GEvalBrief No. 17

GREEN CLIMATE FUND | Independent Evaluation Unit

FEBRUARY 2024 ieu.greenclimate.fund TRUSTED **EVIDENCE**. INFORMED **POLICIES**. HIGH **IMPACT**.

INDEPENDENT EVALUATION OF THE GREEN CLIMATE FUND'S ENERGY SECTOR PORTFOLIO AND APPROACH

Background

The Governing Instrument of the Green Climate Fund (GCF) aims for the GCF to contribute to the achievement of the objectives of the United Nations Framework Convention on Climate Change (UNFCCC). This evaluation[1] assesses whether GCF approaches and investments in the energy sector are effective in contributing to the objectives of the UNFCCC and other global agendas. It examines the GCF's effectiveness and efficiency in reducing the effects of climate change, and promoting a paradigm shift toward low emission and climate resilient development pathways through its investments in the energy sector.

Conclusions

1. ***Relevance:*** GCF has a prominent position in the climate finance landscape. However, the GCF's goals and intended pathways in catalysing a paradigm shift in the global energy sector seem less clearly articulated.

The GCF programming and operations generally align with UNFCCC principles. It has many comparative advantages as a fund dedicated to climate action. But the portfolio does not actively seek synergies beyond project-level impacts, nor does it have a strategically integrated approach to energy investment between supply-side and demand-side measures or across energy subsectors at the portfolio level.

From an energy sector perspective, project development and applying frameworks and tools for project development are not standardized and mainstreamed. Further, GCF-funded projects in the energy sector are not always classified under climate change adaptation, presenting a missed opportunity to accurately manage or measure activity results.

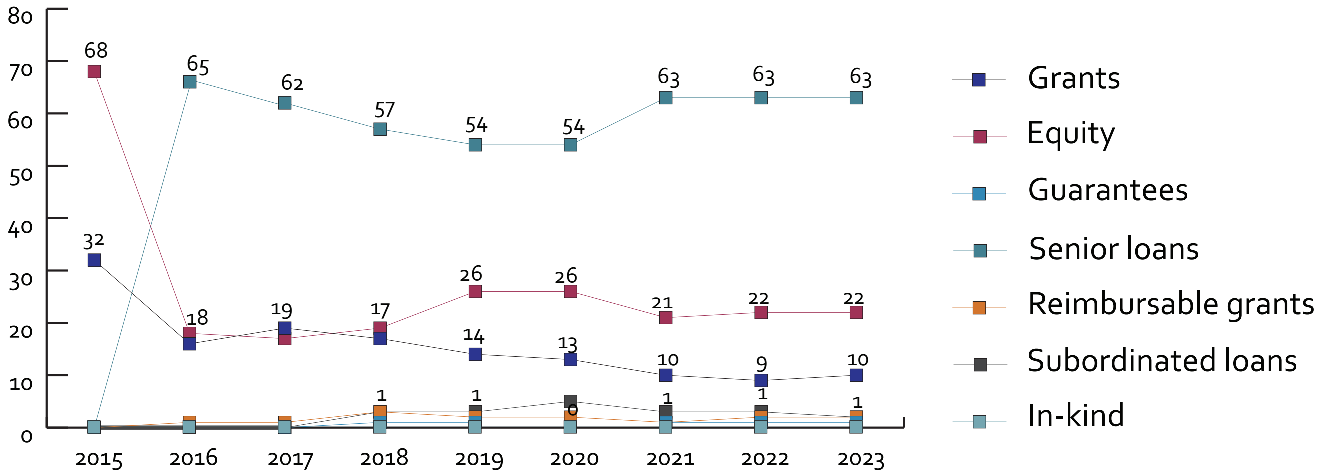
2. ***Energy Sector Programming:*** While the GCF's programming in the energy sector shows substantial volume, reach and use of a diverse set of financial instruments, the Fund has yet to identify and engage the right actors to support achieving strategic and coordinated programming at the country, regional and global levels.

The GCF's use of diverse financial instruments is unmatched by other comparable agencies and funds. Country ownership has been found to be a

1 *Independent Evaluation Unit (2024). Independent Evaluation of the Green Climate Fund's Energy Sector Portfolio and Approach. Evaluation report No. 17 (February). Songdo, South Korea: Independent Evaluation Unit, Green Climate Fund.*

Solar PV panel installed under FP090 in Vava'u, Tonga.©Daisuke Horikoshi

Figure 1. Evolution of energy project total investments, by financial instrument



Source: *Tableau server iPMS data, as of B.37 (23 October 2023), analysed by the IEU DataLab.*

key prerequisite for successful GCF programming, in particular in the energy sector. While the GCF project origination for energy projects is country driven, GCF programming is hindered by the inefficiencies of the NDA-driven model related to coordinating, engaging and mobilizing energy sector stakeholders.

GCF energy projects have paid increasing attention to mainstreaming gender and Indigenous Peoples since the GCF established the respective policies in 2019.

3. ***Enabling environment for the energy sector:*** GCF has identified the importance of an enabling environment for programming; however, it remains underemphasized in the implementation of readiness and preparatory support and projects and programmes.

Readiness and preparatory support grants can provide greater support for an enabling environment at the country and regional levels in the energy sector. However, this support is underutilized. Project appraisal processes do not strongly emphasize or reinforce project components related to the enabling environment within funding proposals. The GCF does not have a systematic approach to promoting activities for creating enabling environments, which limits the incentive to support projects focused on establishing an enabling environment for energy sector projects.

4. ***Risk and innovation:*** Risk is limited in the GCF energy portfolio. Limited operationalization of a risk framework and an observed mismatch between actual and stated risk appetite presents a challenge for GCF programming in the energy sector.

Given the high potential and level of development in the global energy sector, an adequate approach to risk management is key for GCF programming. The GCF's comparative advantage lies in programming at scale, leveraging broad partnerships and willingness to programme with a higher risk appetite, particularly for the advanced global energy market. However, the GCF has yet to fully utilize its potential to support riskier energy sector projects.

To date, the GCF's energy sector portfolio demonstrates a limited risk appetite for more transformational and innovative energy technologies such as offshore wind, green hydrogen and energy storage. The dominance of senior loans as a financial instrument for energy sector programming attests to a more risk-averse positioning.

GCF support for certain energy projects can potentially generate a paradigm shift in the energy sector. However, paradigm shift is poorly tracked in energy sector projects.

The GCF has not clearly defined its expectations for innovation in the energy sector, although it has the access modalities to support innovative approaches and business models. The GCF has been somewhat innovative in using the right financing instruments and delivery mechanisms, but results to date are limited.

5. ***Measuring and achieving results:*** Generally, GCF's results management has been underdeveloped in serving the

needs to identify and demonstrate results. Challenges include poor quality at entry, limited project/programme progress reporting and conceptual gaps in measuring the effectiveness of investments at the portfolio and project levels.

Most GCF projects are still at an early stage of implementation. Consequently, climate impacts are modest across the entire energy portfolio, but there are early indications that results are forthcoming.

The limited alignment between the Investment Framework and the IRMF systematically limits assessment of the effectiveness, outcome and sustainability of the energy sector portfolio of the GCF. While some projects of the GCF energy portfolio identify a limited set of co-benefits and track their results, several relevant co-benefits for energy sector projects are neither identified nor tracked.

Further, GCF lacks specific emissions reduction targets for the energy sector, which will hamper the ability to monitor impact in the future.

Key recommendations

R1: The evaluation recommends that the GCF clarify the pathways for a paradigm shift in the energy sector and its intended role. Providing such clarity would include (i) considering the increased complexity of climate projects, (ii) increasing emphasis on energy efficiency, (iii) linking demand and supply in energy generation, and (iv) considering new and innovative technologies and approaches for piloting and scaling projects.

1a. GCF should clarify its position and intention in the energy sector and consider identifying its intended role in the global energy market, based on which it could define intended portfolio results, which can inform the design of individual projects and readiness support.

1b. GCF should consider a paradigm shift in the energy sector through comprehensive approaches ensuring that renewable energy generation projects are consistently complemented with grid integration and storage and that demand-side measures, including energy efficiency, receive increased investment.

1c. Demand-side measures should be more strongly supported by increasing the integration of energy efficiency activities in GCF energy projects.

1d. GCF should consider new technologies in offshore wind, green hydrogen, energy storage and new approaches in the energy market, particularly those for energy efficiency, by using more of its piloting tools.

R2: The GCF should cultivate an energy portfolio that has a clear internal logic. The available tools for programming should be optimized accordingly, including (i) an explicit approach to a paradigm shift, (ii) clarifying the intended use of sectoral guidance, (iii) clarifying and developing guidelines for classifying energy projects, and (iv) fully operationalizing just transition principles in energy sector programming

2a. The "hardest to reach" countries should be defined for application in the energy sector by taking into account (i) GHG emissions per inhabitant, (ii) perceived risk for private financing, and (iii) level of support from other financing institutions.

2b. The intended purpose of the GCF sectoral guides needs to be further clarified by specifying the target audience and the scope of projects' compliance with the guides. The guides should be standardized to facilitate users' understanding and navigation.

2c. GCF should clarify and develop guidelines within the sectoral guides for categorizing energy projects as adaptation or mitigation.

2d. GCF should clarify how it wishes to operationalize and mainstream the notion of just transition through the lens of energy transition.

R3: The GCF should take an active approach to supporting enabling environments and institutional capacities opportunistically, using the RPSP and funding proposals in the energy sector. The GCF should consider reviewing its in-country institutional set-up and engagement to increase its effectiveness.

3a. RPSP grants could be more widely deployed in the energy sector to prepare institutions and enabling environments for sustainable project investments.

3b. The Secretariat should review the country engagement model and explore new ways for NDAs to engage more effectively with the line ministries and public institutions involved in the energy sector.

3c. GCF should strengthen its focus on the enabling environment, including strengthening institutional and regulatory frameworks; technology deployment;

transfer and innovation; market development and transformation; and effective knowledge generation and learning, as set out in the IRMF.

R4: GCF should match its actual and stated risk appetites and take the risks required to optimize its role in the sector. The GCF should clarify and promote its expectations for innovation in the energy portfolio. This may require revisiting the approach to, assessment of and tolerance for risk in projects, programmes and modalities that emphasize innovation.

If the GCF wants to finance more innovative projects, it must take on more risks. To achieve this, the GCF can take the following actions:

4a. Adapt its risk appraisal methodologies for public and private sector initiatives.

4b. Consider increasing its appetite for credit risk in projects where the implementation risk is low and the expectation of achieving expected outcomes and a related paradigm shift is high.

4c. Develop consistent guidelines to define and rank innovative projects for innovation.

4d. Consider using RFPs to foster innovation.

R5: The GCF should place more emphasis on improving quality at entry and preparation for monitoring and evaluation. To improve the aggregability and reporting of results in the energy sector, the GCF could clarify and, where possible, harmonize measurement methodologies. Within energy projects, the Secretariat might consider requesting data on just transition principles, innovation and co-benefits to align the reporting with the future stated strategic view on the GCF's approach to the energy sector.

5a. GCF should especially improve the monitoring and results management of paradigm shift and innovation components.

5b. GCF should consider differentiated reporting on results. Such differentiated reporting is particularly important for the following energy subsectors: "Energy generation and access", "Energy efficiency" and "Transport".

5c. Evaluability and quality at entry of funding proposals should be improved by strengthening the monitoring and evaluation frameworks in project proposals.

5d. GCF should explore ways and make efforts to ultimately direct a portfolio that is gender transformative, rather than only gender sensitive or gender neutral.

5e. GCF does not set a specific methodology for determining energy savings. Methodologies should be further harmonized between AEs, where possible.

5f. GCF should revisit and further define types of co-benefits in GCF frameworks and policies.

5g. GCF should consider further operationalizing the GCF's knowledge management function throughout the entire project and programme cycle.

Methods

The evaluation used mixed methods for data collection and analysis. The findings were based on an extensive document and literature review; semi-structured interviews with more than 200 stakeholders; six case studies and analysis; gender and Indigenous Peoples analysis; and benchmarking with comparator organizations and portfolio and data analysis, led by the IEU DataLab. The team reviewed and synthesized 28 interim independent evaluations of energy projects, 26 energy annual performance reports (APRs), as well as past IEU evaluations. For benchmarking purposes, relevant agencies were identified, including (i) global climate finance organizations and funds; (ii) multilateral, bilateral and regional development banks; and (iii) agencies that have a strong focus on the energy sector in developing countries and least developed countries (LDCs). Six countries were identified for case studies: Chile, Indonesia, Mongolia, North Macedonia, Tonga and Zambia.

Contact the IEU

Independent Evaluation Unit
Green Climate Fund
175, Art center-daero, Yeonsu-gu
Incheon 22004
Republic of Korea

(+82) 032-458-6450
ieu@gcfund.org
ieu.greenclimate.fund

GREEN CLIMATE FUND | Independent Evaluation Unit

TRUSTED **EVIDENCE**. INFORMED **POLICIES**. HIGH **IMPACT**.