GOVERNANCE

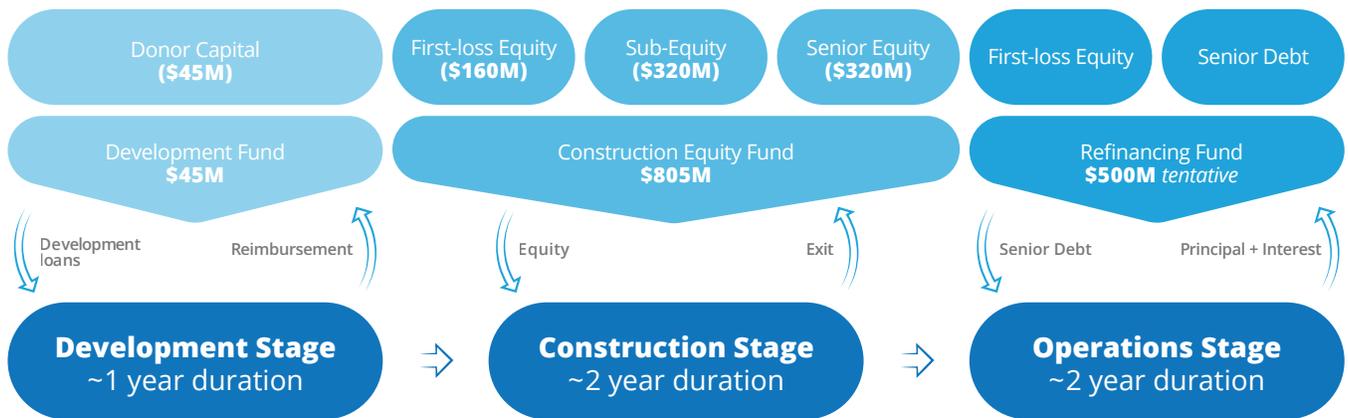
CIO is managed by CFM, a joint venture whose two principal shareholders are FMO and Sanlam InfraWorks (itself a partnership between Phoenix InfraWorks and Sanlam, South Africa). Climate Fund Managers B.V. is registered in The Hague as an independent fund manager.

CFM is solely responsible for guiding the overall operations and investment activities of CIO,

executed by a supervisory board. The CIO Fund is currently comprised of two separate legal entities, Stichting Development Fund (DF) and Coöperatief Construction Equity Fund U.A (CEF). Each have delegated authority for day-to-day decision making through management agreements with CFM, directed by their respective investment committees (ICs).

The DF is governed by a management board, for which FMO is the sole statutory member, as well as an advisory board comprising six members. The CEF board consists of four members. Alongside investment recommendations from CFM's own board, the management and advisory boards guide the investment strategy carried out by the ICs.

Figure 3: CIO structure and capital flow



Operations

INVESTMENT CRITERIA

CIO invests in mid-sized (25 to 75 megawatt (MW) renewable energy infrastructure projects in Africa, Asia, and Central and South America. The Fund intends to bring 30 projects to market over its 15-year investment period. Given its mandate to provide a whole-of-life financing approach, CIO targets high impact projects that, in the absence of CIO funding, would be unlikely to progress beyond the project design phase.

The advisory boards and ICs of both the DF and CEF evaluate pipeline projects based on three fundamental criteria:

- i. the prospective project, once operational, will exhibit sustainable and relatively predictable cash flows;
- ii. the project will not be overly exposed to exogenous macro- and microeconomic forces, including price risk and fluctuating demand; and
- iii. the project has the capacity to provide appropriate risk-adjusted returns.

Potential projects are also screened using a diverse set of other characteristics, such as: developer track record, and energy off-take considerations, and assessed in accordance with CFM's Environmental and Social Management System (ESMS).

Capital allocation framework

CIO invests in different renewable energy technologies, with a particular emphasis on wind, solar, and hydro. The Fund may also finance other technologies like biomass and geothermal projects. Table 1 outlines CIO's capital allocation guideline, on the basis of renewable energy technology and geography.

Table 1: CIO's capital allocation targets

		Aggregate Asset Allocation
Renewable Energy Technology	Hydro	20-45%
	Wind	20-45%
	Solar	10-40%
	Other (biomass, geothermal)	<10%
Geographic	Africa	Max 40%
	Asia	Max 40%
	Central & South America	Max 40%
	Other	Max 10%
	Single country	Max 25%
	Upper-middle income	Max 30%

Eleven countries – Burundi, Cameroon, Djibouti, Indonesia, Kenya, Madagascar, Malawi, Mongolia, Morocco, Nigeria, and Uganda – are earmarked to receive GCF funding held by CIO. In addition to the three selection criteria mentioned above, the low installed capacity of non-hydro renewable energy

sources in these countries (on average about 11% of total energy generation) was an important factor in their selection. GCF sought to prioritize the creation of non-hydro renewable assets given the indirect GHG emission consequences of hydroelectric plants, produced by flora degradation and biodiversity loss in the flooded area. CFM estimates that the CEF will deploy approximately \$500 million to the eleven GCF earmarked countries.

INVESTMENT PROCESS

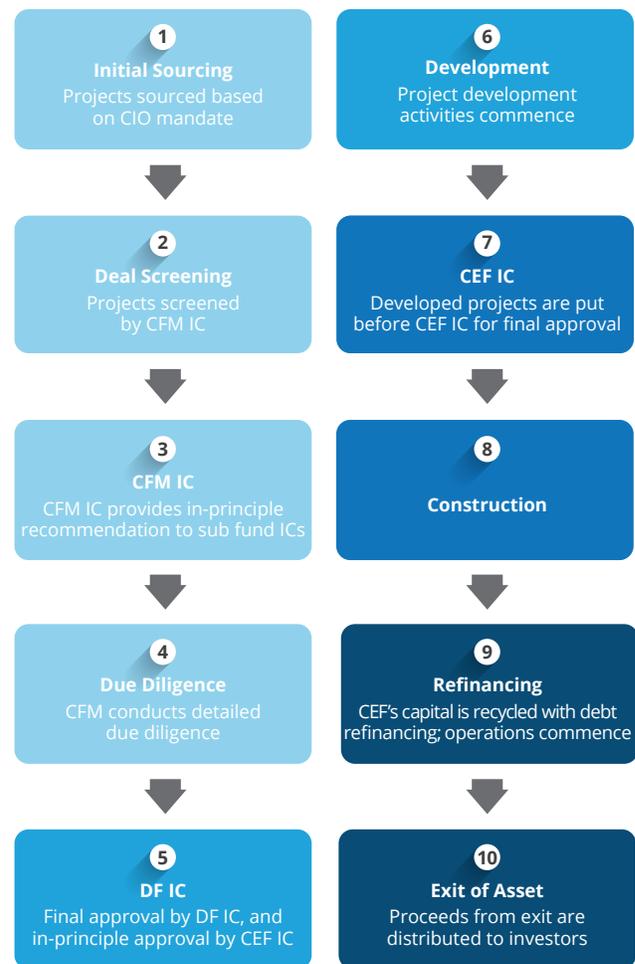
CIO's investment mandate is guided by five principal objectives;

- i. contribute to climate change mitigation by facilitating the delivery of clean, affordable energy;
- ii. promote equality in economic development;
- iii. help address the energy gap in developing markets;
- iv. mobilize private sector capital to emerging markets; and
- v. accelerate the project finance process of renewable energy projects through a simplified financing model

All CIO investees must be engaged at the project development phase. CIO follows a ten-stage investment process (Figure 4), spanning initial project sourcing activities to exit of the asset.

While the CFM IC constructs the initial project pipeline and performs the preliminary screening to assess fit with CIO's general mandate, formal approval of investments is determined by the respective ICs of the DF and CEF.

Figure 4: CIO's cyclical ten-stage investment process



The due diligence activities of the sub-funds are required to incorporate analyses from external technical advisors to ensure proper evaluation of project-specific components, like environmental and social risk, technical risk, political risk, and electrical grid quality. Verification of the project's power-purchase-agreement (PPA) is also a critical aspect of the due diligence phase. At minimum, 75% of CIO projects must have a long-term PPA already formalized prior to CEF investment. This helps to minimize the risk of a time-lag between construction completion and revenue generation.

Community development

At the local level, CFM designs a community development programme for every asset as part of its investment process. The programmes are designed to focus on improving local community access to affordable and clean energy and water supply and sanitation facilities, as well as building the resilience of communities to climate change. CFM appoints development partners to deliver the programme within local communities.

Gender equality and women's empowerment

Gender equality and empowerment of women is an important consideration within CIO's investing framework, and reflected in the core priorities of many CIO investors. Gender mainstreaming is actively undertaken in the development, construction and operations of the CIO portfolio. CFM conducts a gender analysis and develops a gender action development plan during project design, which is then implemented during construction and operation. Local content and recruitment plans are required to include a specific focus on women both as potential employees and as business partners.

CFM's commitment to gender equality is further strengthened by being a signatory of the Women's Empowerment Principles ('WEPs'). CFM is actively implementing the WEPs in its own business operations, as well as rolling them out to the CIO assets.

INVESTMENT ACTIVITY TO DATE

To date, CIO has invested in a total of 14 renewable energy infrastructure projects, deploying ~\$360 million in development and construction phase financing. Six projects are

Table 2: CIO investees that have received funding from both sub-funds

Project	Location	Type	CIO Investment
AHH Run-of-River Hydro	Uganda	Run-of-river hydro – 42MW	• DF – \$0.65M • CEF – \$75M
Red Sea Power	Djibouti	Onshore wind – 59MW	• DF – \$1.4M • CEF – \$25M
Tra Vinh Wind	Vietnam	Near shore wind – 48MW	• DF – \$4M • CEF – \$71.5M
Cleantech Solar	Pan Asia	Rooftop solar panel developer – 600MW	• DF – \$0.8M • CEF – \$95M
Ecotech	Vietnam	Near shore wind – 78MW	• DF – \$3M • CEF – \$71.2M
Ampyr	India	Onshore wind – 38MW	• DF – \$0.54M • CEF – \$37.9M

in Africa and eight in South Asia and East Asia, representing a combined installed energy capacity over 1,250MW. These include:

- **Seven** onshore or near-shore wind technology projects;
- **Six** solar photovoltaic (PV) projects;
- **One** hydroelectric power plant

Six projects have progressed to or beyond the construction phase, receiving approvals for ~\$375 million in aggregate equity from the CEF. A brief summary of these projects is outlined below in Table 2.

Cleantech Solar's rooftop project across Asia is CIO's first investee to receive senior debt refinancing, which it secured from the market.

IMPACT METRICS

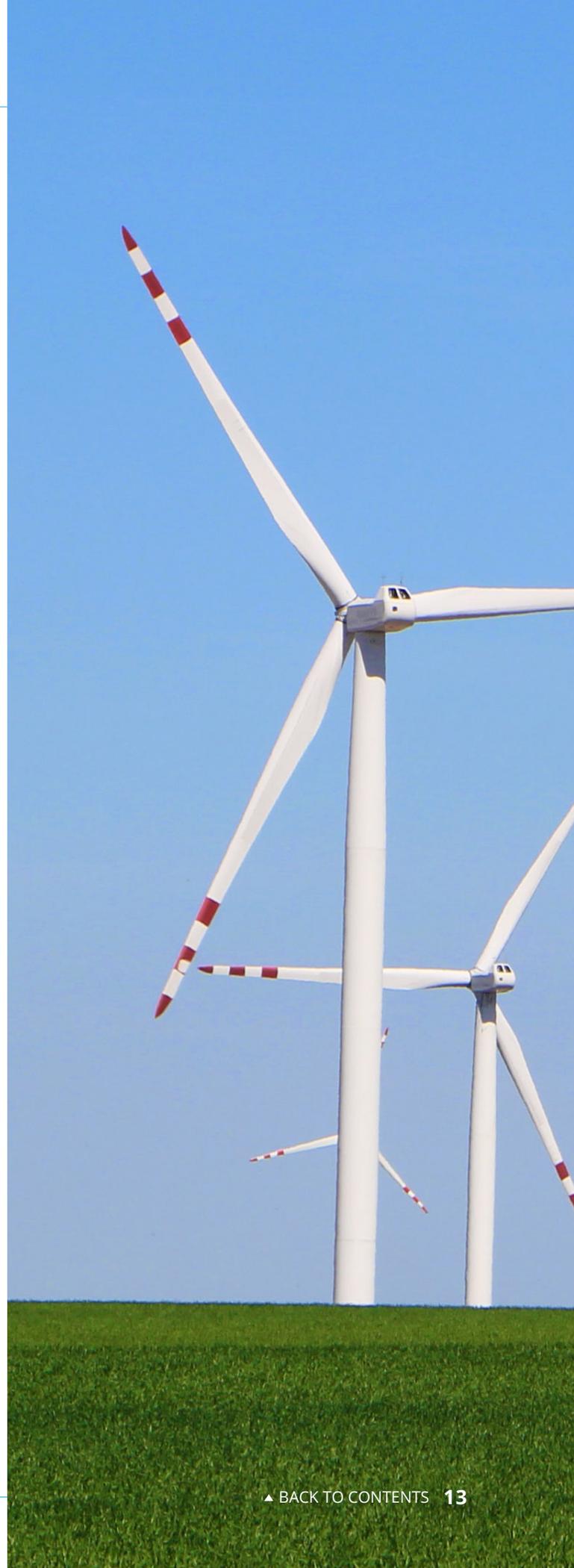
Impact generated by CIO is captured by CFM personnel at the overall fund level. CFM uses a set of primary indicators to measure CIO's impact in three essential areas; 1) energy generation; 2) electrification benefits for the population; and 3) GHG emission reduction. CIO prioritizes progress towards these objectives on a case-by-case basis, depending on the unique characteristics of the country's energy sector. For example, in markets where renewable energy generation may already comprise a fair amount of the national energy mix, but where electrification rates remain low, CIO and its shareholders will seek out opportunities that have a stronger potential to bring power to more households. The primary impact metrics are outlined below (Table 3), along with the corresponding target levels estimated to be achieved over CIO's lifespan.

Asset impact tracking

At the individual project level, a wide range of data and information is collected on a monthly basis to monitor ongoing performance in relation to health and safety, social and environmental indicators. Gender-disaggregated data is collected in relation to jobs and salaries and the implementation of the community development programmes, gender action plans, and the adoption of the WEPs are evaluated annually.

Table 3: CIO's primary impact metrics

Impact Area	Impact Metric	Target outcome over fund lifetime
Clean energy generation	<ul style="list-style-type: none">MWs of installed clean energy capacityGWh's produced per annum	<ul style="list-style-type: none">1,700 MW additional clean energy capacity5,100 GWh produced per annum
Electrification	<ul style="list-style-type: none">number of people with new access to electricity	<ul style="list-style-type: none">13M people with new access to electricity
GHG emission reduction	<ul style="list-style-type: none">tCo2eq avoided per annum	<ul style="list-style-type: none">1.9M tCo2eq avoided per annum



Follow-On Structure — Climate Investor Two

In 2019, CFM, together with FMO and Dutch non-profits SNV Netherlands Development Organization and World Wide Fund for Nature of the Netherlands, won the tender to manage the Dutch Fund for Climate and Development (DFCD). The DFCD is a EUR 160 million capital pool from the Dutch Ministry of Foreign Affairs to be disbursed to efforts that increase the resiliency of developing countries to the already apparent effects of climate change. Approximately EUR 75 million of the DFCD funding forms the anchor investment of CIO's follow-on vehicle, Climate Investor Two (CI2).

Like CIO, CI2 is predicated on a whole-of-life project financing approach and will replicate CIO's blended fund structure. However, while CIO is distinctly a climate change mitigation

vehicle, CI2 shifts the investment focus to climate change adaptation. Three thematic areas fall within the fund's focus; 1) water; 2) sanitation; and 3) oceans. CFM anticipates CI2 to have a similar geographic scope to its predecessor fund. Alongside a \$50 million DF, CFM is targeting a ~\$1 billion CEF. Again, Tier 3 of the CEF is expected to be rated AAA and target institutional investors seeking large ticket sizes. In November 2021, CI2 achieved first close at \$675 million. Commitments came from a range of public and commercial investors, including several who participated in CIO like, NDF, Aegon and KLP. CFM is currently in the process of raising a single refinancing fund that will provide senior debt facilities to both CIO and CI2 projects at the operations phase.

Key Insights

Aligning investment instruments to the distinct project risk periods in the project lifecycle lowers the cost of capital and accelerates timelines:

Fit-for-purpose financing remains rare in the blended finance market. The scarcity of concessional funding, particularly at the development stage of asset development, where the returns are too low for commercial investors to take on the risks presented, is a main roadblock to scale in the renewable energy sector. Similarly, the limited availability of capital from large-scale commercial and public investors pushes up the cost of capital at the construction stage for developers. CIO demonstrates the value of matching financing to risk and phase of the project. In CIO, IPPs tap into an entity that provides both highly risk-tolerant loans in the development phase and meets the large capital requirements of energy asset construction. This replaces the need for developers to arrange a web of grant or technical assistance packages from donors in the preparation phase and avoids the high costs and strict terms of debt financing for construction.

Aggregation structures are critical to attract institutional investors to developing countries at scale:

Delivering large investment ticket sizes has been a central challenge when attracting private investors to blended finance transactions. The structure of CIO addresses this issue by aggregating a portfolio of individual projects that can meet the investment and returns expectations of large investors. A portfolio investment approach also provides risk mitigation advantages through diversification. CIO was able to tap into the large-scale institutional investor class by adopting a

broad investment mandate, encompassing different renewable energy technology types, geographies, and stages of the project finance cycle.

Balancing innovation with proven approaches is essential to bringing scaled private investment to alternative sectors:

Innovative investment vehicles are necessary to break through the risk barriers in emerging markets, but lack the track record required to mobilize investment at scale. Conversely, traditional investment structures like funds appeal to private investors but have less application in alternative sectors. CIO is able to channel scaled investment to renewable energy development by balancing the advantages of an innovative funding model with a traditional fund structure. Specifically, CIO crowds-in private capital to enable an innovative whole-of-life-financing approach, that both de-risks participation for investors and accelerates project development, to ultimately bring more renewable energy projects to market. The easily replicable design also further enhances the scale and impact potential of CIO (e.g. C12).

A degree of flexibility and adaptability in transaction design can prove critical to a successful fundraise:

Given their general appeal and prevalence in blended finance, funds take on an important role in helping investors develop familiarity investing alongside other investor types. Granting unique terms to key investors is appropriate in particular scenarios and may prove useful to enticing new entrants into the blended finance space. Blended fund managers

are thus required to be agile and reconcile the differing mandates of donors (impact oriented) and commercial investors (returns oriented). At the outset of fundraising, CFM adjusted its geographic targeting and capital allocation guidelines to adhere to GCF's funding requirements. Securing AfDB's commitment also necessitated earmarking their capital for projects in Africa. Fund managers must balance the advantages of securing commitments from prominent investors with the potential consequences for the fund's mandate and investing experience of other investors when adjustments to the transaction are made.

Blended finance can play a pivotal role in introducing institutional investors to new sectors, regions, and asset classes: CFM and FMO identified that high-perceived country risk was limiting private sector exposure to renewable energy infrastructure investment in developing countries, which in turn, was restricting the number of projects launching in the market. CIO's blended finance structure addressed this issue in two

ways; (i) the integration of credit enhancement mechanisms (repayment waterfall, credit guarantee) integrated into CIO assuaged both traditional risk concerns (default risk, political risk) and encouraged the private sector to commit to a vehicle that featured many new and innovative components (construction phase financing, collaboration with public sector investors); and (ii) leveraging a wholly concessional development fund ensured a sufficient pipeline of projects expeditiously to progress to the construction phase, thereby mitigating the high-perceived risks of the project pre-construction phase. By generating greater demand for bankable renewable energy projects among institutional investors, CIO is also able to help stimulate deal origination to develop and deepen the renewable energy infrastructure sector in emerging markets.

Sources

Interviews with FMO (The Dutch Development Bank), The Green Climate Fund, Local Pensions Partnership, and Climate Fund Managers

Documentation provided by Climate Fund Managers.

CPI, "Global Landscape of Climate Finance 2019". 2019. [Available here](#).

Global Innovation Lab for Climate Finance, "Climate Development and Finance Facility: Pilot Proposal and Implementation Plan". 2015. [Available here](#).

Green Climate Fund, "Funding Proposal: Climate Investor One". 2018. [Available here](#).

Trinomics, "Evaluation FMO Access to Energy Fund", 2018. [Available here](#).



CONVERGENCE is the global network for blended finance. We generate blended finance data, intelligence, and deal flow to increase private sector investment in developing countries.



BLENDED FINANCE uses catalytic capital from public or philanthropic sources to scale up private sector investment in emerging markets to realize the SDGs.



Our **GLOBAL MEMBERSHIP** includes public, private, and philanthropic investors as well as sponsors of transactions and funds. We offer this community a curated, online platform to connect with each other on blended finance transactions in progress, as well as exclusive access to original market intelligence and knowledge products such as case studies, reports, trainings, and webinars. To accelerate advances in the field, Convergence also provides grants for the design of vehicles that could attract private capital to global development at scale.