



Photo credit: The Blue Circle

# MOBILISING PRIVATE FINANCE

EXPERIENCE FROM A DECADE  
OF DECARBONISATION



SEED  
CAPITAL  
ASSISTANCE  
FACILITY

# SCAF

# MOBILISING PRIVATE FINANCE

## EXPERIENCE FROM A DECADE OF DECARBONISATION

### UN ENVIRONMENT PROGRAMME 2021

**Seed Capital Assistance Facility (SCAF) – Mobilising Private Finance.  
Experience from a Decade of Decarbonisation 2021.**

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### CONCEPT AND EDITORIAL OVERSIGHT

John Hansen (Lead Author) : Michal Logan

### CONTRIBUTORS

|                  |                    |                |
|------------------|--------------------|----------------|
| Andrea Bode      | Carolina Merighi   | Ghita Hannane  |
| Alexander Kinnel | Derek Campbell     | Myriem Touhami |
| Benjamin Schäfer | Françoise D'Estais | Rakesh Shejwal |

**DESIGN AND LAYOUT** Fabrice Belaïre

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# Executive Summary

To reach the goals of the Paris Agreement, the 2030 Agenda for Sustainable Development and reach Net Zero emissions by 2050, a rapid decarbonisation of global energy systems, the unlocking of private sector capital flows and the building up of climate finance and renewable energy development capacity worldwide is needed.

Reaching net zero emissions by 2050 will require annual additions of 630 gigawatts (GW) of solar photovoltaics (PV) and 390 GW of wind by 2030, four-times the record set in 2020 (IEA 2021, Net Zero by 2050 – A Roadmap for the Global Energy Sector). This will mean that annual energy investments should rise to USD 5 trillion by 2030, and investments in clean energy and energy infrastructure to at least triple by 2030 (ibid.).

At the end of 2020, global renewable generation capacity amounted to 2799 GW after an exceptional 10.3% growth (IRENA, Renewable Capacity Statistics 2021). In 2021, annual global energy investment is set to rise to USD 1.9 trillion, with renewables accounting for 70% of the total of USD 530 billion spent on new generation capacity globally (IEA 2021, World Energy Investment 2021). Despite these positive trends, the total global spend on energy infrastructure and renewables is still short of the amount needed to reach the goals of the Paris Agreement.

One of the primary challenges slowing the deployment of renewable energy assets in developing countries is the “early stage financing gap.” While the costs of early stage development are comparatively low, the risks and barriers for investors and developers are extremely high, dynamic and constantly changing—especially in frontier markets.

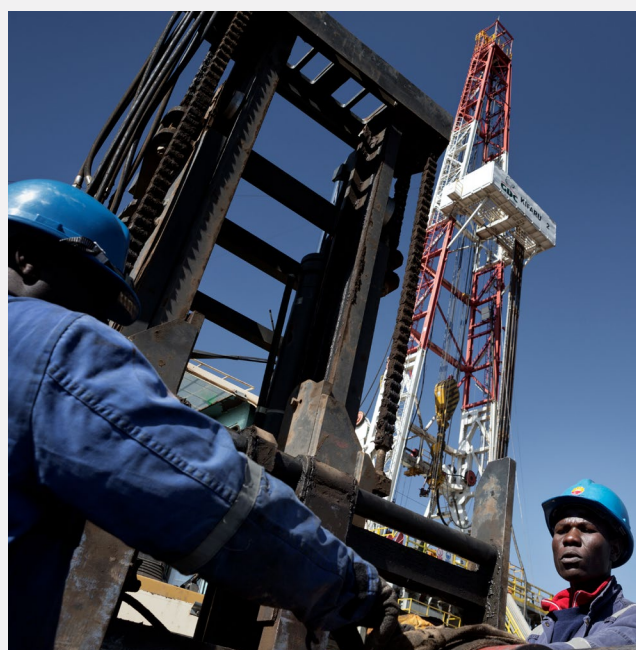
The **Seed Capital Assistance Facility (SCAF)** is a public sector donor-funded Project Preparation Facility (PPF) designed to address this challenge by supporting private sector investment entity managers and development companies working in high-risk frontier markets in Africa and Asia. Through three support lines (SLs) the facility offers pure and repayable enterprise and seed capital grants to help its partners bridge the early stage financing gap, develop bankable pipelines, crowd-in private sector capital and accelerate the deployment of renewable energy projects and clean technologies at scale.

While other facilities and institutions target individual project-level support, SCAF is unique in that it focuses on supporting its partners on a broader level. SCAF is the only publicly funded facility using grants as its only financial support instrument to both fund managers and development companies. Additionally, one essential advantage of SCAF is the alignment of interests it creates between the public finance mechanism and private partners in selecting and supporting projects.

SCAF<sup>1</sup> has delivered support to 23 partners with an aggregate pipeline of over 176 projects (Support Line 1 or SL1) across 31 countries, and provided direct, project-specific seed capital to 43 projects (Support Line 2 or SL2)<sup>2</sup>. The total projected installed capacity of the SL2 seed-funded projects could reach over 1.78 GW and is estimated to generate approximately 8.13 TWh of clean energy. Once commissioned, these SCAF projects are expected to avoid over 4.68 MtCO<sub>2</sub>e emissions per annum having the potential to create over 17,000 local jobs.

To achieve these outcomes, SCAF is disbursing and has committed approximately USD 21 million in support through its three support lines reaching a projected total mobilisation of USD 3.47 billion. Due to its performance, the facility has most recently received additional donor contributions worth approximately USD 16.8 million, allowing for a project scale-up both in terms of impact and duration. As the application window for SCAF II is still open and the programme is continuing to bring on new partners, it is expected that the above outputs and outcomes will increase.

SCAF focuses on building the capacity of the investment entity managers and development companies that deliver pipelines of bankable assets as well as individual projects. As a result, it plays an important role in the mobilisation of private sector capital and the provision of pipelines of investment opportunities that crowd-in later-stage facilities, investors and commercial institutions. Furthermore, SCAF contributes to the development of local and regional ecosystems of expertise with the potential to deploy energy and climate solutions at scale.



<sup>1</sup> SCAF phases I and II as of 31.12.2020

<sup>2</sup> For a detailed definition see chapter “Support Lines” (page 10) or “Annex A: Impact Report Methodology and Supplementary Information

# Climate, Energy, and Economic Context

The Paris Agreement and the IPCC highlight the need to limit global warming to well below 2°C, ideally to no more than 1.5°C above pre-industrial levels. For this, emissions must be reduced by 45% by 2030 (compared to 2010 levels) and reach net zero by 2050 (UN 2021, Theme Report on Energy Transition), which requires a rapid decarbonisation of global energy systems, the unlocking of private sector capital and the building up of climate finance and renewable energy development capacity worldwide.

To get on a pathway to 1.5°C, IRENA estimates that over 80% of the USD 131 trillion total energy investments needed between 2021 and 2050 must be invested in energy-transition technologies, including efficiency, renewables, end-use electrification, power grids, flexibility, hydrogen (IRENA 2021, World Energy Transitions Outlook: 1.5°C Pathway). However, the total amount of investment in renewables over the last decade was just over USD 2.7 trillion, averaging approximately USD 270 billion per year (FS-UNEP Center/BNEF, 2020). Renewables accounted for 13.4% of globally generated electricity (up from 12.4% in 2018) and represented 77.6% of all newly installed capacity in 2019 (FS-UNEP Center/BNEF 2020).

Decarbonisation can also bring numerous social, environmental and economic development co-benefits. The IEA estimates that, in a Net-Zero Emissions by 2050 Scenario clean energy will lead to a net increase of 9 million jobs by 2030, with jobs in solar and wind more than quadrupling. Additionally, aligning energy and infrastructure investments with the UN Sustainable Development Goals (SDG) will strengthen our adaptive capacity to future shocks, save lives, reduce poverty, and lower future adaptation costs.

According to the Bloomberg New Energy Finance (BNEF) and FS-UNEP Collaborating Center (2020), 79% of total global renewable energy investments in 2019 (private and public) went to developed OECD countries (46%) and China-India (33%), leaving only 21% for developing (non-OECD) countries, where financing and investment support is needed most.

Given the limitations on developing countries' national budgets and their public, bilateral, and multilateral funding sources, it is imperative to develop innovative, low-cost, high-impact, cross-sector strategies to build local capacity and develop bankable investment opportunities that attract and mobilise increased volumes of private sector climate finance. A key strategy to increase this private sector climate finance is bridging what is known as the early-stage financing gap.



# Early Stage Project Financing Gap

The **Early Stage Financing Gap** is the result of a combination of risk-based decision-making preventing mainstream private sector lenders and investors from mobilising capital for early-stage renewable energy projects, and the risks, barriers and milestones that developers and fund managers must overcome

to de-risk and develop bankable investment opportunities. The below table summarises some of the most common risks and barriers impacting renewable energy projects in developing countries.

**TABLE 1 COMMON RISKS AND BARRIERS IMPACTING DEVELOPERS AND INVESTORS**

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lack of Access to Capital</b>              | Real and perceived risk, deal size, creditworthiness, new market entry, limited track records, lack of collateral, high transaction costs to deal size, unfavourable terms, and other factors impact availability and cost of capital and credit.                                                                                                                                                     |
| <b>Lack of Bankable Projects or Pipelines</b> | A clear barrier for investors, financiers, fund managers, and development companies that have or are committed to entering a new market, especially in developing countries.                                                                                                                                                                                                                          |
| <b>Lack of Knowledge and Awareness</b>        | This is related to both individual and institutional knowledge and data about target markets and sectors, and how to properly identify, quantify, and evaluate the risks and opportunities of renewable energy projects in frontier markets.                                                                                                                                                          |
| <b>Lack of Skills and Expertise</b>           | There is a shortage of experienced development companies and fund managers with the full range of necessary technical, financial, and managerial skills to develop bankable projects to financial close, as well as a lack of essential skills and technical experience among the local workforce.                                                                                                    |
| <b>Policy and Regulatory Risks</b>            | Impacts all stakeholders, is heightened in frontier markets, and includes future and retroactive changes in government policy and regulatory environments, especially energy-related tariffs and subsidies.                                                                                                                                                                                           |
| <b>Political Risks</b>                        | Impacts all stakeholders, is heightened in frontier markets, and includes exposure to corruption, political changes such as war, terrorism, social unrest, coups d'état, expropriation of assets, breach of sovereign contracts, etc.                                                                                                                                                                 |
| <b>Frontier Cash-flow Risk</b>                | Investors are concerned about the ability of developers and fund managers to clearly anticipate need and maintain enough working capital to cover increased costs of operating in frontier markets. Several stakeholders have identified this as a heightened frontier barrier to overcome before capital can be invested, especially at the earliest set-up and establishment phases of development. |
| <b>Administrative and Institutional Risks</b> | Primarily a risk for the developer but impacts all stakeholders due to increased project costs resulting from potential delays in permitting, access to relevant records and data, lack of clarity on local rules and requirements, and other bureaucratic issues that can increase development costs.                                                                                                |

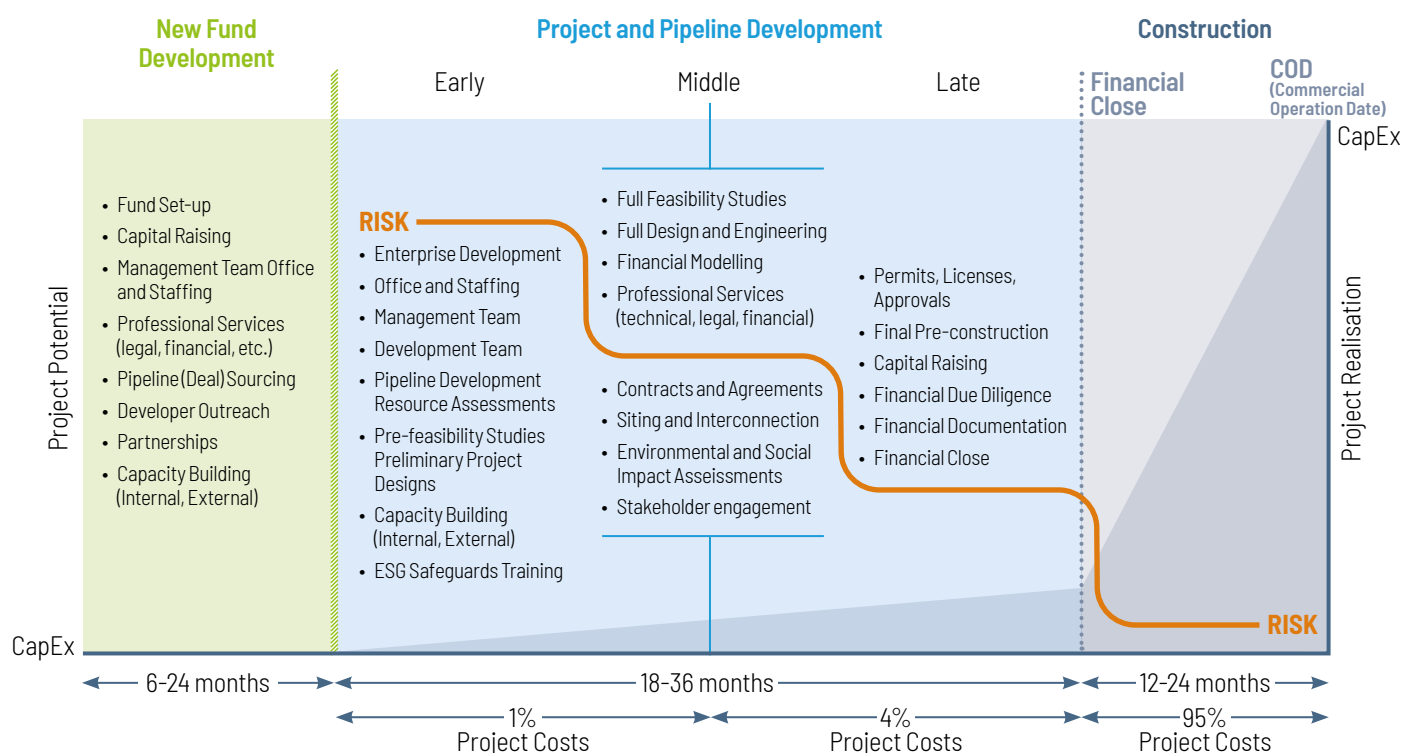
Although the impacts of renewable energy project risks and barriers in developed and emerging economies have been reduced over the last decade, they remain a significant challenge in frontier markets. This is especially true for small- and medium-size renewable energy infrastructure projects, which are **impacted by disproportionately high transaction costs**. While these systems are well-suited to providing clean distributed and grid-connected energy access, their smaller deal size and decentralised nature, combined with high uncertainty in frontier markets, distorts these costs to prohibitive levels.

This disproportionality adds to the early stage financing gap and can slow—or even prevent—many developers and fund managers from installing clean capacity, reducing emissions, enabling access, realising returns, and supporting economic development.

Figure 1 summarises the phases and activities of a renewable energy project development cycle, as well as cost and risk-level representations, through financial close and construction.

**FIGURE 1**

**TYPICAL RENEWABLE ENERGY FUND AND PROJECT DEVELOPMENT LIFE-CYCLE (PHASES, ACTIVITIES AND RISK)<sup>3</sup>**



As developers achieve key milestones and overcome critical barriers, the future asset is de-risked and becomes a tangible investment opportunity. Risks (real and perceived) are highest during the earliest phase when development costs are lowest. They decline as viable opportunities are identified and critical assessments as well as feasibility, modelling, design and development activities have been completed, and are at their lowest in the development process after contracting is completed, permits approved, financing secured, and the project is ready to move into construction. At the same time, expenses gradually increase but remain at a comparatively low level during the project and pipeline development phase, as 95% of project costs incur only after financial close during the construction phase.

Due to the high risks associated with project development, early stage costs are often covered through the direct private investment of project developers, with some help from

venture capital, angel investors and other actors. Facilitating multi-million-dollar project financing is very cost-intensive, time-consuming and requires significant financial, legal and advisory services to complete due diligence, negotiations, documentation, contracting, etc. These transaction costs do not necessarily scale proportionally with the size of the project, its phase of development, or its investment needs and can have negative impacts on the bankability of small- and medium-scale projects.

As a result, commercial developers, investors and lenders typically prefer later-stage, larger projects and deal sizes for scale, efficiency, and return. This creates a significant gap in financial support for early and middle stage project and fund development and can prevent the full project and investment potential being realised. The Seed Capital Assistance Facility (SCAF) works to fill this gap.

<sup>3</sup> Source: UNEP, Aequerio

# Seed Capital Assistance Facility (SCAF)

The Seed Capital Assistance Facility (SCAF) is a donor-funded Project Preparation Facility (PPF) designed to help renewable energy fund managers and development companies mitigate the risks associated with early stage project development, accelerate and scale up deployment, and increase both the volume of early stage private sector investment and the number of renewable energy actors in Low and Lower-Middle Income Countries in Africa and Asia.

SCAF uses a combination of pure and repayable grants delivered through a Support Line mechanism. This intervention enables private sector fund managers and development companies to set-up climate investment vehicles, build enterprise and local expertise, create strong project pipelines, and fully develop the most promising projects into high-quality, bankable investment

opportunities that attract additional financing, achieve financial close, and move on to construction and operation. The resulting outcomes include emissions reductions, clean energy production, energy access, job creation, and revenue generation.

In addition to the immediate sector-specific objective of fostering the deployment of renewable energy, the intervention also achieves market-level impacts that help reduce future barriers and increase risk-tolerance while providing lasting social and environmental co-benefits, including emissions reductions and increased energy access, job creation, and local economic development.

**SCAF is working towards the UN's sustainable development goals (SDGs) 1, 7, 8 and 13.**



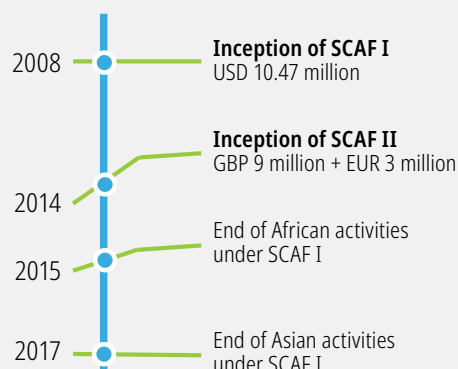
## HISTORY

**SCAF I** was launched in 2008 with a USD 8.4 million grant from the Global Environment Facility (GEF), another USD 700,000 in supplemental funding from the UN Foundation, an additional USD 1.37 million of in-kind contributions from the UN Environment Fund, the Asian Development Bank (ADB), and the African Development Bank (AfDB) for a total budget of USD 10.47 million. SCAF I terminated in December 2015 for its African activities and in December 2017 for its Asian activities.

**Lessons learned from SCAF I** – SCAF is committed to an organisational capacity to learn and provide flexibility in adapting to the changing needs of its private sector partners and evolving market conditions. As a result, the following strategic changes were made to SCAF phase II as a reaction to the experiences made under SCAF I:

- The inclusion of development company partners in SL1 and 2.
- The expansion of eligible legal structures (i.e. HoldCos) and the removal of the anchor investor requirement.
- The creation of SL0 to solely support the setup of new equity investment vehicles for first time managers.
- The increase of SL2 support per project, while designing it

## SCAF's history



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