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# Sub-national Climate Finance Initiative (SnCF)

*LAB INSTRUMENT ANALYSIS*

*September 2020*

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## DESCRIPTION & GOAL —

SnCF is expected to be the first private equity fund that provides local government capacity building and certifies climate adaptation and mitigation projects for SDG impact prior to investment.

## SECTOR —

Sustainable Energy, Waste and Sanitation, Nature-based Solutions

## FINANCE TARGET —

For concessional: Multilateral Climate Funds

For commercial: Private banks, institutional investors

For TAF grant: Private foundations, country governments, development finance institutions

## GEOGRAPHY —

Latin-America, Asia & Pacific, Mediterranean, and sub-Saharan Africa

## NOTICE TO RECIPIENTS

This report (the "Report") has been prepared by the Climate Finance Lab (the "Lab") for purposes of providing information to the Lab's network of climate-focused investors on the Global Subnational Climate Fund (the "Fund", "SnCF" or the "Initiative"), which is currently being pursued by a consortium including Pegasus Capital Advisors, L.P. ("Pegasus" or "PCA" and collectively, the "Consortium").

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Any information about the Fund referenced herein is provided for informational and discussion purposes only, contains expected terms only, and is a summary of certain terms and target fund characteristics that are subject to change and is not intended to be complete and is qualified in its entirety by reference to the Fund's Offering Documents, which should be reviewed in their entirety prior to making an investment in the Fund.

Past or targeted performance is not necessarily indicative of future results, and there can be no assurance that the Fund or any investment will achieve comparable results to those presented herein, that the Fund will be able to implement its investment strategy or achieve its investment objectives or that the returns generated by any investment will equal or exceed any past or projected returns presented herein. There can be no assurance that investors will not lose any or all of their invested capital. Any projections, forecasts or other model or estimated future returns, including estimates of returns or performance, set forth herein ("Projections") are hypothetical, have been prepared and are set out for illustrative and discussion purposes only, and do not constitute a forecast. Projections should not be relied upon and do not represent, and are not necessarily indicative of, the results that may be achieved by any investment. Projected or targeted performance has many inherent limitations. As a sophisticated investor, you acknowledge that you understand and accept such inherent limitations and agree to use Projections for discussion purposes only. No assumption should be made that investments identified and discussed herein were or will be profitable, or that investments made in the future will be comparable in quality or performance to the investments described therein.

Unless otherwise indicated, Projections are presented on a "gross" basis and do not reflect the deduction of any fees and expenses, including management fee or carried interest, taxes payable by an individual investor, transaction costs related to the disposition of unrealized investments or the fund-level taxes, or other fund-level expenses that are expected to be borne by Fund investors, which will reduce returns and are expected to be substantial in the aggregate. Net performance information for Projections cannot be calculated without making arbitrary assumptions about timing of fees and expenses, and for that reason is not included herein.

Projections are based largely on historical information. Neither Pegasus nor the Lab have independently verified the accuracy or completeness of the information nor have the simulated results been independently verified or audited. Should any of the information used in the simulation prove to be inaccurate, the simulated or hypothetical results themselves may be inaccurate. Furthermore, Projections are based upon certain assumptions that may change. There are numerous factors related to the markets in general or the implementation of any specific investment program that cannot be fully accounted for in the preparation of projected or targeted performance results, all of which can adversely affect actual investment results. Projections are therefore subject to a number of important risks, qualifications, limitations, and exceptions. The models, estimates and assumptions on which Projections are based are believed to be reasonable under the circumstances, but actual realized returns on a Fund's investments will depend on, among other factors, the ability to consummate attractive investments and to obtain the leverage reasonably assumed to be achievable based on current proposals from prospective financiers, future operating results, the value of the assets and market conditions at the time of disposition, any related transaction costs and the timing and manner of sale, all of which may differ from the assumptions and circumstances on which Projections are based. Actual results could differ materially from, and may be materially lower than, those discussed or implied herein as a result of various factors, including future economic, competitive, regulatory or market conditions or future business decisions. There can be no assurance that the Fund will realize its objectives or that any investor in the Fund will receive a return of its capital. Variables that could materially and adversely affect the actual investment performance of the Fund may include, without limitation, (i) future operating results of Fund's portfolio companies; (ii) availability and costs of financing; (iii) exit timing; (iv) increases in costs of materials or services; (v) force majeure events (e.g., terrorist attacks, extreme weather conditions, earthquakes, war, pandemics (including COVID-19), etc.); (vi) supply/demand imbalances; (vii) currency fluctuations; (viii) litigation and disputes; (ix) inability to obtain necessary licenses and government, regulatory or other approvals; (x) competition; (xi) whether or not the Fund is able to source and consummate investments in portfolio companies on attractive terms and timing; and (xii) other relevant factors. The existence of concessional capital and the technical assistance facility for the Fund does not eliminate the risk of a loss of principal, including a complete loss of principal.

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Nothing in this Report constitutes tax or legal advice. Prospective investors should review the tax and legal disclosure sections in the Offering Documents, and are urged to seek advice based on the prospective investor's particular circumstances from an independent tax and legal advisor.

None of the Lab, Pegasus, the Fund or their respective affiliates intends that any public offering will be made at any time with respect to any potential transaction discussed in this Report, and each recipient of this Report acknowledges that no public offering is intended.

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The outbreak of the novel and highly contagious form of coronavirus ("COVID-19"), which the World Health Organization formally declared in March 2020 to constitute a global "pandemic", continues to cause concerns for global markets. This outbreak has caused a world-wide public health emergency, significantly constrained global economic production and activity of all kinds, and contributed to both volatility and a severe decline in all financial markets. As a result, economic and market conditions may continue to be significantly affected. The target, model and projected performance presented in this Report does not take into account these subsequent events, the effects of which may be adverse to the aggregate investment performance to certain or all of the individual investments described in this Report.

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Gross IRR is computed on an annual, compounding basis and Gross MOIC is computed using invested capital. Each of Gross IRR and Gross MOIC is calculated without a reduction for any carried interest, management fees and other partnership expenses, which amounts will reduce actual returns from the returns shown here. Such amounts may be significant and may cause such results and the corresponding amounts actually returned to investors to be materially lower than those portrayed. Each of Gross IRR and Gross MOIC is calculated using daily cash flows as they actually occurred and estimated unrealized values. Net IRR and MOIC are calculated based on the gross cash flows, as described above, and are presented net of any carried interest, management fees, and other partnership expenses, but exclude blocker taxes. The management fees and carried interest taken into account for calculating "net" returns are based on assumed projected blended rates paid across all future investors in the Fund and do not necessarily represent the fees and carry paid by any particular investor. An individual investor's Net IRR may vary based on the timing of capital contributions and distributions. Net IRR for individual investments cannot be calculated without making arbitrary assumptions regarding allocation of fees, expenses and carried interest to each investment. For a description of such management and advisory fees, carried interest, transaction costs and other expenses, please see Part 2A of Form ADV maintained by Pegasus, a copy of which is available upon request.

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The interests in the Fund (the "Interests") have not been recommended, approved or disapproved by the U.S. Securities and Exchange Commission (the "SEC") or by the securities regulatory authority of any state or of any other U.S. or non-U.S. jurisdiction, nor has the SEC or any such securities regulatory authority passed upon the accuracy or adequacy of this Report. Any representation to the contrary is unlawful. The Interests have not been registered under the U.S. Securities Act of 1933, as amended (the "Securities Act"), the securities laws of any state of the United States or the securities laws of any other jurisdiction, nor is such registration contemplated. Further, each investor must be prepared to bear the economic risk of the investment in the Interests for an indefinite period of time, since the Interests cannot be transferred or resold (i) except as permitted under the constituent documents of the Fund and (ii) unless they are registered under the Securities Act and under any other applicable securities laws or an exemption from such registration thereunder is available. There is no public market for the Interests and no such market is expected to develop in the future. It is extremely unlikely that the Interests will ever be registered under the Securities Act. The Interests will be sold only to "accredited investors" as defined in the Securities Act, and potential investors will be required to provide verification of their accredited investor status.

The Fund will not be registered as an investment company under the U.S. Investment Company Act of 1940, as amended (the "Investment Company Act"), and consequently the investors will not be afforded the protections thereof. The Fund will rely on the exceptions contained in Section 3(c)(1) and/or Section 3(c)(7) of the Investment Company Act. The Fund will obtain appropriate representations and undertakings from prospective investors to ensure that the conditions of the applicable exception(s) are met. The recipient of this Report acknowledges and agrees that (i) it is aware of, and that it will advise each of its representatives of, the fact that some or all of the Report is or may be material, non-public and/or price-sensitive information and that the provision of such information may constitute its and its representatives as "insiders" for the purposes of applicable securities laws and (ii) applicable securities laws strictly prohibit any person who has received material, non-public and/or price-sensitive information from dealing, purchasing or selling (or causing or procuring others to deal or trade), whether directly or indirectly, publicly listed or tradable securities or debt of entities referred to in the Report and/or the subject of, or connected to, the Fund.

The Lab seeks to identify, develop, and launch sustainable finance instruments that can drive billions to a low-carbon economy. The 2020 Global Lab cycle targets four specific sectors across mitigation and adaptation: nature-based solutions; sustainable agriculture for smallholders in sub-Saharan Africa; sustainable energy access; and sustainable cities, as well as three regions: India, Brazil and Southern Africa.

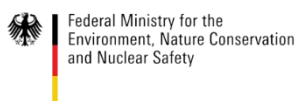
## AUTHORS AND ACKNOWLEDGEMENTS

The authors of this brief are H el ene Van Caenegem, Jane Chu, and John Michael LaSalle.

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<sup>1</sup> The third-party logos represent the Lab's funding partners and does not imply affiliation with or endorsement of SnCF by such firms. There is no guaranty that the Consortium or SnCF will work with any of the entities whose logos are included herein in the future.

## SUMMARY<sup>2</sup>

The Sub-national Climate Finance Initiative (SnCF) or (the Initiative) seeks to deploy a closed-end fund (the Fund) alongside a grant-funded technical assistance facility (the TAF) to identify, prepare, and finance sub-national<sup>3</sup> infrastructure projects in up to 20 developing countries. The Fund is expected to blend concessional with commercial capital and seeks to invest in the sustainable energy, waste and sanitation, and nature-based solutions sectors. The TAF is a grant-funded mechanism that combines impact certification and local government capacity building functions with a project preparation facility (The PPF).

Lab analysis recommends endorsement of the SnCF instrument based on its effort to fulfil the four key Lab criteria:

**Innovative:** SnCF is expected to be the first private equity fund to feature a TAF which provides local government capacity building and certifies all projects for SDG impact prior to investment.

**Financially sustainable:** The Fund is expected to be financially sustainable through a standard private equity management fee. The projects seek to become financially sustainable through their commercially viable business models, **after the fund's exit**.

**Catalytic:** The USD 150M concessional tranche is expected to be leveraged 4x with private investment within the Fund. **At project level, the Fund's concessional equity tranche can catalyze up to 24x in private finance.**

**Actionable:** SnCF has a clear implementation plan, which the Consortium members will seek to execute once the concessional finance is secured.

In light of the COVID-19 pandemic, maintaining a focus on sustainable, inclusive, and resilient urban development has become more important than ever, as cities have been disproportionately hard hit by the crisis (CCFLA, 2020). The SnCF Initiative seeks to have a clear pathway to implementation and aims to generate economic, environmental, and social returns amidst COVID-19, which might make it a potential green recovery instrument across cities. While there are comparable blended finance funds in existence, current offerings and funds are nowhere near to filling market opportunities for blended finance (GCoM, 2020a). SnCF could therefore offer an important innovation and addition to this sector.

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<sup>2</sup> There can be no guarantee that the SnCF's objectives will be met. Please see the "Notice to Recipients" on page 2 for important additional information.

<sup>3</sup> Sub-national in the context of this report is defined as all subdivisions of a country, including but not limited to regions, provinces, states, and municipalities.

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## CONTEXT

Over two-thirds of the global population is expected to live in cities by 2050 (United Nations, 2018). To meet this demand, urban land areas are projected to expand by up to 1.3 million square kilometers between 2015 and 2050, the equivalent of building one New York City every eight days for 35 years (Huang, Li, Liu, & Seto, 2019).

This urbanization boom presents unprecedented challenges for climate goals, with infrastructure built over the next 30 years potentially locking in high-emissions and non-resilient pathways. Engagement at the sub-national level is also critical to reaching global sustainability goals, with local behavior and investment choices influencing up to 80% of GHG emissions (UNDP, 2009) and at least 60% of SDG targets (OECD, 2020) depending on sub-national action.<sup>4</sup>

The urbanization boom also presents unprecedented opportunities for climate adaptation and mitigation. In fact, there is already growing momentum, with approximately 6,000 state and municipal governments committing to reducing emissions (NewClimate Institute et al, 2019). Despite this, there is a tremendous financing opportunity in the amount of investment needed, estimated at close to USD 30 trillion in climate-related investment in sub-national projects by 2030, over USD 2 trillion of which are in sectors targeted by SnCF (IFC, 2018). With public budgets increasingly under strain, private sector investment is crucial to narrowing this gap, but barriers including high risk, low returns, and small investment size constrain private investment (Convergence, 2020b).

The SnCF, led by a consortium of organizations with diverse and complementary expertise (the Consortium), seeks to streamline the pathway for private investors to invest in sustainable infrastructure, particularly in cities in emerging markets. It aims to do so through a blended finance fund that is intended to de-risk projects through a concessional tranche, combined with a grant-funded TAF that develops the pipeline and certifies the impact of sustainable infrastructure projects.<sup>5</sup>

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<sup>4</sup> UNDP considers all sub-national authorities including regions, provinces, states, and municipalities.

<sup>5</sup> There can be no guarantee that the Fund will achieve its investment objectives. Loss of principal, including complete loss of principal, is possible notwithstanding the existence of the concessional tranche and the TAF.



# CONCEPT

## 1. INSTRUMENT MECHANICS

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*SnCF seeks to accelerate the development of climate-smart infrastructure primarily in cities by deploying a blended finance fund for mid-sized projects, supported by a TAF that seeks to develop pipeline and build capacity.*

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### 1.1 INSTRUMENT GOAL

SnCF seeks to mobilize USD 3.8 billion by establishing (i) a **global private equity fund** ("the Fund"), which is expecting to raise USD 750 million and seeks to invest in public-private partnership (PPP) mid-sized sustainable sub-national infrastructure projects and (ii) a complementary USD 28 million TAF which will prepare projects, certify impact, and build local government capacity.

### 1.2 MAIN COMPONENTS<sup>6</sup>

As shown in Figure 1, the Fund expects to be structured as a global blended finance fund with USD 150 million of concessional capital and USD 600 million of commercial capital. The Fund anticipates this capital will be invested in a portfolio of around 40 sub-national infrastructure projects in up to 20 countries, with a target project size ranging from USD 5 to 75 million. The Fund will have a 12 year lifetime from the final closing, with a 5 year investment period from the final closing and 7 year holding period thereafter, subject to up to three one-year extensions. The Fund is expected to charge an annual management fee of 2% of total Fund commitments during the investment period and 1.5% on actively managed capital. The carried interest is 20%, subject to the preferred return with a 100% catch-up. The fund targets an overall return of 13% gross IRR at project level<sup>7</sup>.

Figure 1 also shows that the TAF will be implemented in tandem with, yet financially and operationally separate from, the Fund. The TAF is targeting USD 28 million in grant funding to carry out three sleeves of activities: 1) project preparation; 2) impact monitoring and certification; and 3) local government capacity building. It is planned to last 7 years.

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<sup>6</sup> Expected Fund terms provided herein are for informational and discussion purposes only, consist of expected terms only, are a summary of certain terms and are not intended to be complete and are qualified in their entirety by reference to the Fund's Memorandum and Partnership Agreement, which should be reviewed in their entirety prior to making an investment in the Fund. An investment in the Fund may only be made on the basis of the information contained in the Memorandum and Partnership Agreement, as and when available.

<sup>7</sup> Targeted performance included herein is provided solely for illustrative purposes and is based on a variety of assumptions and estimates about, among others, future operating results, profitability of investments, default rates and principal losses, speed of deployment of capital, duration of the investment period, management fee levels, fee offsets, carried interest levels, preferred return and actual transaction terms and other events that have not occurred, any of which may prove incorrect and may differ from the assumptions on which the projected performance herein is based. There are numerous factors related to the markets in general or the implementation of any specific investment program that cannot be fully accounted for with respect to the projected performance herein. Any targets or estimates are therefore subject to a number of important risks, qualifications, limitations, and exceptions that could materially and adversely affect the Fund's or an investment's performance. Accordingly, actual results may differ materially from targeted performance included herein. There can be no assurance that projected results will be attained within the proposed timing set forth herein or at all, and actual results may be significantly different from the projections herein. See the "Notice to Recipients" on page 2 for important additional information regarding use of target performance. Net IRR cannot be calculated without making arbitrary assumptions regarding management and advisory fees, carried interest, transaction costs and other expenses and has not been included.

- The project preparation facility (PPF) is expected to serve as the Fund's pipeline and further de-risk projects through due diligence and high-quality preparation. The PPF is seeking to be reimbursed by the project developer, for the cost of the feasibility study on a voluntary basis upon financial close.
- The SDG Monitoring, Reporting and Verification (MRV) window of the TAF will seek to establish and implement standardized methodologies for measuring impact, going beyond a project's climate impacts to include other SDGs such as gender and health.
- The capacity building and training of public authorities activities of the TAF will consist of: 1) helping advance enabling conditions for green infrastructure investments through tools to fast track procurement and project development; 2) workshops focused on setting up legal and policy frameworks during project implementation; and 3) workshops for local sub-national organizations to showcase successful projects and provide training on technical, legal, financial and SDG impact lessons learned. Knowledge sharing in other locations will also be supported by publication of investment project blueprints.

SnCF's target sectors are sustainable energy, waste & sanitation, and nature-based solutions. Nature-based solutions will, where practical, be incorporated into projects in the other target sectors (R20, 2020b). Moreover, the projects are expected to contribute positively to climate action (SDG 13) and to at least two other SDGs. The Initiative's Consortium has a track record of originating and preparing projects, examples from the renewable energy and energy efficiency sectors are detailed in section 5.3 and Annex 3<sup>8</sup>.

Finally, to fund the SnCF Initiative, the Consortium is targeting multilateral climate funds for the USD150 million first loss tranche and more particularly have submitted a proposal to the Green Climate Fund (GCF). The USD 600 million commercial tranche of the Fund is expected to be sourced from private investors, and USD 28 million in grants required for the TAF is expected to be raised from multilateral climate funds and other donors. The Fund plans to invest around a fifth of each project's total capital, while the remaining will be a blend of debt and equity from co-financiers including banks, project developers, and other funds.<sup>9</sup>

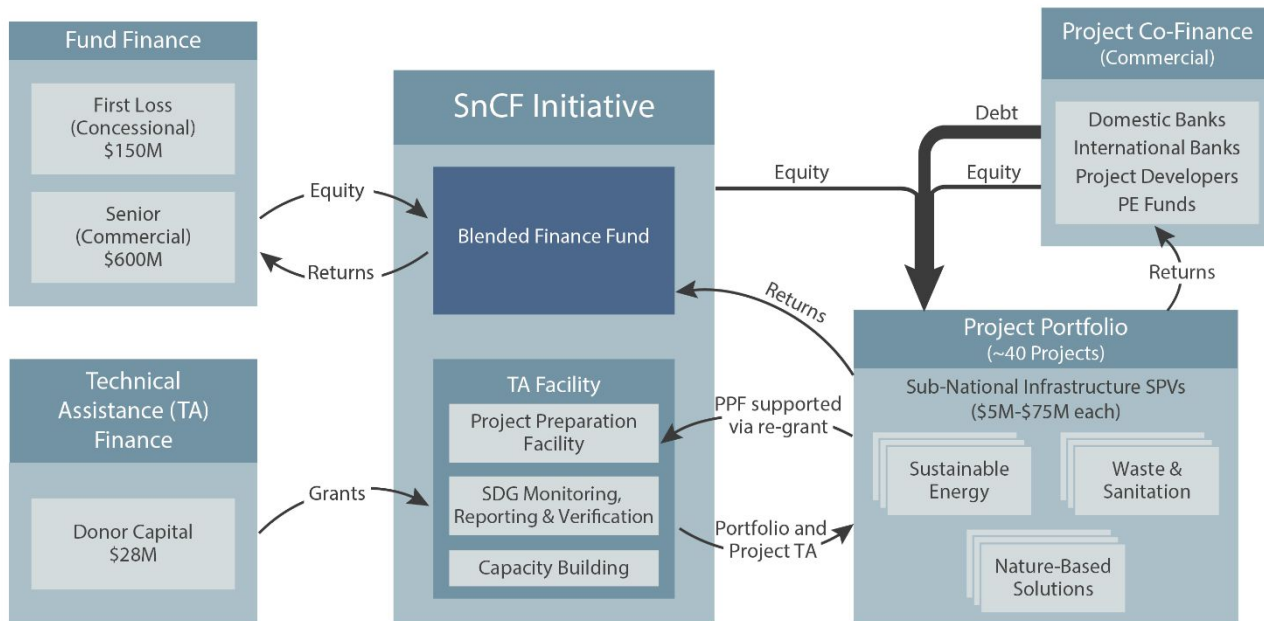
Figure 1. SnCF Instrument Mechanics<sup>10</sup>

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<sup>8</sup> Case studies are provided for illustrative purposes only. There can be no guarantee that similar opportunities will be available to the Fund or that the Fund will successfully consummate an investment in such opportunities. See the "Notice to Recipients" on page 2 for important additional information. Past performance is not a guarantee of future success.

<sup>9</sup>There is no guarantee that estimated investment targets will be achieved.

<sup>10</sup> Expected Fund mechanics provided herein are for informational and illustrative purposes only, consist of expected terms and mechanics only, are not intended to be complete and are qualified in their entirety by reference to the Fund's Memorandum and Partnership Agreement, which should be reviewed in their entirety prior to making an investment in the Fund.



### 1.3 KEY STAKEHOLDERS

The SnCF Initiative will be managed by a Consortium of organizations including:

- Pegasus Capital Advisors (PCA), GCF-accredited, US-based registered investment adviser with the SEC focused on sustainability and wellness. PCA is responsible for managing the Fund and the investment committee (IC).
- R20 Regions of Climate Action (R20), the Geneva-based proponents of this instrument that work with cities and regions to accelerate green infrastructure development and financing. R20 will assist PCA in sourcing, evaluating and implementing projects and will be managing the Project Preparation Facility (PPF).
- The Gold Standard, the Geneva-based organization that has developed a standard for aligning projects with the Paris Climate Agreement and the Sustainable Development Goals. The Gold Standard is responsible for measuring and certifying impact.
- The International Union for Conservation of Nature (IUCN), an international conservation NGO and GCF-accredited entity. IUCN is responsible for the management of the TAF and capacity building of public authorities.
- BNP Paribas, the Paris-based international banking group. BNP Paribas is the custodian of the Fund and responsible for distributing the Fund to clients.

Other stakeholders include:

- Sectorial experts (engineering firms), which take part in the PPF of the Fund. They are involved in conducting feasibility studies for projects in the target sectors, including waste, energy, and water (see Section 3.2). They might also play a role in sourcing of projects.<sup>11</sup>
- Independent impact certification body, SustainCERT<sup>12</sup>, will serve as a third party to verify post-investment climate benefits and other SDG impacts at project level.

<sup>11</sup> There can be no assurances that any plans described herein will be realized on the terms expressed herein or at all.

<sup>12</sup> SustainCERT is the official certification body for Gold Standard for the Global Goals, a robust standard for measuring, reporting and verifying climate and development impacts (SustainCERT, 2020).

- Institutional partners<sup>13</sup>, networks of sub-national authorities<sup>14</sup>, National Designated Authorities and Accredited Entities, make up SnCF's broad network of stakeholders which the Initiative is expected to source projects from.
- Recipient countries, countries in which the Fund might invest, have all shown support for the initiative by submitting a No-Objection Letter (NOL)<sup>15</sup>.

To govern the Fund, the Consortium has established two committees for investment decision taking and authorizing the Fund's expenditure. First, the TAF's Project Accelerator Facilities Committee, which is managed by R20, is responsible for selecting projects, providing technical assistance and authorizing use of the TAF for project development. Other Members of the Project Accelerator Facilities Committee are IUCN, sectorial experts (see section 3.2), and both Pegasus and Gold Standard as a non-voting observer. Second, the Fund's Investment Committee (IC) authorizes the expenditure of the Equity. The IC is managed by Pegasus and consists of certain Pegasus investment professionals, an R20 representative, Environmental & Social (ES) specialist with IUCN as a non-voting observer. The Consortium will ultimately work together through the SnCF Programme Steering Committee, managed by R20 and consisting of all the Consortium members to ensure coherence between the TAF and Fund.

## 1.4 PROJECT INVESTMENT CYCLE

The Initiative seeks to source projects through its PPF, an activity to which sixty-five percent of the TAF budget is expected to be dedicated. While initial feasibility studies are expected to be funded by the TAF under the direction of IUCN, Pegasus expects to be involved throughout the TAF evaluation process as it seeks to ensure the TAF yields a robust pipeline of **projects appropriate for the Fund's equity investment**. The remaining 35% of the TAF budget is expected to be used for capacity building activities, and SDG methodology development. These activities include creating whitepapers on successful models for replication, trainings for sub-national authorities and other relevant regional and national stakeholders, and the creation of new methodologies and tools for climate and SDG impact assessment and evaluation.

Figure 2 outlines the main steps that the project investment cycle follows<sup>16</sup>:

- Desk-based research by the TAF is expected to first filter the top 10% of projects from a longlist of projects gathered by Consortium members through a project identification campaign similar to R20's 2016 100 Climate Solutions Projects Campaign<sup>17</sup>. At this stage, projects will be screened by: 1) SDG impacts reviewed by

<sup>13</sup> Examples of SnCF's Institutional partners are Afrochampions, Union for the Mediterranean, ASEAN, CC35. There is no guarantee that the SnCF will work with any of the firms or businesses whose names are included herein in the future.

<sup>14</sup> Examples of organizations part of R20's network of sub-national authority networks are ORU Fogar, Global Covenant of Mayors, 100 Resilient cities, C40 Cities, ICLEI. There is no guarantee that the SnCF will work with any of the firms or businesses whose names are included herein in the future.

<sup>15</sup> To ensure country support of development projects, the Green Climate Fund (GCF) requires all funding proposals to be accompanied by No-Objection Letters (NOLs) between their National Designated Authority (NDA) and SnCF.

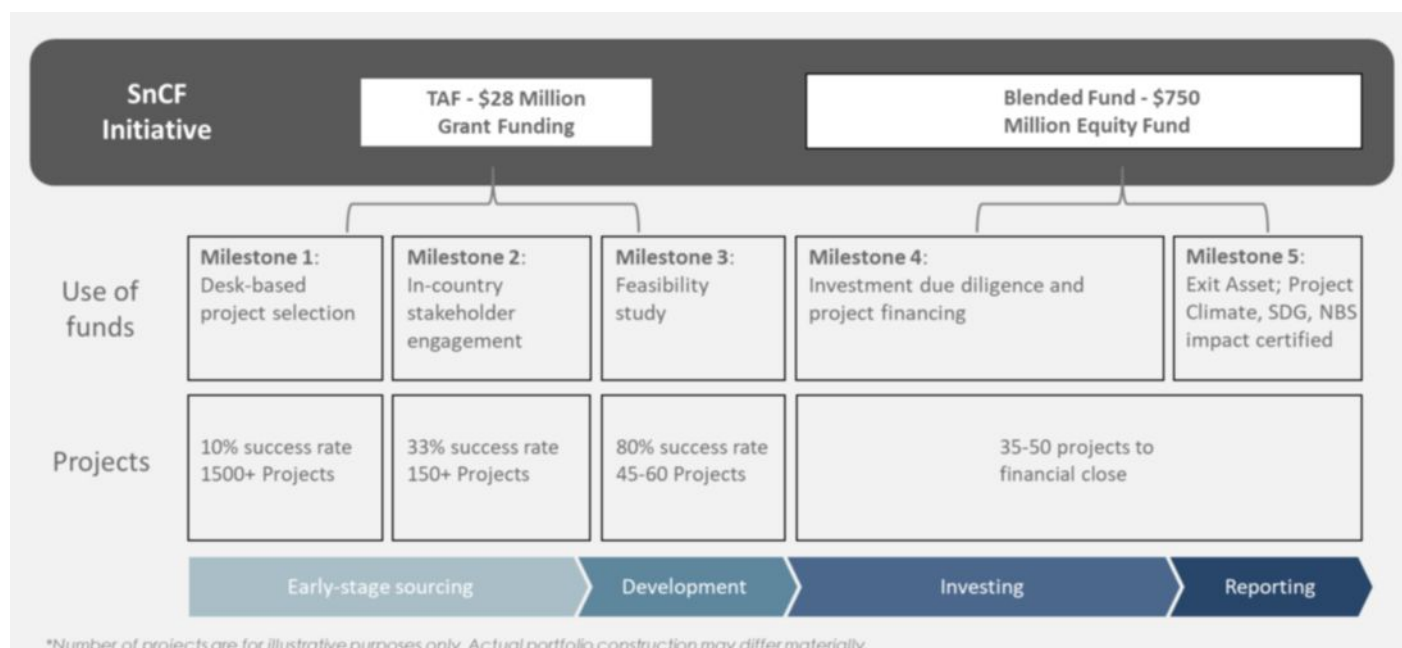
<sup>16</sup> The pipeline information described herein relates to certain potential investment opportunities that have been sourced previously; however, not specifically for the Fund. There can be no assurance that historical trends will continue throughout the life of the Fund nor that such opportunities will be available to the Fund.

<sup>17</sup> The 100 Climate Solutions Projects Campaign has identified over one hundred renewable energy, energy efficiency and waste management infrastructure projects from around the world. All project applicants have submitted official support letters from a public entity R20. (2020a).

Gold Standard<sup>18</sup>, 2) Basic feasibility assessments by sectorial experts 3) Gap analysis towards bankability 4) Environmental and Social (E&S) categorization. A detailed list of the minimum project selection criteria can be found in Annex 2.

- Then, the TAF will perform in-country stakeholder engagement to further screen the list of shortlisted projects to advance for feasibility studies. Generally, the requirements for the project to pass into the next phase include completing an Environmental & Social questionnaire, passing a project resilience screen, conducting a pre-feasibility study, and passing safeguards criteria from Gold Standard.
- The TAF expects it will ultimately fund 45-60 feasibility studies, which are a prerequisite to attract investors and reach financial close and cost on average USD 250k per project. An estimated 20% of projects with completed feasibility studies will be removed from the pipeline after further due diligence by PCA, and for failing to be compliant with the E&S policy, including compliance with the IFC Performance Standards (IFC, 2012)), leading to a final investment portfolio of approximately 35 -50 projects. Project engagement with the TAF expects to provide a right of first offer for equity by the fund.<sup>19</sup>
- Finally, SnCF expects it will invest approximately 20% of the total capital for each funded project in blended equity, while sourcing debt and/or equity co-financing from public and private finance institutions to complement their investment<sup>20</sup>.
- The fund will seek to exit its investments by refinancing or selling its shares and after the respective project becomes fully commercial, which the Fund expects will take approximately 7 years on average.<sup>21</sup>

Figure 2. SnCF Investment Cycle<sup>22</sup>



<sup>18</sup>Gold Standard for the Global Goals is a standard that sets requirements to design projects for maximum positive impact in climate and development (Gold Standard, 2020).

<sup>19</sup>There is no guarantee that portfolio characteristics or estimated investment targets will be achieved.

<sup>20</sup>The ratios are estimates and will be determined on a project by project basis.

<sup>21</sup>There can be no guarantee that the Fund will successfully exit investments within the 7-year timeframe.

<sup>22</sup>Expected terms and operational plans provided herein are for informational and illustrative purposes only, consist of expected terms and plans only, and are not intended to be complete and are qualified in their entirety by reference to the Fund's Memorandum and Partnership Agreement, which should be reviewed in their entirety prior to making an investment in the Fund.

## 2. INNOVATION

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*SnCF is expected to be the first private equity fund to feature a TAF which is expected to provide both local government capacity building and certifies all projects for SDG impact prior to investment.*

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### 2.1 BARRIERS ADDRESSED

SnCF aims to address barriers to the sourcing of bankable projects, certification, and development of mid-sized sub-national infrastructure projects that address climate adaptation and mitigation. To address these barriers, blended finance funds seek to de-risk these projects using concessional finance, while offering private investors larger investment opportunities.<sup>23</sup> However, investors may still find it difficult to invest in blended funds, due to a lack of standard reporting practices, governance models, and gaps in monitoring and evaluating impact (OECD, 2018). Furthermore, for sub-national infrastructure, private investors require dependable fiscal and regulatory systems to be enforced by strong institutions, which can often be absent in the developing country context (White & Wahba, 2019).

SnCF seeks to present solutions to these barriers by:

- De-risking projects through concessional finance and technical assistance, while seeking to offer larger investable opportunities through the fund format. By doing so, the Fund expects to accelerate the time from conceptualization of a project to financial close (GCoM, 2020a).
- Sourcing deals through a TAF which aims to ensure standard governance, reporting, and local government capacity building to strengthen local regulations and enforcement of contracts.
- Certifying all projects prior to first close using internationally recognized Gold Standard methodologies for environmental and social impact.

### 2.2 INNOVATION<sup>24</sup>

The Lab Secretariat mapped 48 funds on five dimensions of similarity to SnCF: 1) whether the fund has a dedicated TAF; 2) whether it is a blended finance fund; 3) whether the fund makes equity investments; 4) whether the fund focuses on infrastructure investments; and 5) whether the TAF provides local government capacity building.

No funds matched SnCF across all five dimensions, but seven funds matched SnCF on four. These are detailed in Table 1 below with differentiation from SnCF identified. A full table of the most comparable instruments examined in the analysis is in the Comparable Instruments Annex (Annex 6). Two characteristics that SnCF had that made it stand out from other comparable instruments are its exclusive focus on sub-national projects, and the replenishment mechanism for the TAF.

Table 1. SnCF Comparable Instruments

Instrument	Description	Differentiation from SnCF
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<sup>23</sup> Performance cannot be guaranteed. See the "Notice to Recipients" on page 2 for additional important information.

<sup>24</sup> The comparables provided herein were selected by the Lab for illustrative purposes because lab analysis has shown that they present the most direct comparables in the industry within the relevant time period. Selection of such criteria is inherently subjective and others might select other comparables based on their assessment of the market. Actual results may differ, perhaps materially from the estimates included herein.



Africa50 (Africa50, 2020)	A blended finance fund focused on energy, transport, Information and Communications Technology (ICT), and water. Makes early and late stage investments and provides technical assistance.	Africa50 invests in carbon-intensive projects like midstream gas, while SnCF has a clear climate focus. Africa50 does not invest in nature-based solutions or provide technical assistance to local governments.
Climate Investor One (Climate Fund Managers, 2020)	A blended finance fund invested in renewable energy infrastructure projects in emerging markets. There is a second fund (Climate Investor Two) focused on water, oceans, and sanitation.	Climate Investor One has a less diversified portfolio than what is expected for SnCF and invests in larger projects than SnCF.
CRAFT: Climate Resilience and Adaptation Finance & Technology Transfer Facility (The Lab, 2017)	A global private equity fund investing in companies that offer climate resilience products and services. A technical assistance facility provides grants to companies in developing countries.	CRAFT Invests in both developed and developing countries with a focus on resilience, while SnCF invests in developing countries with a focus on mitigation.
GEEREF: Global Energy Efficiency and Renewable Energy Fund (Convergence, 2020a)	A Public-Private Partnership (PPP) Fund-of-Funds investing in private equity funds focused on clean energy infrastructure projects.	GEEREF Invests in funds rather than projects directly and is focused on just the energy sector. The technical assistance facility associated with GEEREF is smaller than SnCF's TAF.
AREF: Africa Renewable Energy Fund (Get Invest, 2020)	A dedicated renewable energy fund investing in small to medium renewable energy in Sub-Saharan Africa. A technical assistance facility provides pre-investment concessional funding to structure projects and improve bankability.	AREF invests only in renewable energy in Sub-Saharan Africa, while SnCF will invest in multiple regions.
ASEAN Infrastructure Fund & ASEAN Catalytic Green Finance Facility (Asian Development Bank, 2020)	A regional blended infrastructure fund investing in ASEAN member development needs by using debt instruments with co-financing from the Asian Development Bank.	Invests in sovereign-backed projects infrastructure projects and uses debt instruments.
EaIF: Emerging Africa Infrastructure Fund (Emerging Africa Infrastructure Fund, 2020)	A public private partnership mobilizing capital to lend to businesses creating, improving, or expanding infrastructure in Sub-Saharan Africa using commercial debt terms.	Invests in high GHG emitting and environmental damaging sectors like gas and mining. Does not invest in local government projects.

In addition, the Lab analysis shows that SnCF is unique among comparable blended finance funds because:

- At USD 750M, SnCF is larger than most comparable funds. The median comparable fund is under USD 250 million.
- The TAF seeks to be replenished through a regrating mechanism, which is innovative as technical assistance facilities are often funded by non-replenishable grants or function as seed stage equity investments.
- The Initiative is certifying the impact of individual projects through the Gold Standard<sup>25</sup>, while other funds report SDG or ESG impacts at the fund level only.

<sup>25</sup>Gold Standard for the Global Goals is a standard that sets requirements to design projects for maximum positive impact in climate and development (Gold Standard, 2020)

- The Fund is the only fund in the Lab's analysis that provides technical assistance to sub-national governments, which helps improve enabling environments and facilitates knowledge sharing.

## 2.3 CHALLENGES TO INSTRUMENT SUCCESS<sup>26</sup>

The Fund will be subject to risks inherent to the infrastructure asset class as well as specific to the sub-national level. The management strategy for these risks will differ based on the individual project's needs and will be informed by lessons learned over the course of the project preparation period. Certain risks and the Fund's risk mitigation strategies are summarized in Table 2.

Table 2. Risks and Risk Mitigation Strategies

Risk	Description	Risk Mitigation Strategy
Currency risk	Currency risk including availability and convertibility risk due to the Fund's international nature	<ul style="list-style-type: none"> <li>• Favoring off-taker agreements in USD</li> <li>• Risk is determined on a project by project basis, if the risk is estimated too high insurance will be taken</li> </ul>
Reputational risk	Arises from local public concerned about impact, as well as from stakeholders regarding fee structures	<ul style="list-style-type: none"> <li>• Ensure stakeholders are on board with impact focus and understand fee structures</li> <li>• Ensure each project hires local legal, policy, and communications experts</li> </ul>
Technical/Execution Risk	Including underperforming feasibility studies, delays in construction and additional costs as well as poor operation management of the asset	<ul style="list-style-type: none"> <li>• Prioritize local &amp; sectoral expertise when setting up TAF and within Fund management</li> <li>• Establish Fund-wide guidelines for evaluating EPC partners and project operation teams</li> </ul>
Political Risk	Changing political leadership and support can challenge project success over the long-time frames typical of infrastructure. This risk is compounded at project, city, and national levels for infrastructure projects	<ul style="list-style-type: none"> <li>• Seeking to invest in countries that have extended no-objection-letters will help ensure national political support</li> <li>• Select projects that the Fund believes can show track record and clearly support local policy goals</li> </ul>
Credit Risk	Projects are expected to be financed by an average of 60% debt, making credit risks relevant to project returns	<ul style="list-style-type: none"> <li>• Emphasize geographic and sectoral diversification from the start</li> <li>• Assessing project due diligence prior to investment</li> </ul>

<sup>26</sup> This section does not purport to be a complete description of the risks of investing in the Fund. A further detailed description of risks associated with the Fund can be found in the Memorandum, which should be reviewed in its entirety prior to making an investment in the Fund. See the "Notice to Recipients" on page 2 for important additional information.



# MARKET TEST AND BEYOND

## 3. IMPLEMENTATION PATHWAY AND REPLICATION

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*42 national governments expressed their support for SnCF through No-Objection Letters (NOLs).<sup>27</sup> Initial implementation will target mid-sized urban greenfield projects in waste, water, energy and nature-based solutions.*

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### 3.1 TARGET COUNTRIES AND SECTORS

In order to ensure country support of development projects, the Green Climate Fund (GCF) requires all funding proposals to be accompanied by No-Objection Letters (NOLs) between their National Designated Authority (NDA) and SnCF. By doing so, it is insured projects have official backing and are consistent with national plans. Out of 42 countries (see Annex 1) which the Consortium received NOLs from, SnCF is targeting a sub-set of up to 20 countries.

Lab analysts evaluated this set of 42 countries for investment risk and mitigation potential to establish suitable<sup>28</sup> target markets. This analysis revealed that out of the 42 NOL countries, Chile, South Africa, North Macedonia, Mexico and Jordan were top markets, with relatively lower-risk investment environments and high mitigation potential (Figure 3). On a municipality level<sup>29</sup>, the city with the highest mitigation potential, within these geographies, both in terms of solid municipal waste per capita and emissions per capita is Durban, followed by Johannesburg, Santiago de Chile, Mexico City, Monterrey, Amman, and Skopje. Of those cities, Durban, Mexico City, Amman, and Skopje have climate action plans that address SnCF's target sectors, and Johannesburg is developing one that is expected be released in the 3<sup>rd</sup> quarter of 2020 (City of Johannesburg, 2020).

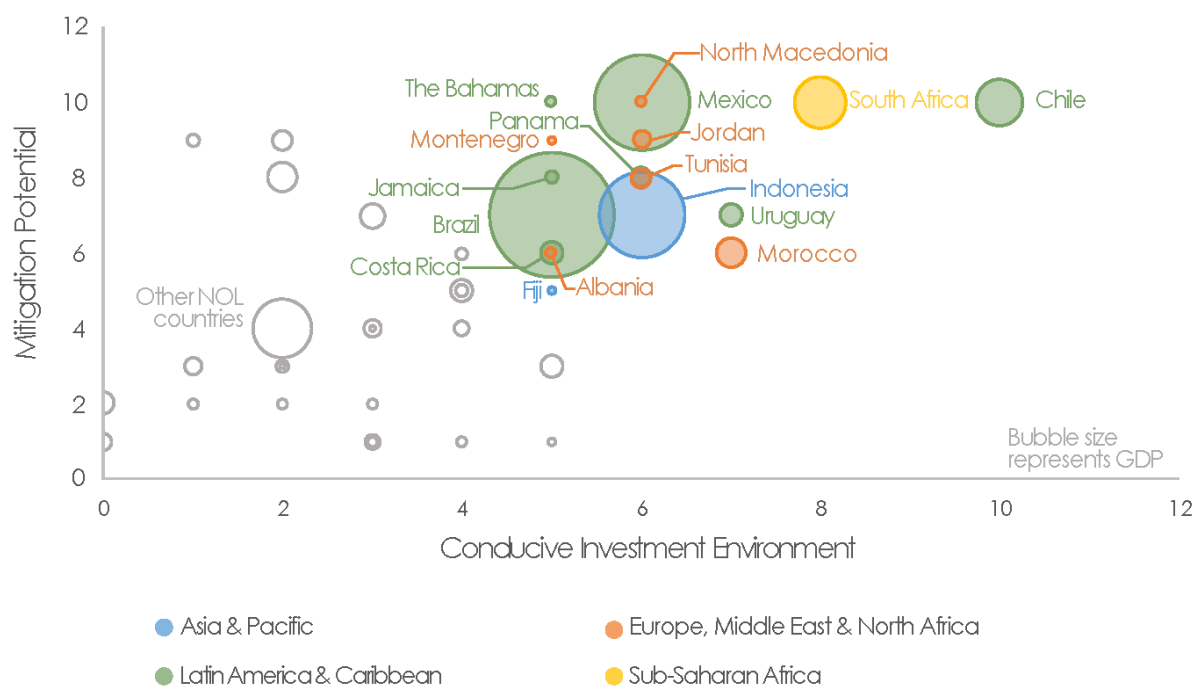
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<sup>27</sup> As of September 14, 2020.

<sup>28</sup> In this analysis, mitigation potential has been defined as emissions per capita (World Bank, 2020a) and investment risk was defined as the average of the Ease of Doing Business Indicator (World Bank, 2020d), Domestic Credit to Private Sector as percent of country GDP (World Bank, 2020c), Sovereign Credit Risk (Trading Economics, 2020), CPI Transparency Score (World Bank, 2020), and PPP Regulatory Framework (World Bank Group, 2018). A detailed methodology is mentioned in Annex 4. There can be no assurances that the Fund will make an investment in any of the sectors or sub-sectors included herein.

<sup>29</sup> In this analysis, data on municipal waste per capita is sourced from the World Bank (2020) and emissions per capita from GGMCF (2005).

Figure 3. Target Market Analysis of the 42 countries with NOLs<sup>30</sup>



SnCF aims to invest 30% in sustainable energy, 40% in waste and sanitation, and 30% in nature-based solutions (including regenerative agriculture projects), while aligning its projects with the host country's National Determined Contributions (NDCs).<sup>31</sup> Of SnCF's 42 NOL countries, 91% have NDCs that include sustainable energy and 58% include waste and sanitation.<sup>32</sup> The analysis showed that SnCF target countries have prioritized the Renewable Energy and Energy Efficiency sectors (Table 3).

Table 3. NDCs in SnCF target countries<sup>33</sup>

Sector included in Mitigation Measures	Sector included in NDCs Globally (%)	Sector included in NDCs of 42 SnCF target countries (%)
Sustainable Energy	74%	91%
Renewable Energy	61%	79%
Energy Efficiency	55%	70%
Waste & Sanitation	41%	58%
Recycling, Solid Waste and/or Waste-to-Energy	12%	9%
Wastewater and other <sup>34</sup>	9%	16%

<sup>30</sup> Figure provided for illustrative purposes only. See Annex 4 for a further description of the methodology used by the Lab to perform the analysis shown herein.

<sup>31</sup> There is no guarantee that portfolio characteristics or estimated investment targets will be achieved.

<sup>32</sup> Number of countries as of September 14, 2020.

<sup>33</sup> NDC data was sourced from ClimateWatch (2020), and latest accessed July 15, 2020.

<sup>34</sup> Other includes: Water Conservation and Reuse; Water Management; Watershed and River Basin Management

## 3.2 IMPLEMENTATION PATHWAY

The Consortium has already identified hundreds of potentially investable energy, water and waste management projects around the world through several past and current project preparation facilities and campaigns including the 100 Climate Solutions Project Campaign, which screens projects for bankability (R20, 2020a)<sup>35</sup>. Its pipeline will ultimately be determined by the strength of in-country partnerships through the Consortium members' networks.

To prepare projects, IUCN, as manager of the TAF, has established three Project Accelerator Facilities to conduct feasibility studies for projects in three target sectors: waste, energy, and water. A similar facility for climate smart agriculture is being considered.<sup>36</sup>

- The Waste Project Facilitator works with Egis Group, a 75% French subsidiary of Caisse des Dépôts specializing in construction and sustainable cities (Egis, 2019).
- The Energy Project Facilitator works with BG Group, a Swiss engineering consulting firm specializing in energy and infrastructure (BG Group, 2018), and Alpiq Group, a Swiss energy services provider and electricity producer (Alpiq, 2020).
- The Water Project Facilitator works with Waterpreneurs, a Swiss organization with hybrid LLC-nonprofit governance structure which provides consulting and accelerator services to SDG projects, focusing on the nexus of water and human rights (Waterpreneurs, 2019).

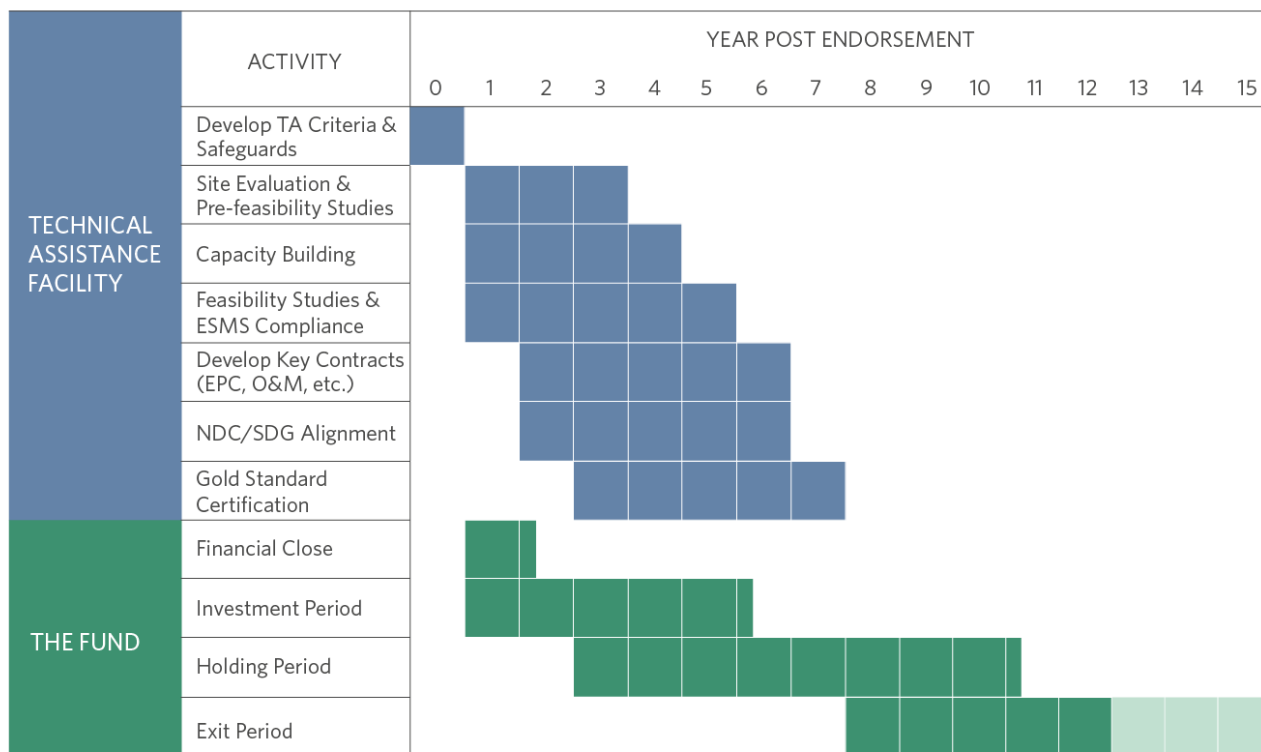
The Fund is expected to have a term of 12 years with up to three one-year extensions. Its associated TAF is planned to last 7 years (Figure 4). The process is expected to begin when the Fund's concessional tranche is secured. For the commercial tranche, the Fund will seek a minimum USD 10 million commitment. The Fund is expected to have closings for a period of up to 15 months, and the investment period, holding period and liquidation period are all determined based on the date of the final closing.

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<sup>35</sup> Description of potential projects is for illustrative purposes only. There can be no guarantee that similar projects will ultimately be available for the Fund, that the Fund will be able to consummate an investment in such projects or that such projects will successfully generate an investment return.

<sup>36</sup> There can be no assurances that any plans described herein will be realized on the terms expressed herein or at all.

Figure 4. SnCF Timeline<sup>37</sup>



### 3.3 IMPLEMENTATION CHALLENGES<sup>38</sup>

The main implementation challenges for SnCF, according to the Lab, are listed below:

- The Initiative is purpose-built to mobilize funding from the Green Climate Fund (GCF), which is subject to COVID-19 pandemic related delays. The Initiative has applied for concessional finance from the GCF and two-thirds of the grant funding for technical assistance, with Pegasus and IUCN as GCF accredited entities. Currently GCF approval for the Fund is delayed due to the COVID-19 crisis. Pegasus and IUCN are collaborating with the GCF in an effort to mitigate the risk of further administrative and fundraising delays.
- The COVID-19 crisis might delay fundraising for the commercial tranche and sourcing of private co-investment at project level. Infrastructure investments tend to have a low historical correlation with other asset classes and therefore are attractive diversifiers in volatile economic times (UBS, 2020) (Blackrock, 2015). More specifically, PPPs have long-term availability-based revenues and together with renewable energy, its valuations are therefore the least affected by COVID-19 within the private infrastructure sector, according to UBS (2020).
- **The Fund’s governance is more complex than that of typical blended finance funds.** The Consortium needs to work together for the next 7 years and navigate changing macro-economic conditions. To mitigate this risk, the Consortium established a SnCF

<sup>37</sup> Expected SnCF Timeline is provided herein for informational and illustrative purposes only and is not intended to be complete. There can be no assurances that the proposed Timeline will be attained at all or on the proposed timing set forth herein.

<sup>38</sup> This section does not purport to be a complete description of the risks of investing in the Fund. A further detailed description of risks associated with the the Fund can be found in the Memorandum, which should be reviewed in its entirety prior to making an investment in the Fund. See the “Notice to Recipients” on page 2 for important additional information.

Programme Steering Committee, managed by R20 and consisting of all the Consortium members in an effort to ensure coherence and collaboration between the TAF and Fund.

- **The Fund's pipeline is dependent on institutional connections**, preparing a pipeline of profitable and impactful projects will be a challenge, particularly in locations where the Consortium does not yet have a track record. In an effort to mitigate this risk, the Consortium will be engaging with their network of stakeholders consisting of engineering firms (section 3.2), institutional partners, networks of sub-national authorities, National Designated Authorities and Accredited Entities, which the Initiative will also source projects from.

## 4. FINANCIAL IMPACT AND REPLICATION

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*For every 1 USD of the Fund's concessional tranche, the Fund believes it can mobilize up to USD 4 in private finance at fund-level and up to USD 24 in private finance at project-level.*

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### 4.1 QUANTITATIVE MODELING

Under the baseline assumptions (Annex 5), the Fund estimates a projected net IRR of 9.4%<sup>39</sup> (1.77x projected net MOIC) for commercial Limited Partners (LPs) and a projected net IRR of 5.4% (1.44x projected net MOIC) for the concessional finance tranche.<sup>40</sup> In the baseline scenario, the cumulative management fees amount to an estimated USD 122 million.<sup>41</sup> The assumptions and model have been provided by the proponent, while the Lab performed sensitivity analysis to stress test the returns on each investor class. One such sensitivity is depicted below, which shows the effect of varying gross project-level returns on the Fund's net IRR for commercial and concessional investors.

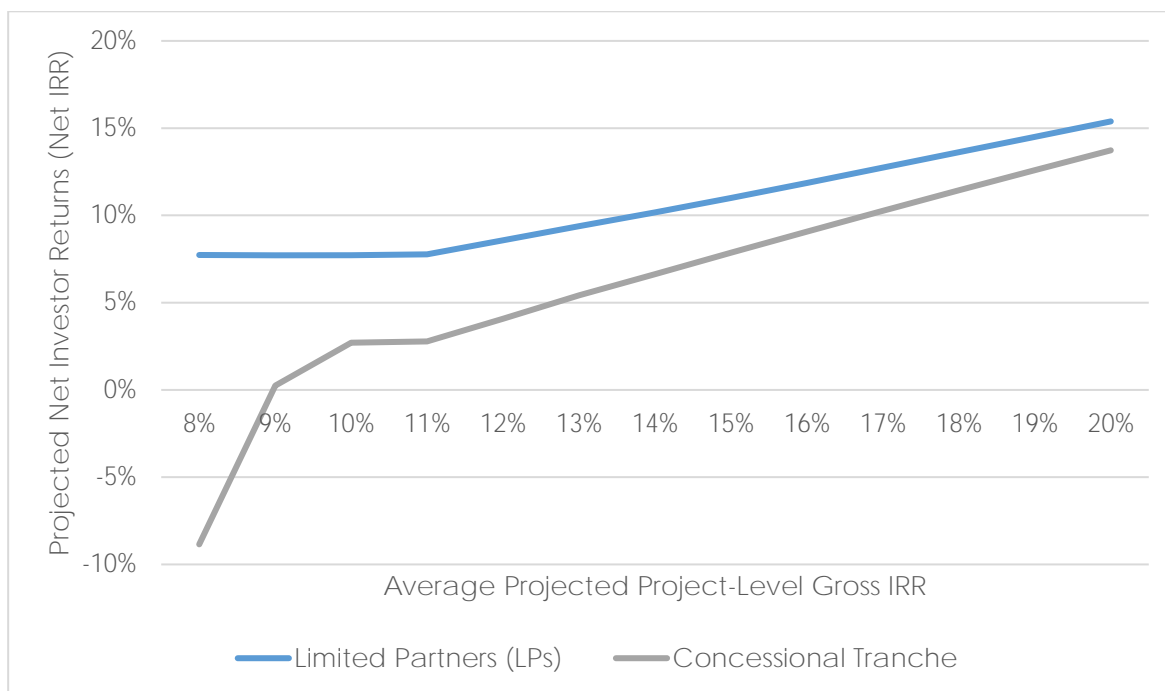
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<sup>39</sup> Preqin (2019) estimates a median net IRR of 9.8% and standard deviation of 12.16% for close-end infrastructure funds (with no split between developed and emerging markets). A net IRR that is similar to SnCF's baseline net IRR for the Limited Partners (LP).

<sup>40</sup> Targeted performance included herein is provided solely for illustrative purposes, and is based on a variety of assumptions and estimates about, among others, future operating results, profitability of investments, default rates and principal losses, speed of deployment of capital, duration of the investment period, management fee levels, fee offsets, carried interest levels, preferred return and actual transaction terms and other events that have not occurred, any of which may prove incorrect and may differ from the assumptions on which the projected performance herein is based. There are numerous factors related to the markets in general or the implementation of any specific investment program that cannot be fully accounted for with respect to the projected performance herein. Any targets or estimates are therefore subject to a number of important risks, qualifications, limitations, and exceptions that could materially and adversely affect the Fund's or an investment's performance. Accordingly, actual results may differ materially from targeted performance included herein. Targeted and modeled Net IRRs and Net MOICs do not reflect investors' individual taxes and transaction costs in connection with the disposition of investments, which may be substantial, as any estimate of such taxes and transaction costs would be arbitrary. There can be no assurance that projected results will be attained within the proposed timing set forth herein or at all, and actual results may be significantly different from the projections herein. See the "Notice to Recipients" on page 2 for important additional information, including the calculation of "Net IRR" and "Net MOIC" as well as the use of projected performance.

<sup>41</sup> The cumulative management fees are based on the baseline model, under the assumptions depicted in Annex 5.

Figure 5. Modeled returns on equity investment for each of the expected investor classes with varying average projected gross project-level returns<sup>42</sup>



The effect of varying average project returns under the baseline scenario with a projected average of 13%<sup>43</sup> Project-Level Gross IRR and estimated holding period of 7 years:

- Limited partners (LP), consisting mainly of commercial investors, are projected to have a 9.4% net IRR on the baseline scenario assuming an 80% participation rate and 8% hurdle rate. Figure 5 shows that, LP returns experience the least variation as project-level returns deviate from the 13% baseline estimate.
- The concessional tranche has an average projected net IRR of 5.4% under the baseline scenario assuming a participation rate of 20% and hurdle rate of 3%. The concessional investors **take the most downside risk if projects don't perform and will start earning a return when the average project IRR reaches 9%.**

<sup>42</sup> Modeled returns are provided for illustrative purposes only. There can be no guarantee that such returns will be achieved. Actual results may vary significantly. See the "Notice to Recipients" on page 2 for important additional information, including the calculation of performance as well as the use of projected performance.

<sup>43</sup> 13% projected project-level gross IRR estimate is provided for illustrative purposes only, and is based on a variety of assumptions and estimates about, among others, future operating results, profitability of investments, default rates and principal losses, speed of deployment of capital, duration of the investment period, management fee levels, fee offsets, carried interest levels, preferred return and actual transaction terms and other events that have not occurred, any of which may prove incorrect and may differ from the assumptions on which the projected performance herein is based. There are numerous factors related to the markets in general or the implementation of any specific investment program that cannot be fully accounted for with respect to the projected performance herein. Any targets or estimates are therefore subject to a number of important risks, qualifications, limitations, and exceptions that could materially and adversely affect the Fund's or an investment's performance. Accordingly, actual results may differ materially from targeted performance included herein. See the "Notice to Recipients" on page 2 for important additional information, including the calculation of "Net IRR" and "Net MOIC" as well as the use of projected performance. Cambridge Associates, (2019) estimates that Clean Tech projects globally (excluding US projects) had an average gross IRR of 9.5% between 2000 to 2017. Smart Grid projects leading with a 32.2% pooled gross IRR, followed by Renewable Power Development (10.7%), Waste & Recycling (10.3%), Water & Wastewater (10%), Energy Efficiency (6.4%) and Lighting (-8.1%) (Cambridge Associates, 2019). These are listed for illustration purposes only. Past performance is not a guarantee of future success.

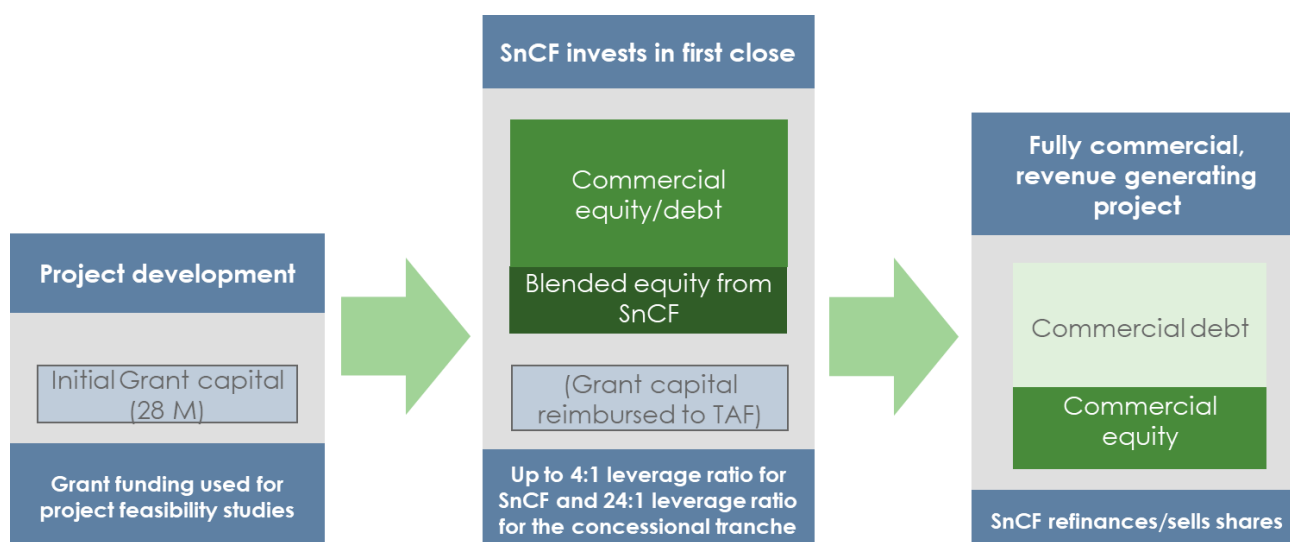
The General Partner (GP) is expected to invest 1% of the total fund size in the commercial tranche.

## 4.2 FINANCIAL SUSTAINABILITY & PRIVATE MOBILIZATION<sup>44</sup>

PCA, as the manager of the Fund, will be compensated through standard management and performance fees. The management fee is expected to be 2.0% during the commitment period and 1.5% thereafter, while the performance fee will be 20% after a hurdle rate of either 8% (LPs) or 3% (concessional tranche), with a 100% GP catch-up. The Technical Assistance Facility (TAF) seeks to become partly financially sustainable through a voluntary reimbursement of the feasibility study costs by the project developers of projects that reach financial close. Finally, projects seek to become financially sustainable, after exit of the fund, through their commercially viable business model.

Through its structure, the Fund believes USD 1 of the Fund's concessional finance tranche has the potential to mobilize up to USD 4 in private finance at Fund-level and up to USD 24 in private finance at project-level. The SnCF initiative, including the grant finance, therefore, aims to mobilize up to 20 times its size in private finance (Figure 6).

Figure 6. Project-level financial sustainability<sup>45</sup>



The Initiative has applied for concessional finance from the GCF (USD 150 million) and two-thirds of the grant funding for technical assistance (USD 18.5 million), while the remainder of the grant funding is expected to be sourced from other donors (USD 9.5million).<sup>46</sup> To achieve the target private mobilization at project level, the SnCF is expected to support the sourcing of co-financing over the course of the investment period for up to USD 3 billion. All potential investment opportunities are depicted in Table 4.

<sup>44</sup> Expected Fund terms are provided herein are for informational and illustrative purposes only, consist of expected terms only, are not intended to be complete and are qualified in their entirety by reference to the Fund's Memorandum and Partnership Agreement, which should be reviewed in their entirety prior to making an investment in the Fund.

<sup>45</sup> Figure provided for illustrative purposes only.

<sup>46</sup> There can be no assurances that any plans described herein will be realized on the terms expressed herein or at all, and all such plans are subject to uncertainties and risks.

Table 4 Investment opportunity<sup>47</sup>

Investment Opportunities			
	Type	Role of Capital	Targeted Amount
TAF Level	Public Grant <i>DFIs, governments, Foundations, Multilateral Climate Funds</i>	Grant funding for Technical Assistance	USD 28 million
Fund Level	Commercial Equity <i>Private endowments/ Institutional investors/ High-net worth individuals / Private Finance institutions including from emerging countries / Corporates</i>	Commercial Investment tranche of the Fund	USD 600 million
	Concessional Equity <i>Multilateral Climate Funds</i>	Concessional investment tranche of the Fund	USD 150 million
Project (Sponsor) Level	Commercial Equity and Debt <i>Sponsors/ Public and Private Finance institutions including from emerging countries</i>	Co-Financing at project-level	Up to USD 3 billion

### 4.3 REPLICATION STRATEGY & POTENTIAL

The Consortium believes addressing the limited supply of bankable projects and limited sub-national capacity could open up a large potential market for future funds. The IFC (2018) estimates there is an extensive investment potential in emerging market cities before 2030. Climate-smart water has an estimated global investment potential of USD 1 trillion, waste has a global investment potential of USD 200 billion, and renewable energy has a potential of USD 842 billion. East Asia Pacific has the biggest investment potential in cities in of the above-mentioned sectors to 2030, followed by Latin America & Caribbean (IFC, 2018).

After a successful pilot fund, the Consortium members envision a plan to move from a single portfolio to separate regional and decentralized blended funds for sub-national investments in specific geographies and technologies. Ultimately, the Consortium envisions regional hubs, with their own in-country technical assistance facilities, and strengthened regional network of municipalities and other stakeholders. Using lessons learned during the initial fund to shape follow-on funds is expected to be a key part of the replication strategy.<sup>48</sup>

The Consortium believes a lack of capacity in municipalities is a major hindrance in scaling a pipeline of bankable projects. Replicating the capacity building and project preparation activities of the TAF has the possibility to address this gap and build the pipeline for future funds. Of 504 cities in countries with NOLs that are members of the Global Covenant of Mayors for Climate and Energy, which the Consortium believes indicates their commitment to ambitious and measurable climate initiatives, just nine have climate action plans and

<sup>47</sup> Nothing in this Report constitutes an offer to sell, or the solicitation of an offer to buy, any security. There can be no assurances that any targeted investment amounts or potential investment opportunities described herein will be realized on the terms expressed herein or at all, and all such plans are subject to uncertainties and risks. See the "Notice to Recipients" on page 2 for important additional information.

<sup>48</sup> There can be no assurances that any plans described herein will be realized on the terms expressed herein or at all, and all such plans are subject to uncertainties and risks.



seventeen have emissions inventories (GCoM, 2020b). If the TAF is effective at increasing the capacity of cities to plan high quality sustainable infrastructure projects, the Consortium believes it could increase the pipeline and help to open sub-national infrastructure to private investment.

## 5. ENVIRONMENTAL AND SOCIO-ECONOMIC IMPACT

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*The Fund has the potential avoid 3.8 million tonnes of CO<sub>2</sub> annually and up to 77 million tonnes over the lifetime of the infrastructure. It has the potential to create 20,000 direct jobs and has a clear gender focus.*

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### 5.1 DIRECT IMPACT TARGETS

The Initiative is targeting the following direct environmental and social impacts across their investment portfolio<sup>49</sup>:

- SDG 7: Affordable and clean energy  
The Fund targets projects that it believes will generate 1.8 GWh of renewable energy per year
- SDG 8: Decent work and economic growth  
The Fund targets projects that it believes will generate 20,000 permanent jobs
- SDG 11: Sustainable cities and communities  
The Fund targets sustainable infrastructure projects that it believes will improve urban living conditions for 17 million city dwellers
- SDG 13: Climate Action  
The Fund targets investments that it believes will reduce global GHG emissions by 77 million tonnes of CO<sub>2</sub> equivalent (MMTCO<sub>2</sub>E)

### 5.2 INDIRECT IMPACTS

Aside from the direct impacts detailed above, the SnCF Initiative also expects to generate the following indirect environmental and social impacts through its investment and technical assistance activities:

- SDG 3: Good health and well-being  
More investments in renewable energy and waste management facilities means better air quality and cleaner city streets
- SDG 5: Gender equality  
The TAF will consider gender in its certification process for all projects
- SDG 9: Industry, innovation, and infrastructure  
The SnCF Initiative builds local government capacity to finance sub-national infrastructure projects. This improves access to urban services and supports green innovation

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<sup>49</sup> A series of sample projects were used to arrive at these direct targets. There can be no guarantee that similar projects will be available for investment by the Fund or that the Fund will successfully consummate an investment in such projects. The sample projects include 28 projects in the solar, wind, biomass, wastewater treatment, smart irrigation, waste processing, and LED street lighting sectors. These projects are expected to be spread over Rwanda, Fiji, Indonesia, Honduras, Guatemala, Morocco, Ecuador, Democratic Republic of the Congo, and Lebanon. Each project is assumed to cost between USD 40 million – 50 million. There is an expected 70 MW installed capacity for each renewable energy project, 280,000 square meters of daily processing for each wastewater project, 122,350 MWh of electricity saved by each smart irrigation project, 430,000 tonnes per year of wet waste processed by each waste processing project, and 5,694,000 KWh of energy saved per year by each LED street lighting project.

- SDG 14: Life below water  
Financing waste management and Nature-Based Solutions reduces effluence and improves water quality, while protecting coastal zones to improve resilience
- SDG 15: Life on land  
Financing renewable energy reduces fossil fuel-related ecosystem degradation and biodiversity loss

### 5.3 IMPACT CASE STUDIES<sup>50</sup>

Energy Efficiency: R20 supported the adoption of LED streetlights in Brazil through a set of capacity building and project preparation activities. R20 conducted a feasibility study in Rio de Janeiro and two outlying towns to retrofit streetlights with LED fixtures, leading to a pilot project in two months that led to 50% electricity savings and a 40% reduction in maintenance costs. R20 also overcame resistance to the technology by showcasing the market opportunity to domestic manufacturers to create lower-cost domestic LED fixtures and arranged for Electrobras, a major utility, to test and provide warranties for the fixtures. Alongside Pegasus, R20 created a template for a special purpose vehicle to enable private investment. Since 2014, LED light fixtures and PPPs have become the standard for municipalities in Brazil (see Annex 3).

Renewable Energy: R20 also originated a project with Akuo Energy, a global renewable energy developer based in France, and the Government of Mali to build a 50 MW solar photovoltaic facility in Kita, Mali. The project was financed by an equity stake from Akuo, and a senior loan from FMO, and supported by land concessions from the government of Mali and a “take or pay” Power Purchase Agreement (PPA) with Energie du Mali SA, the national electricity company. The project delivered electricity to over 700,000 people and created 430 jobs (see Annex 3).

### 5.4 IMPACT ON SUSTAINABLE CITIES

The Sustainable Cities stream of the Lab strives to address market barriers and support the deployment of climate solutions in cities in developing countries. Such solutions may fall under energy efficiency, clean energy, low carbon transport, and other sectors. The SnCF Initiative aims to finance these infrastructure projects with a focus on renewable energy, waste management, and nature-based solutions. Furthermore, SnCF's TAF is expected to provide grants that support knowledge transfer to developing country cities through local government capacity building efforts as well as the creation and dissemination of standardized impact measurement and reporting tools for urban infrastructure projects.

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<sup>50</sup> Case studies included herein are for illustrative purposes only, have been selected in order to provide examples of the types of projects undertaken by Consortium members that may be pursued by the Fund and do not purport to be a complete list thereof. It should not be assumed that investments made in the future will be comparable in quality or performance to the investments described herein. Further, references to the investments included in the illustrative case studies should not be construed as a recommendation of any particular investment or security. Certain information was provided by third parties and certain statements reflect the Lab's findings as of the date hereof based on prior experience and Lab analysis. Past performance is not necessarily indicative of future results. There can be no guarantee that similar opportunities will be available to the Fund or that the Fund will successfully consummate an investment in such opportunities. See the “Notice to Recipients” on page 2 for important additional information.

## NEXT STEPS

The Initiative has a well-developed structure, experienced Consortium members, and clear path to market. With a lack of shovel-ready mid-sized infrastructure projects in cities in developing economies and the need for a green recovery from the COVID-19 crisis the demand for an instrument like SnCF is only increasing.

The immediate next steps for SnCF's successful pilot implementation are the following:

- Secure approval for the concessional tranche from GCF
- Hire staff to manage the day-to-day activities of the Fund and the TAF across all organizations in the SnCF Consortium
- Commence fundraising for the commercial tranche
- Secure grants to fully fund the TAF
- Start selecting and preparing projects through the TAF

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## ANNEX

### 1. LIST OF NO OBJECTION LETTER COUNTRIES<sup>51</sup>

Latin America & Caribbean	Asia & Pacific	Sub-Saharan Africa	Europe, Middle East & North Africa
Brazil	Cambodia	Burkina Faso	Albania
Chile	Fiji	Cameroon	Jordan
Costa Rica	Indonesia	Cote d'Ivoire	Lebanon
Dominica	Myanmar	DR. Congo	North Macedonia
Dominican Republic		Gabon	Montenegro
Ecuador		Kenya	Morocco
El Salvador		Mozambique	Tunisia
Guatemala		Nigeria	
Haiti		Rwanda	
Honduras		Senegal	
Jamaica		South Africa	
Mexico		Togo	
Panama		Uganda	
Uruguay		Mauritania	
The Bahamas		Guinea	
		Mali	

### 2. INVESTMENT SELECTION CRITERIA<sup>52</sup>

The Fund has a screening process working in 2 distinct phases: a screening phase and due diligence phase. The investment committee is highly involved with the project selection for the TAF in an effort to ensure a high probability for selection for the Fund.

1. Geography – Targets to invest 25% of the Fund in each of the regions: Latin-America, Mediterranean, sub-Saharan Africa, and Asia-Pacific in up to 20 countries. There is a clear target to not invest more than 20% of the Fund's portfolio in 1 single country and the Fund will only invest in countries it received a no objection letter from, per the GCF requirement.
2. Sectors – The target scope of the Fund is to invest 30% in sustainable energy projects, including renewable energy and energy efficiency, 40% in waste and sanitation, including waste optimization, water and sanitation and 30% in nature-based solutions, including regenerative agriculture/aquaculture and coastal marine economy.
3. Project type and deal-size.

<sup>51</sup> As of September 14, 2020.

<sup>52</sup> Expected Fund terms and portfolio characteristics are provided herein are for informational and illustrative purposes only, consist of expected terms and portfolio characteristics only, are not intended to be complete and are qualified in their entirety by reference to the Fund's Memorandum and Partnership Agreement, which should be reviewed in their entirety prior to making an investment in the Fund. There is no guarantee that portfolio characteristics or target returns will be achieved. Diversification does not ensure a profit or protect against a loss.



- a. The Fund will seek to invest in equity of underlying projects. The Fund may invest in debt or convertible debt on a case-by-case basis.
  - b. Greenfield infrastructure projects with an estimated project size of USD 5-75M, up to 45 projects and with a target of 35-50 projects.
4. Impact targets:
- a. Minimum requirement: Project does not fall under the exclusion list in the ESMS and E&S project categorization will be B or C.
  - b. The Fund is expected to target projects with a nature-based solution component. Any target project is expected to contribute positively to climate action (SDG 13) and positively contribute to at least two other SDGs, such as (but not limited to) SDG Improved health (SDG 3), Gender mainstreaming (SDG 5), Clean Water and sanitation (SDG 6), Access to clean energy (SDG 7), Job creation (SDG 8), Sustainable communities (SDG 11), Biodiversity (SDG 14 and 15).
5. Public stakeholder buy-in:
- a. The Fund has received a mandate letter or similar from the relevant Sub-national Authority to develop and seek financing solutions for the project
  - b. The project aligns with the host country's NDCs.
6. Preliminary financial analysis yields an expected target gross IRR for the project of at least 13%.<sup>53</sup>

### 3. CASE STUDIES<sup>54</sup>

#### 3.1 LED STREET LIGHTING RETROFITS IN BRAZIL

Sector: Energy Efficiency

Year: 2014

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<sup>53</sup> Targeted performance included herein is provided solely for illustrative purposes, and is based on a variety of assumptions and estimates about, among others, future operating results, profitability of investments, default rates and principal losses, speed of deployment of capital, duration of the investment period, management fee levels, fee offsets, carried interest levels, preferred return and actual transaction terms and other events that have not occurred, any of which may prove incorrect and may differ from the assumptions on which the projected performance herein is based. There are numerous factors related to the markets in general or the implementation of any specific investment program that cannot be fully accounted for with respect to the projected performance herein. Any targets or estimates are therefore subject to a number of important risks, qualifications, limitations, and exceptions that could materially and adversely affect the Fund's or an investment's performance. Accordingly, actual results may differ materially from targeted performance included herein. Targeted and modeled Gross IRRs do not reflect investors' individual taxes and transaction costs in connection with the disposition of investments, which may be substantial, as any estimate of such taxes and transaction costs would be arbitrary. There can be no assurance that projected results will be attained within the proposed timing set forth herein or at all, and actual results may be significantly different from the projections herein. See the "Notice to Recipients" on page 2 for important additional information, including the calculation of "Gross IRR" as well as the use of target performance.

<sup>54</sup> Case studies included herein are for illustrative purposes only, have been selected in order to provide examples of the types of projects undertaken by Consortium members that may be pursued by the Fund and do not purport to be a complete list thereof. It should not be assumed that investments made in the future will be comparable in quality or performance to the investments described herein. Further, references to the investments included in the illustrative case studies should not be construed as a recommendation of any particular investment or security. Certain information was provided by third parties and certain statements reflect the Lab's findings as of the date hereof based on prior experience and Lab analysis. Past performance is not necessarily indicative of future results. There can be no guarantee that similar opportunities will be available to the Fund or that the Fund will successfully consummate an investment in such opportunities. See the "Notice to Recipients" on page 2 for important additional information.



Direct SDG Impacts: 7 and 13

Indirect SDG Impacts: 11

**Opportunity:** Street lighting represents an opportunity for cities to directly invest in energy efficiency and improved safety, but the cost of imported LED streetlights was prohibitive for Brazilian cities (R20, 2020b). Safety is the primary motivator for expanding and improving lighting. Streetlighting in Brazil is associated with large reductions in crime, (Arvate et al, 2018). The enabling environment for new models of finance was in place. Since 2009, municipalities have had a dedicated source of revenue for public lighting, the Contribuição para Custeio do Serviço de Iluminação Pública (COSIP), levied on households with electrical connections (Global Infrastructure Facility, 2019).

**Strategy:** In 2014, R20 conducted a feasibility study in Rio de Janeiro and two outlying towns to retrofit streetlights with LED fixtures, leading to a pilot implementation within two months. To overcome skepticism from city leaders on the suitability of the technology, R20 arranged for Eletrobras, a major utility, to test and provide warranties for the fixtures, and introduced Brazilian manufacturers to the market to jumpstart a domestic LED industry to bring down costs (R20, 2017). After the success of the pilot project, R20 worked with the law firm Tozzini e Freire, Dr. Aragao, and Pegasus to develop a replicable legal structure using a special purpose vehicle to draw private finance that would be repaid with energy and maintenance savings (R20, 2020b).

**Impact:** The switch to LED light fixtures reduced energy consumption by 50% and maintenance costs by 40% in the pilot project in Rio de Janeiro as well as improving the safety of neighborhoods that are served by improved street lighting. Technical assistance from R20 and its technical partners—including Pegasus—was essential in enabling the adoption of LED streetlights in over 40 Brazilian cities by 2017 (R20, 2017). LED streetlights have since become the standard for all cities in Brazil, showing that R20 successfully catalyzed a scalable model that shifted business as usual in environmentally, socially, and financially beneficial ways (R20, 2020b).

**SnCF Value Add:** SnCF will seek to build off of R20's experience by combining a similar model of technical assistance with built-in access to finance, reducing transaction costs, and timelines by creating a one-stop-shop. SnCF believes its ability to fund capacity building activities will increase the environmental impact of similar projects—for example, SnCF will be able to investigate the need for a circular economy approach, to ensure the recycling of LEDs is properly incorporated into the project design.

## 3.2 SOLAR PHOTOVOLTAICS IN KITA, MALI

Sector: Renewable Energy

Year: 2013

Direct SDG Impacts: 7, 8, and 13

**Opportunity:** Demand for electricity in Mali exceeds the generation capacity, leading to a 32 MW gap in 2014. Most energy in Mali comes from biofuels burned by households lacking access to electricity (AfDB, 2015). Electrification brings a host of benefits including increased incomes, better health, and more investment in education (Biteye, 2015). The electricity that is produced is mostly generated with imported oil, making the country vulnerable to price fluctuations in addition to greenhouse gas emissions (AfDB, 2015).

**Strategy:** In an effort to close the generation gap and reduce Mali's dependence on fossil fuels, R20, in partnership with the government of Mali and Akuo Energy, a global renewable

energy developer based in France, committed to building 160 MW of new solar power generation. The first project originated by R20 in this partnership is located in Kita, a town 190km west of Bamako. The site is located next to a substation, enabling a low-cost connection to the electrical grid (Akuo Energy, 2018).

The facility is being developed by Akuo Energy through a special purpose vehicle, Akuo Kita Solar. The Ministry of Energy provided a 30-year concession of 100 hectares of suitable land next to a substation for the project. The project received a revenue guarantee in the form of a "take or pay" Power Purchase Agreement (PPA) that provided *Energie du Mali SA*, the national electricity company, with a below-average electricity price, and the project sponsors with a secure revenue stream. Akuo Energy provided the feasibility, basic design, and engineering design. Of the EUR 80 million total project cost, EUR 55 million was financed with a senior loan from FMO, the Dutch Entrepreneurial Development Bank, and a USD 2.8 million guarantee by GuarantCo (Akuo Energy 2018, FMO 2017, GuarantCo 2017).

Impact: This project is expected to generate 50 Megawatts of new, carbon-free electricity, helping to close Mali's generation gap without increasing greenhouse gas emissions, serving over 700,000 people. The project created 400 construction and 30 permanent jobs during operation (GuarantCo, 2017). The project was expected to become commercially active after 24 months of development (Akuo Energy, 2018).

SnCF Value Add: SnCF will seek to streamline the fundraising process by securing the initial equity investment. A nature-based solutions element of the project was studied for feasibility, but without the support that the SnCF can provide for nature-based solutions, it was determined to be too complex and dropped from the project.

## 4. TARGET MARKETS

The indicators used for determining the key countries in the target market analysis in paragraph 3.1 are listed below:

Mitigation potential was defined as emissions per capita (in metric tonnes per capita). The average of emissions per capita from 2010-2014 was taken (World Bank, 2020a). Emissions per capita were converted to deciles to treat outliers.

Investment risk was defined as the average of the ease of doing business indicator (World Bank, 2020d), domestic credit to private sector as percent of GDP (World Bank, 2020c), sovereign credit rating, corruption transparency score and conducive regulatory PPP environment. All data was normalized on a range from 0 to 10 and indicators were weighted equally.

Bubble size is defined by the Gross Domestic Product (GDP). The average of country's GDP values between 2014-2018 was used to avoid any single-year anomalies (World Bank, 2020e).

## 5. CASHFLOW ANALYSIS<sup>55</sup>

A modeling exercise for the Fund was undertaken to simulate the distribution of fund proceeds to investors. The model relies on the assumptions taken below:

Table 1. SnCF Investment assumptions

SnCF Investment assumptions	
Target size	USD 750M
1 <sup>st</sup> Close	Q4 2020
Term	12 with up to three one-year extensions
Preferred return	8% for Class A investors 3% for Class B investor (Green Climate Fund)
Management Fee	2% of committed capital during the Commitment Period 1.5% of invested capital thereafter
Minimum commitment	USD 10M
Target Project-Level Return	13% gross IRR <sup>56</sup>
Target Deal Size	USD 5M – 75M
Commitment Period	5 years from the final close
Carried Interest	20%, subject to the preferred return with 100% catch-up
GP investments	Fund manager will invest min 1%

Assumptions on the pay-out structure of the different investor classes are listed in table 1. The internal rates of return for the baseline model scenario are listed in table 2.

Table 2. Waterfall Assumptions

STEP	SnCF
1	Repay Limited Partners including the Hurdle rate of 8%
2	Repay concessional tranche including a Hurdle rate of 3%
3	Carry to the GP until it has received 20% of all distributions
4	Distribute other returns 80% to the LPs (including concessional tranche) and 20% to the GP

Table 3. Internal rates of return for the baseline model scenario<sup>57</sup>

Investor Type	Target Net IRR
Class A – Limited Partners	9.4%

<sup>55</sup> Projected performance and model cash flows included herein are not necessarily indicative of future results, and there can be no assurance that an applicable investment will achieve comparable results to those presented herein, or that the returns generated by such an investment will equal or exceed any projected or modelled returns presented herein. Any estimated future returns and revenue information set forth herein are hypothetical and do not constitute a forecast. Such estimations and assumptions may require modification as additional information becomes available and as economic and market developments warrant. Any such modification could be either favorable or adverse. See the "Notice to Recipients" on page 2 for important additional information regarding use of model and projected performance. There can be no assurance that projected results will be attained within the proposed timing set forth herein or at all, and actual results may be significantly different from the projections herein.

<sup>56</sup> Target return is included for illustrative purposes only. There can be no guaranty that the target return will be achieved. Actual results may vary significantly. See the "Notice to Recipients" on page 2 for important additional information regarding the use of projected and model performance. Net IRR cannot be calculated without making arbitrary assumptions regarding management and advisory fees, carried interest, transaction costs and other expenses and has not been included.

<sup>57</sup> Targeted returns are included for illustrative purposes only. There can be no guarantee that such returns will be achieved. Actual results may vary significantly. See the "Notice to Recipients" on page 2 for important additional information.

Class B – concessional tranche	5.4%
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## 6. COMPARABLE INSTRUMENT ANALYSIS<sup>58</sup>

The most similar instruments listed in Table 1 of section 2.2 are not repeated here.

Instrument	Description	Differentiation from SnCF
<a href="#">The African Local Bond (ALCB) Fund</a>	Public debt fund that provides technical assistance for local currency bond issuances by either first-time issuers or issuers using innovative transactions in a local context.	Invests in local bonds and provides technical assistance to bond issuers rather than in projects directly.
<a href="#">Blackrock - Climate Infrastructure Fund</a>	A blended emerging markets climate infrastructure fund investing in climate change mitigation projects such as renewable energy, energy efficiency, energy storage, and low-carbon transport in Southeast Asia, Latin America, and Africa.	Does not invest in waste and water infrastructure.
<a href="#">Access to Clean Energy Fund</a>	A donor-funded technical assistance facility to support market building. A variety of projects will help portfolio companies to enhance their operations by following best international practices, for instance in managing ESG risks.	Only supports energy projects and uses debt instruments rather than equity investments. Much smaller technical assistance facility relative to fund size.
<a href="#">Global Climate Partnership Fund (GCPF)</a>	A blended finance fund with donor-funded technical assistance facility that invests in renewable energy and energy efficiency through either senior or subordinated debt.	Only invests in renewable energy and energy efficiency
<a href="#">Green for Growth Fund (GGF)</a>	A blended finance fund with technical assistance facility that invests in energy efficiency projects in Eastern Europe, the Middle East, and North Africa.	Lends to both financial institutions and project developers.
<a href="#">Climate Investment Fund</a>	An USD 8 billion multilateral climate fund investing in clean technology, energy access, climate resilience, and sustainable forests in developing and middle-income countries.	Not a blended finance fund and does not provide technical assistance to local governments.
<a href="#">InfraCo Africa</a>	A donor-funded company that develops infrastructure projects in Africa, providing both the funding and project development expertise needed to take an infrastructure project from concept to bankable investment opportunity.	Not a blended finance fund. Only invests in Africa.

<sup>58</sup> The comparables provided herein were selected by the Lab for illustrative purposes because Lab analysis has shown that they present the most direct comparables in the industry within the relevant time period. Selection of such criteria is inherently subjective and others might select other comparables based on their assessment of the market. Actual results may differ, perhaps materially from the estimates included herein.

<a href="#">Frontier Energy II</a>	A blended finance fund that invests in and actively supports project development for renewable energy generation in Kenya, Rwanda, and Uganda.	A narrow regional and sectoral focus, and no associated technical assistance facility.
<a href="#">Ashmore Andean Fund II (AAF II)</a>	A long-term private equity fund that invests in infrastructure in Colombia, Peru, Panama, Costa Rica, El Salvador, and Guatemala.	The fund does not provide technical assistance and is fully private.
<a href="#">Africa Agriculture and Trade Investment Fund (AATIF)</a>	A closed-ended blended finance fund that invests debt and equity in small and medium enterprises across the agriculture value chain.	Only invests in small and medium enterprises in the agriculture sector and does not provide local government technical assistance.