

52nd GEF Council Meeting
May 23 – 25, 2017
Washington, D.C.

EVALUATION OF GEF'S ENGAGEMENT WITH THE PRIVATE SECTOR

VOLUME I

(Prepared by the Independent Evaluation Office of the GEF)

ABBREVIATIONS AND ACRONYMS

AE	Accredited Entities
AfDB	African Development Bank
APR	Annual Performance Report
BD	Biodiversity
BOAD	West African Development Bank
CC	Climate Change
CEX	Global
CI	Conservation International
CIF	Climate Investment Fund
CPI	Climate Policy Initiative
CSO	Civil Society Organizations
CTF	Clean Technology Fund
CW	Chemical and Waste
DBSA	Development Bank of South Africa
DFI	Development Finance Institutions
DPSP	Dedicated Private Sector Programs
EBRD	European Bank for Reconstruction and Development
ECA	Europe and Central Asia
EF	Earth Fund
ESG	Environmental, Social and Governance
EU	European Union
FAO	Food & Agriculture Organization of the United Nations
FI	Financial Institutions
FIP	Forest Investment Program
GCF	Green Climate Fund
GCPF	Global Climate Partnership Fund
GEEREF	Global Energy Efficiency and Renewable Energy Fund
GEF	Global Environment Facility
GIIN	Global Impact Investing Network
IAPs	Integrated Approach Pilots
ICI	International Climate Initiative
IEO	Independent Evaluation Office
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IW	International Waters
LAC	Latin America and Caribbean
LD	Land Degradation
LDC	Least Developed Countries
M&A	Mitigation and Adaptation
MDB	Multilateral Development Bank
MEAs	Multilateral Environmental Agreements
MSME	Micro, Small and Medium-sized Enterprise

NGP	Non-Grant Pilot
PAD	Project Appraisal Document
PES	Payment for Ecosystem Services
PIF	Project Identification Forms
PMIS	Project Management Information System
POPs	Persistent Organic Pollutants
PPCR	Pilot Program for Climate Resilience
PPP	Public-Private Partnership
PSF	Private Sector Facility
PV	Photovoltaic Power System
REG	Regional
RMF	Risk Mitigation Facility
ROI	Return-On-Investment
SCF	Strategic Climate Fund
SDGs	Sustainable Development Goals
SFI	Specialized Financial Instrument
SLM	Sustainable Land Management
SME	Small and Medium Enterprises
SPVs	Special Project Vehicles
SREP	Scaling Up Renewable Energy Program
TA	Technical Assistance
TE	Terminal Evaluation
TER	Terminal Evaluation Review
TNC	The Nature Conservancy
UN	United Nations
UNDIO	United Nations Industrial Development Organization
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

EXECUTIVE SUMMARY

Background and Objectives

1. In a world with a changing climate, rising populations, natural resource demands, and increasing environmental degradation, the GEF's mandate to partner with the private sector to tackle environmental challenges, especially in the developing world, is as strong as ever. This mandate has been reinforced by explicit guidance to the GEF on private sector engagement from the various Multilateral Environmental Agreements (MEAs) that it serves.
2. At the same time that new opportunities are arising, many of the historic barriers to private investment and the GEF's engagement of the private sector remain. These include technology and market risk, inadequate regulatory regimes, lack of institutional capacity, and insufficient deal flow of investible projects at the requisite size and scale, among other challenges. Overall, progress in green investments continues to be outpaced by investment in fossil-fuel intensive, inefficient infrastructures.
3. GEF strategies to engage the private sector and encourage investment have historically included a variety of intervention models: 1) transforming policy and regulatory environments to encourage sustainable business investment, 2) deploying innovative financial instruments, 3) convening multi stakeholder alliances, 4) strengthening institutional capacity and 5) demonstrating innovative approaches.
4. In GEF-4 and GEF-5, projects geared towards private sector engagement tended to use set-aside funding and included non-grant instruments, to address important barriers to private sector engagement. More recently, in GEF-6, the Integrated Approach Pilots (IAPs) explicitly provide for engagement with the private sector while the \$110 million Non-Grant Pilot Program maintains momentum for public and private recipients to use innovative financing models. A more holistic and comprehensive approach was also envisioned in GEF-6 to mainstream private sector engagement across all GEF focal area strategies. The GEF IEO presents this evaluation as part of its sixth comprehensive evaluation (OPS6) of the GEF in advance of negotiations for the GEF-7 replenishment. The aim of this study is to provide insights for the GEF Partnership to more effectively leverage the potential of private sector investment and commitment towards sustainable practices as well as provide insights into the demand, the offer and potential gaps around environmental finance. Understanding the GEF's niche and comparative advantages in this domain is a particular objective of this study. This report specifically provides:
 - a) An analysis of the drivers for the private sector to address environmental issues, the environmental finance landscape and the hurdles faced by different actors in the environmental finance market;
 - b) An assessment of the GEF's private sector engagement activities around environmental finance;
 - c) Conclusions on the role for GEF, instruments and tangible measures that the GEF could incorporate in GEF-7, taking into account the GEF's strategy, current market demand and existing peer offering.

5. The evaluation took a mixed-methods approach encompassing qualitative and quantitative data gathering and analysis. Its inputs include stakeholder surveys, desktop research, a portfolio review, and a multifaceted analysis of the environmental finance landscape. The study was limited in its ability to develop an accurate portfolio of projects that engages the private sector given the systematic inability to isolate projects from the GEF's Project Management Information System.

Evolving Landscape for Environmental Finance

6. In recent years, new opportunities for and drivers of collaboration with the private sector to address environmental degradation have emerged, including public and private efforts to address climate change, the adoption of the Sustainable Development Goals (SDGs), the emergence of cost-competitive clean energy technologies, and the rise of impact investing and conservation finance, and environmental and sustainability consciousness across the corporate, finance, and investor communities.

7. The semi-public and public environmental finance field in which the GEF operates is now a complex arena made up of a variety of actors with diverse fund offerings in terms of instruments and environmental themes. Among public and semi-public environmental finance funds, the Green Climate Fund (GCF) and, to a slightly lesser degree, the Clean Technology Fund (CTF), part of the Climate Investment Funds (CIFs), are the GEF's main peers: all three mechanisms are the largest in the field and comparable in terms of focus and accessibility. Few funds in this niche successfully combine a broad instrumental and thematic focus with easy access for the private sector. The GCF and CIFs are both multi-billion dollar funds with mandates to leverage private finance and stimulate market development for climate change finance. Both have made private sector co-investment a central strategic focus, but are still working to refine their niche.

Private Sector Views of the GEF

8. A survey of private sector stakeholders revealed drivers for their engagement in pursuing activities that generate environmental benefits. These include natural capital depletion and diminishing availability of resources needed for operational inputs. Societal expectations of companies are also changing with investors and consumers demanding more transparency and adherence to global standards. Financiers are also assessing portfolios from an environmental degradation and climate change lens seeking to avoid stranded assets and directing flows to opportunities provided by the transition to low-carbon climate resilient economies.

9. Private sector stakeholders also shared challenges to greater participation in environmental activities and finance. An inconsistent regulatory environment was broadly recognized as hampering for greater engagement. Policies that create pricing or payments for environmental benefits can accelerate investment opportunities. The inability to replicate or scale environmental solutions was also cited as an impediment. Because many environmental finance opportunities are small or dissimilar, they are difficult to aggregate or expand creating

limitations for financial intermediaries. Many companies also lack a track record of working in environmental markets which when combined with a conservative risk perspective means potential green investment opportunities are not pursued. Finally, high transaction costs are particularly the case for companies which are faced with challenges of poor infrastructure and limited ability of customers to pay for green services and goods.

10. To build on the drivers for engagement and address the challenges, respondents also shared a number of strengths and weaknesses with the GEF's private sector engagement. In terms of comparative advantages, first, the GEF has a range of flexible financing instruments and a broad thematic niche extending beyond climate change to other environmental demands. Second, it has a greater appetite for high-risk, early stage, and smaller projects than the CIFs, GCF, and most other large development finance institutions (such as MDBs). Third, the GEF's track record includes broad global experience, knowledge, and reach, and GEF possesses valuable experience with technical assistance, capacity building, and policy enabling environments necessary to generate deal flow for larger public and private funds alike. Lastly, the GEF is seen as having a strong brand and convening power among several networks, giving it a strategic opportunity to pursue multi-stakeholder alliances engaging various private sector actors.

11. The GEF is also perceived as having weak outreach to the private sector and the specifics of its work are not well known even among a number of its nominal partners. Its funding mechanisms are generally believed to be inaccessible and bureaucratic. These learnings reinforce earlier findings that suggest the GEF still has much room to improve its private sector engagement, and could benefit from better strategic targeting and upstream planning to ensure it can overcome its internal obstacles in seeking to mobilize resources and support from private sector actors.

GEF Private Sector Intervention Models

12. A review of GEF-5 and GEF-6 projects to assess the five intervention models used by the GEF to engage with private sector actors revealed that the majority of projects (79%) relied on more than one model to address the barriers faced by private sector to environmental protection. The most commonly applied was strengthening institutional capacity and transforming policy and regulatory environments. These are critical elements to help build capacity and put in place the right incentive and signals that allow private sector to (re)direct their investment in an environmentally sustainable manner.

13. Concerning non-grants the GEF uses a broad spectrum of instruments that fall into three broad types of financial instruments: loans, including hard loans, concessional loans, contingent loans, and revolving funds; guarantees and risk mitigation, such as credit, risk, or performance guarantees; and equity investment, either direct participation in a company, or through a fund. Most projects reviewed for this report used a combination of these tools, and also included technical assistance (TA) and capacity building components generally provided on a grant basis.

14. The GEF has used these instruments and models to work with private sector actors ranging from smallholders to multi-national companies.

Portfolio Review of Private Sector Engagement

15. The GEF IEO conducted a portfolio review of all projects engaging the private sector, including non-grant projects. Altogether, these 460 projects represent US \$2,499.2 million in GEF grant investment. These projects included 91 projects that have used non-grant instruments.

Co-financing

16. For the private sector portfolio, on average, \$1 of GEF grant leverages \$8 in co-financing. If the non-grant projects, which have high co-financing (\$1 GEF grant leverages \$10), are removed from the overall portfolio the ratio is \$1 GEF grant to \$7 co-financing. For the overall private sector portfolio, \$3 out of \$8 in co-financing comes from private sector investment, mostly in the form of equity (41%). This number decreases to \$2 out of \$8 if non-grant projects are taken out from the private sector portfolio. Leverage ratios and absolute amounts of co-financing rose in GEF-5 and continued to grow in GEF-6, suggesting that the co-financing from the private sector, catalyzed in large part by PPPs and non-grant instruments, is increasingly strong.

Evolving Focal Area Concentration

17. Projects in the climate change (CC) focal area account for the bulk of the private sector portfolio, both by number of projects (68%) and GEF investment volume (62%). Overall, biodiversity is the second most populated focal area (13%). Multi-focal area investments increased dramatically in GEF-6, making it the second most invested area (18%). In GEF-6, chemicals and waste (CW) also featured prominently. A similar trend is also observed with the non-grant portfolio with the bulk of projects in the climate change focal area (79%) and an increasing trend of diversification in GEF-6.

Strong Performance

18. Both the private sector grant, non-grant and overall GEF portfolios have comparable levels of performance with ~ 80% of the private sector portfolio and the general portfolio evaluated as “Moderately Satisfactory or Above” on project outcomes. No global projects and projects in European and Central Asia are rated as Unsatisfactory or below, indicating stability and solid performances in these regions. On the other hand, 35% African projects have Moderately Unsatisfactory or below ratings, the highest percentage in this category among all regions.

Evolving Non-Grant Instruments

19. Loans and guarantees were the most commonly encountered non-grant financing vehicles. In the completed projects sample, only three involved equity investment. Equity

investments appear more frequently among the newer projects approved. In some cases, the GEF financing was akin to a capital grant to fund demonstration projects or provide an initial capitalization of a fund. Revolving funds, involving “seeding” a facility with funds that are then provided for eligible activities, are also popular.

20. In 2008 (GEF-4) the GEF created the Earth Fund, itself a pilot Public Private Partnership (PPP) initiative with \$50 million of GEF resources plus another \$6 million to cover Agency fees. This private sector set-aside was based on the concept of Council-approved platforms with delegated authority for individual projects to be approved by the relevant implementing Agencies within their funding envelopes. For example, the IFC Earth Fund platform was allocated \$30 million, of which 25% could be used for technical assistance/advisory services. The Earth Fund had a separate advisory Board, was globally and sectorally flexible and its funding could be fully subordinated as needed. The Earth Fund’s commercial co-financing exceeded \$1 billion.

21. Created in GEF-5, the Public Private Partnership Program (PPP) concerns a private-sector set-aside of \$80 million for the July 1, 2010 – June 30, 2014 period. It prioritizes partnerships with the private sector with a focus on the expanded use of non-grant instruments, such as loans and equity investments. Five projects are classified as PPPs in the portfolio, for a total GEF financing of \$70 million and co-financing of over \$900 million. These projects are still on-going.

22. For the GEF-6 Non-Grant Pilot, the GEF invested in ten projects amounting to \$91.2 million (out of an envelope of \$110 million). The equity instrument features more prominently and is generally in the form of participation in a fund. There are two unusual features that can be observed in the GEF-6 batch of projects, compared to previous ones: *pari-passu* structures that place the GEF on equal footing with co-investors; and a broad proliferation of financial instruments, including mezzanine structures, with quasi-equity upsides; unique equity opportunities; and senior, subordinated and other tailored debt instruments. A noteworthy development is the new GEF agencies such as the Development Bank of South Africa and Conservation International that have partnered with GEF for the first time on non-grant projects and some traditional ones do not feature in the portfolio. Both GEF-5 and GEF-6 non-grant instrument projects anticipate reflows to the GEF.

Going Forward

23. The survey with private sector stakeholders and portfolio research highlighted areas of limitation and suggested the GEF Partnership should consider focusing its private sector engagement efforts where it is most likely to succeed: larger initiatives where the GEF can dedicate more effort per dollar spent; high-impact thematic or sectoral activities where the GEF’s value-added in the eyes of the private sector is significant; and arenas where the GEF’s comparative advantage is greatest, such as convening and alliance building, early-stage risk capital deployment, and improvement of policy and capacity to enhance investment enabling environments. At the same time, stakeholders have identified areas for improvement such as a clear definition of GEF’s offerings to the private sector, addressing challenges with time-cycles and inaccessible processes. GEF also has demonstrated comparative advantage working on

cross-cutting approaches in a wide range of non-climate change conservation domains and can help encourage private sector activity into these areas.

Conclusions

24. **Conclusion 1: The GEF should continue to engage with a wide variety of for-profit entities that vary in their industry focus, size, and approach to environmental issues using a mix of intervention models.** The range extends in size from multinational corporations, through large domestic firms and financial institutions to micro, small and medium enterprises and smallholders/individuals. Because GEF projects are designed to address complex issues, an assortment of intervention models is needed to address the assortment of barriers to environmental protection. Among the intervention models, the most commonly applied ones are those that facilitate institutional strengthening and those that transform policy and regulatory environments. These are areas of comparative advantage for the GEF. Lack of regulatory frameworks and environmental policies can impede in-country compliance with standards and affect the achievement of global environmental benefits while creation of supportive conditions are a factor in successful private sector participation.

25. GEF's private sector activities overall, can thus be broadly considered as "upstream" in the development continuum – to create and nurture the necessary ecosystem for private sector engagement. However, this is potentially at odds with a push for greater financial self-sufficiency, which emphasizes reflows and financial structures that provide a financial return to the GEF. Indeed, the GEF appears to be drifting more "downstream," even structuring its non-grant instrument on equal footing with other investors in some recent cases.

26. **Conclusion 2: The GEF is constrained in its engagement with the private sector due to operational restrictions.** The GEF's ability to engage the private sector diminished during GEF-4 as a result of the then-introduced resource allocation framework (RAF). For many Operational Focal Points and countries this was a shift to empowering them to program GEF support to the country. Consequently, private sector set-asides have been a primary modality through which engagement has continued, first with the Earth Fund platform and then the PPP platform in GEF-5 and the non-grant pilot in GEF-6. The fragmented nature of these interventions combined with the limits of STAR allocation often mean that private sector innovation is not easily reconciled with country ownership and national strategies and priorities.

27. **Conclusion 3: It is difficult to systematically gather evidence on elements of GEF's private sector activities without improvements to the GEF Project Management Information System (PMIS).** GEF projects that have an element of private sector engagement are not easily retrieved from the organizational database. This lack of systematic 'tagging' of those projects was raised by the IEO in the OPS5 study on private sector engagement. The inability to generate accurate project data still persists. Moreover, the quality of the information about private sector engagement contained in terminal evaluations is extremely variable. A significant shortcoming was the scant attention paid in most non-grant project TEs to the financial information about the project.

28. **Conclusion 4: GEF investments involving private sector engagement have higher co-financing.** In particular, private sector portfolio is catalyzing private investment. Every \$1 from

GEF grant leverages a competitive ratio of \$8 in co-financing, compared to \$6 in co-financing estimated for the overall GEF portfolio. Three (\$3) out of \$8 in co-financing come from private sector investments, mostly in the form of equity investment. The leverage ratio has been steadily increasing since the first GEF period (with exception in GEF-4). In GEF-5, for every \$1 spent by the GEF, \$11 in co-financing was received for private sector projects by other parties (incl. private sector).

29. By stimulating markets and reducing risk, non-grant projects have resulted in high co-financing leverage ratios. On average, \$1 GEF grant spent for non-grant projects leverages \$10 in co-financing. Not only is the overall leverage ratio highest amongst the private sector portfolio, but also highest among the general GEF portfolio. Notably, this ratio has improved greatly in GEF-5 and GEF-6. For every \$10 leveraged by GEF non-grant, \$5 comes from private sector investments.

30. **Conclusion 5: Climate change projects feature heavily in the private sector portfolio.** Two thirds of projects in the portfolio are in the climate change focal area, amounting to 62% of GEF's total investment in private sector projects. Furthermore, the majority of the non-grant projects concern climate change. This reflects the significant global effort that has gone into creating conducive policy and regulatory environments that would facilitate private activity in the climate change arena. In GEF-6, chemicals and waste, a differentiated focal area, was added. Sixteen chemicals and waste projects representing 17% of private sector portfolio projects and 15% in terms of investment in this period are being implemented. While all focal areas have consistently identified the private sector in their focal area strategies, it was considerably easier to locate examples of engagement from the climate change and biodiversity focal areas than it was to find project examples for International Waters, Land Degradation (excluding projects concerning small holders). These signals of low involvement within a portfolio known to have engaged the private sector indicate a need for more comprehensive collection of information and documentation on engagement with the private sector.

31. **Conclusion 6: There are several players in the climate finance space but few in the other Convention areas covered by the GEF.** In comparison to climate change, the other Convention areas have limited private sector activity in present-day challenge areas such as water scarcity and food security affecting vulnerable populations. Though the low levels of activity impede GEF's ability to structure non-grant projects in these areas with significant reflores and returns, the earlier stage of development is an opportunity to focus and develop the upstream environments needed to enable private sector participation and thereby grow new environmental markets. The GEF has the flexibility and thematic breadth to employ cross-cutting approaches and to work in a wide range of environmental finance and conservation domains. Among non-grant projects in GEF-5 and GEF-6, there is a relative increase in non-climate change projects. Particularly, the GEF-6 projects show greater diversity in the sectors covered, with an increased focus on biodiversity and land degradation.

32. **Conclusion 7: The range of non-grant instruments employed by the GEF is needed to target specific environmental market failures.** Many of the barriers to private sector investment have not fundamentally changed in the 20-plus years covered by the sample projects. Justification for the GEF non-grant financing still includes limited availability of capital;

limited appetite on the part of commercial banks; lack of familiarity with the sectors, financing modalities and instruments.

33. Technical Assistance (TA) plays a significant role in most non-grant projects, and is often integrated into the financing structure or mechanism. The GEF has a long history of and experience with providing TA and capacity building. These are necessary adjuncts to investment support, and a clear niche for the GEF when acting in conjunction with other financiers. The GEF also appears to have a greater risk appetite and tolerance than other financiers, as evidenced by its willingness to take first loss positions and assume the highest risk in a financing plan. This can play a vital role in unlocking other sources of finance, and together with TA, has catalyzed systemic shifts in climate change mitigation. Alongside TA and capacity building, the non-grant instrument can lend itself to a variety of structuring to address some subset or combination of these barriers.

34. **Conclusion 8: There has been an evolution in the use of the non-grant instrument towards more systematic reflows and a more explicit requirement for returns.** Non-grant projects in earlier cycles were structured to recover principal at best. In later cycles, there was an expectation of a positive financial return. To date \$8.2 million in reflows has been received. GEF-5 and GEF-6 projects have not yet begun generating reflows, and the long timeframes involved in the sorts of activities financed means that reflows would be generated 10-20 years into the future. It Projected reflows in GEF-5 and GEF-6 seem optimistic, particularly in light of GEF experience which suggests that many non-grant projects set overly ambitious targets for implementation results. should also be noted that there are tradeoffs with returns and reflows based on the development phase of the activity being financed. If used in the context of more upstream activities, then instruments will need to focus more on concessionality, which will sacrifice returns and reflows. For more downstream activities, such as in early-stage and new concept projects, the GEF could expand the use of the non-grant instrument, with potential for greater returns and reflows.

35. **Conclusion 9: GEF country clients and private sector stakeholders each lack awareness of the opportunities for engagement with one another.** As reported through the online survey, the GEF's position, processes and role is insufficiently clear to the private sector. Similarly, GEF recipients have varying degrees of knowledge of the role of private sector in green finance and accessing funds beyond the usual GEF grant instruments. Private sector respondents find it hard to obtain information on the GEF's private sector engagement and the role of Agencies and opportunities for cooperation. Additionally, nearly all stakeholder respondents mentioned that the approval process of the GEF is too slow and complex. This causes uncertainty and deters potential private sector partners from working with the GEF. Private sector respondents expect more clarity to help them better prepare for cooperation with the GEF.

TABLE OF CONTENT

Abbreviations and Acronyms	ii
Executive Summary	iv
Background and Objectives	iv
Conclusions	ix
I. Introduction and Background	1
Evaluation Objectives	2
Methodology	2
II. Private Sector Engagement in the Changing Landscape of Environmental Finance	4
Why Private Sector Engagement is Crucial for the GEF	5
Main Drivers of Private Sector Engagement	8
Challenges to Private Sector Participation in Environmental Finance	10
Opportunities through recent developments	12
Semi-Public Environmental Finance Actors	15
The Green Climate Fund and the Climate Investment Funds	17
III. GEF Models of Engagement with the Private Sector	22
GEF-6 Engagement	23
Intervention Models	23
Private Sector Grant and Non-Grant Portfolio	27
Integrated Solid Waste Management Project (POPs)	43
Lessons Learned	43
Capacity Building	44
Stakeholder Engagement	44
IV. Assessment of GEF Non-Grant Instruments	46
Non-Grant Instruments	46
GEF-5 Public Private Partnership Programs	54
A Closer Look at the GEF-6 Non-Grant Portfolio	55
Reflows	56
Comparison of Projects with Reflows to GEF and Projects with Reflows to Country/Facility	57
Returns Continuum	58
V. GEF's Role in Engagement with the Private Sector	59
Views on GEF's Position in the Environmental Finance Landscape	59

Strengths	59
Weaknesses	61
Three Main Roles	62
VI. Conclusions And Recommendations	69
Conclusions	70
Recommendations	73
Bibliography.....	74
 Figure 1: Potential Public-Private Finance Mobilization to Close Cost Gap.....	5
Figure 2: Global Climate Finance Flows (Public and Private) by Destination (2014)	6
Figure 3: Global Climate Change Adaptation Assessment (2014)	7
Figure 4: Importance of Environmental Issues to Companies' Core Business.....	9
Figure 5: Drivers for Private Sector Investment to Address Environmental Issues	10
Figure 6: Hurdles for GEF Private Sector Stakeholders.....	12
Figure 7: Semi-Public Development and Environmental Financing Organizations.....	13
Figure 8: Snapshot of the Semi-Public Environmental Finance Landscape	16
Figure 9: GEF-5 and GEF-6 Projects by Intervention Models.....	25
Figure 10: Frequency of Different Intervention Models.....	25
Figure 11: Comparison of Investment Volume and Number of Projects, by Phase	28
Figure 12: Distribution of Private Sector Grant Projects, by Agency	28
Figure 13: Distribution of Non-Grant Projects, by Agency.....	29
Figure 14: Total Co-Financing in Private Sector Projects, by Phase.....	30
Figure 15: GEF Leverage of Co-financing from the Private Sector in Private Sector Portfolio	30
Figure 16: Total Co-Financing in Non-Grant Portfolio, by Phase	31
Figure 17: Leverage of Co-Financing from the Private Sector in Non-Grant Portfolio	31
Figure 18: Project Size Distribution of Private Sector Portfolio	32
Figure 19: Focal Area Distribution of Private Sector Projects.....	32
Figure 20: Focal Area Distribution of Private Sector Grant Portfolio, by Phase	34
Figure 21: Focal Area Distribution of Non-Grant Portfolio, by Phase.....	35
Figure 22: Comparison of GEF Investments (\$M), by Focal Area	35
Figure 23: Investment and Number of Private Sector Grant Projects, by Region	37
Figure 24: Regional Distribution of Investment in Private Sector Grant Projects, by Phase	37
Figure 25: Investment and Number of Non-Grant Projects, by Region.....	38

Figure 26: Regional Distribution of Investment in Non-Grant Projects, by Phase.....	38
Figure 27: Moderately Satisfactory or Above Project Outcome Ratings, by Phase.....	39
Figure 28: Private Sector Portfolio Project Outcome Ratings, by Region and Focal Area	40
Figure 29: Distribution of Ratings on the Sustainability of Outcomes.....	40
Figure 30: Distribution of Ratings for Efficiency of Projects	41
Figure 31: Distribution of Non-Grant Instruments, by Phase	48
Figure 32: Frequency of Use of Different Non-Grant Vehicles	48
Figure 33: GEF investments in Reflowing and Non-Reflowing (to the GEF) Projects, by Phase	57
Figure 34: Reflowing and Non-reflowing Projects Distribution, by Region and Focal Area	58
Figure 35: Complexities in Working with the GEF	62
Figure 36: Key Roles of the GEF in Environmental Finance Landscape	62
Figure 37: Most Impactful Intervention Model	68
Figure 38: Interest in Types of GEF Support and Financial Instruments.....	68
Figure 39: GEF View on Type of Support to be Given to the Private Sector.....	69
 Table 1: Five Intervention Models for GEF Private Sector Engagement.....	 24
Table 2: Distribution of Non-Grant Instruments in a Sample of Completed and Ongoing Projects.....	49
Table 3: List of GEF Non-Grant PPP Projects	54
Table 4: Evolution of the Non-Grant Portfolio and Reflows	56
 Text Box 1: Examples of Multi-Stakeholder Alliances Intervention Model at Work	 26
Text Box 2: Examples of GEF-6 Private Sector Engagement Projects	36
Text Box 3: Lessons Learned from IFC Earth Fund	45

I. INTRODUCTION AND BACKGROUND

1. To execute its mission of tackling the planet's biggest environmental issues, the GEF works with a wide range of partners. These partners include public bodies, partner agencies, civil society organizations (CSOs), and private sector actors. The GEF's engagement and support for projects has been predominantly geared towards the public sector but with the increasing recognition of the role of the private sector in delivering environmental and social improvements, the GEF continues to address cross-cutting environmental issues and leverage private sector resources. The GEF distinguishes three groups of private sector actors: capital providers (pension funds, venture capital funds, etc.), financial intermediaries (investment banks, commercial banks, financial advisory services, etc.) and industry players (large corporations, SMEs, individuals/entrepreneurs).
2. Initial efforts to involve the private sector in GEF operations were undertaken early during GEF's pilot phase. Thereafter, the GEF Council approved a GEF strategy in 1996 which identified the "removal of market, information and other barriers" as the key approach to engage the private sector. The focus shifted from removing market barriers to non-grant instrument during GEF-2 (1998-2002). In 1999, GEF released the policy paper: Engaging the Private Sector in GEF Activities. This paper underlined the importance of private sector and identified several modalities that would be needed for barrier removal, including technical assistance and a range of non-grant financing modalities.
3. The tools for private sector engagement were formalized during GEF-3 (2002-2006). The following replenishment periods were characterized by a focus on partnerships and platforms (GEF-4, 2006-2010) and technology and innovation (GEF-5, 2010-2014). The GEF proposed a Public-Private Partnership Fund in 2005, and set aside US \$50 million to create the GEF Earth Fund with delegated authority to IFC and other agencies to prepare and approve projects more quickly in line with private sector expectations. Under the IFC platform, 14 projects were supported (five Investment Services and nine Advisory Services projects).
4. During the latter stages of GEF-5, significant efforts were undertaken to re-define a strategy for enhancing public-private partnerships. GEF developed a new strategy paper, Revised Strategy for Engagement with the Private Sector, to increase private sector engagement. This strategy prioritizes the expanded use of non-grant instruments as a key tool available to the GEF for building public private partnerships, also using a Multilateral Development Bank (MDB) platform approach to attract greater private sector financing.
5. Building on the GEF-5 operational approach, three priorities are identified for expanding private sector engagement in GEF-6 (2014-2018): mainstreaming private sector engagement in all GEF projects; setting aside US \$110 million for a Non-Grant Pilot Program which funds proposals that have the potential of generating reflows; and making the private sector integral to design, development and implementation of three integrated approach pilots (IAPs) featured in GEF-6 and which are at mid-course.
6. With GEF-6 having been underway for a few years now and to be succeeded by GEF-7 in 2018, the GEF independent Evaluation Office (IEO) undertook to study the results of private sector engagement including an in-depth examination of GEF's non-grant projects. The non-grant instruments are by definition expected to generate financial returns and therefore, most

likely to be deployed in the context of private sector engagement. This study includes an assessment of GEF's private sector portfolio and provides guidance and suggestions for future private sector engagement.

Evaluation Objectives

7. The aim of this study is to provide insight for the GEF to more effectively leverage the potential of private sector investment and commitment towards sustainable practices as well insight in the demand, the offer and potential gaps around environmental finance. This report specifically provides:

- (a) An analysis of the drivers for the private sector to address environmental issues, the environmental finance landscape and the hurdles faced by different actors in the environmental finance market;
- (b) An assessment of the GEF's private sector engagement activities around environmental finance;
- (c) Recommendations for roles, instruments and tangible measures that the GEF could incorporate in GEF-7, taking into account the GEF's strategy, current market demand and existing peer offering.

Methodology

8. The evaluation was undertaken by a team of GEF IEO staff and consultants and is based on desk research, portfolio analysis, online surveys and interviews with relevant officeholders.

Desk Research

9. The documents reviewed include relevant Council documents, previous evaluations that contained analysis on the GEF's private sector engagement and GEF project documents, including terminal evaluations. Additionally, external literature including leading reports on environmental finance from international organizations (World Resources Institute, G20 and UN Bodies), specialized initiatives (e.g. Climate Policy Initiative, Climate Bonds Initiative), and research by multilateral development banks, commercial banks and consultancy firms were considered. A list of documents used is presented in the Bibliography.

Portfolio Analysis

10. A complete portfolio of 460 GEF projects, including 91 non-grant projects was analyzed for trends. For the portfolio development, "engagement of the private sector" is interpreted broadly by and within the GEF partnership to extend from engagement with capital providers and financial intermediaries to direct financing for enterprises to regulatory changes in support of environmentally-friendly market reforms.

11. The evidence presented in this portfolio analysis draws on two inter-related sources. The first is the project data pulled from GEF's Project Management Information System (PMIS) that was used as a starting point for developing the portfolio. Projects that are indicated as receiving private sector co-financing or executed by private sector actors were included in the initial list. Project documents associated with the initial list of projects were also reviewed to ensure the integrity of the list.

12. The second source is the GEF IEO's internal project performance database (Terminal Evaluation (TE) Review Database), which contains rating on outcomes for projects that have been evaluated through the Office's Annual Performance Reports (APRs). One hundred forty (140) of the 460 private sector projects identified are also included in the IEO's TE Review database, with 123 projects having ratings on project outcomes. Using this information on project performance, the study compared the relative performance of projects that engaged the private sector with that of projects that did not along the dimensions of outcome quality, likelihood of sustainability, and relative efficiency.

13. An additional in-depth desk review was conducted for 58 projects for which TE/TER data is available. These were selected on the basis of their receipt in the GEF-5 and GEF-6 periods. One of the TEs reviewed was for the IFC Earth Fund platform (GEF ID 4257), which took a programmatic approach and included 14 sub-projects. Overall, 17 of the projects with TEs are from GEF-4; 2 are from GEF-5. The remainder are from earlier GEF phases. A review instrument (see Annex I) was designed to assess the extent of documented private sector engagement through questions about the number and variety of private sector entities identified in the TE report as well as question on the roles these entities played in the projects. The desk review also identified non-grant financial structures, co-financing contributions, the variety of mechanisms used to target the private sector and the types of lessons learned from private sector projects. A full list of the projects included in the analysis is presented in Annex II.

Online surveys

14. In order to better understand what are the drivers and hurdles for private sector actors to pursue activities that generate environmental benefits, an online survey was designed that targeted six GEF stakeholder groups, of which three were private sector stakeholders ("external stakeholders") and three are involved in GEF private sector engagement ("internal stakeholders"). The three external stakeholder groups consisted of private sector companies, financial institutions, and network organizations. The three internal stakeholder groups consisted of GEF secretariat staff members involved in private sector engagement, GEF Agencies, and national focal points. The contact list for external GEF stakeholders was compiled by the IEO and consultants to the study.

15. The surveys resulted in a total of 60 responses, 30 from private sector stakeholders (14 companies, 12 financial institutions and 4 network organizations) and 30 from internal stakeholders (4 secretariat staff members, 9 implementing agencies and 17 national focal points). Throughout the report, survey findings are highlighted.

Interviews

16. In addition to the surveys, 22 in-depth interviews were conducted with the different stakeholder group representatives. One to two-hour phone interviews were conducted with 14 private sector stakeholders and 5 GEF internal stakeholders as well as with representatives of the Green Climate Fund (GCF) and the Climate Investment Funds (CIFs). The GEF staff interviews included multiple conversations with the GEF private sector lead and an interview with the GEF CEO. An overview of survey participants and interviewees is provided in Annex III.

Limitations

17. The study relies on triangulation of evidence from quantitative and qualitative sources, there are however, some limitations. The portfolio analysis relies on the GEF Project Management Information System database to explore GEF engagement with the private sector. The PMIS, however still does not allow for systematic ‘tagging’ of projects that engage the private sector be it partnerships with and outreach to private sector during stakeholder consultation, support for innovative technologies or support for regulatory changes in support of market reforms. While individual focal areas may have their own lists of projects that involve the private sector and the non-grant projects have been more systematically tracked; it is not possible to retrieve this information from organizational databases. Furthermore, ‘engagement with the private sector’ can and is interpreted broadly within the GEF partnership. This results in too general an approach that is not representative of a focused set of projects but may also result in missing other projects that are not readily tagged as part of the ‘private sector portfolio’. Hence, the list of projects in the portfolio is not exhaustive.

18. To ensure the inclusion of as comprehensive portfolio as possible, the IEO did a systematic review of project titles, co-financiers, executing agencies, and project descriptions as well as review of lists provided by focal area officers and in some cases review of project documents.

19. It should also be noted that the online survey respondents were drawn from a known universe of private sector stakeholders, all of which had some experiences with the GEF in order to get informed viewpoints. Hence, they provide important insights from knowledgeable and carefully selected samples

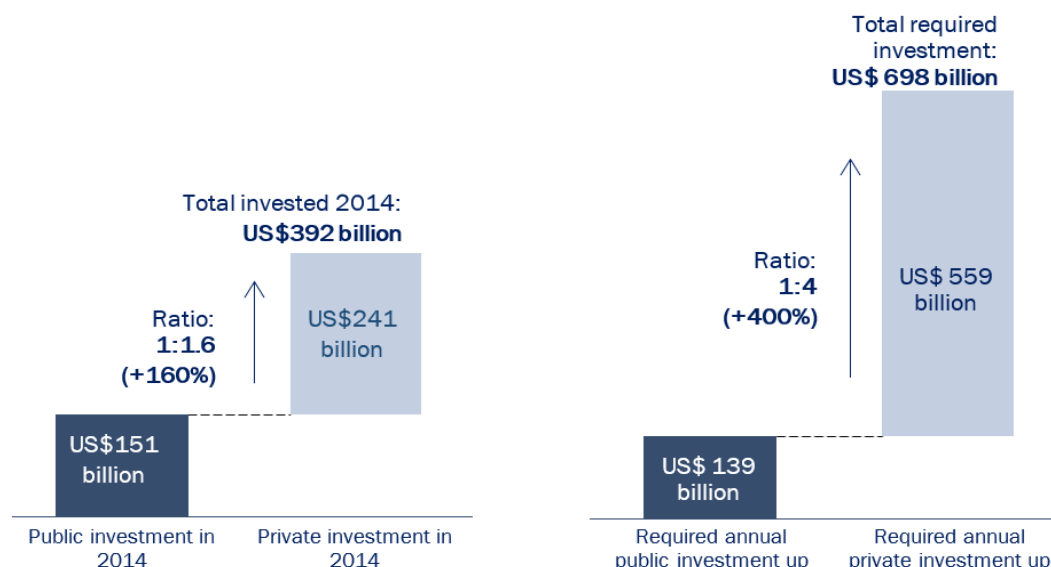
II. PRIVATE SECTOR ENGAGEMENT IN THE CHANGING LANDSCAPE OF ENVIRONMENTAL FINANCE

20. The GEF today is operating in a very different environment than when it first started. It is no longer the only multilateral purveyor of environmental finance, which is now a burgeoning field that has developed quickly over the last 25 years, tracking the history of the GEF itself. A thorough understanding of the GEF’s position vis-à-vis private sector actors within the environmental finance landscape is the basis for researching how the GEF can best leverage the private sector in tackling environmental issues. This chapter provides an overview of the market structure, its actors and financial instruments. Additional attention is paid to the role of (semi) public environmental finance actors and financial instruments that are specifically suited to the environmental finance market.

Why Private Sector Engagement is Crucial for the GEF

21. While the public sector has a vital role to play in the transition to sustainable economic growth, the private sector also plays a substantial role in this space and provides the bulk of the financing for solutions to our global environmental challenges. The fundamental role of the private sector is exemplified by its current and future role in environmental finance. The Climate Policy Initiative (CPI) calculated that, of the \$392 billion global investments in environmental finance in 2014, 61% (\$241 billion) was provided by the private sector (Figure 1). Moreover, of the remaining \$151 billion public sector climate finance, an estimated 33% went to private sector entities.

Figure 1: Potential Public-Private Finance Mobilization to Close Cost Gap¹



22. Looking ahead, the role of the private sector in environmental finance is expected to become even larger. Achieving the ambitious Sustainable Development Goals (SDGs) will cost a lot of money. The total will be far more than governments can make available. For example, according to the World Economic Forum (WEF), an annual \$700 billion investment is required up to 2020 for investment in clean energy infrastructure, low-carbon transport, energy efficiency and forestry to limit the global average temperature increase to below 2°C above pre-industrial levels. CPI estimates that this annual amount needs to further increase, estimating total required investments over the next 15 years at \$16.5 trillion. As public funding is expected to remain stagnant, additional investments should come from the private sector.

23. While these required additional investment amounts seem staggering, the capital is available. Global capital markets are currently estimated at \$218 trillion. Moreover, individual investors, commercial banks or larger institutional investors like pension funds, insurance companies, or sovereign wealth funds are all increasingly interested in combining their capital

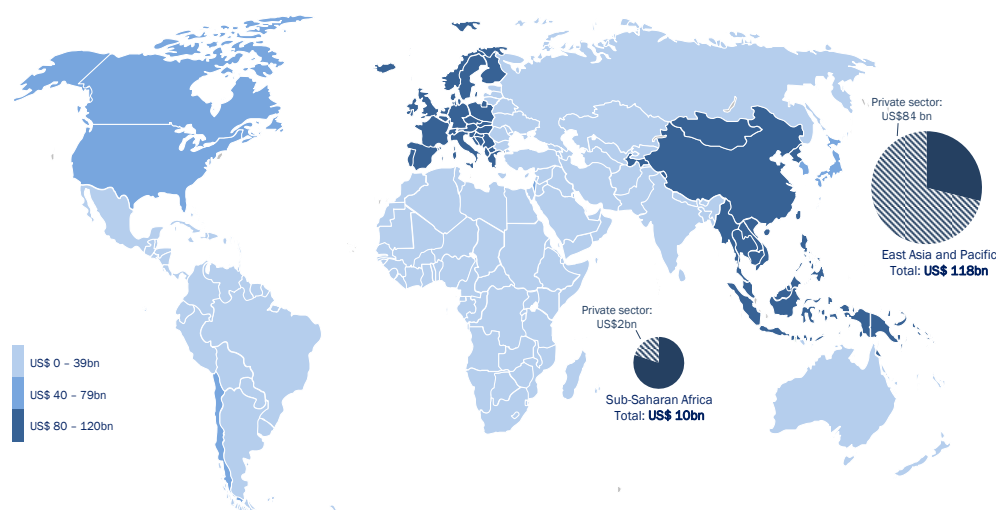
¹ Based on research in the Climate Policy Initiative's "[Global Landscape of Climate Finance 2014](#)" (2015) and the World Economic Forum's "[Green Investment Report](#)" (2013).

with some form of environmental or societal return. The principles underlying private sector participation are anchored in all the SDG targets including target 17 on strengthening global partnerships for sustainable development. The launch of a new UN platform with the private sector in 2016 for scaling up innovative financial solutions for the SDGs is another example of pathways forward for transformation of global capital markets. Similarly, guidance for companies such as those developed by the Global Reporting Initiative, Global Compact and World Business Council on Sustainable Development² on how to align private strategies as well as measure and manage contributions to the SDGs, seek to help mobilize private sector efforts around the goals.

24. Another encouraging sign is that over the past few years, financial institutions have increased their capacity and capability to provide financial services to climate change mitigation measures initiated by the private sector. A number of innovative new financial products, instruments and asset classes that can be labeled “green financing” have been introduced into the market. Examples include green bonds, clean energy investment funds, and sustainable forestry investment (Annex IV) includes a focus on these innovative instruments). In addition, investment analysis and risk management improved with the integration of Environmental, Social and Governance (ESG) factors into investment decision-making.

25. At the same time, when looking at the distribution of green financing to geographies (in this case limited to climate finance for consistency and comparability), one sees that the finance flows are predominantly directed towards developed countries (Figure 2) while the developing countries need it the most as these countries are generally less resilient to climate change than their developed counterparts (Figure 3).

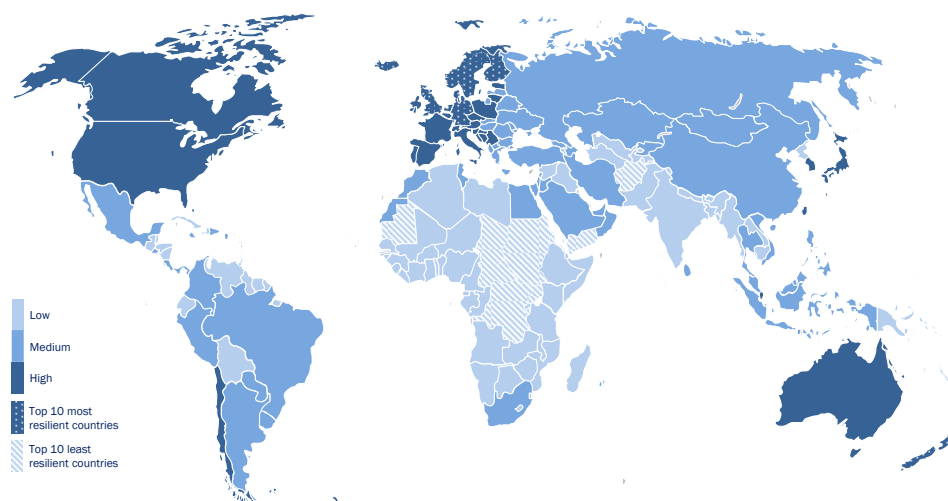
Figure 2: Global Climate Finance Flows (Public and Private) by Destination (2014) ³



² SDG Compass. 2015. “[The Guide for Business Action on the SDGs](#)”. Global Reporting Initiative.

³ Based on the data from the Climate Policy Initiative’s “[Global Landscape of Climate Finance 2014](#)”(2015)

Figure 3: Global Climate Change Adaptation Assessment (2014) ⁴



26. The distribution of climate finance in 2014 was primarily concentrated in North America, Western Europe and East Asia, receiving 66% of global climate finance. In contrast, only 9% of climate finance flowed towards Africa, South Asia and The Middle East. Moreover, the portion of private sector climate financing for environmental solutions is significantly higher in countries that are better equipped to adapt to climate change. Whereas the percentage of private sector finance as part of total climate finance flows was 90% in North America and 71% in East Asia⁵, it only constituted 36% in South Asia and 20% in Africa. This means that there is great need for re-directing overall climate finance flows, and in particular private sector financing flows, to those countries with a greater need for adaptation solutions.

27. Current investment in less-mature conservation finance markets is even more skewed towards developed countries, particularly North America: from 2004 to 2015, one study found roughly one-third of non-government market investments in global sustainable food and fiber production, and more than 80% of both water quality and habitat conservation investment, targeted North America, despite acute needs in developing countries worldwide.⁶

28. In sum, although global climate finance increases by the year, there still remains a significant gap between the current level of environmental investments and the required amount – particularly in developing countries. Further unlocking private finance for environmental projects and infrastructure is therefore key in the transition towards sustainable economic growth. However, financing for projects and infrastructure is constrained by limits in public financing, policy and market uncertainty. Legacy fiscal measures such as fossil-fuel

⁴ Based on the ND-GAIN (Notre Dame Global Adaptation Initiative) Country Index. Vulnerability measures a country's exposure, sensitivity and capacity to adapt to the negative effects of climate change across six life-supporting sectors: food, water, health, ecosystem service, human habitat, and infrastructure.

⁵ In developed countries and emerging markets private sector finance totaled \$210 billion, and in developing countries \$23 billion. In Japan, Korea and Israel 93%, and in Australia and New Zealand 95%.

⁶ Kelley Hamrick. 2016. ["State of Private Investment in Conservation 2016: A Landscape Assessment of an Emerging Market."](#) Ecosystem Marketplace: A Forest Trends Initiative.

subsidies combine with the steady but slow progress of international environmental negotiations weaken incentives for green investment and when combined with a lack of awareness of private finance providers of green growth opportunities, progress is restricted.

29. To encourage private investment, development finance institutions must focus on systematically de-risking countries moving towards commercial viability. The GEF can play an important role in this transition as it has much-needed instruments in its toolbox. These instruments include regulatory or policy reforms to make projects commercially viable, targeted financing, support for institutional arrangements that blend private and public interests, technical expertise and instruments that can reduce risk and address bottlenecks preventing private investment.

Main Drivers of Private Sector Engagement

30. In order to leverage the private sector in tackling environmental issues, the GEF needs to understand what the drivers are for private sector actors to pursue activities that generate environmental benefits. This insight can then frame for the GEF which instruments it can best deploy to meet private sector needs. The desk research and in-depth interviews has identified the following three main factors that drive this change for private sector investments.

Natural resource scarcity and losses due to environmental damage

31. Extreme weather events, natural capital depletion and the diminishing availability of water are a few of the risks that pose a threat to the core operations and activities of both private sector companies and financial institutions, regardless of geography or sector.

Companies face rising costs, which result from a growing scarcity of operational inputs, and increasing damage done to physical assets.

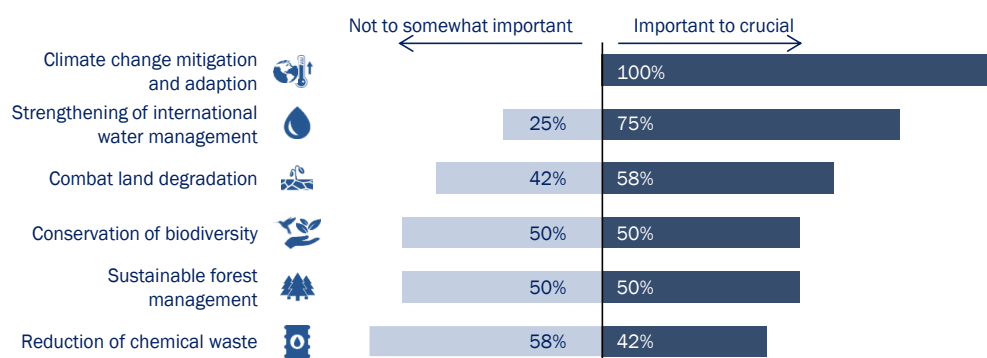
The increasing scarcity of water is already leading to competition between businesses

and society. Limited access to water for the agriculture sector means decreased productivity and thus business losses. In addition to rising costs, some sectors such as tourism or real estate are dependent on natural resources to such an extent that they are concerned about stranded assets.

"Agricultural commodities have become a key focus for the future growth of our business; which is why climate adaptation and water management are crucial for our business" - General Manager, Corporation

32. The respondents to the online survey of the GEF's private sector stakeholders recognize that the environmental issues (as per the GEF focal areas) are important on a global scale, although the extent to which it affects their business varies (Figure 4).

Figure 4: Importance of Environmental Issues to Companies' Core Business



33. Responses indicate that the companies surveyed are primarily focused on climate change, which is often seen as the overarching theme for other environmental themes, notably land degradation, biodiversity, and sustainable forest management. Many respondents credited the COP 21 in Paris for placing climate change even more firmly on the corporate agenda. Water management is also considered highly important, as it is a fundamental resource in production processes as well as crucial in transport and trade. The reduction of harmful chemicals and waste is perceived to be less directly relevant to the surveyed private sector's core business. The topic has been on the corporate agenda for longer and is being addressed by companies and regulators (e.g. REACH⁷) alike. Subsequently the issue has matured over time and is no longer perceived as a directly pressing risk or opportunity.

Societal expectations

34. In addition to the scarcity risk, there is a societal trend at play where norms and stakeholders' expectations are shifting. Investors demand transparency and adherence to global standards; NGOs want accountability; and consumers have expectations of companies' CSR commitments. An increased consumer interest in sustainability also presents an opportunity for companies to develop 'green' products that cater to that consumer interest. On top of this, governments push the private sector with regulatory and fiscal incentives to make their production cleaner. In response to and in anticipation of more stringent regulations, companies are looking for more efficient and cheaper production methods. American food company General Mills has saved \$350 million in costs by reducing their carbon footprint by 21% by generating clean energy from oat hulls (the waste from their production of oat flour).

⁷ Registration, Evaluation, Authorization and Restriction of Chemicals is a EU regulation.

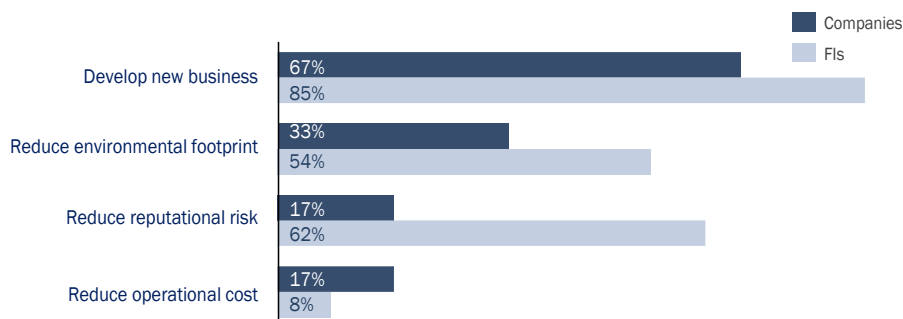
Financing requirements and opportunities

35. Although most of the large-scale impacts of environmental degradation and climate change are expected to materialize in the second half of this century, the financial sector is already taking action to anticipate on potential stranded assets in portfolios due to environmental degradation and climate change. A first measure they take is to use their leverage as a financier to engage with their investee and influence the company's policies and practices on the environment. Another option is to divest from a specific company or sector. The Norwegian Government Pension Fund (\$825 billion) for example, announced in 2016 to divest altogether from coal companies. Yet the sector is also increasingly aware of the opportunities provided by the transition to a low-carbon climate-resilient economy. The financial sector is investing in the development of new products and services for their clients, as described in Annex IV.

"Why do we provide a conservation asset class? To serve our clients needs and demands, and to generate higher returns for our clients" - Asset manager

36. GEF stakeholders, and especially financial institutions (FIs), also cite developing new business as a key driver to develop new environmental products, services and technology, as shown in Figure 5. They see a strong opportunity in developing financial products for clean technology and resource efficiency. This is indicative of the positive trend in private sector response to environmental challenges.

Figure 5: Drivers for Private Sector Investment to Address Environmental Issues



Challenges to Private Sector Participation in Environmental Finance

37. Despite the above-mentioned motivators, the environmental finance market is still hampered by several hurdles that are holding the private sector back from achieving real scale and impact with their environmental projects and investments. The main actors in the environmental finance value chain (notably companies, financial intermediaries, capital providers) experience these hurdles differently. We discuss six hurdles here.

"There is no liquidity issue, but a quality and risk issue. The most innovative solutions have a hard time finding investors because of their high risk, small scale and sometimes lack of quality" - Asset manager

Inconsistent regulatory environment

38. There is broad recognition among private sector players that inconsistent regulatory frameworks hamper the environmental finance landscape. This is a particular issue in developing countries, where the need for environmental finance is higher and consistent government regulation is scarce. Government regulation can create investment opportunities and generate confidence amongst investors. Government regulation clarifying legal rights and rules and protecting investors can reduce risk (often the case in developing countries). Policies that create pricing or payments for environmental benefits of investments can create monetary returns, as in the case of carbon pricing or ecosystem services pricing.

"We do not need money, we need a good regulatory environment to operate in" – Asset manager

Limited replication and scale

39. A key hurdle for environmental projects is that they lack the size required to access financing from the mainstream capital market, either directly or indirectly. Most environmental solutions are innovative and have a modest financing need that does not correspond with the large sums that mainstream investors seek to invest. Second, these solutions are often very specific to geographies and topics, which makes them difficult to replicate or scale. Because many environmental finance opportunities are small or dissimilar, they are difficult to aggregate or expand, creating difficulties for financial intermediaries seeking to offer mainstream investors in the capital market investments that meet those investors' demands for investment size and risk profile. This in turn creates a problem for large institutional investors. They don't have access to enough investment opportunities to match their environmental finance ambitions.

"Credit quality, scale-ability and repeatability are key hurdles" – Commercial Bank

Lack of track record

40. Many of the companies active in the field of environmental solutions are new. Either their technology is a new invention, their market is unexplored or the team running the operation is inexperienced. Although this is what makes them different and creative, it also makes them less attractive for financiers because they do not bring a longstanding history of proven business operations. This lack of track record withholds mainstream financiers to commit as they want to see a proof of quality. The same problem holds up for new innovative financial intermediaries. They have similar trouble in raising capital when their target group, financial product or team itself operates in unproven terrain.

Conservative risk perspective

41. Many investors still approach potential green investment opportunities with a traditional risk-return reference in mind. However, the projects can often not meet the traditional return expectations until they have matured and the risks are lowered. Scenario analyses and risk assessments for green investments are still being developed, and investors thus have to rely on traditional and

"The finance sector is ill-prepared for small and remote electricity projects with limited ROI" – Executive Director, Industry Partnership

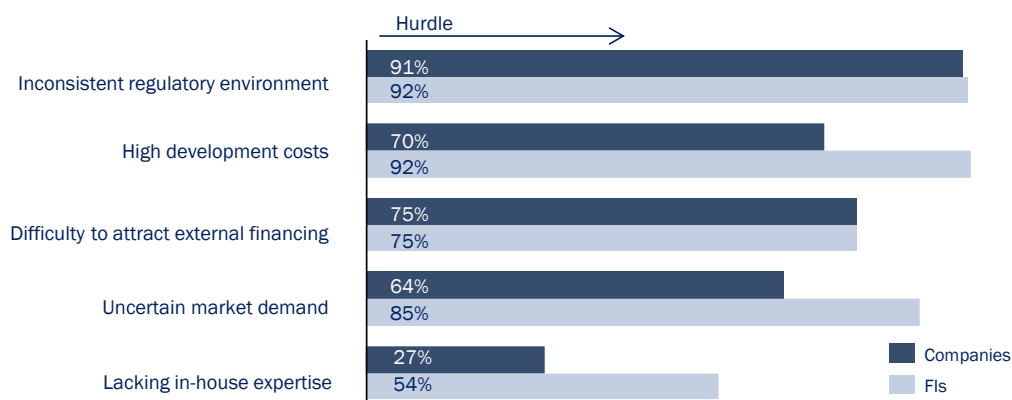
often unsuitable methodologies. For example, the returns of most projects do not fall within the traditional return-on-investment (ROI) timeframe of five to seven years. Because many environmental finance opportunities are novel, investors do not have access to extensive historical data, and making cross-sectoral comparisons in order to price risk is challenging and time-consuming.

High transaction costs

42. Linking natural resources to revenue streams is the foundation of for-profit environmental solutions yet this is a challenging exercise to many companies. The costs of developing innovative products are often high and the rewards are often not immediate and apparent. High development costs are particularly the case for companies in developing countries, which are faced with challenges such as poor infrastructure and a lack of existing supply chains. To some private sector actors, the lack of expertise adds to their inability to effectively overcome this hurdle. Capital providers often lack the financial and human resources to dedicate to finding green investment funds that meet their risk and impact standards.

43. Many of these hurdles were identified by private sector stakeholders. During the interviews and online survey, the private sector respondents each saw a clear role for the GEF to play in overcoming these hurdles. Figure 6 gives an overview of the findings.

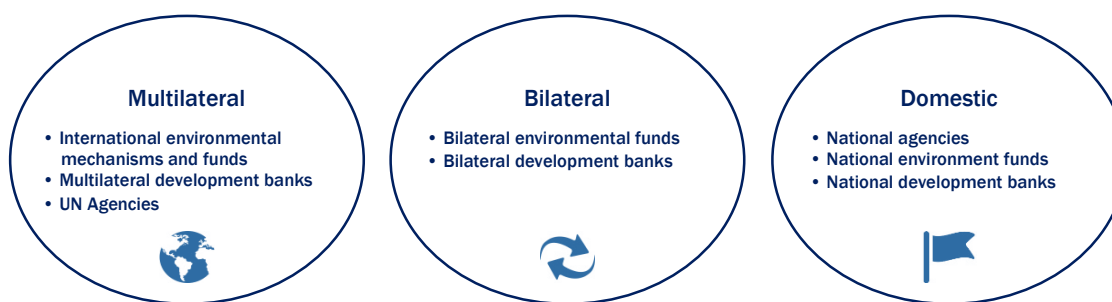
Figure 6: Hurdles for GEF Private Sector Stakeholders



Opportunities through recent developments

44. Leveraging private sector finance is key to effectively address global environmental issues. This is even more important in developing countries, where the public sector generally is weaker and more resource constrained than in developed countries. An encouraging sign is that private sector investment in developing countries, including in environmental finance is growing rapidly. By intervening to improve the investment attractiveness of projects, semi-public sector mechanisms can direct and significantly leverage private sector capital flows for environmental finance in developing countries. Multilateral, bilateral, and domestic finance institutions – collectively referred to as the semi-public and public development and environmental finance institutions - all play important roles in this landscape.

Figure 7: Semi-Public Development and Environmental Financing Organizations⁸



45. Over the last few years there have been a number of developments that have or may have a significant effect on the environmental finance landscape. These developments all have the potential to positively influence the flow of private sector capital towards environmental projects. They are important for the GEF to recognize, and explore how it can use and build upon them.

International agreements

46. In the past years a number of major international conferences took place with positive outcomes for environmental finance. Three are most prominent. The first is the adoption of the Sustainable Development Goals in September 2015, which provide clear objectives and indicators for private sector involvement in sustainable development, including environmental objectives. The second is the Paris Agreement concluded during the COP21 in December 2015, which determines national contributions to greenhouse gas emissions climate mitigation, adaptation and climate finance. The third is the July 2015 Addis Ababa Conference on Financing for Development, which resulted in an agreement on an economic framework to support the sustainable development agenda, acknowledging the private sector's role as a prominent driving force for development.

Low interest rate environment

47. The persisting low interest rates in global financial markets offer opportunities as investors welcome new investment opportunities with reasonable risk-return profiles that have little to no correlation to their other investments. If made investable for institutional investors, environmental projects may increasingly qualify as such, as natural resources (e.g. forests, water, wind) are independent from macroeconomic developments (e.g. inflation).

New technologies and tools

48. The monitoring of the impact of environmental projects has become better and more affordable. This increases the transparency and measurability of the impact of efforts, and thus

⁸ Shally Venugopal, Aman Srivastava, Clifford Polycarp and Emily Taylor. 2012. [“Public financing instruments to leverage private capital for climate-relevant investment: focus on multilateral agencies”](#). World Resources Institute.

increases the credibility of the environment as an asset class. An example of this is the partnership between the NGO the Freshwater Trust, which partnered with Google to assess the quality of waterways⁹.

Corporate Sustainability

49. In recent decades, the field of sustainable investing using environmental, social and governance (ESG) criteria, has become central to corporate management and investment strategies, both to improve corporate performance and value creation as well as to reduce risks associated with environmentally unsustainable practices. As environmental sustainability has become a goal, environmental instruments such as green bonds have begun to emerge as a discrete asset class, and climate-friendly and environmentally sustainable investments have been approached as a hedge against fossil fuel-related risks, risks of natural disasters, supply chain disruption, and climate impacts, and commodity price volatility.

50. Consequently, institutional investors – particularly those with long time horizons - have increasingly expressed interest in environmental finance products previously limited only to public finance institutions, philanthropies and impact investors. Private sector entities such as companies, investment funds, and sustainability disclosure and reporting standards have emerged to enable the identification and assessment of environmental performance metrics of corporations and investment products. These new entities populating the environmental finance landscape have increased liquidity, investment capital, and financial products up and down the financing chain, catalyzing a profusion of new opportunities for public environmental financiers to partner with the private sector.

Rise of impact investing and conservation finance

51. Impact investments are investments made into companies, projects, and funds which aim to generate a specific measurable, beneficial social or environmental impact alongside a financial return. An industry level analysis on global impact investor market activity undertaken by the Global Impact Investing Network (GIIN)¹⁰ through an annual survey found that the global impact investing market is scaling at double-digit rates (18% compounded annually from 2013 to 2015) and that impact investments are made across the world using a variety of financial instruments, reflecting a wide variety of strategies. Overall, investors are consistently satisfied with both impact and financial performance. Innovative environmental projects are an important focus area for impact investors.

52. Conservation finance – the dedication of public and private capital for protection of ecosystems and sustainability of resource use – is also a rapidly growing field. A recent report found that \$52 billion now flows annually to conservation projects, primarily public and philanthropic funds.¹¹ Private capital allocation is growing as well. In 2015, \$2.0 billion in private capital was committed to conservation projects in three categories: sustainable food and fiber,

⁹ Frederick Reimers. 2015. [“Mapping American’s Disgusting Waterways”](#). Bloomberg.

¹⁰ GIIN. 2016. [“Impact Investing Trends: Evidence of a Growing Industry”](#).

¹¹ Credit Suisse Group AG and McKinsey Center for Business and Environment. 2016. [“Conservation Finance: From Niche to Mainstream: The Building of an Institutional Asset Class.”](#)

habitat conservation, and water quality and quantity. The \$2.0 billion represented an 80% year-on-year increase from 2014 and tenfold increase over the past decade.¹² However, this total still represents a small share of the potential: \$3.1 billion in dedicated private sector conservation funds remained on the sidelines in 2015 for lack of identifiable investment opportunities,¹³ and an estimated \$300 to \$400 billion is needed in annual flows to meet conservation goals, which is 6 to 8 times greater than current levels of investment.¹⁴

53. A second report, from Ecosystem Marketplace¹⁵, reviewing the state of private investment in conservation reported that private capital committed to conservation investments is growing dramatically, jumping 62% in a two-year period to \$8.2 billion in 2015, but still dwarfed by public investment. The report surveyed investors and not-for-profit organizations who responded that a lack of attractive risk/return deals, small transaction sizes and management track records were limitations to conservation investment growth.

54. The findings of these reports offer encouraging evidence that private capital is moving rapidly to environmental directions and there is an accelerating demand from mainstream investors for impact and conservation investments that generate a return while having a positive impact on natural infrastructure but there remains a shortage of investments that meet criteria of both.

Semi-Public Environmental Finance Actors

55. As discussed, semi-public development and environmental finance institutions are critical players in the flow of finance to developing countries for environmental finance activities. These institutions have a dual function: they are crucial mechanisms that invest in riskier environmental projects directly, and they are also well-positioned to catalyze additional private sector investment towards relevant environmental projects.

56. The semi-public and public environmental finance field in which the GEF operates is a complex arena made up of a variety of actors with diverse fund offerings in terms of instruments and environmental themes. In order to provide a basic overview of the actors and mechanisms that operate in this arena, Figure 8 below plots a sample of 14 multi-lateral, bilateral and national funds and mechanisms on two characteristics: their level of focus and their accessibility to the private sector.

57. The two characteristics are assessed on the basis of qualitative research of a select number of criteria. The horizontal axis depicts the level of focus of the mechanisms, which consists of both their thematic focus (i.e. broad environmental themes or specific focus such as forest management) and their instrumental focus (i.e. solely grant-based or employing non-grant instruments as well). The vertical axis indicates the accessibility of the funds to the private sector. Accessibility is assessed according to three criteria: the extent to which they operate directly with the private sector (i.e. involvement of partners and intermediaries or not), their

¹² Kelley Hamrick. 2016. ["State of Private Investment in Conservation 2016: A Landscape Assessment of an Emerging Market."](#) Ecosystem Marketplace.

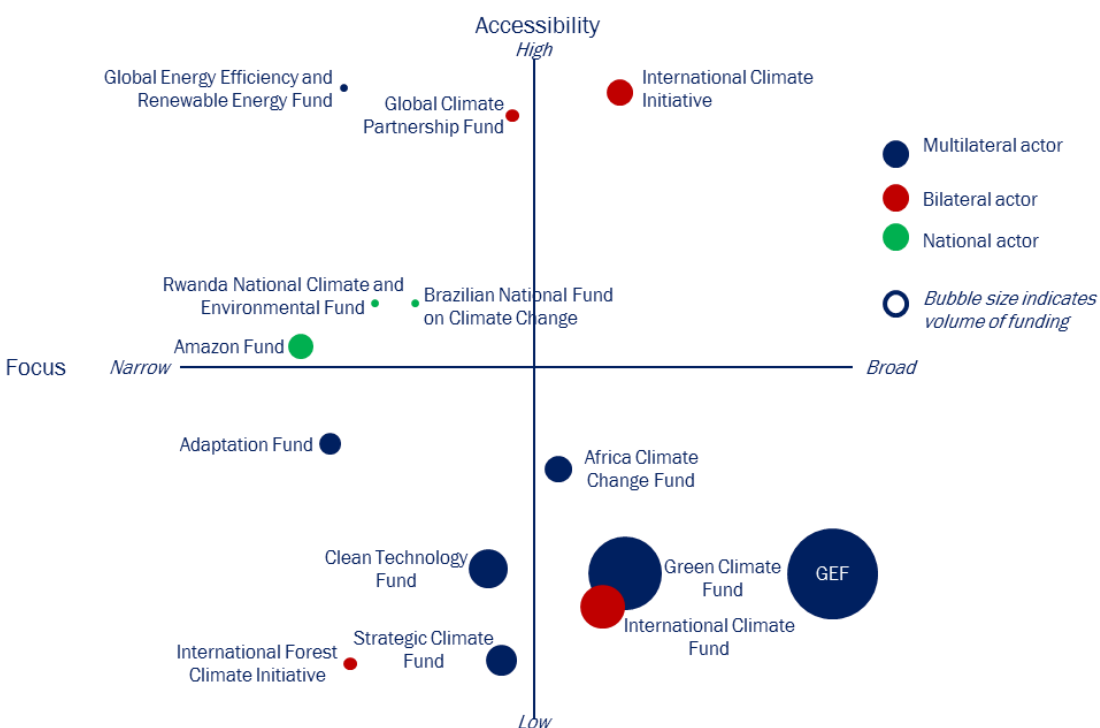
¹³ *Ibid.* Executive summary, p. ix.

¹⁴ Credit Suisse Group AG and McKinsey Center for Business and Environment. 2016. ["Conservation Finance: From Niche to Mainstream: The Building of an Institutional Asset Class."](#)

¹⁵ Hamrick. 2016.

communication on private sector engagement, and their disclosure of project cycle information (for further details on the methodology used for Figure 8 please refer to Annex V).

Figure 8: Snapshot of the Semi-Public Environmental Finance Landscape



58. Three striking features can be observed in the graph. As noted, the Green Climate Fund (GCF) and, to a slightly lesser degree, the Clean Technology Fund (CTF), are the GEF's main peers: all three mechanisms are the largest in the field and comparable in terms of focus and accessibility (the CTF scores slightly higher than the others on focus, but this focus diminishes if the CTF is viewed as part of the thematically broader Climate Investment Funds, or CIFs. The second is the lack of funds in the upper right quadrant, which appears to indicate that it is challenging to combine a broad instrumental and thematic focus with easy access for the private sector. The third is that the European mechanisms promoted by the EIB (GEEREF), European DFIs (GCPF), and German government (ICI) appear to be most accessible to the private sector, while still offering different opportunities. The ICI, the only mechanism in the upper right quadrant, has a broad thematic and instrumental focus providing both grant and non-grant instruments. In terms of accessibility, project cycle information and criteria are easily available and proposals can be submitted electronically.

59. For a more detailed discussion on the role of semi-public development and environmental finance institutions in directly financing and leveraging private sector financing through financial instruments and advisory services, see Annex IV. A review of the structure, focus, and private sector engagement of the GCF and Climate Investment Funds or CIFs (of which the CTF is the largest constituent fund), the two largest and most similar peers of the GEF in terms of environmental finance, follows below.

The Green Climate Fund and the Climate Investment Funds

The Green Climate Fund (GCF)

60. The GCF was established in 2010. It has raised \$10 billion, which it aims to deploy on low-emission and climate-resilient projects and programs in developing countries, equally distributed between mitigation and adaptation, at least 50% of adaptation funding going to the most vulnerable countries, including LDCs, SIDS, and African States. Its Board is evenly split between developed and developing country representatives. Among other features, it has a Private Sector Facility to finance direct private sector engagement, and has a risk-bearing capacity that can be structured to leverage additional investment.

National Designated Authorities at the country level serve as focal points and provide the interface between country priorities and the GCF. GCF resources are channeled through Accredited Entities; these can be private or public, non-governmental, sub-national, national, regional or international, and have to go through an accreditation process. They develop funding proposals, manage and monitor projects and programs. As of April 6 2017, there are 48 Accredited Entities (AE), of which 52% are international (DFIs, commercial banks, investment funds, UN agencies such as UNDP, international environmental groups like the World Wildlife Fund and Conservation International), 29% national (national entities such as the National Environment Management Authority of Kenya) and 19% regional (regional DFIs such as the Caribbean Development Bank).¹⁶ A further 160 entities are awaiting accreditation as of March 2017. The GCF thus differs significantly from the GEF with respect to access modalities.

The GCF has two funding windows: Mitigation and Adaptation, which are implemented by sovereign governments; and the Private Sector Facility (PSF), which is implemented by non-government accredited entities (AEs). Thus the implementing entity determines whether a project is classified as 'private sector'. The GCF defines 'private sector' as non-sovereign government-implemented projects, all of which are reviewed by and implemented through the PSF¹⁷.

61. The PSF's mandate is "to fully engage private sector investors, developers, entrepreneurs, corporations, and small and medium sized enterprises (SMEs) in climate-sensitive and resilient projects throughout the developing world. It aims to mobilize at scale private funding flows from local, regional, and international commercial banks and institutional investors (i.e. insurance companies, pension funds, and private equity funds)."¹⁸ The vast majority of the projects concern sustainable energy, either through energy efficiency credit lines and facilities, or investment funds for renewable energy, including off-grid solar systems to improve energy access.

62. The PSF focuses on deal making with private sector financial institutions, and works with a range of co-investors. For the GCF's public sector projects, governments are the usual co-financiers; sometimes AEs put their own money in. For PSF proposals: the investor mix depends

¹⁶ Green Climate Fund. ["Accredited Entities"](#).

¹⁷ GCF is still exploring its position in relation to PPPs. A distinctive feature of the GCF is that some of the AEs are commercial banks, and these AEs would be mapped to the PSF. Elements 02. Investment Opportunities for the Green Climate Fund. p16-17.

¹⁸ GCF website. ["Private Sector."](#)

on the type of proposal and financial product. For an equity proposal, the PSF has co-invested with an impact fund, family offices, and corporations such as Google and eBay. For other types of proposals, financial institutions, MDBs and local FIs are typical co-financiers.

63. The PSF often mixes mechanisms of financial support within individual projects. Most incoming proposals propose a mix of grants and loans, or grants and equity, or grants and guarantees. The GCF also tries to narrowly target concessionality to end-beneficiaries (i.e., small enterprises) and target sectors, rather than to private sector bank, AEs, or other intermediaries.

64. As of the end of the sixteenth Board Meeting in April 2017, the GCF has committed \$2.25 billion in 43 projects. Of these, 12 projects are classified as private sector projects, towards which the GCF has committed approximately \$1.3 billion in a combination of equity, loans, guarantees and grants; these 12 projects account for approximately 57% of the funding amount. Each \$1 from GCF is expected to leverage \$3 additional from DFIs, other private sector entities, public sector and other facilities, for a total project value of \$4 billion.

65. There is a significant difference in the instruments used for the private sector compared to the public sector. A review of the overall portfolio prior to the April 2017 board meeting indicated that 47% of the funding committed is in the form of grants, 42% in loans, 10% in equity and 1% in guarantees. Contrast this with the numbers for the private sector: only about 8% of the funding provided is in the form of grants. Loans account for 70%, while equity is at 19%, and guarantees 3%. In terms of thematic area, 3 of the 9 projects concern credit lines or related intermediary instrument, but represent over 50% of the project investment and of the GCF funding committed. These have been undertaken with the EBRD and the IDB – both GEF partners.

66. It is not possible to glean hard financial information regarding the terms of the GCF instrument in these private sector projects, since term sheets and the financing agreements are not publicly available. Despite a standard format, there remains great variability in the information contained in the funding proposals. However, some of the proposals reviewed indicate that the GCF financing is “concessional” relative to the prevailing Accredited Entity rates. In interviews, GCF representatives indicated that levels of concessionality are determined ad hoc based upon the market niche and objective of individual investments, and that concessionality, when provided, is intended to be targeted to end beneficiaries, rather than to accredited entities or other financial intermediaries.

67. Some of the projects approved for financing by the GCF also include financing from other climate finance providers, notably the Climate Technology Fund. One example is the Energy Efficiency Green Bonds in Latin America and the Caribbean, an IDB-led project to finance and aggregate energy efficiency projects with a view to their eventual securitization. The project is to be implemented in phases, with the GCF providing \$20 million in guarantees and \$2 million in TA; the CTF is also providing \$19 million in a 2nd loss guarantee for the IDB loan financing. It would be interesting to see if there are differences in the structuring of the GCF and CTF funding, along the lines of the World Bank India Partial Risk Sharing Facility for Energy Efficiency Project discussed below.

The Climate Investment Funds (CIFs)

68. The Climate Investment Funds consist of two funds: the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF), which in turn includes three targeted programs: the Forest Investment Program (FIP), Scaling Up Renewable Energy Program (SREP), and the Pilot Program for Climate Resilience (PPCR). The governance structures of the CTF and the SCF comprise equal representation from contributor and recipient countries.¹⁹ The CIFs work through multilateral development banks (MDBs), which serve as both intermediaries and implementing entities.

69. Set up in 2008, the CIFs have mobilized \$8.3 billion in funding from 14 countries for investments in renewable energy, energy efficiency, sustainable transport, climate resilience and sustainable forestry management in 72 countries. The CTF is by far the largest of the CIFs, at \$5.6 billion. Overall, the CIFs have approved financing of \$4.9 billion, of which \$1.8 billion has been disbursed (as of end-December 2015; the annual report for 2016 is not yet available); total co-financing in the projects and programs concerned is \$36 billion – resulting in a co-financing ratio of 1:7.²⁰

70. Across the CIFs, \$2.3 billion (or close to 30% of \$8.3 billion total CIF funding) is designated for projects and programs that aim to stimulate private sector participation. Private sector engagement can take place in three ways:

- (a) Direct or intermediated finance through MDBs' private sector windows
- (b) Through public-private partnerships (PPPs)
- (c) Through private co-financing of public investment projects.

71. The CIF employs two financing vehicles for engaging the private sector in program operations: \$1.7 billion allocated for private sector projects specified in CIF investment plans; and approximately \$640 million allocated to specific private sector facilities to achieve scale and speed in response to market demand, including \$465 million allocated through the CTF Dedicated Private Sector Programs (DPSP). CIF funding can be deployed across a range of instruments, based on the implementing MDB practice.²¹ CIF funding can be subordinated to the MDBs, providing greater structuring flexibility, and can be used for local currency lending (with the foreign exchange risk borne by the CIFs).

72. Like the GEF, the CIF's country and government-led investment planning process seems to have resulted in most funding being focused on the public sector, with the lengthy approval processes further discouraging private sector engagement.²² Private sector investments comprise the balance (roughly \$2 billion or 25% of the CIFs by dollar value), usually in the form of special project vehicles (SPVs), a common project finance structure, with private-sector ownership of project equity and without recourse to sovereign guarantees.

¹⁹ Climate Investment Funds. ["Governance"](#).

²⁰ Climate Investment Funds. 2015. [CIF Annual Report 2015: Empower a Green Future](#).

²¹ Climate Investment Funds, Private Sector, available on the [CIF website](#).

²² ICF International. 2014. ["Independent Evaluation of the Climate Investment Funds"](#). Washington DC: World Bank

73. While leveraging private capital is embedded in the CIFs' mission, after several years of operation it became apparent that the CIFs, including the CTF, were skewing towards public sector investment, in part because governments preferred to implement their own projects, in part because it was faster and easier for MDBs and governments to partner in historically proven ways, and in part because in some sectors and regions private sector funding was scarce and more difficult to properly price.

74. Consequently, in 2012 CIFs established private-sector carve-outs of donor funds for private sector projects. In the FIP, SREP, and PPCR, private sector carve-outs constitute 10% to 20% of those respective fund portfolios. The CTF established the Dedicated Private Sector Programs (DPSP) to "finance[e] programs or operations that can deliver scale (in terms of development results and impact, private sector leverage and investment from CTF financing) and speed (faster deployment of CTF resources, more efficient processing procedures), while at the same time, maintaining a strong link to country priorities and CTF program objectives." Roughly 25% of the CTF resources, or \$460 million of \$1.5 billion, were earmarked and for and disbursed through the DPSP.

75. Both the CIFs and the GCF have in recent years developed, and continued to develop, targeted initiatives, funding vehicles, and programming and investment modalities to enhance and better target the engagement of, investment from, and impact on the private sector. The CTF has participated in co-financing projects alongside the GEF (albeit on different terms) as well as with the GCF. One such project is the World Bank's India Partial Risk Sharing Facility for Energy Efficiency (GEF ID 4918). This project involves a GEF financing of \$18 million, a CTF financing of \$25 million, and other co-financing for \$127 million. \$12 million of the GEF financing is to fund an RSF (the balance is for TA); the RSF is "backstopped" by \$25 million of CTF contingent finance. Although classified as a guarantee, the GEF financing is used to fund the RSF and cover facility management and operating expenses in addition to guarantee calls. No reflows to the GEF are foreseen, as any remaining balances in the facility accrue to the government for appropriate disposition due to the specific programming requirements of the country allocation model. A guarantee fee is charged to users of the facility, and fees are used to pay the CTF's fees and other operating expenses of the facility. This example demonstrates the different risk (and return) profiles of the two multilateral climate finance providers (GEF and CTF), with the GEF in the highest risk position.

The GEF, CIFs and GCF – A Comparative Analysis

76. Annex VI presents the similarities and differences between the GEF, CIFs, and GCF. They all share a desire to catalyze private sector investment – particularly in the climate change arena – through a mix of support mechanisms anchored by relatively large-scale investments. A number of areas of relative difference and comparative advantage have emerged from the comparative analysis, largely reinforcing feedback from the private sector stakeholder survey.

77. First, the GEF has an environmental mandate that extends beyond climate change, setting it apart from the CIFs and GCF. Many outside observers have lauded the GEF's multifocal approach, targeting the drivers of environmental problems and harnessing multiple benefits across different thematic areas (such as land degradation and biodiversity), which was

noted as a particular strength by stakeholders.²³ Consequently, it is best situated amongst the three to pursue cross-cutting thematic programs that address not only climate change, but also domains of other environmental conventions. As a result, the GEF may find its thematic niches in areas both outside of the climate change arena entirely, as well as in those that engage multiple sectors or environmental issues.

78. The GEF can support impact at scale through its funding across multiple sectors. One outside survey found that the GEF “should focus on its traditional strengths in working across the five conventions it serves (Climate Change, Biological Diversity, Persistent Organic Pollutants, Desertification, and Mercury), and focus its “pure play” climate change projects on targeted activities that have large catalytic impacts.”²⁴

79. Second, the GEF appears to be uniquely well-suited to take on early-stage risk, both because of its mandate – allowing substantial grant components and limited reflows when necessary – as opposed to the CIFs (particularly the CTF) and GCF, which are both heavily focused on direct collaboration with investors and financial intermediaries to expand clean energy and climate change markets.

80. The CIFs differ from the GEF and the GCF in that they only have six implementing institutions, and all are MDBs. Consequently, there is a high degree of coordination between the CTF and its partner MDBs to blend finance in project deals and to negotiate precise terms. Furthermore, playing to the strengths and operating modalities of MDBs, CIF investments – particularly in the CTF - focus on non-grant financial products that approximate market transactions in their structure. Non-CTF CIF projects (PPCR, FIP and SREP) include greater proportions of grants for technical assistance, policy support, etc., pushing them further across the spectrum away from market transactions towards traditional development assistance.

81. The GCF, by contrast, is fairly unique among large climate finance institutions in seeking to directly target local finance institutions, the private sector, and non-governmental non-profit entities. As of April 2017, the GCF had accredited a total of 48 implementing entities. The PSF is currently prioritizing “direct access”, i.e. disbursement of resources and channeling of investment directly to such local institutions in developing countries, rather than primarily through MDBs as intermediaries. The GCF is actively encouraging those local/national entities to get accredited and apply directly.

82. Consequently, the CIFs appear to be best situated to neatly tailor their programs to the strong suits of the MDBs: large-scale lending and anchoring investments in collaboration with the private sector. Meanwhile, the PSF appears to be de-emphasizing existing multilateral and international finance institutions, instead focusing on local-level initiatives in developing countries, as well as on initiatives (regardless of the implementer) that focus on small and medium enterprises. Both approaches are heavily focused on transactions.

83. The GEF appears to have particular strength and experience in the domains of institutional capacity building, policy and regulatory development to improve the investment

²³ Niranjali Amerasinghe, J. Thwaites, G. Larsen and A. Ballesteros. 2017. [“The Future of the Funds”](#). World Resources Institute. p.53

²⁴ *Ibid.* p.63.

climate, alliance building, and innovative approaches – i.e., all of the intervention models aside from innovative financing approaches. Capacity building has been noted by private sector stakeholders and GCF staff as a unique GEF strength. The WRI report comparing international climate finance institutions also found that the GEF “has a critically important role to play in advancing country ownership through its focus on capacity building. Its historic emphasis on capacity building was further strengthened by the mandate it received from COP21 to implement the Capacity Building Initiative for Transparency²⁵. WRI also advocated for the GEF continuing to maintain broad country coverage within these core strengths.

84. The GEF has played an important role in demonstrating private sector viability in nascent markets (notably in climate change mitigation) through its ability to tolerate higher levels of risk. However, as these markets grow, complex financial structures, despite efforts dating back to early GEF replenishments through the Earth Fund, and recent efforts since GEF-5, are less proven and relatively untested for the GEF. Consequently, it may find that its resources in such emerging markets are best deployed to explicitly enable, support, and prepare the pipeline and investment climate for other more established climate finance institutions such as the CIFs and GCF.

85. In a number of instances, the GEF, CIFs, and PSF have already interacted directly in a complementary way, including through jointly supported projects. However, this type of close collaboration appears to be the exception rather than the rule in GEF projects that have reached the CTF and GCF. More intensive collaboration and portfolio development could enhance these synergies.

86. The ample opportunities in conservation finance beyond the narrow scope of climate change and the identified priorities of the GCF and CIFs suggest that the GEF has many opportunities to establish niches and comparative advantages in the innovative finance arena as well. Within the climate space, GEF appears better suited to fund smaller scale and high-risk investments that are too small for MDBs or commercial banks, but which are necessary to bring down perceived risks in new markets, a view corroborated by GCF staff.

87. Others have noted, “The GEF may face constraints in supporting bigger programs due to its allocation system, but it could build on its cross-sectoral programming and rely on other entities to co-finance promising initiatives”.²⁶ Consequently, cross-cutting programs could benefit from advance planning for the scale-out of funding in collaboration with other environmental finance institutions.

88. A brief description of other comparative bilateral and regional agencies providing finance for environmental-related investments can be found in Annex VII.

III. GEF MODELS OF ENGAGEMENT WITH THE PRIVATE SECTOR

89. Guided by the environmental Conventions that it serves (Annex VIII), the GEF has a long history of working with a wide range of private sector partners. Within the GEF, there is no single entity or sector that constitutes “the private sector”, and the GEF defines private sector engagement as “broad partnerships rather than specific capital investments”. GEF Private

²⁵Amerasinghe et al. 2017. pp.63-64

²⁶ Amerasinghe et al. 2017. p.62

Sector Engagement can thus be mapped in a crosscutting manner according to a range of operational approaches and programs.

GEF-6 Engagement

90. The GEF-6 period aims to take a holistic and comprehensive approach to engaging the private sector as compared to the previous replenishments. Three specific priorities have been identified in expanding such engagement²⁷: mainstreaming, integrated approach pilots (IAPs), and the non-grant pilot.

Mainstreaming

91. GEF-6 takes a three-pronged approach in mainstreaming private sector engagement in its programming, project design, and monitoring and reporting strategies: (i) fostering private sector mainstreaming within GEF-6 programming across all seven focal areas; (ii) fostering enhanced awareness on private sector engagement and “private sector” friendly project design; and (iii) better tracking and monitoring of private sector engagement.

92. As demonstrated by previous evaluations and portfolio analysis, five intervention models (discussed below) identified in the GEF 2020 Strategic Plan have been used by GEF-6 for addressing barriers to private sector engagement and strengthening such engagement.

Non-Grant Pilot

93. Building on the non-grant instruments launched under GEF-5, GEF-6 has set aside \$110 million for a Non-Grant Pilot (NGP) Program that aims to enhance private sector engagement and expand the use of non-grant instruments such as credit guarantees and concessional loans to deliver global environmental benefits.

Integrated Approach Pilot (IAP) Programs

94. Integrated Approach Pilots (IAPs) are pilot programs that address major drivers of environmental degradation in a holistic, industry-wide manner. They are being designed and implemented through a platform that involves key stakeholders, such as the private sector, upfront. The three main IAPs focus on food security, sustainable cities and taking deforestation out of commodity supply chains. Separate evaluation studies on the IAPs are being undertaken and will be presented in the context of OPS6 in the fall of 2017 and will include an examination of the private sector in the design and development of the programs.

Intervention Models

95. The GEF 2020 Strategic Plan has identified five intervention models (Table 1) used by the GEF to work with a range of private sector actors from capital providers to entrepreneurs to address barriers to private sector engagement.

²⁷ GEF. 2014. [“Actions Taken to Enhance Private Sector Engagement”](#). GEF/C.47/Inf.05.

Table 1: Five Intervention Models for GEF Private Sector Engagement

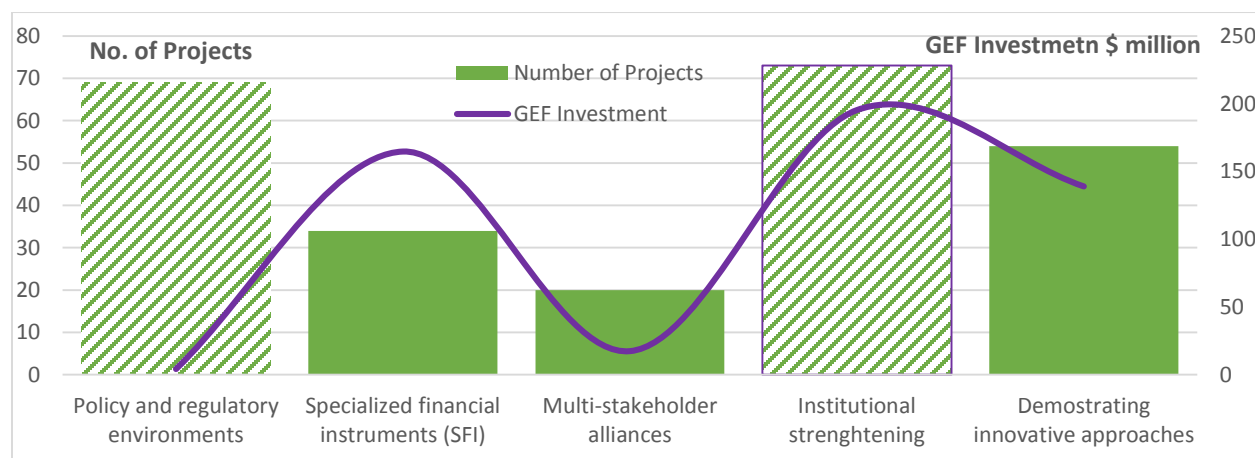
Intervention model		Examples
 <i>Transforming policy and regulatory environments</i>	Incentivizing the private sector and consumers to make optimal decisions through consistent policy and regulatory environments	• New policy and regulatory frameworks • Feed-in tariffs for renewable energy
 <i>Strengthening institutional capacity and decision-making</i>	Strengthening institutions and enhancing accountability in public and private decision-making processes	• Capacity building for public agencies • Advisory services (e.g. for SMEs)
 <i>Convening multi-stakeholder approaches</i>	Collaborative goal setting by a partnership of a variety of stakeholders to overcome complexity and coordination failures	• Certification (e.g. Rainforest Alliance) • Transformational targets (e.g. 80% of cocoa sustainable by 2020)
 <i>Demonstrating innovative approaches</i>	Supporting a technology, policy or an approach which can be adopted by a variety of stakeholders and subsequently scaled-up	• Payment for ecosystem services • Cleantech Innovation Programs
 <i>Deploying effective financial instruments</i>	Providing instruments that help cover risks or investments gaps thereby providing incentive and leveraging private sector investments	• Loan guarantees • Revolving funds

96. According to a categorization of a sample of 101 GEF-5 and GEF-6 private sector projects, 80% of projects relied on more than one intervention model. This finding resonates with information from the 22 interviews that corroborate that GEF projects are designed to address complex issues, hence, a variety of intervention models are needed to overcome the barriers to environmental protection.

97. Among the intervention models, the most commonly applied ones are those that facilitate institutional strengthening (72%) and those that transform policy and regulatory environments (68%). These are critical elements to help build capacity and put in place the right incentive and signals that allow private sector to redirect their investment in an environmentally sustainable manner.

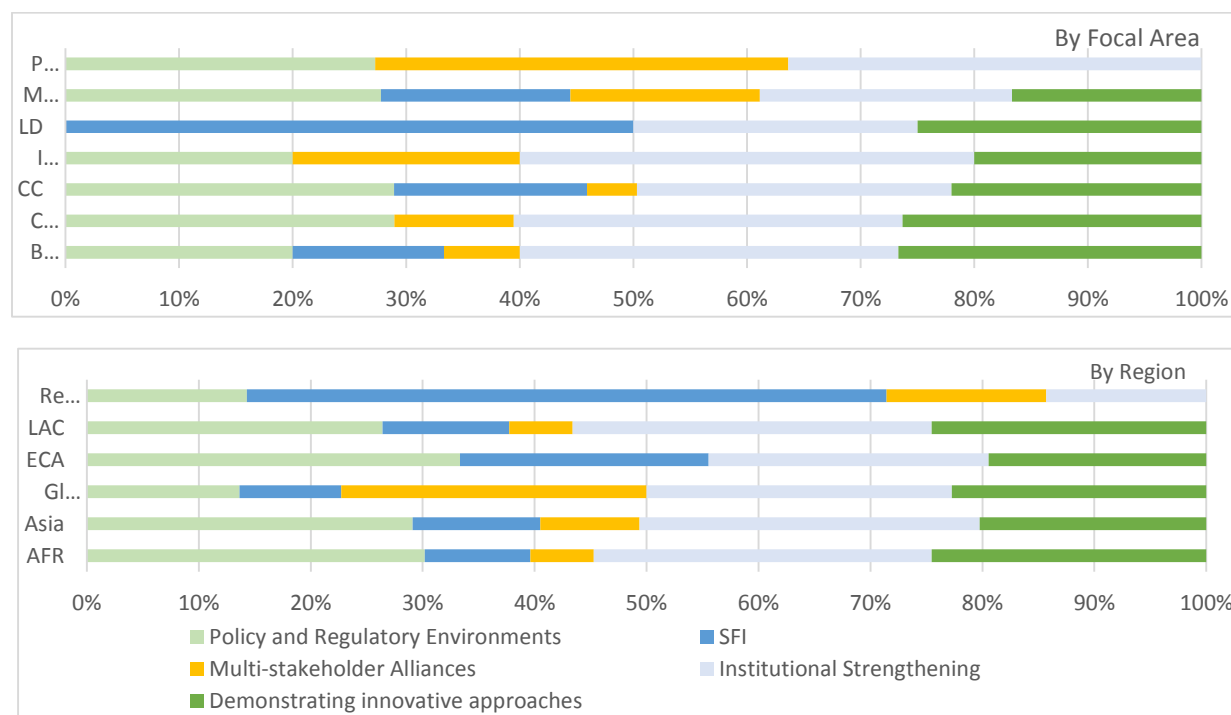
98. Although there is a high number of projects supporting enabling policy and regulatory environments, this category does not receive as high a GEF investment in dollar terms. GEF investments were predominately planned for specialized financial instrument and institutional strengthening. In fact, specialized financial instruments, such as loan guarantees or revolving funds, are the most capital intensive intervention models with the highest investment to number of projects ratio. Only 20 out of the 101 projects applied only one intervention model. Half of these single model projects are under the specialized financial instruments.

Figure 9: GEF-5 and GEF-6 Projects by Intervention Models



99. Projects focusing on Chemical and Waste (CW) and Biodiversity (BD) are most likely to involve the innovative approaches component. In general, enabling policy and regulatory environment and institutional strengthening are the most commonly observed categories in all types of projects across every region (Figure 10). There are several examples, also, of strong multi-stakeholder alliances across the GEF partnership (Text Box 1).

Figure 10: Frequency of Different Intervention Models



Text Box 1: Examples of Multi-Stakeholder Alliances Intervention Model at Work

Strengthening Capacity for International Cooperation in the Ecosystem-based Management of the Antarctic Large Marine Ecosystem – GEFID 9443, GEF Grant \$6,192,694, Co-financing \$45,000,000

The objective of this project is to strengthen multilateral cooperation in ecosystem-based management of the Antarctic Large Marine Ecosystem (ALME) through supporting national-level institutional strengthening and building the capacity of GEF-eligible countries to meet their marine resource management commitments and obligations under the intergovernmental Convention for the Conservation of Antarctic Marine Living Resources, (CCAMLR) to help ensure sustainable ALME fisheries in the context of climate variability and change.

Through multinational cooperation, multisectoral coordination and partnership, the project will enhance ecosystem-based management and monitoring of ALME. Partnership will also be established with private sector, including industry associations, and civil society to improve the management effectiveness of CCAMLR. Key private sector partners will include national level stakeholders and international bodies such as the Antarctic and Southern Ocean Coalition (ASOC), the Association of Responsible Krill Harvesting Companies (ARK), and the Coalition of Legal Toothfish Operators (COLTO).

Transforming The Global Aviation Sector: Emissions Reductions from International Aviation, GEFID 5450, GEF Grant \$1,950,000, Co-financing \$8,300,000

The objective of the program is to support the building of capacity in developing countries for implementing technical and operational measures for reducing CO₂ emissions from international aviation. In partnership with airlines and other international aviation stakeholders, the project will establish a technical support platform that brings together information essential to implement aviation emission reductive measures. The information will be public domain and will be collected from different sources including: International Civil Aviation Organization (ICAO), national governments, academia, vendors, business associations, etc. The availability of such a platform will also significantly reduce the time spent, costs and other overheads of developing States to collate information, leading to incremental implementation of emissions reduction measures.

Global Opportunities for Long-term Development of ASGM Sector - GEF GOLD, GEF9602, GEF Grant \$45,262,294, Co-financing \$135,174,956

The project aims to reduce the use of mercury in the Artisanal and Small-Scale Gold Mining (ASGM) sector in the participating countries through facilitating the access to finance to artisanal miners and mining communities for the introduction of low and non-mercury technologies and techniques and through the development of sustainable ASGM gold supply chains. ASGM is the largest global source of anthropogenic mercury releases into the environment with about 35% of total releases from a multitude of sites in over 70 countries. It occurs almost entirely in developing countries and countries with economies in transition.

Eight countries in the three major regions where ASGM is present will participate to the Programme. The project will help use or set up revolving funds and provide support to ASGM communities to build their capacity to access financing. In some countries, the funds will be set-up by the host Government while in others, it will be set up in collaboration with external investors. The project will also work

with gold consumers, and in particular, with industrial users in order to raise their awareness on their possible role of positively influencing gold extraction practices through ensuring implementation and compliance with international standards. Finally, the development of more direct gold value chains through the cooperation between national gold buying institutions and international refiners and gold end-users will ensure miners who respect environment and social standards obtain a better selling price for their production.

Private Sector Grant and Non-Grant Portfolio

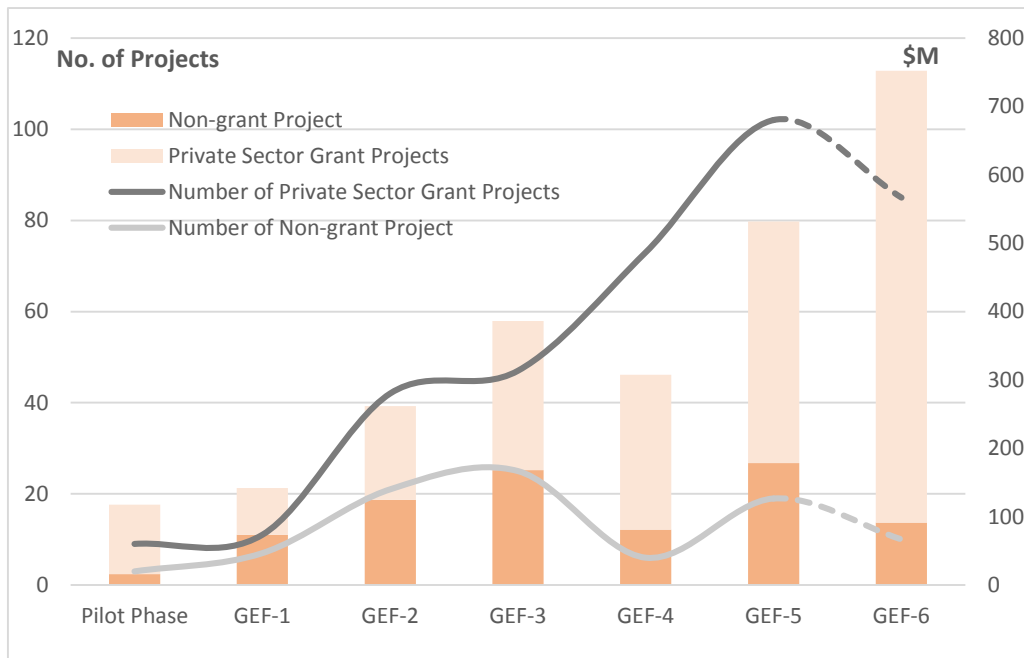
100. The private sector portfolio identified for OPS6 is made up of 460²⁸ projects from pilot phase to GEF-6 (See Annex II). This portfolio comprises about 17% of the broader GEF portfolio in terms of total GEF investment. Regarding the number of projects, this private sector portfolio is approximately 11% of the total of 4319 projects that are approved as of September 30th, 2016.

101. Among the 460 projects, included are 91 projects that have used non-grant instruments (See Annex IX), which are by definition expected to generate financial returns. The rest 369 projects are private sector grant projects. Altogether, these 460 projects represent US \$2499.2 million in GEF grant investment. Unless stated otherwise, the private sector portfolio represents both grant and non-grant projects.

102. As shown in Figure 11, the number of projects and investments under each GEF period vary. Investment dollars dipped in GEF-4 for the private sector portfolio. In GEF-5, the total amount of investment from GEF for private sector engagement projects reached \$531.9 million. During the same period, the non-grant portfolio increased to 19 projects with \$178.4 million investment, the highest amount so far. Comparing to the broader private sector portfolio, the number of projects using the non-grant vehicle remains a small fraction.

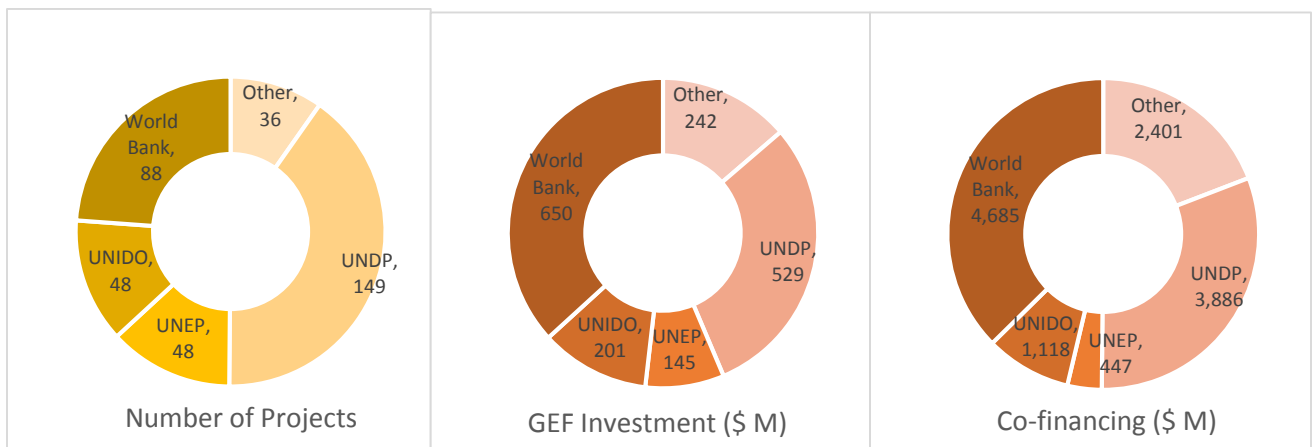
²⁸ In OPS5, 290 projects were identified and analyzed. Ten (10) of these projects have been cancelled or dropped since OPS5. This study identified another 170 projects. The projects in the portfolio are as of September 30, 2016.

Figure 11: Comparison of Investment Volume and Number of Projects, by Phase



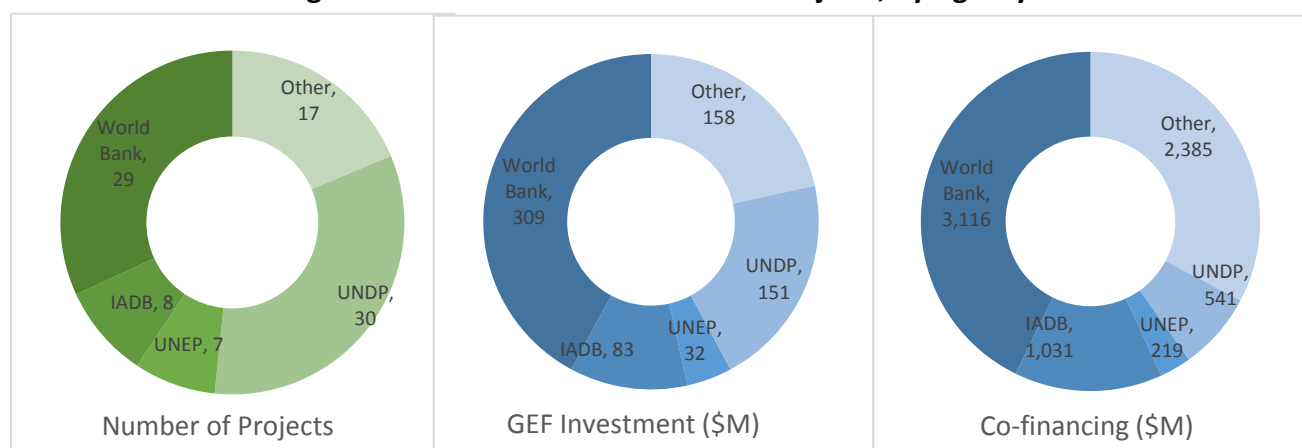
103. UNDP was the lead implementing agency for approximately 40% of the private sector grant portfolio. The World Bank, UNEP and UNIDO implemented another 24%, 13%, and 13% respectively. The remaining 10% of projects were implemented by the regional development banks, IFAD and the FAO. Figure 12 presents the number of projects and the corresponding GEF grant and co-financing amounts with these implementing agencies.

Figure 12: Distribution of Private Sector Grant Projects, by Agency



104. Historically, most of non-grant projects have been implemented through UNDP (33%) and IFC as a member of the World Bank Group (32%). The IADB and UNEP implemented another 9% and 8% of projects respectively. African Development Bank led projects obtained the highest co-financing ratio (1:30) among all lead implementation agencies²⁹ in the non-grant portfolio.

Figure 13: Distribution of Non-Grant Projects, by Agency



Co-financing

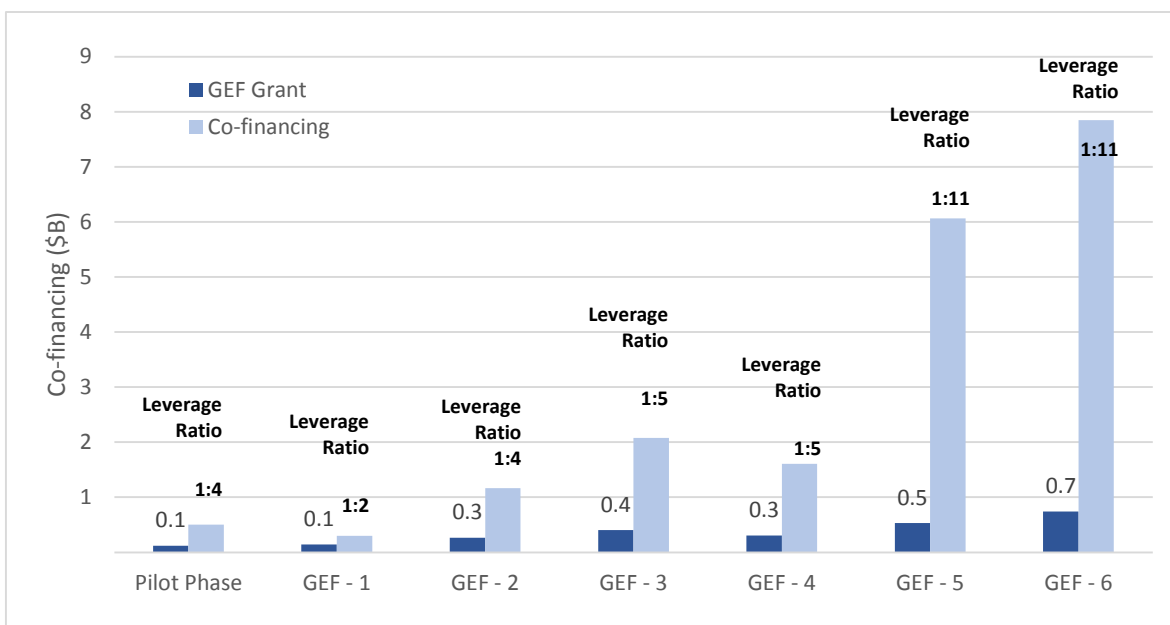
105. For the private sector portfolio, on average, \$1 GEF grant leverages \$8 in co-financing. If the non-grant projects, which have high co-financing, are removed from the overall portfolio the ratio is \$1 GEF grant to \$7 co-financing.

106. For the overall private sector portfolio, \$3 out of \$8 in co-financing comes from private sector investment. In the non-grant portfolio, \$4 out of \$8 in co-financing comes from the private sector.

107. As can be seen from Figure 14, the leverage ratio (\$ co-financing per \$ GEF grant) stayed steady in the first four GEF periods in the overall private sector portfolio. In GEF-5, for every \$1 financed by the GEF, \$11 was financed by other parties (including the private sector). This is a significant increase when compared to the co-financing ratio in the first five periods, where every \$1 GEF was matched by approximately \$4 in co-financing. The absolute amount of co-financing remains steady and increases from GEF-5 to GEF-6, suggesting that the co-financing from the private sector, catalyzed in large part by PPPs and non-grant instruments, is increasingly strong.

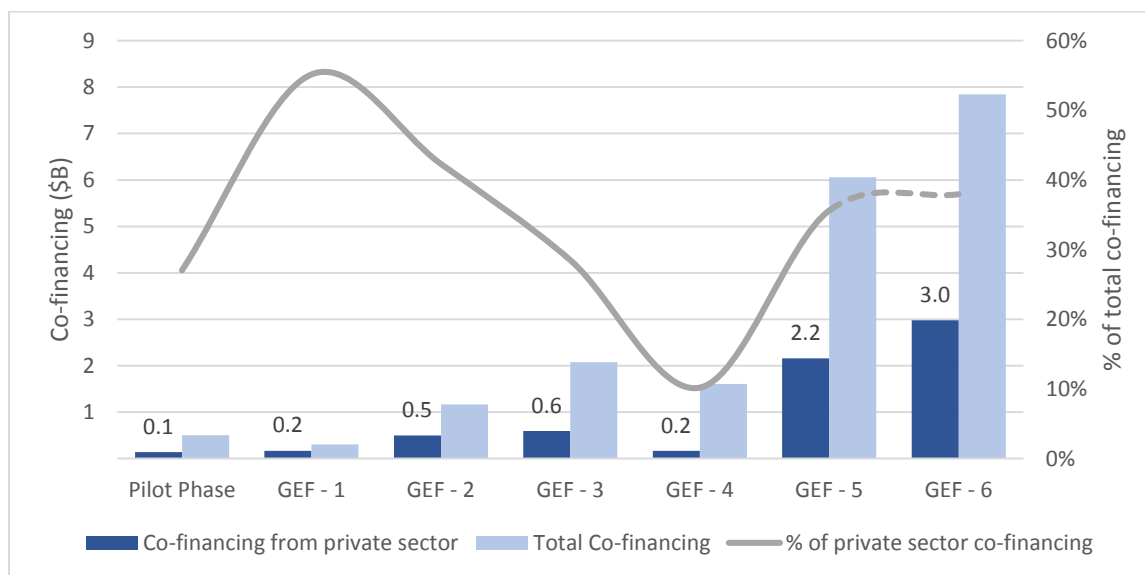
²⁹ This high leverage ratio is mostly a result from GEF ID 9043: *Investing in Renewable energy Project Preparation under the Sustainable Energy Fund for Africa (SEFA)*, in which \$10M GEF investment is expected to leverage \$955M in co-financing.

Figure 14: Total Co-Financing in Private Sector Projects, by Phase



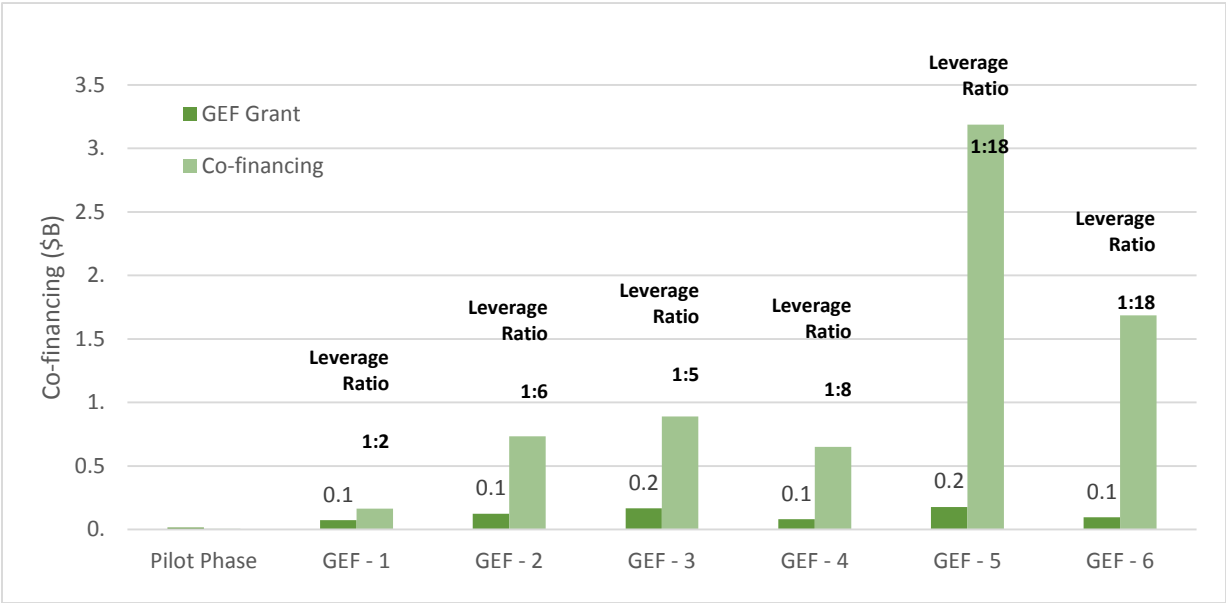
108. Figure 15 visualizes co-financing from private sector as a part of total co-financing volumes per replenishment period. As shown, co-financing from the private sector generally increased in absolute terms (with the notable exception of GEF-4 at which time the country allocation framework was introduced). The private sector contribution to co-financing peaks in GEF-6. In this replenishment period, approximately 38% of co-financing came from private sector. In fact, every \$1 spent by GEF is matched by \$4 from private sector in GEF-6.

Figure 15: GEF Leverage of Co-financing from the Private Sector in Private Sector Portfolio



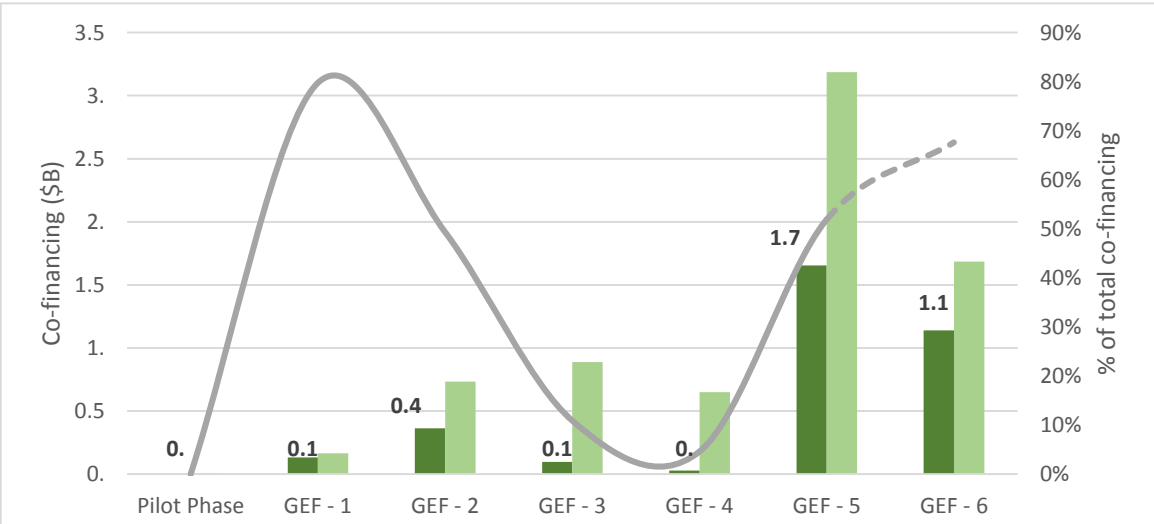
109. For the non-grant portfolio, on average, \$1 GEF grant leverages \$10 in co-financing and \$5 of \$10 in co-financing comes from private sector investment. As illustrated by Figure 16, the leverage ratio (\$ co-financing per \$ GEF grant) increased steadily along the GEF replenishment period (exception in GEF-3). In GEF-5, for \$1 financed by the GEF, \$18 was financed in private sector projects by other parties. This is a significant increase when compared to the co-financing ratio in the previous periods, where \$1 from GEF was matched by approximately \$5 in co-financing. In contrast to the stable investments from GEF, the absolute amount of co-financing peaked in GEF-5 and stayed strong in GEF-6.

Figure 16: Total Co-Financing in Non-Grant Portfolio, by Phase



110. Figure 17 shows co-financing from private sector for non-grant projects as a part of total co-financing volumes per replenishment period. As can be seen, co-financing from private sector was significant in GEF-1 and GEF-2, then it dipped in GEF-3 and GEF-4. In the two latest GEF periods, co-financing from private sector for non-grant portfolio was a larger portion of the total co-financing. In GEF-6, the private sector’s contribution to co-financing makes up of 68% of total co-financing. This reveals the private sector’s expanding interest in involvement with the non-grant projects.

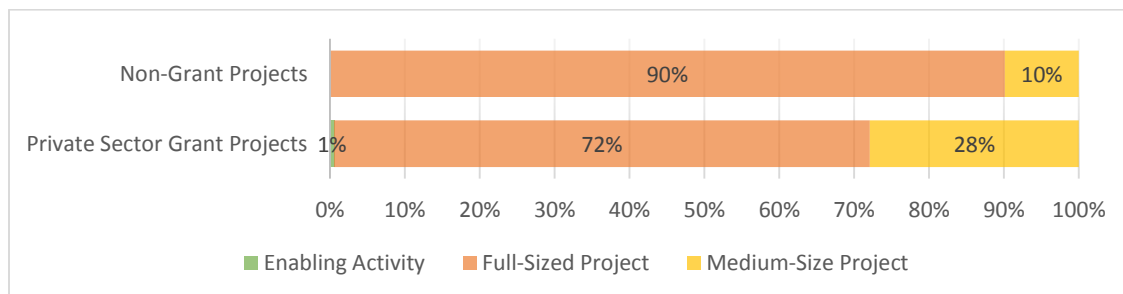
Figure 17: Leverage of Co-Financing from the Private Sector in Non-Grant Portfolio



Modality, Focal Area and Region

111. The overall private sector portfolio contains 346 full-size projects, and 112 medium-size projects and 2 enabling activity. In the private sector grant portfolio, full-size projects greatly outnumber medium-size projects. Seventy-two percent (72%) of the private sector portfolio (264 projects) is made up of full size projects. The fraction of full size projects is even more dominant in non-grant portfolio (90%) than in the private sector grant portfolio.

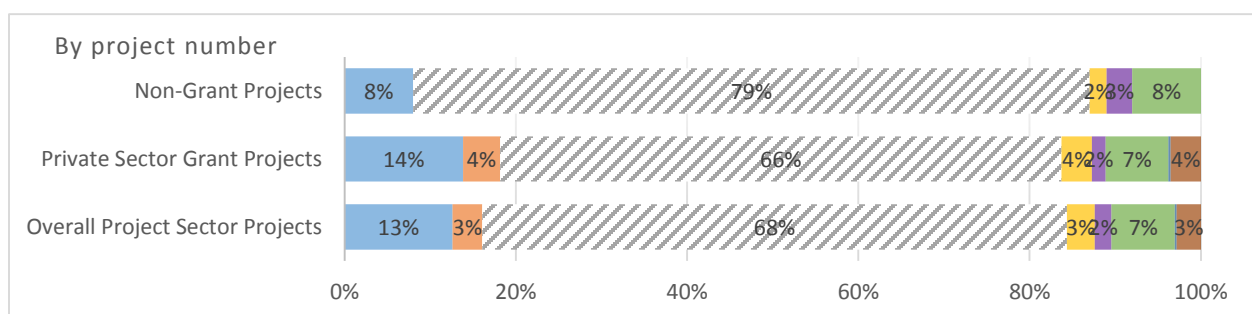
Figure 18: Project Size Distribution of Private Sector Portfolio

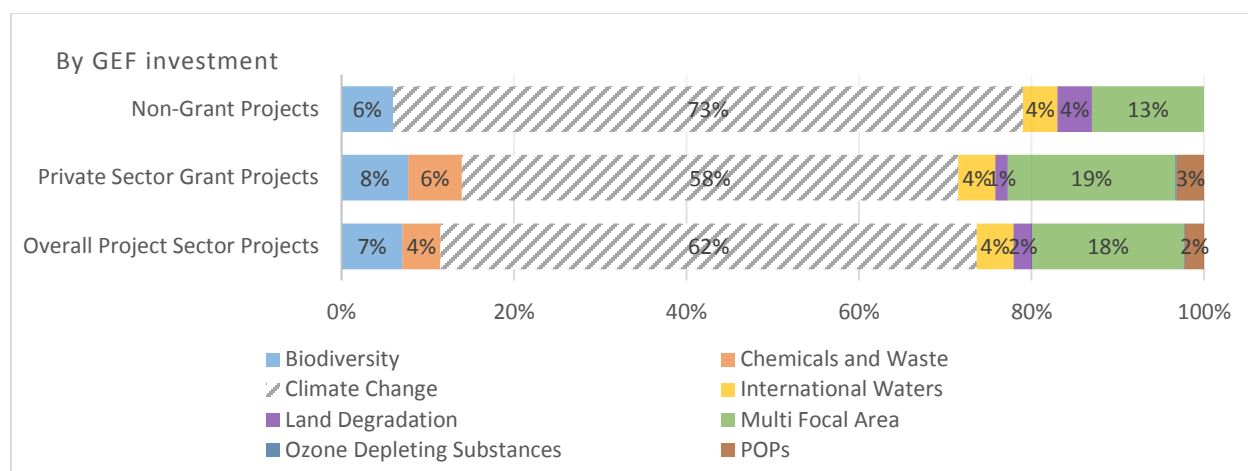


112. As shown in Figure 19, projects in the climate change (CC) focal area account for the bulk of the private sector portfolio. Sixty-eight percent (68%) of projects in the portfolio are in CC focal area, representing 62% of GEF total investment in private sector grant projects. Biodiversity projects are also a popular focal area in the private sector portfolio (13%). Though multi-focal projects only represent 7% of private sector projects, they actually receive 18% of GEF investment.

113. Similar to the trend observed in the private sector grant portfolio, the bulk of the non-grant portfolio is dominated by climate change projects (79%). In reviewing a sample of completed non-grant projects, only 7 of 41 projects were not climate change focused. In a sample of ongoing-projects sample, there is a relative increase in non-climate change projects (9 out of 29).

Figure 19: Focal Area Distribution of Private Sector Projects





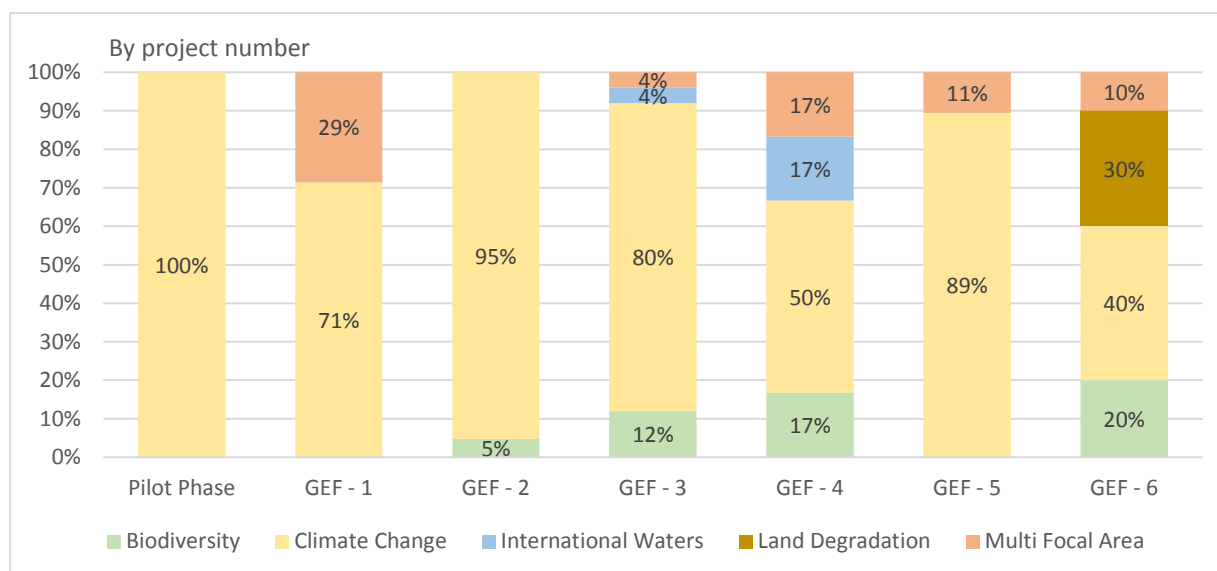
114. According to focal area distribution by phase, the number of climate change projects as a proportion of the private sector grant project portfolio has risen in GEF-5 to 76% since shrinking from GEF-2 to GEF-4, but has dropped again in GEF-6 to 65%. The GEF investments as a proportion of the private sector grant project portfolio also dropped to 38%. Multi-focal area investment increased dramatically in GEF-6, making it the most invested area in GEF-6 (41%). In GEF-6, chemicals and waste (CW) also featured prominently. Sixteen chemicals and waste projects representing 19% of the private sector grant portfolio in this period were implemented.

Figure 20: Focal Area Distribution of Private Sector Grant Portfolio, by Phase



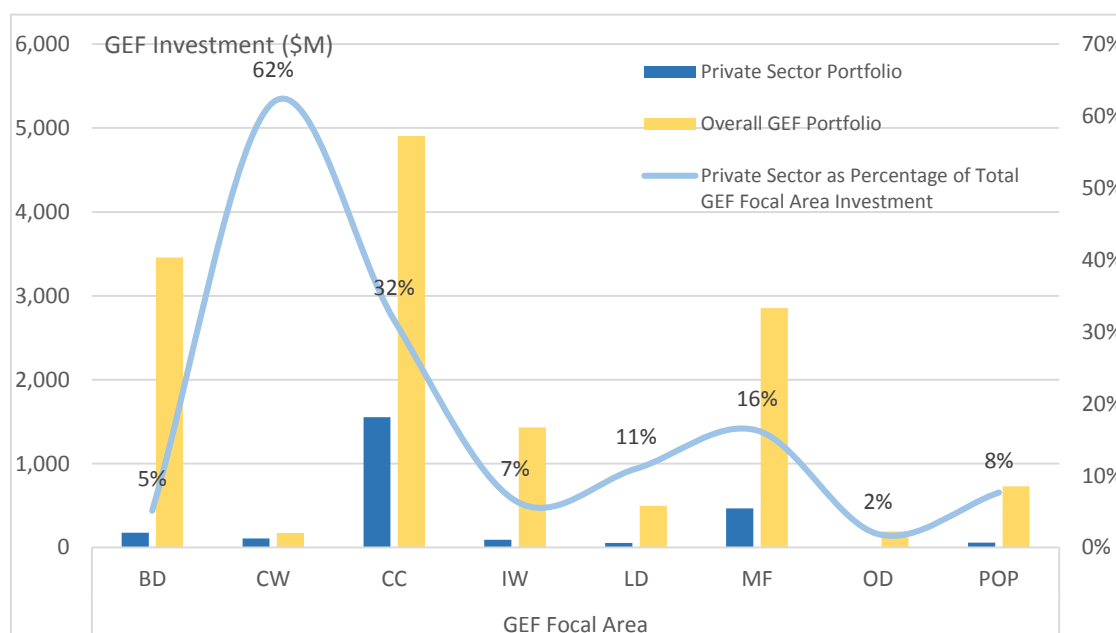
115. For the non-grant projects focal area distribution (Figure 21), in GEF-6, more non-grant projects than ever are diversified to different focal areas other than climate change. In particular, land degradation and biodiversity projects together represent 50% of the non-grant portfolio.

Figure 21: Focal Area Distribution of Non-Grant Portfolio, by Phase



116. To further understand private sector focal area distribution, investment volumes in these focal areas are analyzed against the broader GEF portfolio. As illustrated in Figure 22, climate change projects involving the private sector represent 32% of total GEF investments in this focal area. Chemical and waste projects with private sector engagement constitute 62% of the GEF overall investment in this focal area.

Figure 22: Comparison of GEF Investments (\$M), by Focal Area



117. Some examples of GEF activities to mainstream private sector engagement beyond climate change in GEF-6 projects are presented in Text Box 2.

Text Box 2: Examples of GEF-6 Private Sector Engagement Projects

Sustainable Land Management for Increased Productivity in Armenia (SLMIP) - GEF ID 8005, GEF Grant \$3,937,500, Co-financing \$29,473,000

Using GIS resource mapping exercises and market analysis, potential economic opportunities derived from landscape restoration actions will be identified. The funding will support a number of demonstration actions that facilitate the establishment or strengthening of local associations and cooperatives and market the selected wild products. The project will also develop a collaboration framework with the Armenian National Agrarian University (ANAU) and the Environmental Research and Management Centre (ERCM) to undertake several policy analyses. The results of this review will be presented at a national seminar on supportive policies for sustainable agriculture in the Armenian rural landscapes.

Demonstration of Mercury Reduction and Minimization in the Production of Vinyl Chloride Monomer (VCM) in China - GEF ID 6921, GEF Grant 16,900,000, Co-financing \$99,000,000

China's total mercury usage is about 1200 t/y, which accounts for about 50% of the world's total usage. The emission and release of the mercury in China could potentially cause local, regional and global impact. With its high mercury consumption and high risk of mercury pollution, the VCM industry is the key Chinese industry targeted for prevention and control of mercury pollution under the Minamata Convention.

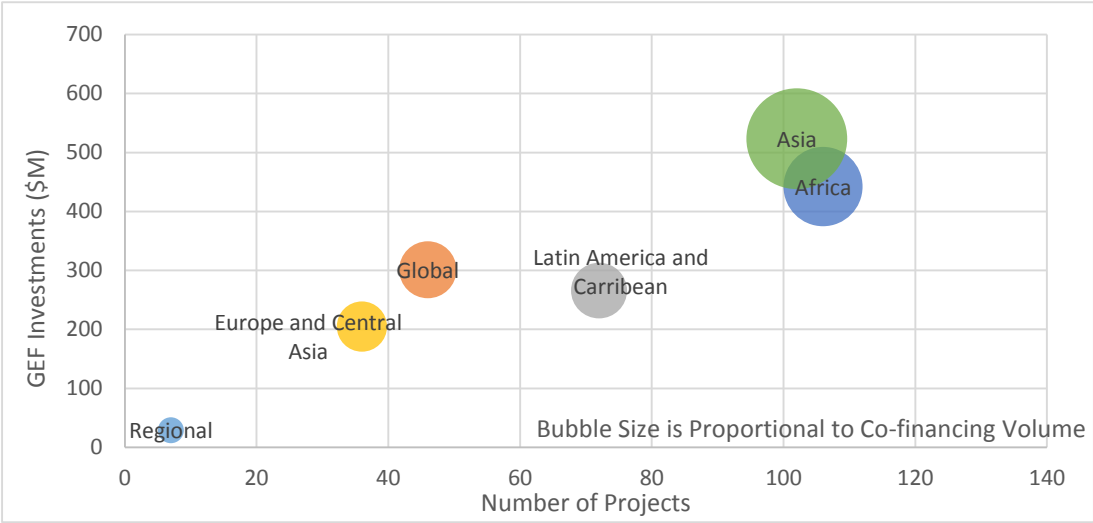
The main objective of this project is to demonstrate mercury-free technology and promote Best Available Technique (BAT)/ Best Environmental Practice (BEP) to reduce mercury release and emission from existing VCM facilities. With GEF intervention, mercury-free technology demonstrations, essential for China's mercury phase-out, will be carried out. This project will make full use of GEF funding to seed, catalyze and leverage capital ventures and thus encourage enterprises to carry out independent research & development, and manufacturing demonstrations. In total, the project aims to reduce 360 tons of mercury.

Implementation of the Strategic Action Program of the Gulf of Mexico Large Marine Ecosystem – GEF ID 6952 – GEF Grant \$12,900,000, Co-financing 124,210,000

The project aims to conserve and restore the quality of coastal and marine ecosystem in the Gulf of Mexico through community involvement and enhanced bilateral cooperation. One of the barriers identified in the baseline is that there is very limited dialogue between the government and the private sector, which hinders the effective implementation of ecosystem based management approaches. Industries, manufacturing, tourism, and operators responsible for wastewater discharge have to take part in the dialogue for the project success. This project will provide a number of trainings to raise the awareness in the private sector and fishing communities over the long-term benefit of the ecosystem based management and enhance the cooperation between the public and private sector.

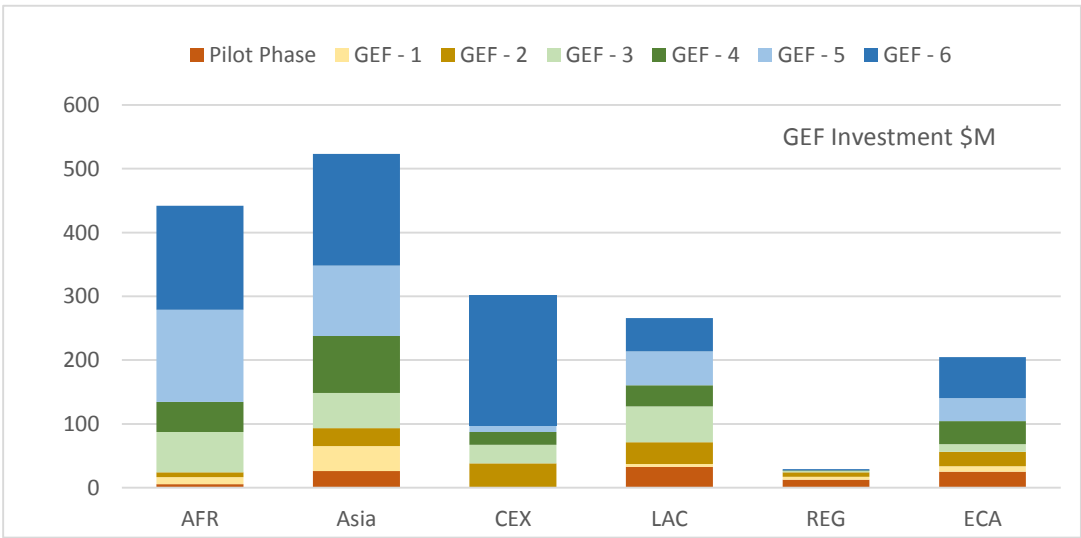
118. Geographically speaking, projects involving private sector entities are evenly spread out. Based on the private sector grant portfolio (Figure 23), projects are most concentrated in Asia and Africa with regard to both investment dollars and numbers of projects. Asian projects are also attracting the largest amount of co-financing among all regions indicated by the bubble size. Regional projects are smallest in terms of GEF investments and number of projects.

Figure 23: Investment and Number of Private Sector Grant Projects, by Region



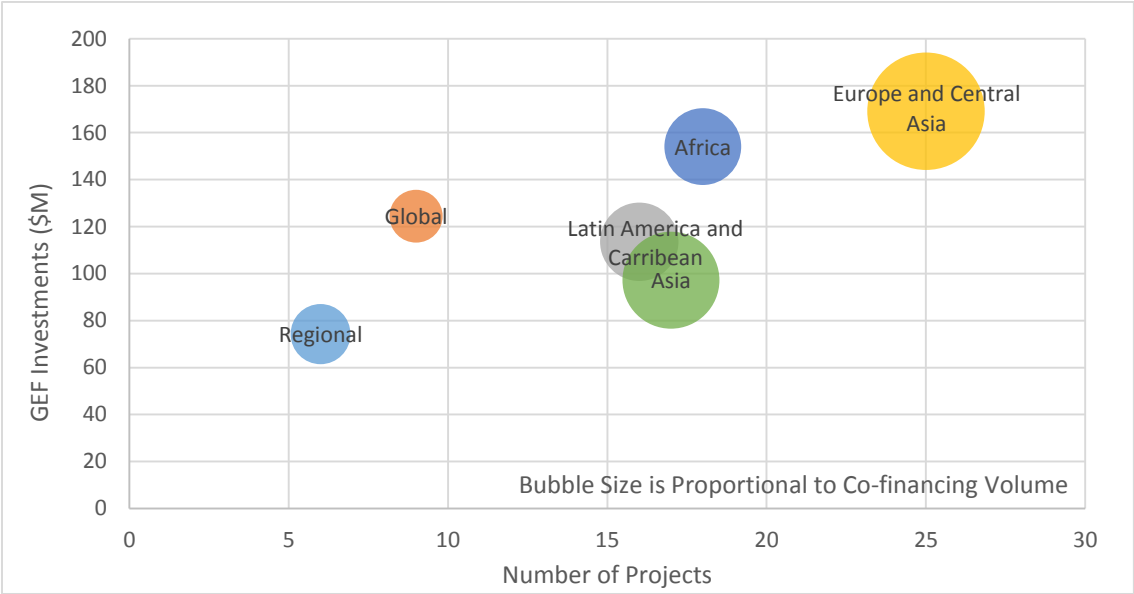
119. Global projects (CEX) are heavily funded in GEF-6, making them the first in the amount of GEF total investment (31%) in this period to date. Most regions are receiving more or about the same amount of GEF grants in GEF-6 compared to previous cycles except regional projects. Figure 24 below show these shifts.

Figure 24: Regional Distribution of Investment in Private Sector Grant Projects, by Phase



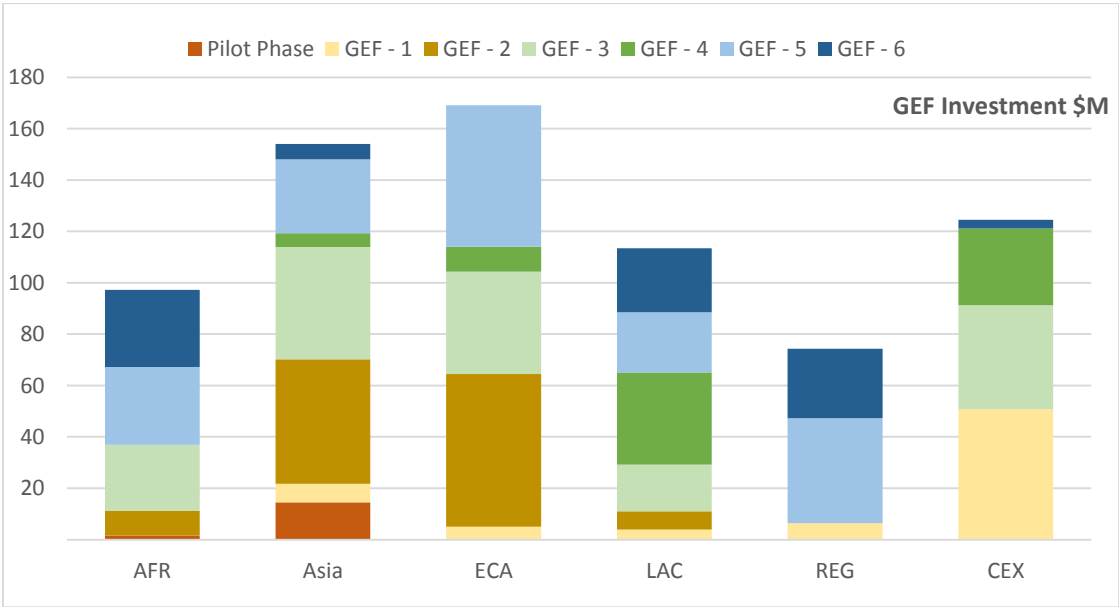
120. Regarding the non-grant portfolio, the greatest number of projects has been implemented in Europe and Central Asia (ECA).

Figure 25: Investment and Number of Non-Grant Projects, by Region



121. In GEF-6, no non-grant projects have been approved in ECA to date. Meanwhile, there are more regional projects observed in GEF-5 and GEF-6, representing a significant increase from previous cycles. In the GEF-6, the non-grant set-aside is not subject to the same programming constraints and country allocations as other GEF resources.

Figure 26: Regional Distribution of Investment in Non-Grant Projects, by Phase

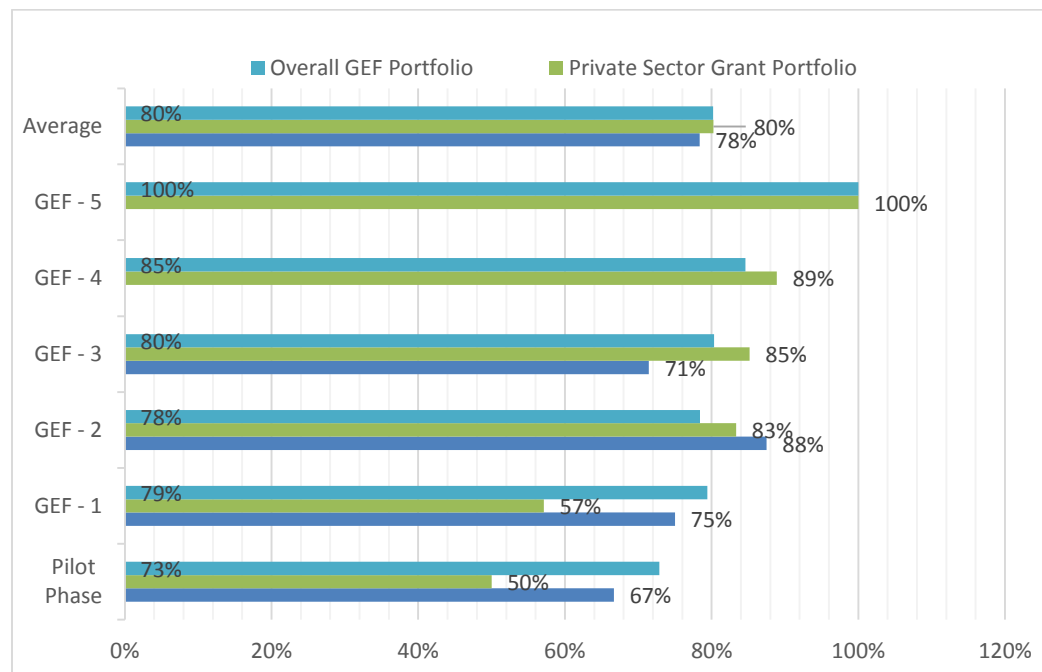


Performance of the Private Sector Portfolio

122. Of the 460 total projects in the private sector portfolio, 140 projects have terminal evaluations available for review as of October 31, 2016. Of these, 123 projects were rated on outcomes, 118 were rated on the likelihood of sustainability and 85 rated on efficiency as of September 30, 2016.

123. From the outcome perspective, both the private sector grant and non-grant portfolios are comparable to the performance across all GEF portfolio as per the Annual Performance Report (APR) 2015. Overall, 80% of private sector grant projects are rated as Moderately Satisfactory or Above, while, 78% of the non-grant projects are in the satisfactory range. According to Figure 27, the performance of the private sector portfolio indicates improvements in outcomes achievement since the pilot phase. Although only 10 private sector projects were rated in GEF-4 and GEF-5, 9 of them receive “Moderately Satisfactory or Above” ratings.

Figure 27: Moderately Satisfactory or Above Project Outcome Ratings, by Phase³⁰

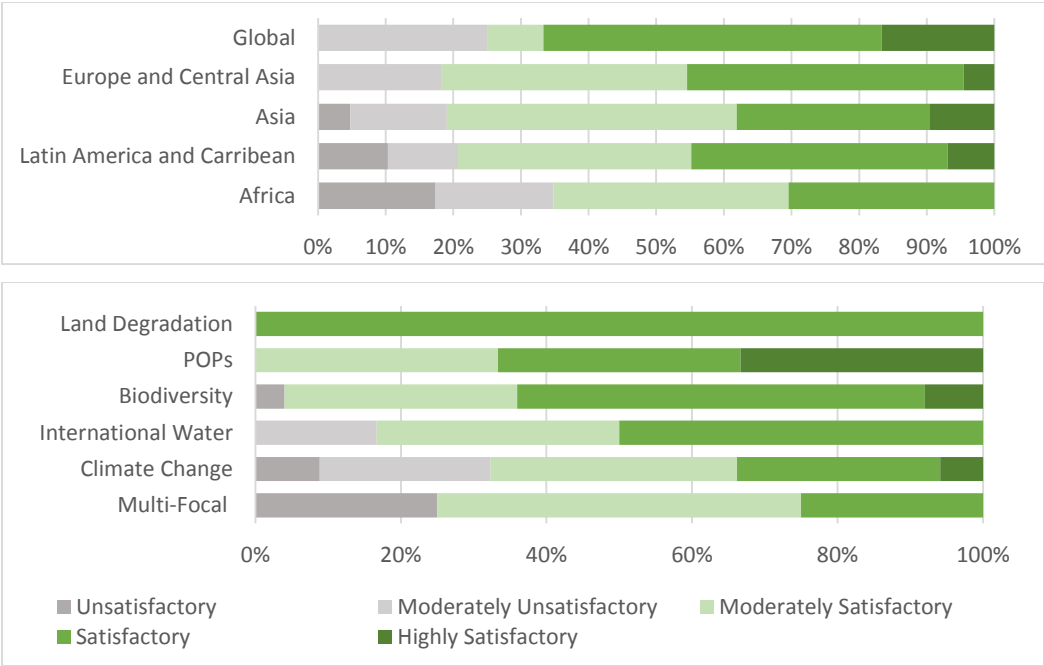


124. From the outcome perspective, no global projects nor projects in European and Central Asia are rated as Unsatisfactory or below, indicating stability and solid performances in these regions. Particularly, global projects have the most satisfactory performance, with 67% of projects receiving Satisfactory or above ratings. On the other hand, 35% African projects have

³⁰ In GEF-5, only 5 projects in the overall GEF portfolio are rated in APR 2015. All of them receive Moderately Satisfactory or Above ratings. One of these projects involved private sector engagement, making the rating performance 100% for both private sector grant portfolio and overall GEF portfolio.

Moderately Unsatisfactory or below ratings, the highest percentage in this category among all regions. In terms of focal area, aside from one project, all biodiversity projects received ratings in the satisfactory range.

Figure 28: Private Sector Portfolio Project Outcome Ratings, by Region and Focal Area



125. On the measure of sustainability and efficiency (Figure 29 and Figure 30), the differences between the private sector portfolios and overall GEF portfolio are, on average, negligible. Sixty-one percent (61%) of the private sector grant projects and 65% of the non-grant projects had ratings of Moderately Likely or Above on the sustainability of outcomes compared to 60% of the broader GEF portfolio. Similarly, 88% of private sector grant projects and 76% of overall GEF projects were considered to be Moderately Satisfactory or Above on efficiency. The ratings on efficiency for non-grant projects do show some difference, with the non-grant projects having lower ratings on this parameter. However, since the sample size is not large enough, this cannot be interpreted as a clear trend.

Figure 29: Distribution of Ratings on the Sustainability of Outcomes

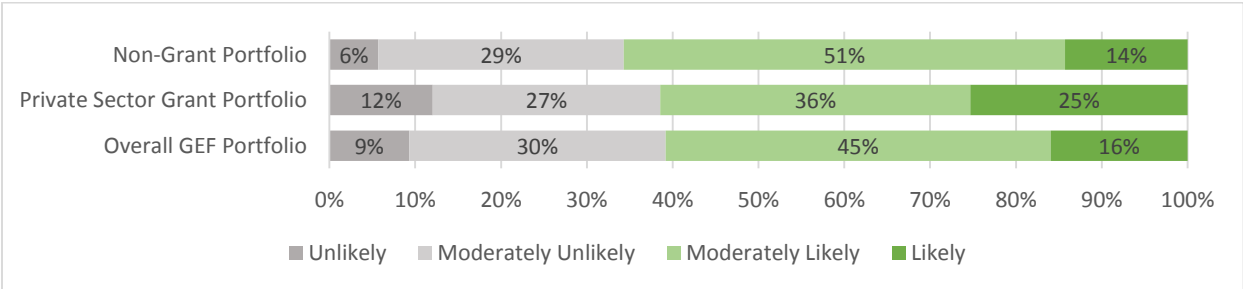
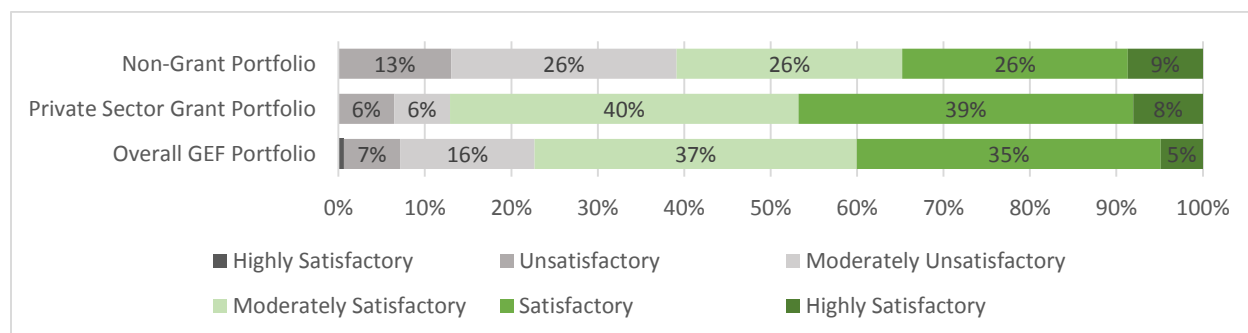


Figure 30: Distribution of Ratings for Efficiency of Projects



Environmental Outcomes

126. As indicated by the performance ratings, the vast majority of GEF projects that engage the private sector have outcomes that are considered Satisfactory and above. To provide an illustration of what these results look like from an environmental perspective, we can refer to the IEO OPS6 Studies on “GEF Support for Transformational Change” and “Impact of GEF Support on National Environmental Laws and Policy Reform in Selected Countries” which examined the GEF’s past experience with a representative sample of projects that are transformational because of their relevance in addressing a global environmental concern, their deep and large scale impact, and their expected long term sustainability. Among the initiatives highlighted in that studies are the following:

The Lighting Africa (LA) program

127. Created to transform the off-grid market by removing barriers, its goal was to help catalyze markets for quality, affordable, clean, and safe off-grid lighting, and ultimately to create a sustainable commercial platform that would realize the vision of providing 250 million people with modern off-grid lighting by 2030. The overall approach was to demonstrate the viability of the market by providing market intelligence, improve the enabling environment by developing a quality assurance infrastructure, facilitate business to business interactions, help governments address policy barriers, provide business development services, and facilitate access to finance for manufacturers, local distributors and other stakeholders. The program received about \$22 million in donor contributions from 2007-2013. The GEF was the largest donor, providing more than one third of the funds (\$7.85 million, GEF ID 2950).³¹ In 2014, the final evaluation of the Lighting Africa program concluded that the program had played a crucial role in transforming the market.³² The program was effective and made an impact. A few of the key accomplishments were:

³¹ World Bank. 2015. [“World Bank Group Support for Electricity Access, FY2000-2014 – An Independent Evaluation - Volume II: Together for Energy: How Partnership Programs Support Energy Access”](#). Independent Evaluation Group.

³² Castalia Strategic Advisors. 2014. [“Evaluation of Lighting Africa Program – Final Report. Report to International Finance Corporation”](#).

- (a) Through the program's quality assurance efforts, 183 solar lamps models were tested and 66 of them received the Lighting Africa quality certification.
- (b) The program hosted 1,157 forums during its consumer education campaigns, directly reaching over 36,000 people in Kenya.
- (c) Over 680,000 LA-certified lamps were sold in Kenya, 135 percent above the Kenya program's target. Furthermore, almost two million lamps were reported to have been sold in other African countries—185 percent above the target.

128. The evaluation also concludes that the benefits achieved by the program are sustainable after donor funding had stopped. Basically, interviews suggest that people who have used solar lamps will continue to do so and suppliers will continue to supply. The extent to which the market transformation process itself will continue however, remains to be seen. While the program has laid the groundwork for continued market transformation through arrangements with an industry association and a Kenyan NGO to take over its continue the program activities, these organizations are still partially reliant on donor support.

Creating the Wind Power Market in Uruguay

129. Around the turn of the century, Uruguay's power system had been fully dependent on hydropower and imported fossil fuels. Since the country's hydropower potential was practically exhausted, imported natural gas was expected to play a major role in meeting the growth of electricity demand, estimated at about 3% annually. At this point, in 2007, the Uruguay Wind Energy Programme (UWEP) was launched with the objective of contributing to the elimination of the existing barriers to the development of commercially viable wind energy investments and the establishment of a 5 MW demonstration project. The project budget was about \$7 million, of which \$1 million from GEF (GEF ID 2826), \$35,000 from UNDP, and government co-financing of \$6 million.³³

130. The project was designed with activities expressly aimed at removing each of the identified barriers. Specifically, UWEP supported the creation of an enabling policy framework for wind energy, including regulations for construction and operation of wind farms, access and dispatch to the network, technical codes and financial incentives. It strengthened capacity and business skills to prepare and implement wind energy technology with public and private delivery models. It also addressed technological barriers through the provision of measuring equipment and the implementation of a pilot 5 MW wind power plant connected to the grid.

131. Following UWEP's closing in 2012, the Final Evaluation report³⁴ concluded that "with the decisive participation of this project, an enabling legal and regulatory framework was established for the development of wind energy in the country. A transparent market for wind power was created and 43.45 MW have been introduced in the country through December 2013, and several projects are in development which by December 2015 were expected to total 990 MW, far exceeding project goals and converting wind power into a major energy source for

³³ The project was also supported by GEF project preparation grants (PPG) of \$0.50 million

³⁴ Humberto Rodriguez. 2013. "[Uruguay Wind Energy Program \(UWEP\) – Final Evaluation](#)". UNDP

the country.” The directly avoided carbon emissions were estimated to have risen to 0.86 million tons of CO₂ per year in 2015, from zero in 2007. As discussed in the final evaluation, the sustainability of these achievements is rated as *probable*, given the technical and institutional capacity that were developed, and the credible financial sustainability of the investments.

Integrated Solid Waste Management Project (POPs)

132. The focus of the project was on packaging and loading PCB-containing transformers and pumping out liquid PCB transformer oil from a landfill. Concerning the PCB disposal, 75% percent of the cost was borne by the GEF grant and the remaining 25% by the private sector (PCB operation owners).

133. The following are the main regulations developed. A number of technical codes of common practice were also developed to monitor persistent organic pollutants.

- (a) National Plan of Implementation (NIP) of the Obligations of the Republic of Belarus under the Stockholm Convention on Persistent Organic Pollutants in 2011-2015
- (b) Regulation of the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus on the Procedure of Maintenance of the Uniform Database on Persistent Organic Pollutants

134. Overall, between 2010 and 2013, about 3,000 tons of POPs stockpiles and waste were recovered and packaged, about 1,800 tons have already been destroyed, and about 1000 tons of the remaining stockpiles have been stored at a secure location, eliminating POPs-associated health risks for 116,000 people and reducing PCBs by 17%. In addition to the tonnage of POPs removed, awareness for risks associated with POPs was increased among adjacent communities and a number of new legislative acts, strategies and programs in the area of POPs management were developed and approved.

Lessons Learned

135. One of the GEF’s methods of generating actionable knowledge and learnings from its portfolio is through lessons learned. Some lessons learned from the batch of 19 TEs received from projects in GEF-4 and GEF-5 include the following:

Funding and Financial Planning

136. While lessons specific to funding and financial planning arose only 32% of the time within the projects, every single project rated below satisfactory has mentioned financing in its terminal evaluation. In the SPWA-CC: Promoting Renewable Energy Based Mini-Grids in Rural Communities for Productive Uses in Côte d'Ivoire (GEF ID 4005), the program was not able to secure the \$3M originally planned from BOAD. In the end, the project had to move from a market-based approach to a community-based approach and shifted its activities to building the capacity of villagers from pilot site demonstrations. Nevertheless, the project installed 215 kW of PV and connected 728 households to PV mini-grids and thereby reduce GHG emissions from those households substituting diesel generated energy with PV electricity.

137. Similarly, with Promoting Energy Efficiency Technologies in the Beer Brewing Sector in Burkina Faso (GEF ID 4285), African Export & Import Bank (Afrexim) pledged \$500,000 in soft-loans at the time of the CEO Endorsement of the project, representing 68% of the total co-

financing. However, the interest rates that Afrexim offered on the soft-loans were not competitive, leading to its withdrawal from the project. As a result, the actual levels of co-financing were significantly lower than expected. The lessons learned section concluded “Co-financing without a firm and clear commitment from the other stakeholder can seriously undermine the implementation of a programme”.

Capacity Building

138. Technical support to the private sector can help overcome the problem of low capacity, catalyze investments and facilitate market change. A pilot financing mechanism for wastewater infrastructure was established in Guyana (*Testing a Prototype Caribbean Regional Fund for Wastewater Management (CReW)*, GEF ID 3766). This Guyana Wastewater Revolving Fund (GWRF) targets both private and public operators of wastewater treatment works. Despite government efforts to attract interest from the private sector, there was no expression of interest in the fund. The TE indicates that a significant lack of awareness and capabilities restricted small private sector companies from providing compliant technical and financial proposals. When dealing with small private sector firms, projects should provide more capacity building in preparing proposals, and adopt a more flexible and innovative approach to the loan conditions. While the project has not generated any data on marine environment to indicate possible improvements (and to-date there is limited completion of wastewater treatment works), the expectations is that all investments on wastewater will lead to improvements to health, marine (and terrestrial) environments and livelihoods through improved fish stocks, tourism benefits from enhanced water quality and ecosystem status.

Stakeholder Engagement

139. Lessons on stakeholder engagements are shared by 68% of the projects reviewed. Designing a project linking private sector and various institutions has the potential of generating huge benefits of sustainability. As shown in *Mainstreaming Biodiversity Management into Medicinal and Aromatic Plants (MAP) Production Processes in Lebanon* (GEF ID 3418), the project chose to work with various institutions of different levels, local collectors, middlemen and traders. This engagement empowered these public and private entities by providing experience and training and also in developing effective ownership and participation, thereby promoting long-term sustainability of the project's. The project has developed and introduced 8 products into the market, worked on 11 MAP species and national distribution surveys and density assessments for 3 species. Status of 2 globally-threatened MAP species improved as good regeneration taking place at ground. The project also established 7 oregano cultivation demonstration plots across Lebanon to address threat related to unsustainable harvest to globally significant MAP species by enhancing appropriate collection methods and strengthening supply chain framework and value addition to MAP products.

140. Operating since 2008, the Earth Fund (EF), was an innovative pilot Public Private Partnership (PPP) initiative with a set-aside funding of \$50 million from GEF. Five platforms were approved under it: UNEP Efficient Lighting, UNEP – Rainforest Alliance (RA) cocoa industry, IDB – The Nature Conservancy (TNC) water funds, UNEP - Conservation International (CI) conservation agreements and the IFC Earth Fund.

141. In August 2016, Ernst & Young completed an independent evaluation of the IFC Earth Fund Platform, which received 60% of the Earth Fund's resources at \$30 million. The evaluation highlighted the value of an efficient wholesale business model that catalyzed private sector investments in tandem with advisory work and capacity building to promote risk-sharing and replicable, sustainable approaches for generating global environmental benefits. This collaboration allowed IFC to test and refine a model of blending GEF's concessional finance with IFC's commercial finance and other private finance leading to the creation of a "Blended Finance" unit in the IFC that now concessional investments that go beyond a "one-off" intervention and integrate with IFC's mainstream investment activity.

142. The achieved environmental benefits are available for ten Earth Fund projects (4 investment services, 5 advisory services). To date, 96% of targeted GHG emission reduction has been achieved (3,135,924 tons/years). Total water use reduction has exceeded the target to 160% (15,033,789 m³/year). It should also be noted that environmental benefits to date reflect only a portion of the project portfolio, as some results are not yet available. In this context, the total amount of environmental benefits achieved by the Earth Fund Platform may even more highly exceed original targets if the other portion of the portfolio performs at or above target-levels.

143. The evaluation concluded that IFC had met its goal to reach a leverage ratio of above 1:3 and achieved an actual leverage of 1:26 disbursing all funds allocated for the platform. There were 14 IFC Earth Fund Platform projects, consisting of 9 advisory services in projects and 5 investment services in projects. Advisory services supported research, consulting, capacity building and training. Investment services included loans, risk-sharing facilities and equity. Several lessons also emerged from the terminal evaluation of the individual IFC Earth Fund Platform projects (see Text Box 3). More information on the Earth Fund is available in Annex X.

Text Box 3: Lessons Learned from IFC Earth Fund

Selecting the right partner is crucial to project success. Particularly, professional associations can be a meaningful lever for engaging with industry stakeholders. These professional or industry associations help provide credibility and allow access to relevant industry contacts and organizations. Furthermore, their existing outreach activities can be leveraged by the project in its engagement or awareness-raising activities, leading to more impact. In the Green Power for Global Mobile II project, collaborating with the association of mobile operators has been vital to engaging industry stakeholders. Similarly, in Industrial Energy Efficiency in Ecuador (GEF ID 4147), the collaboration with several chambers of industry secured additional co-financing from private sector.

Confirming knowledge related to the current market, regulatory and project context is up to date before launching a project or allocating funds helps ensure its success. A few projects faced difficulties related to market, regulatory context, which could potentially have been avoided if the ongoing validity of the project context was challenged and the project adjusted in consequence. For example, the Mexico Sustainable Energy Finance project, for which additional preliminary studies may have helped identify in advance the challenging context of

the Mexican banking sector. The SPWA-CC: Promoting Renewable Energy Based Mini-Grid for Rural Electrification and Productive Uses project (GEF ID 3959) faced baseline information error, which could have been better studied and considered in the project design phase.

In some cases, projects faced challenges because the market was not sufficiently. Certain projects faced challenges due to market conditions, notably an insufficiently mature market. For example, the Cleantech Innovation Facility faced challenges in identifying eligible projects; this appears to be partly due to Cleantech markets not being mature enough in the targeted countries leading to a very limited pipeline of deals.

IV. ASSESSMENT OF GEF NON-GRANT INSTRUMENTS

144. Non-grant projects in the GEF refers to projects in which GEF financing is used in products and mechanisms that have the potential to generate financial returns, regardless of whether such returns accrue to the GEF. Non-grant instruments are negotiated under the principle of minimum concessionality when it comes to the private sector, or provided on terms comparable to IDA in the case of the public sector.³⁵ The GEF financing could be provided as a contingent grant, with no expectation of repayment, or as concessional finance, with an expectation of reflows.

Non-Grant Instruments

145. The GEF uses a broad spectrum of non-grant instruments. The types of financial mechanisms that have been utilized fall into three broad types of financial instruments:

- (a) **Loans**, including hard loans, concessional loans, contingent loans, and revolving funds.
- (b) **Guarantees and risk mitigation**, such as credit, risk, or performance guarantees,
- (c) **Equity investment**, either direct participation in a company, or through a fund.

Evolution of Instruments

146. Non-grant instruments were mentioned formally in GEF-2. In 1999, to respond to the Council's request for a review of modalities to facilitate private sector involvement in GEF activities, the Secretariat prepared the paper: Engaging the Private Sector in GEF Activities. This paper identified several modalities that would be needed for barrier removal, including technical assistance and a range of non-grant financing modalities. In GEF-4, a new strategy to enhance engagement with the private sector was finalized considering the newly adopted Resource Allocation Framework. The 2006 Strategy envisioned "strategic use of non-grant/risk mitigation instruments" as one of the main instruments together with public/private sector partnership fund and knowledge management tools to achieve the goal. At this time the GEF

³⁵GEF.2014. "[Non-Grant Instruments](#)". Policy FI/PL/02

Earth Fund was established with delegated authority to IFC and other agencies to prepare and approve grant and non-grant projects more quickly in line with private sector expectations.

147. In 2011, another strategy paper was developed for building public private partnerships and attracting greater private sector financing. In total, the GEF-5 private sector set-aside amounted to \$80 million, focusing entirely on providing catalytic financing through the use of non-grant instruments. Drawing on this and other previous experience, the GEF launched a \$110 million pilot program in GEF-6 to demonstrate and validate the application of non-grant financial instruments to combat global environmental degradation. The Pilot Program also required that project proposals generate reflow.

148. Non-grant instruments allow the GEF to better meet the evolving and differentiated needs of GEF recipient countries and can help overcome financial constraints and technological risks to better support technology transfer and the “greening” of major infrastructure. They lend themselves to tailored structuring, allowing a better alignment of mitigation measures to the risk being covered, not only helping to ensure the principle of minimum concessionality but also minimizing market distortions. Financial support from the GEF enables agencies to provide soft loans to middle-income countries, which are not eligible for the multilateral development banks’ concessional windows. The GEF’s past experience³⁶ suggests that non-grant instruments can make an important contribution to the achievement of the GEF’s objectives.

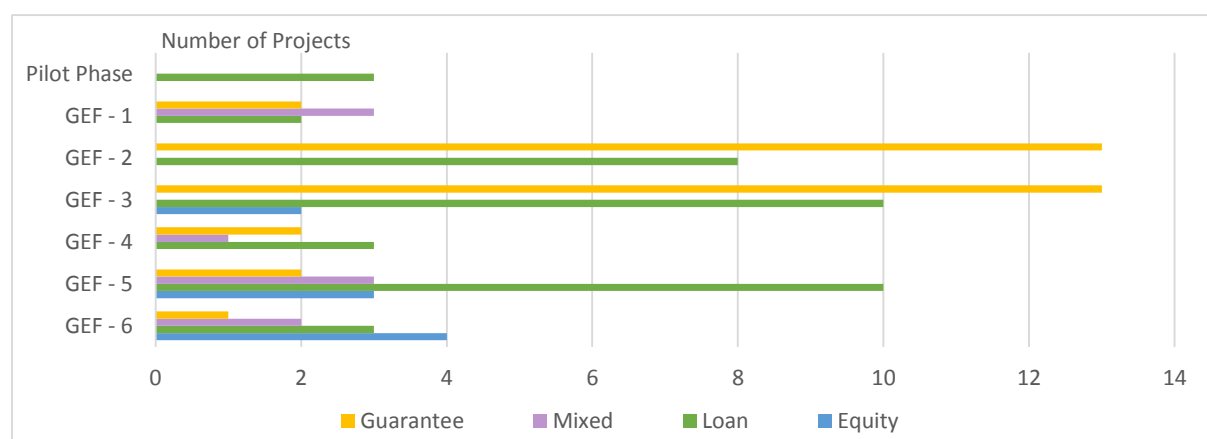
149. The use of non-grant instruments also increases the attractiveness of GEF projects to private sector partners and attracts larger co-financing and may be appropriate where incremental costs eligible for GEF funding have the potential to generate recoverable revenues or cost savings, or where there is a global public good associated with incremental risk that private investors are unwilling to assume. GEF funding offers unique advantages, such as flexible risk positions, longer term lengths, and concessional rates, that makes GEF investment an attractive addition to equity funds and other financial mechanisms. Of course, some private sector partners would be pleased to accept the GEF funding as a straight grant, with no return or reflows. But for GEF, a virtue of non-grant instruments is that proceeds (i.e., reflows) from these projects are available to expand the pool of GEF resources available for future investments. The returns include recovery of principal, earnings or interest, dividends, proceeds from the sale of equity, and repayment of any reserves and fees.

Instruments Review

150. The variety of instruments used by the 91 projects is shown in Figure 31. Furthermore, most projects included technical assistance (TA) and capacity building components generally provided on a grant basis.

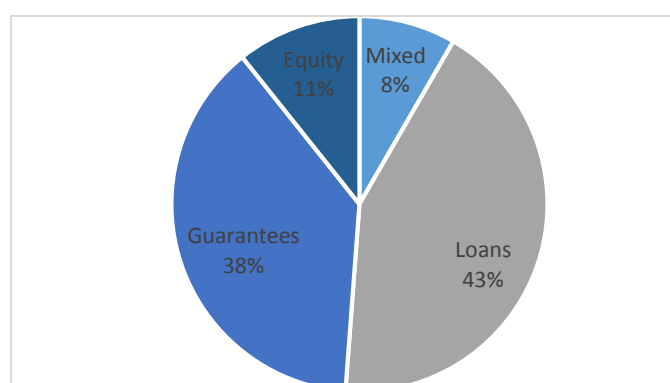
³⁶ GEF IEO. 2014. “[Review of GEF Engagement with the Private Sector](#)”. OPS5 Technical Document #13

Figure 31: Distribution of Non-Grant Instruments, by Phase



151. Historically, loans and guarantees have been the most commonly used non-grant financing vehicles. In particular, revolving funds for small-scale lending was the most used non-grant modality, followed by credit guarantees; often these tools were used in combination. As shown in Figure 32, with more non-grant projects investing in environmental funds in GEF-6, there is a rise in the use of equity instrument.

Figure 32: Frequency of Use of Different Non-Grant Vehicles



152. Seventy (70)³⁷ projects were desk reviewed in-depth for assessment of non-grant instruments used. Among the 70 projects, only 9 projects did not have a TA component. TA, when included, is almost invariably financed by the GEF. This suggests that other financiers in GEF projects are either not interested in financing TA or are unable to do so on comparable (i.e., grant) terms. Yet, TA is an indispensable part of the project – suggesting that this may be

³⁷ Originally 73 projects were examined: 43 completed and 29 ongoing, however as 2 of the 43 were cancelled projects they were removed from the analysis.

one area of GEF's comparative advantage. Table 2 provides a distribution of the use of instruments by type in the sample of projects reviewed.

Table 2: Distribution of Non-Grant Instruments in a Sample of Completed and Ongoing Projects³⁸

Sample	Time	Project Number	Guarantee	Loan	Equity	TA
Completed	Pre GEF-4	56	13	15	3	31
Completed	GEF-4	6	8	5	0	10
Ongoing	GEF-5	19	5	5	3	17
Ongoing	GEF-6	10	2	7	4	5

153. Loans and guarantees were the most commonly encountered non-grant financing vehicles; in the completed projects sample, only three involved equity investment. In some cases, the GEF financing was akin to a capital grant to fund demonstration projects or provide an initial capitalization of a fund. The revolving fund structure continues to be popular. Occasionally, instruments are designed to provide incentives ex-post, such as performance bonuses. One project includes an insurance feature.

154. **Loans:** Debt instruments were used in 20 projects in the sample of completed projects and used 12 times with the ongoing projects (Table 2). The GEF funding is sometimes used to provide loans and sometimes used in a blended structure with other finance provided by the executing agency or the financial intermediary (FI). The concessionality could be a lower interest rate, or a longer maturity, or a subordinated position.

155. Loan facilities reviewed in both samples sometimes take the form of a revolving fund (see below) and generally involve some form of subordination. They are also often provided in conjunction with a multi-lateral development bank (MDB) facility, which takes a more senior position. The EBRD Russian Federation Green Shipping Program (GEF ID 5530), for example, blends subordinated GEF financing with an EBRD senior loan, with returns for the GEF portion limited to LIBOR plus margin of 75 bps. Reflows are expected to recover a portion of the financing provided.

156. The GEF-6 EBRD Green Logistics Program (GEF ID 9047) is another example of a blended finance facility where the GEF financing is subordinated to and earns a lower return than the EBRD funds provided. The justification provided in the project document is to "allow the EBRD to take a senior position and invest its own funds in projects that otherwise would be priced excessively for the clients to take the risks, thus attracting other investors and leveraging the EBRD's capacity to deliver energy efficiency solutions in the logistics sector in the region and to help clients to introduce best practices."

157. An unusual and interesting use of a loan structure is used in the proposed WB Third South West Indian Ocean Fisheries Governance and Shared Growth Project (GEF ID 9563) in

³⁸ Because multiple instruments are used in a single project the totals do not necessarily equate to the total sample size

GEF-6. Here, the GEF's loan is provided on highly concessional, IDA-like terms, to be used as support and credit enhancement for a Blue Bond to be issued by the Government of Seychelles; a WB guarantee is also foreseen to further increase creditworthiness. This is the only case in both samples of the use of GEF funds to credit enhance a capital market transaction, and the Blue Bond is itself a relatively new instrument that follows the successful Green Bond pioneered by the World Bank almost a decade ago.

158. **Revolving Funds (RF):** This is a commonly encountered structure in GEF non-grant projects, more so with UN Agencies. Essentially, it involves "seeding" a facility with funds that are then provided for eligible activities; repayments, including any interest and fees, go back to the facility and are available for reuse. The RF continues until it is used up, or until the end of the project, at which time it is maintained by the beneficiary, or wound up with proceeds allocated to another use. Such funds are often placed within national development banks or governmental agencies. The funds are usually provided to the final beneficiary as loans.

159. Under GEF-6, an RF-type structure is employed in the AfDB's Investing in *Renewable Energy Project Preparation under the Sustainable Energy Fund for Africa (SEFA)* (GEF ID 9043). SEFA provides TA, capacity building and investment capital to support private investments in sustainable energy in Africa. One financing modality is the project preparation grant, reimbursable when the project reaches financial closure, thereby creating reflows that improve the facility's financial sustainability. The GEF financing is to be used to finance such project preparation grants, with GEF reflows occurring at the end of the implementation period. Given that not all projects will reach financial closure, reflows are unlikely to recover principal.

160. **Guarantees and Risk Mitigation:** These instruments are used in conjunction with loans, and are typically structured to cover first loss tranches in FI credit. The usual guarantee structure consists of coverage of individual projects up to a certain amount of the loss, up to a certain amount of the portfolio (thus, this instrument is often called a "risk sharing facility", or RSF). The GEF financing typically covers any losses under the guarantee. Some projects foresee collection efforts on the part of the FI but in general, once the guarantee is called, the amount is treated as a grant in the completed projects sample. The first use of this instrument dates from 1997, in the Hungary Energy Efficiency Cofinancing Program executed by IFC (GEF ID 111). The rationale for the guarantee is to overcome FI perception of risk in lending to the activity in question by providing a risk-sharing mechanism; TA is an integral part of such projects (there are only two projects in both samples where this is not the case).

161. The guarantee appears to have gone from patchy use in the pre-GEF-4 period (13 out of 33 TEs) to have attained greater popularity in GEF-4 (8 out of 10 completed projects) before declining in GEF-5 (5 out of 19 projects) and GEF-6 (only 2 out of 10 projects). See Table 2.

162. The evidence on the effectiveness of the guarantee instrument is mixed. Of the 21 projects with a guarantee feature in the completed sample, at least 9 indicate that the RSF was not used, or "did not take off." It is very likely that there are more projects in the Samples that would deliver a similar conclusion, but the documentation available does not squarely address the issue

163. The Poland Energy Efficiency Project (GEF ID 786), approved in 2004 and executed by the World Bank, included a partial credit guarantee; the project was restructured because of

very limited demand from banks for the guarantee. The TE concluded that the guarantee instrument was not critical for energy efficiency lending; rather the lack of creditworthiness of the client was the major constraint. Another World Bank project, the Croatia National Power Utility Project (GEF ID 944), also found that there was little demand for a RSF: public sector clients proved to be of low risk, while private sector clients suffered from a lack of borrower creditworthiness.

164. In other cases, the guarantee appears to have been highly successful in expanding energy efficiency lending. The China Utility-based Energy Efficiency Finance Program (GEF ID 2624) is a case in point.³⁹ In at least five other cases, the guarantee was used with minimal or no losses – proving the soundness of the business case and the underlying premise. Overall, the take-away, cited in many TEs, is that success in one country is not necessarily replicable in another, and depends on a variety of factors that cannot be addressed by structuring alone.

165. No clear conclusion can be drawn with regard to the evolution of the structure of the guarantee. First loss cover ranges from a low of 40% of principal to a high of 90%; sometimes the cover is subject to absolute or relative limits (i.e., a dollar amount, or some percent of the portfolio), and sometimes not (in one case, the entirety of the RSF was used up in a single claim). Typically, a guarantee fee is charged, and paid by the entity availing itself of the guarantee. Not all the projects reviewed spell out explicitly how the fee is to be charged and used. Where information is available, proceeds are used to cover operating expenses, or paid as a fee to the MDB or provider of the guarantee, or ploughed back into the RSF.

166. There appears to be a shift in regional focus in the use of the guarantee instrument over time: about half of the guarantees in the completed sample were in Eastern Europe – compared to a third in the ongoing sample; in LAC, guarantees grew from zero in the completed sample to 2 (out of 6) in the ongoing sample. There also appears to be an institutional divide in the use of the guarantee: while the UNDP accounted for a third of the guarantees in the completed sample, only one was included in a UN agency submission in the ongoing sample. Similarly, the regional development banks were largely absent in their use of this instrument (or any non-grant instrument, for that matter) prior to GEF-5, or, if they did indeed use such instruments, they have not yet provided TEs for the relevant projects.

167. The institutional differences also extend to how the guarantee is structured, with the MDBs generally structuring it in conjunction with credit lines provided to FIs. Even within the MDBs, there are differences. IFC's structuring involves more risk sharing with the FI concerned, for instance.

168. In GEF-6, only one project includes an explicit first loss feature: the IDB's Risk Mitigation Instrument for Land Restoration (GEF ID 9277). This project also includes subordinated loans. These instruments would reduce risk to IDB's ordinary capital by assuming risky positions in projects' financial structures, enabling the IDB and co-lenders to finance projects that they would normally be unable to, thereby leveraging equity investments and providing scale to projects. The PIF does not provide many details on the exact financing mechanism, however.

³⁹ IEG. 2010. "[Energy Efficiency Finance: Assessing the Impact of IFC's China Utility-based Energy Efficiency Finance Program](#)". Washington DC: World Bank Group.

169. **Performance Incentives:** This instrument is not commonly encountered, having been used just four times in the completed sample and once in the ongoing sample. It involves the payment of a bonus, or some other monetary reward, upon successful achievement of pre-defined milestones. As such, performance bonuses reward good behavior ex-post, creating incentives to stay on track. However, the limited number of projects utilizing this modality suggests that it is not considered particularly attractive.

170. **Insurance:** Only one project in both samples involved an insurance scheme. This was the Geothermal Energy Development Program in Europe and Central Asia (GEF ID 1615), approved in 2006 and executed by the World Bank. It included a Geological Risk Insurance component to cover risks of exploration and operation of geothermal energy. Premiums were charged for both types of insurance. The insurance component paid out practically the totality of the allocation against claims during the project, but according to the TE, this is a sign of success as the component worked as designed. It is interesting to note that this project had a very long preparation period (58 months), attributed in part to revisions to design prompted by the GEF's desire to use financial instruments.

171. **Equity:** Equity is rarely encountered in the completed sample (3 projects out of 41), but is more prevalent in the ongoing sample (7 projects out of 29 – see Table 2). The GEF financing is used as a participation in an equity fund in most of the cases; direct equity investment is relatively rare. The earlier equity investments faced limited success, due to a misalignment of incentives or difficulties in sourcing deals, high monitoring costs, and unclear exit strategies.

172. There is greater use of equity in the more recent projects, and proportionately more in GEF-6 than in GEF-5 (4 out of 10 projects vs. 3 out of 19 respectively). Two unusual features can be observed in the GEF-6 batch of projects, compared to previous ones:

- (a) **Pari passu⁴⁰ structures:** the *AfDB Moringa Agro-Forestry Fund* (GEF ID 9051) structures the GEF investment on a pari passu basis, as does the IDB's Impact Investment in Support of the Implementation of the *Nagoya Protocol on Access and Benefit Sharing Project* (GEF ID 9058) and Conservation International's *The Meloy Fund Project* (GEF ID 9370). This is the second appearance of such structuring in the samples⁴¹. Interestingly, no explanation is provided for why a pari passu return sharing is proposed, and whether this is a realistic assessment of market requirements. It suggests an increased risk tolerance in the market such that GEF resources are not required for concessionality. It should be noted that in two cases, the GEF is providing finance alongside impact investors – whose risk appetite may be

⁴⁰ ***Pari-passu* is a Latin phrase meaning "equal footing" that describes situations where two or more assets, securities, creditors or obligations are equally managed without any display of preference.**

⁴¹ The EcoEnterprises Fund II (EcoE2) in GEF-5 was also a pari-passu equity investment. In this case the fund offered a sub-commercial pro-forma equity return in the region of 9-11% and was structured and managed in conjunction with The Nature Conservancy. The GEF participation was 25% of the fund's capital and was a key anchor investment due to the scarcity of investors targeting funds that offer a sub-commercial return. This was also a case of progression from GEF grant funding for TA for the smaller initial EcoEnterprises Fund to a full GEF equity participation in the second larger EcoE2 fund, i.e. a good example of "scaling up".

similar to the GEF's and who may be motivated by similar environmental and social public good concerns.

- (b) **Wide variety of instruments:** The IDB project foresees the use of a variety of instruments: mezzanine structures, with quasi-equity upsides (royalty streams, warrants, convertible notes); unique equity opportunities; senior, subordinated and/or other tailored debt instruments. The Conservation International project also foresees the use of debt and equity instruments, together with TA. The flexibility in instruments will allow for a better tailoring of the financing to the needs of the project; an earlier manifestation of this principle was the GEF-IFC Earth Fund platform.

173. Another use of equity can be seen in the GEF-6 South Africa Equity Fund for the Small Projects Independent Power Producer Procurement Programme (GEF ID 9085) implemented by the Development Bank of South Africa (DBSA). The GEF financing is to support a broader government program to encourage SME (small and independent power producers) participation in the renewable energy market. An SME needs to provide a 10% equity stake in a project to qualify for 90% debt financing from the DBSA facility. However, the opportunity cost of the equity would render the structure unviable in the South African market. The GEF financing, by covering 50% of the required equity stake at a lower return, essentially beefs up the equity return for the SME investor. The GEF takes an unsecured equity position, but receives reflows from the dividend flow of the project. This structure adheres more closely to the role that GEF financing typically plays in the risk profile.

174. The earlier equity instruments were experienced as being challenging: the need for high returns and a secure exit further complicated sourcing of deals in “difficult” sectors like climate change and biodiversity, as evidenced by the TEs for completed equity deals. Yet, there has been an uptick in the share of equity structures in more recent projects. The equity transactions in GEF-6 appear to be complex and consist of several moving parts. It is too early to gauge performance, as none of the GEF-5 or GEF-6 projects has been evaluated. That being said, equity is the highest risk position in the capital stack, and could be seen to be a good fit with the GEF's greater risk tolerance. It will be interesting to see if this complexity has an impact on project performance, or if the market has matured sufficiently to better absorb such structures.

175. **Capital Grants:** In some cases, the GEF non-grant funding is provided in the form of a capital grant or subsidy to the activity in question. This mechanism has been used since the early days of the non-grant instrument. The Bolivia Rural Electrification Project (GEF ID 314), approved in 1999 and executed by UNDP, included a capital subsidy for the purchase of photovoltaic systems, as well as a credit scheme for buyers through an FI. The TE notes that the key driver for the uptake of the PV systems was the capital subsidy, even though the credit was at a preferential rate. The socioeconomic group that would have most benefitted from the credit was not attractive to the FI. More recently, the South Africa Promoting Waste-to-Energy and Other Low-carbon Technologies in SMEs project (GEF ID 5704), approved in 2016 and executed by UNIDO, includes a capital grant to finance demonstration projects.

176. For the World Bank's International Lighting Efficiency Facility Project (GEF ID 6980) in GEF-6, the GEF financing is expected to cover the product development costs of the Facility,

including legal analysis and documentation, market soundings, establishment of the Facility and related needs. Although the document repeatedly mentions recovery of product development costs by the GEF, the modalities for so doing are not spelled out, and in any event, contingent upon the Facility meeting all its other financial obligations first. Under the circumstances, perhaps this financing should have been better characterized as (reimbursable) TA.

GEF-5 Public Private Partnership Programs

177. Created in GEF-5, the Public Private Partnership (PPP) Program concerns a private-sector set-aside of \$80 million, with a focus on the expanded use of non-grant instruments. Five projects are classified as PPPs in the portfolio, for a total GEF financing of \$70 million (Table 3).

Table 3: List of GEF Non-Grant PPP Projects

GEF ID	Project Name	GEF Investment (\$M)	Co-financing (\$M)
4929	AfDB-PPP Public Private Partnership Program	20	240
4959	IDB-PPP MIF Public-Private Partnership Program	15	266.3
5143	PPP-EBRD South Eastern Mediterranean EE/ESCO Markets Platform (PROGRAM)	15	150
5388	PPP-IDB Sustainable Caribbean Basin Private Equity Fund (PROGRAM)	15	200
5754	IDB-GEF Climate-Smart Agriculture Fund for Latin America and the Caribbean (PROGRAM)	5	50.9

178. All five are presented as platforms that can cover multiple countries in the MDB's purview. The area of focus is predominantly climate change, but biodiversity and climate-smart agriculture are also included. A variety of financial structures is used, and all involve reflows to GEF, consisting of principal and a return, ranging from concessional interest to equity returns upon sales from the equity fund.

179. None of the projects has been evaluated yet, but based on the design documents the unique feature of the PPP seems to be the "platform" nature of the program and an upfront approval of funds based on broad parameters. In this respect, the PPP platforms echo the Earth Fund, with perhaps the difference that the PPP platforms do not universally include TA. Debt instruments or credit lines, which are proposed in three of the GEF-5 platforms, are a well-established financing modality in GEF projects, as is risk mitigation through a guarantee structure. The GEF has also had prior experience with equity funds. Finally, GEF reflows, which are explicitly addressed in the platforms, are not a PPP innovation. They have existed under prior GEF projects, even if applied selectively and in a limited number of cases. Hence it seems the clear improvement from previous practice is the requirement that reflows and returns to GEF be discussed; however, this requirement should apply to all GEF projects that have a non-grant feature, and is not exclusive to PPPs.

180. The key feature of the Earth Fund and the GEF-5 PPP Platforms seems to be that they are dedicated private sector set-asides, outside the RAF/STAR and regional or global in nature. The Earth Fund had some unique governance features (including the Earth Fund Board and

clear delegated authority) that were not replicated in the GEF-5 PPPs, and hence the Earth Fund was more akin to a pilot “Private Sector Facility” as seen in the GCF. The GEF-5 PPPs are also more restricted than the Earth Fund in that they were MDB-only and non-grant instrument-only.

A Closer Look at the GEF-6 Non-Grant Portfolio

181. The GEF-6 cycle contains the most recent batch of projects approved, and a closer look at them may shed light on how the use of the non-grant instrument is evolving. In GEF-6, an amount of \$110 million was available for programming according to the policy set forth⁴². The 10 projects amount to \$91.2 million of GEF investments. (See Annex IX)

182. Of the 10 projects approved, 2 are being implemented by agencies that have not hitherto led non-grant projects: DBSA and Conservation International. This indicates a greater diversification in the GEF’s traditional partners. It is particularly encouraging that a national level development finance institution accesses GEF financing. At the same time, two previously active agencies – the IFC and UNDP – are absent. This may be a function of the limited financing available for programming – the GEF Secretariat states that many more requests for funding were received than could be accommodated by available resources.

183. Eight of the 10 projects are multi-country efforts, representing a significant increase from previous cycles (5 of the 19 GEF-5 projects were multi-country). One reason for this evolution could be diversification and pooling of risk. Another reason could be perceived or real GEF preferences to make financing available to a broader group of recipients. Perhaps the more likely explanation is that the non-grant set-aside is not subject to the same programming constraints and country allocations as other GEF resources, and thus follows the example set by the PPPs in GEF-5 and the Earth Fund in GEF-4.

184. The GEF-6 projects also show greater diversity in the sectors covered, with an increased focus on biodiversity and land degradation (3 projects each). Here, too, one reason could be perceived or real GEF preferences. Another could be that there are more sources for climate change related investment now compared to previous cycles, but GEF remains one of the few financiers of other Convention areas. Yet another reason could be that private markets in biodiversity and other sectors are reaching a stage where external financing is a viable growth option for private firms.

185. The GEF-6 projects make use of a wider variety of instruments, including more emphasis on equity: four of the 10 projects involve some sort of equity structure. As mentioned above, GEF-6 also marks the second appearance of a *pari passu* risk/return sharing feature. Equity is the riskiest form of capital in the capital stack, and it stands to reason that a mission investor like GEF takes this position. Another reason for the greater use of equity could be the potential for returns. GEF-6 also sees the appearance of an innovative use of the non-grant instrument to provide credit enhancement for a sovereign Blue Bond. All GEF-6 projects expect to provide reflows to the GEF over the course of project implementation.

⁴² GEF. 2014. [“GEF-6 Non-Grant Instrument Pilot and Updated Policy for Non-Grant Instruments”](#). GEF/C.47.06

Reflows

186. Reflows are the financial returns transferred to the GEF Trust Fund. GEF financing is considered GEF concessional finance if it is provided to a project or program that is expected to generate reflows to the GEF Trust Fund. However, there is another aspect to reflows from GEF financing: their use in a revolving fund or similar mechanism, where monies are used to provide loans or other financing contractually expected to be repaid, and which constitute reflows to the revolving fund. These monies can then be “recycled” towards additional activities. Such project-level reflows may or may not reflow to the GEF Trust Fund. In the majority of cases reviewed in this report, project-level reflows remain in the country and continue to be used as originally intended or are deployed to other agreed uses. The significance of such “recycling” is that the same GEF resource delivers multiple rounds of intended benefits.

187. It should be noted that the majority of projects in the completed projects sample were structured with no expectation of GEF reflows, even if several included project-level reflows. The first projects to structure GEF finance in the expectation of GEF reflows were the private sector initiatives undertaken by IFC. In some cases, remaining balances in a project were rolled over into a successor project. In some projects, such as the IFC Earth Fund, reflows are just beginning.

188. For better tracking, starting with GEF-5, project appraisal documents presented for CEO endorsement contain an annex where reflows are to be explicitly addressed. It was not possible to ascertain whether this requirement has resulted in changes in project design to incorporate or emphasize a reflow mechanism. What can be said is that there has been a clear evolution in reporting practice, with better descriptions of the reflow mechanism and quantification of returns to the GEF where applicable.

189. Table 4 below provides a historical perspective on non-grant investments and reflows in various GEF cycles. There has been a growth in the use of non-grant instruments in later GEF cycles, as well as increased expectations of returns, as can be seen in the table. Projects in earlier cycles were structured to recover principal at best. In later cycles, there is an expectation of a positive financial return. The portfolio review of completed projects suggests that many projects set overly ambitious targets for implementation results. To what extent is over-promising dictated by the real or perceived demands of the GEF? One area in which the GEF-5 and GEF-6 projects contain rosy scenarios is for GEF reflows, as seen in Table 5. It remains to be seen whether these expectations will be met. None of the GEF-5 and GEF-6 projects have yet begun generating reflows, and the long timeframes involved in the sorts of activities financed means that reflows could be generated 10-20 years into the future.

Table 4: Evolution of the Non-Grant Portfolio and Reflows

(Source: GEF Secretariat)

GEF Cycle	Projects with expected reflows	GEF amount (\$M)	Co-financing amount (\$M)	Expected reflows (\$M)	Reflow received to-date (\$M)
GEF-3	2	39	146	26.1	7.8
GEF-4	1	22.5	1000	22.5	0.4

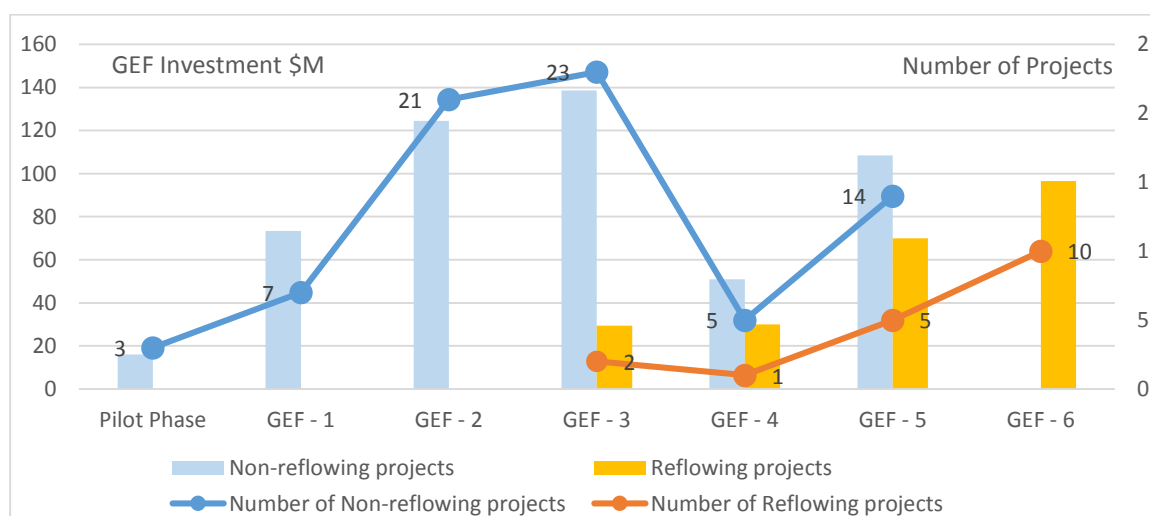
GEF-5	5	70	907.1	90.8	0
GEF-6	10	91.2	1689	108.4	0

190. These reflows should not be confused with the return of unused funds at the end of the project, as happens when a project component is unable to spend the resources as expected and consequently, underspends.

Comparison of Projects with Reflows to GEF and Projects with Reflows to Country/Facility

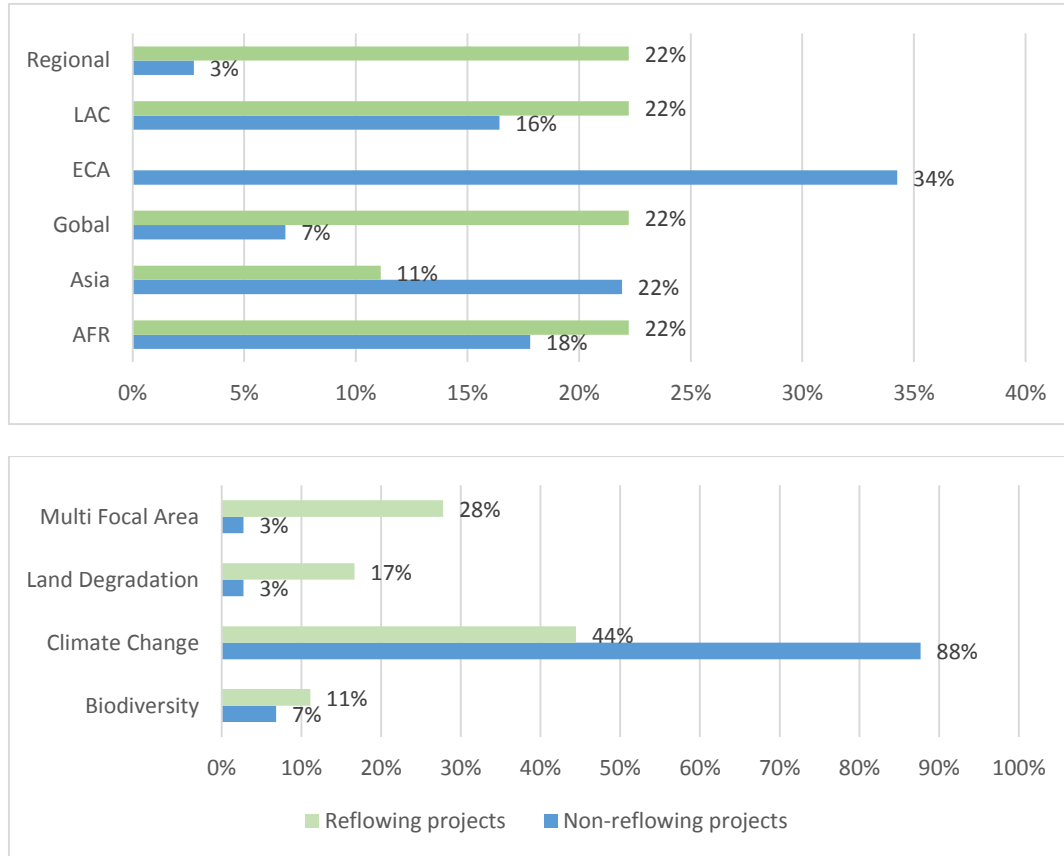
191. For most projects reviewed, reflows remain in the country and continue to be used as originally intended or deployed to other agreed-upon uses. Seventeen projects in the 91 non-grant projects portfolio are designed to expect reflows to GEF while the majority (73) are not. Since GEF 3, increasing number of non-grant projects that generate reflows have been implemented. Particularly, all of the ten non-grant projects in GEF-6 are expecting reflows to GEF (Figure 33). The average co-financing ratio for the reflow projects is 1:13 compared to 1:9 in the non-GEF-reflow projects.

Figure 33: GEF investments in Reflowing and Non-Reflowing (to the GEF) Projects, by Phase



192. Like the overall non-grant portfolio, the non-reflowing (to the GEF) projects are evenly spread out in countries in various regions (Figure 34). Apart from two projects in Seychelles and South Africa, the rest of reflow projects are regionally or globally focused. Meanwhile, reflow projects display a more balanced focal area distribution compared to the non-reflowing (to the GEF) projects. Though climate change is still the most invested area (44%), substantial fractions of resources are devoted to multifocal (28%) and land degradation at the same time (11%). Overall, the reflow projects appear to cover more countries and more regionally and globally focused.

Figure 34: Reflowing and Non-reflowing Projects Distribution, by Region and Focal Area



Returns Continuum

193. This review of GEF’s non-grant portfolio reveals that projects are structured across a range of expected returns from those with strong prospects for generating financial returns alongside environmental and other desired impacts to those that have an expectation of market-level impact but limited return. Yet, neither the approval documents nor the terminal evaluations of the investments consider where on the spectrum of environmental impact and financial return a particular project may fall. A discussion of the appropriateness of the public subsidy to be applied and the correlation to development returns would be justified as part of the overall consideration to provide concessional finance or grants.

194. Impact investors have developed a knowledge base that can help the GEF develop a framework to assess correlations between social impact and financial return along a returns continuum. Mission-driven investors have developed frameworks for commercial capital, sub-commercial capital and grants around the theme of market building when analyzing business models and investment proposals. For example, Omidyar Network’s framework defines market-level impact taking place through pioneering of new models, providing industry infrastructure

and influencing policy, and it categorizes investments in these categories. More concessional investments are expected to make a more compelling market impact.

195. As a mission-driven investor with a mandate to support market building and environmental impact using non-grant instruments, GEF assumes risks with an expectation of risk-adjusted returns. By assessing the investments along a continuum of return and the expected market impact using different categories and measures, as opposed to a wholesale approach, GEF could be more clear in the expectations of environmental impact, particularly when trying to influence market transformations.

V. GEF'S ROLE IN ENGAGEMENT WITH THE PRIVATE SECTOR

196. As described in Chapter 2, the global environmental financial landscape has changed significantly since the establishment of the GEF and is now full of different actors and financial instruments supporting environmental projects at various stages. At the same time the GEF's toolbox is ample and flexible, as exemplified by the GEF's five main intervention models for private sector engagement. This implies that there is an even greater opportunity for the GEF to support environmental projects involving the private sector, directly or indirectly, while providing clear value-add.

197. In the survey of GEF private sector stakeholders, the majority think that the current environmental finance landscape lacks a clear, coherent overarching approach and is difficult to oversee. A recent World Resources Institute report⁴³ that examined several of the climate funds (including the GEF) also stated that the proliferation has resulted in some overlapping of roles and duplication of efforts hampering efficiency and coordination.

198. This chapter discusses GEF's potential in the context of other multilateral funds that come closest to the GEF in terms of mandate, philosophy and operating modalities as well as in the context of the roles it can and does play.

Views on GEF's Position in the Environmental Finance Landscape

199. Building on the comparative analysis of the GEF with other facilities, as part of the survey of private sector stakeholders who have personal experience in working with the GEF, questions were asked to gauge awareness and attitudes towards the GEF's engagement of the private sector. Private sector respondents familiar with the GEF report that the GEF is not perceived as a very accessible organization. Nevertheless, once an individual establishes a personal relationship with a GEF representative (staff or implementing agency) satisfaction rates go up and respondents mention that their counterpart is very willing to work together.

Strengths

200. Private sector stakeholders consider the GEF a (potentially) valuable partner mainly based on the following five capabilities and strengths.

Flexible financing instruments

⁴³ Amerasinghe et al. 2017.

201. The GEF has several financing grant and non-grant finance instruments available. The variety of instruments is large and the possibility to combine different instruments in one project makes it all the more appealing to private sector partners. In particular, for the more complex projects that need both financing and capacity building.

"Our project was unique and innovative in that it focused on sub-national governments, however this limited funding opportunities. The GEF's mandate allowed it to support us where others could not. - Company director

Risk appetite

202. With its not-for-profit mandate, the GEFSEC has room to take more risk with its financing than for-profit financial players. This makes the GEF an excellent partner to support innovative early stage ventures that have difficulty accessing mainstream capital. Either through lending, equity investments or risk-sharing mechanism, the GEF helps create the right conditions for other (private sector) capital to step in.

Reputation

Given its long track record in the environmental finance field, the GEFSEC has a well-respected reputation. Having a partner on board with that kind of reputation, is important to private sector companies and project as it gives them a 'stamp of approval'; a powerful tool to projects with strong potential but a lacking track-record.

"GEF involvement gives a stamp of approval which is good to attract other donors"
– Climate finance specialist

Knowledge

203. The GEFSEC is praised for the technical expertise that its people have on environmental projects. The private sector appreciates the knowledge that the GEF can bring to a project and how this improves execution quality.

Network

204. As the center of a partnership between 183 countries, 18 implementing agencies, civil society organizations and the private sector, the GEFSEC's network function is of strong added value to private sector actors. The GEFSEC has the ability to make connections with donors or development banks, assist in addressing regulatory issues or gaining political backing.

"The GEF really helped us navigate the development finance landscape and get access to funding" – Company director

205. It should be noted that the vast majority of stakeholders indicated that these strong points generally are underleveraged in private sector engagement and practical cooperation. If the GEFSEC wants to strengthen private sector engagement, it will have to further institutionalize these capabilities and strengths and better communicate on cases where these strengths resulted in added value to a private sector partner.

Weaknesses

206. The stakeholders also identified four main weaknesses in the GEF's engagement and operations.

Cumbersome approval procedures

207. Nearly all respondents mention that the approval process of the GEF is too slow and complex for the private sector. This causes uncertainty and deters potential private sector partners from working with the GEF, thereby affecting the quantity and quality of proposals submitted to the GEF. There is consensus among respondents that the cumbersome approval process is the most pressing issue hampering effective private sector engagement by the GEF (Figure 35).

"The GEF currently does not have the agility and speed to keep pace with the private sector, this makes it unlikely for large parts of the private sector to have the patience to work with the GEF" – Company director

Difficult to obtain information

208. Respondents find it hard to obtain information on the GEFSEC's private sector engagement and the opportunities for cooperation. Communication material is too technical and although national focal points are the first point of contact for the private sector, they seem to have limited awareness on the opportunities of GEFSEC's private sector engagement. Most partners actually know about the GEFSEC and opportunities for working together through personal interaction with the GEFSEC people rather than public information.

Ambiguous project requirements

209. The GEF's eligibility criteria for support are perceived as too general, providing insufficient guidance on what the GEF actually expects from projects. The key qualifier for projects under the non-grant agreement is to "contribute to global environmental benefits as per GEF-6's Focal Area Programming Directions". The private sector expects more clarity on exact requirements which enables them to submit better project proposals. At the same time, some partners encountered that the GEF formulated new or additional project criteria during the appraisal process which created a non-transparent and unpredictable situation⁴⁴.

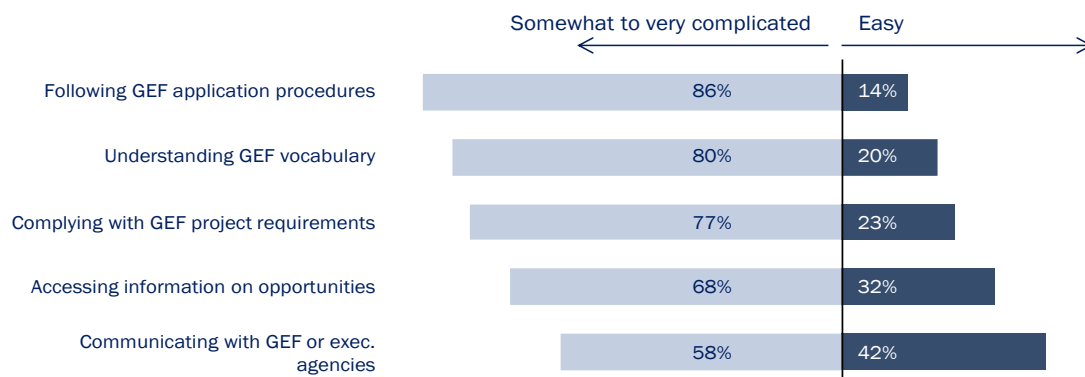
Lacking private sector mindset

210. Although private sector partners describe GEFSEC staff as very knowledgeable, it is also felt that their focus on technical issues does not match private sector reality. Respondents mentioned situations in which GEFSEC staff requested very detailed information about a

⁴⁴ Interviews with GEFSEC reveal that private sector entities often don't understand initially that projects must be implemented or supervised by GEF Agencies. In the case of the Earth Fund, there were numerous dialogues with the proposing entities, including "matchmaking" discussions with relevant GEF Agencies to develop proposals that met all the relevant criteria and allocated the benefits and burdens among the parties. The Earth Fund also published a set of criteria and procedures that could be sent to interested private sector entities and made the process easier to understand. The IFC Earth Fund platform was managed separately by IFC.

project that was disproportionate to the project's maturity or size. Some respondents cited a lack of knowledge about financial mechanisms, terminology, and practices as additional factors that appeared to have slowed down project appraisal processes.

Figure 35: Complexities in Working with the GEF

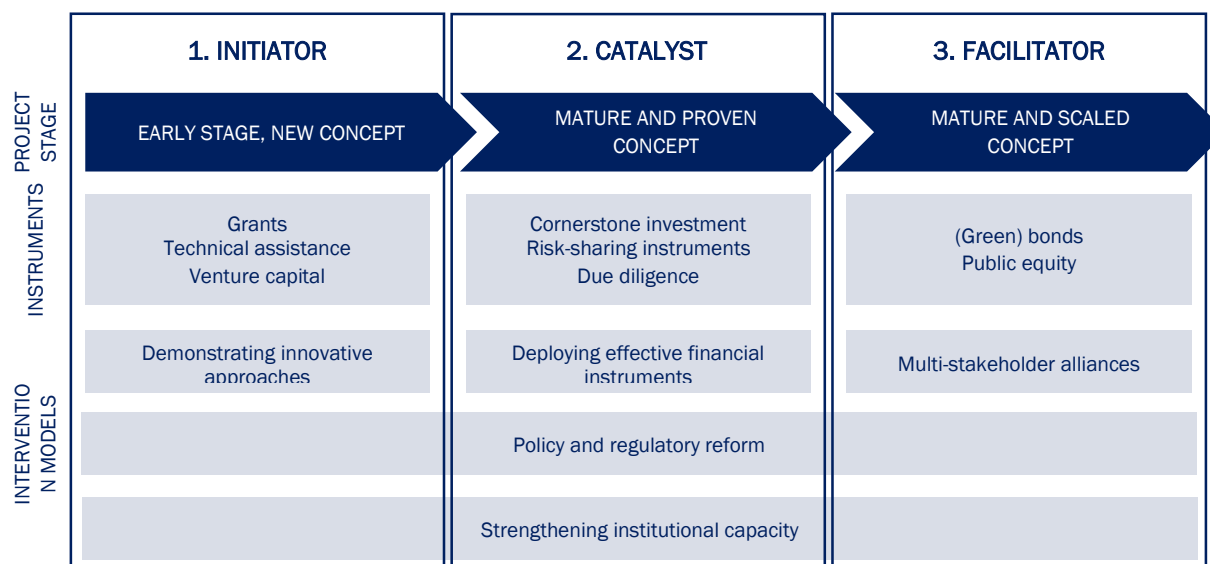


211. These overall observations indicate that the GEF does not have a natural and preexisting channel for private sector engagement, particularly to larger corporate entities engaging primarily in non-government transactions.

Three Main Roles

212. Considering GEF's intervention models, the GEF's private sector engagement can be thought of as structured around three main roles: that of an initiator, catalyst, and facilitator.

Figure 36: Key Roles of the GEF in Environmental Finance Landscape



Initiator

213. The first role is that of the initiator. The core focus in this role is to help initiate new, innovative concepts and/or early stage environmental projects, companies or funds that have potential for up-scaling or replication. This role is particularly critical as multilateral development banks expand their commitment to climate and environmental finance, but at times lack viable projects with the backing of private investors in their deal pipelines. Many key project-side barriers in conservation finance markets have been identified that the GEF as an initiator can help address: high search costs, lack of track record of developers and projects, lack of bankable collateral, scalability difficulties, and insufficient monitoring.⁴⁵

Instruments

214. The projects or companies looking for support often are still too small, untested and therefore risky for private sector investors. They could benefit from the GEF's ability to provide different forms of financial and non-financial support, the GEF's 'stamp of approval', and the GEF's network. The main suggested forms of financial support to the private sector in this role for the GEF are:

- (a) Grants: funding the costs and activities that could help develop a company or project in its initial stages where other forms of financing are not yet available;
- (b) Technical assistance: funding for feasibility studies or the assistance of third party experts or consultants in the development of a company or project;
- (c) Venture capital: investing in the early stages of a project or company, preferably as the anchor investor. Where possible, investment should be preferred over grants, as it provides a more credible demonstration of viability to the market

What's needed in this role

215. This role is closest to the GEF's traditional focus, as the GEF has a long history of providing support for the demonstration of a technology or a new approach to address environmental degradation, with the aim of creating a "beacon effect" that can spur broader adoption. The GEF's early support for concentrating solar power production or the support for payment for ecosystem services, are but two examples among the many of GEF's support for innovation.

216. In order to attract more potential projects that meet the GEF's requirements, the GEF needs to better define and communicate its eligibility criteria and approval process (including

⁴⁵ Credit Suisse Group AG and McKinsey. 2016. p. 13.

the role of GEF Agencies) for each of the different instruments. It could consider developing a portal on the GEF's website, which clearly outlines the criteria, process and templates to use.⁴⁶

217. The GEF might also be able to prioritize geographic areas and market niches for investment and partnership with private sector where other climate change funds and MDBs have struggled. For example, the CIFs' Scaling Up Renewable Energy Programme (SREP) was able to receive only a small number of viable private sector projects to satisfy its programming requirements in its private sector carve-out.⁴⁷ SREP plans to expand its pipeline by loosening programming and geographic constraints, and enhancing collaboration with other renewable energy development programs and institutions. GEF efforts could create complementarities to help fill these gaps, including laying the groundwork through enabling environment improvements, stakeholder outreach, and technical assistance to foster project development.

Key factors in project appraisal

218. If the GEF wants to have most impact through its support, it should try to focus on technologies or projects with disruptive potential. Specifically, the following three criteria should be on top of its list during company or project appraisal:

- (a) Innovativeness: the extent to which a project or instrument pilot innovative approaches, either in a country, sector and/or technology context;
- (b) Scalability: the extent to which projects can be replicated (e.g. in multiple countries) or financed repeatedly at lower transaction costs.
- (c) Commercial viability: the operational impact of the supported projects should be sustainable, both during and after the GEF's involvement and/or financial support, thereby ensuring the commercial viability of the project.

Catalyst

219. The second role is that of the catalyst. The core focus in this role is to help attract additional private financing for environmental projects, companies or funds. This helps covering investment gaps and/or risks that investors, who generally focus on financial returns or private development benefits, would not have the incentive to cover. A recent World Resources Institute study of climate change finance institutions noted that the GEF has an opportunity through "focusing "pure play" climate change support on catalytic mitigation interventions. In doing so, the GEF can complement the GCF and CTF in supporting programmatic approaches and systemic shifts for mitigation."⁴⁸ In this manner, the GEF role as a catalyst can create

⁴⁶ An example of a public, mission-driven fund that has such a portal for funding applicants is the [Global Health Fund](#). This portal was specifically mentioned by a key industry network specialist as a best practice in the field.

⁴⁷ "It has been recognized, however, that the PSSA model placed many programming constraints on MDBs, which considerably reduced the program's effectiveness for private sector engagement. ... As a result, not many high-quality proposals were submitted for consideration." Climate Investment Funds. 2016. "PROPOSAL FOR ENHANCED PRIVATE SECTOR ENGAGEMENT UNDER SREP." November 29, 2016.

SREP/SC.16/5.

⁴⁸ Amerasinghe et al. 2017.

synergies with its role as an initiator: the GEF can build upon its early relationships with nascent and emergent pilot and demonstration projects through follow-on risk-sharing, cornerstone, and due diligence investments that draw in other financiers, yielding a pipeline of investment-ready projects at scale.

Instruments

220. The GEF can leverage private sector financing by signaling confidence to the market through own (co-) investment or by de-risking investments through financial or non-financial instruments. The three main forms of support to catalyze additional investment are:

- (a) Risk sharing instruments: through risk sharing instruments the GEF can mitigate potential high risk perceptions and/or a lack of confidence in the financial viability of environmental projects or innovative investment funds. This will catalyze additional financing by private investors in these projects or funds;
- (b) Cornerstone investment: particularly for innovative environmental investment funds it is crucial to get the first investor on board. By stepping in first the GEF can signal confidence to the market and act as an active reference to other potential investors;
- (c) Due diligence: the GEF could also mitigate risk by carrying out or financing due diligence for innovative projects or funds. As long-term investors often lack the technical knowledge or resources to carry out the intensive and technical due diligence required, the GEF can pave the way for investors to step in.

What's needed in this role

221. The GEF also already has some experience in this role, particularly with risk-sharing instruments. A concrete example is its support for the project on China Utility Energy Efficiency, where the GEF provided funds to lower the risk of large-volume IFC loan guarantees to help unlock energy-efficiency lending from commercial banks. However, this experience is still limited, and the GEF should consider increasing its support through these instruments.

222. The GEF has less experience with cornerstone investments and (financing) due diligence projects. In order to support funds as a cornerstone investor, the GEF will need to specifically accept a higher level of risk appetite. It would need to communicate on this to (potential) fund managers through its website and network conferences. It will also need to change its procedures to allow for quicker decision-making. If the GEF also wants to mitigate risk for investors through execution of due diligence, it will need to streamline its project appraisal processes more along the lines of private sector due diligence processes. In the short term, the GEF could consider setting up a financing facility for due diligence projects.⁴⁹

⁴⁹ An example of such a facility is the Netherlands' government 'Develop 2 Build (D2B) programme, which provides funding for preliminary studies, such as feasibility studies, environmental impact assessments and conceptual designs, needed for infrastructural project tenders. For more information, see: <http://english.rvo.nl/subsidies-programmes/develop2build-d2b>.

Key factors in project appraisal

223. For most impact in this role, the GEF should particularly focus on the following two factors:

- (a) Leverage: the key factor is the GEF's potential leverage effect, or the extent to which the GEF's support has the potential for crowding in additional private sector financing or other resources. Unfortunately, there is no standardized model to calculate this, and will have to be considered on a case-by-case basis;
- (b) Replicability: the project, company or fund supported through the GEF's de-risking instruments should ideally have a demonstration effect. This means that it should ideally be able to be replicated in different geographies.

Facilitator

224. The third role is that of the facilitator. The focus in this role is more indirect, but not less important. It is aimed at bringing parties together and creating an enabling environment for larger scale financial intermediaries and capital providers to operate effectively. In this space the GEF can provide support on policies and regulation, bring together stakeholders from different backgrounds, and strengthen institutional capacity. The GEF's credibility, long track record and network are its key capabilities that can be of added value to the market.

Instruments

225. The main suggested forms of support to the private sector in this role for the GEF are:

- (a) Multi-stakeholder alliances: the GEF could initiate and strengthen initiatives that facilitate investment by capital providers and financial in environmental projects, companies and funds;
- (b) Policy and regulatory support: the GEF could help governments and financial regulatory bodies put in place policies, regulations, or particular incentives that allow financial instruments aimed at environmental benefits (e.g. green bonds) to thrive;
- (c) Strengthening institutional capacity: the GEF could raise awareness and build capacity among ministries of member states on innovative private sector solutions to environmental problems.

What's needed in this role

226. The domain of capital markets and institutional investors is largely uncharted territory for the GEF, but at the same time a place where it can bring unique features to the table. Compared to the initiator and catalyst roles, the GEF's potential support instruments in the facilitator role are less clear-cut. The GEF should carefully assess where its reputation as a credible institution, its technical expertise and network among governments can add most

value, and where private sector actors are open to include the GEF as a full-fledged partner. This will require an additional round of talks with private sector actors active in this segment of the market, from major banks and investors to initiatives (e.g. Climate Bonds Initiative) and service providers (e.g. ESG rating agencies).

227. In parallel the GEF could perform internal deliberations on where it would see a role for itself. It could further research the set-up of new partnerships that aim to tackle hurdles such as the lack of standardized frameworks, or new business models that link natural resources to revenue streams. It could also research where it can bring its knowledge, credibility and network to the table of existing initiatives, such as the 'Green Bond Principles'. A start could be an awareness raising campaign of best practices by private sector actors and best practices of member states facilitating private sector solutions.

Key factors in project appraisal

228. The GEF should carefully assess where it can add value in this segment of the market. This could particularly be relevant in cases of a lack of knowledge, level playing field, credibility or standardization.

Stakeholders Views

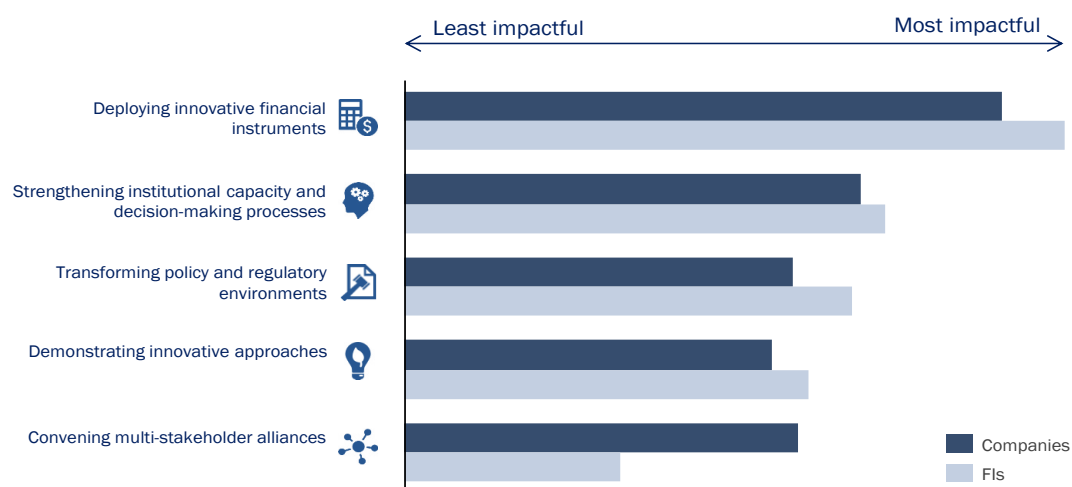
229. In the survey both private sector stakeholders and GEF internal stakeholders were asked about current GEF intervention models and instruments.

Private sector stakeholder views

230. When asked about the most impactful intervention models, GEF private sector stakeholders have a preference for the deployment of innovative financial instruments. As the figure below shows, both companies and FIs perceive innovative financial instruments to be the most impactful engagement. This preference for the deployment of innovative financial instruments appears to indicate that private sector stakeholders prioritize the GEF's role as a catalyst.

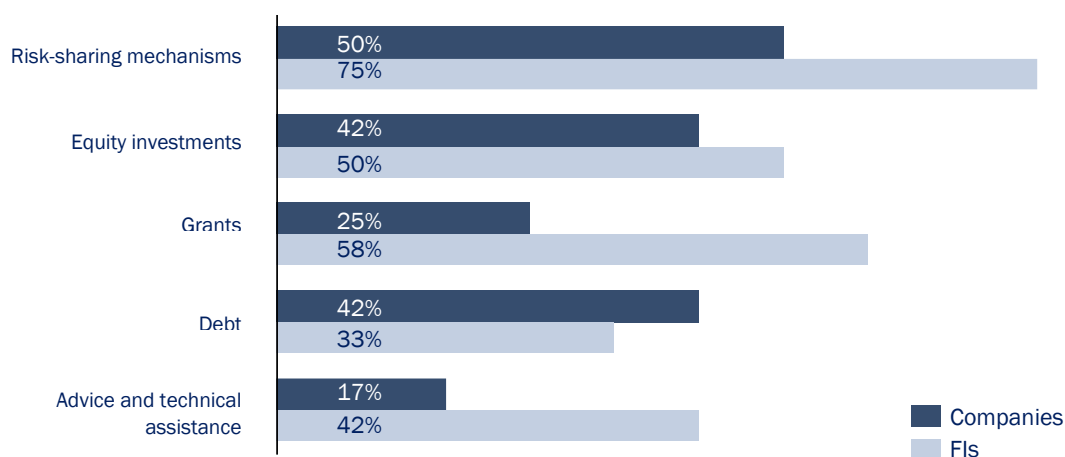
231. On the other GEF roles views are more balanced, with comparable views on the potential impact of GEF support. FIs do not yet seem to realize the potential for the GEF to contribute to multi-stakeholder initiatives, which can be explained by the lack of a track record of the GEF in supporting initiatives in the financial sector.

Figure 37: Most Impactful Intervention Model



232. The importance of GEF’s potential role as a catalyst is further confirmed by the private sector stakeholders’ interest in specific instruments: Figure 38 shows both companies and FIs are most interested in risk-sharing mechanisms. Particularly the interest in risk-sharing mechanisms among FIs is striking, and FIs concretely suggest the GEF to help design instruments for blended finance which will better enable institutional investors to invest in the environmental programs in developing countries that meet their risk/return requirements.

Figure 38: Interest in Types of GEF Support and Financial Instruments



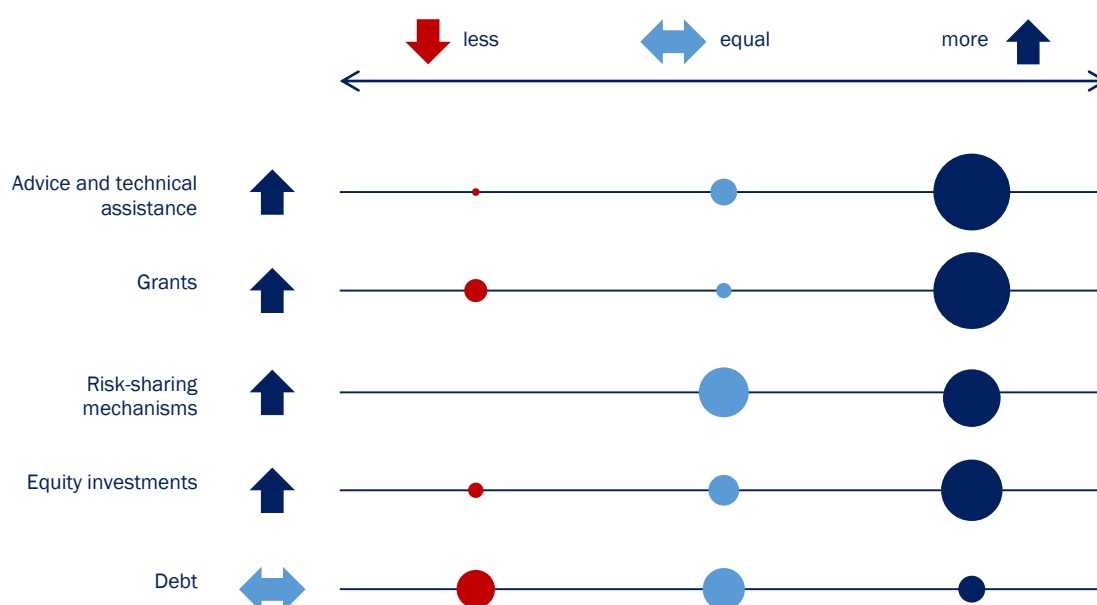
233. In addition to risk-sharing mechanisms, companies are mostly interested in finance for projects in the form of debt and equity (Figure 38). Only a small portion of companies is interested in grants, advice and technical assistance. FIs on the other hand do have an interest in these forms of support. FIs see grants as instruments that could further leverage their

financing, while technical assistance can remove bottlenecks for financing, such as funding for technical due diligence.

GEF internal views

234. GEF internal stakeholders (secretariat staff, implementing agencies and focal points) think the GEF should increase its support to the private sector through various instruments. Figure 39 summarizes their combined views on five different instruments, with bubble size indicating the number of respondents.

Figure 39: GEF View on Type of Support to be Given to the Private Sector



235. The majority of internal stakeholders surveyed think the GEF should offer more technical assistance, grants, risk-sharing mechanisms and equity investments. Only in the case of debt financing opinions are mixed. Most internal stakeholders see merit in increasing technical assistance and grants, the most familiar instruments in the GEF's toolbox. At the same time, none of the stakeholders surveyed seem to oppose risk-sharing mechanisms. These findings seem to indicate solid support within the GEF for intensified GEF private sector engagement.

VI. CONCLUSIONS AND RECOMMENDATIONS

236. In setting the stage for the planning for the GEF-7 replenishment, a key line of inquiry of this study is identifying the GEF's comparative advantage in the realm of private sector engagement in general, and environmental finance in particular. This question holds both with regards to the GEF's delivery on its commitment to engaging and partnering with the private sector consistent with guidance from the Multilateral Environmental Conventions (MEAs), as well as throughout its operations and programs.

237. When the GEF first started, it began its private sector engagement by focusing on buying down risk, often on a project-by-project basis. This approach has yielded success: the GEF has

helped to create lines of business in banks where previously lending was absent. But internal studies since at least 2011 have revealed that the GEF needs dedicated, sophisticated, and enduring strategic efforts to develop private sector engagement strategies that overcome the GEF's weaknesses in this area to achieve transformative impacts.

238. Moreover, the private sector and environmental finance landscapes have changed considerably. Notably, the amount of climate finance and environmental finance is much greater today than even a few years ago. Mainstream financial institutions in many mid-income countries are providing loans for projects such as wind power and energy efficiency; furthermore, many development banks and development assistance institutions are active in this space, making the issue of identifying the GEF's comparative advantage a pressing one.

239. At the same time, the GEF now has a greatly expanded set of experiences working with the private sector than it did even a few years ago, thanks to its expanded experimentation with non-grant instruments, public-private partnerships (PPPs), mainstreaming, and integrated approach pilots (IAPs).

240. Meanwhile, the private sector's attention to GEF's core issues of environmental sustainability has expanded dramatically in recent years, as has non-government investment in the conservation, environmental, and climate change finance domains.

241. The key question: where and how does it make sense for GEF to be involved within the private sector? The GEF is active across many types of pilots and programs, engagement approaches, geographic and thematic areas, project scales, levels of concessionality in investments, and degrees of innovation.

242. To get at this question, the GEF has conducted an internal portfolio review, including of its non-grant instruments, surveyed external stakeholders on its private sector engagement and completed a comparative analysis of the two largest public climate finance institutions (aside from the GEF), the Green Climate Fund (GCF) and the Climate Investment Funds (CIFs), to glean lessons learned and better refine the GEF's niche in this arena.

Conclusions

243. **Conclusion 1: The GEF should continue to engage with a wide variety of for-profit entities that vary in their industry focus, size, and approach to environmental issues using a mix of intervention models.** The range extends in size from multinational corporations, through large domestic firms and financial institutions to micro, small and medium enterprises and smallholders/individuals. Because GEF projects are designed to address complex issues, an assortment of intervention models is needed to address the assortment of barriers to environmental protection. Among the intervention models, the most commonly applied ones are those that facilitate institutional strengthening and those that transform policy and regulatory environments. These are areas of comparative advantage for the GEF. Lack of regulatory frameworks and environmental policies can impede in-country compliance with standards and affect the achievement of global environmental benefits while creation of supportive conditions are a factor in successful private sector participation.

244. GEF's private sector activities overall, can thus be broadly considered as "upstream" in the development continuum – to create and nurture the necessary ecosystem for private sector

engagement. However, this is potentially at odds with a push for greater financial self-sufficiency, which emphasizes reflows and financial structures that provide a financial return to the GEF. Indeed, the GEF appears to be drifting more “downstream,” even structuring its non-grant instrument on equal footing with other investors in some recent cases.

245. Conclusion 2: The GEF is constrained in its engagement with the private sector due to operational restrictions. The GEF’s ability to engage the private sector diminished during GEF-4 as a result of the then-introduced resource allocation framework (RAF). For many Operational Focal Points and countries this was a shift to empowering them to program GEF support to the country. Consequently, private sector set-asides have been a primary modality through which engagement has continued, first with the Earth Fund platform and then the PPP platform in GEF-5 and the non-grant pilot in GEF-6. The fragmented nature of these interventions combined with the limits of STAR allocation often mean that private sector innovation is not easily reconciled with country ownership and national strategies and priorities.

246. Conclusion 3: It is difficult to systematically gather evidence on elements of GEF’s private sector activities without improvements to the GEF Project Management Information System (PMIS). GEF projects that have an element of private sector engagement are not easily retrieved from the organizational database. This lack of systematic “tagging” of those projects was raised by the IEO in the OPS5 study on private sector engagement. The inability to generate accurate project data still persists. Moreover, the quality of the information about private sector engagement contained in terminal evaluations is extremely variable. A significant shortcoming was the scant attention paid in most non-grant project TEs to the financial information about the project.

247. Conclusion 4: GEF investments involving private sector engagement have higher co-financing. In particular, private sector portfolio is catalyzing private investment. Every \$1 from GEF grant leverages a competitive ratio of \$8 in co-financing, compared to \$6 in co-financing estimated for the overall GEF portfolio. Three (\$3) out of \$8 in co-financing come from private sector investments, mostly in the form of equity investment. The leverage ratio has been steadily increasing since the first GEF period (with exception in GEF-4). In GEF-5, for every \$1 spent by the GEF, \$11 in co-financing was received for private sector projects by other parties (incl. private sector).

248. By stimulating markets and reducing risk, non-grant projects have resulted in high co-financing leverage ratios. On average, \$1 GEF grant spent for non-grant projects leverages \$10 in co-financing. Not only is the overall leverage ratio highest amongst the private sector portfolio, but also highest among the general GEF portfolio. Notably, this ratio has improved greatly in GEF-5 and GEF-6. For every \$10 leveraged by GEF non-grant, \$5 comes from private sector investments.

249. Conclusion 5: Climate change projects feature heavily in the private sector portfolio. Two thirds of projects in the portfolio are in the climate change focal area, amounting to 62% of GEF’s total investment in private sector projects. Furthermore, the majority of the non-grant projects concern climate change. This reflects the significant global effort that has gone into creating conducive policy and regulatory environments that would facilitate private activity in the climate change arena. In GEF-6, chemicals and waste, a differentiated focal area, was

added. Sixteen chemicals and waste projects representing 17% of private sector portfolio projects and 15% in terms of investment in this period are being implemented. While all focal areas have consistently identified the private sector in their focal area strategies, it was considerably easier to locate examples of engagement from the climate change and biodiversity focal areas than it was to find project examples for International Waters, Land Degradation (excluding projects concerning small holders). These signals of low involvement within a portfolio known to have engaged the private sector indicate a need for more comprehensive collection of information and documentation on engagement with the private sector.

250. **Conclusion 6: There are several players in the climate finance space but few in the other Convention areas covered by the GEF.** In comparison to climate change, the other Convention areas have limited private sector activity in present-day challenge areas such as water scarcity and food security affecting vulnerable populations. Though the low levels of activity impede GEF's ability to structure non-grant projects in these areas with significant reflows and returns, the earlier stage of development is an opportunity to focus and develop the upstream environments needed to enable private sector participation and thereby grow new environmental markets. The GEF has the flexibility and thematic breadth to employ cross-cutting approaches and to work in a wide range of environmental finance and conservation domains. Among non-grant projects in GEF-5 and GEF-6, there is a relative increase in non-climate change projects. Particularly, the GEF-6 projects show greater diversity in the sectors covered, with an increased focus on biodiversity and land degradation.

251. **Conclusion 7: The range of non-grant instruments employed by the GEF is needed to target specific environmental market failures.** Many of the barriers to private sector investment have not fundamentally changed in the 20-plus years covered by the sample projects. Justification for the GEF non-grant financing still includes limited availability of capital; limited appetite on the part of commercial banks; lack of familiarity with the sectors, financing modalities and instruments.

252. Technical Assistance (TA) plays a significant role in most non-grant projects, and is often integrated into the financing structure or mechanism. The GEF has a long history of and experience with providing TA and capacity building. These are necessary adjuncts to investment support, and a clear niche for the GEF when acting in conjunction with other financiers. The GEF also appears to have a greater risk appetite and tolerance than other financiers, as evidenced by its willingness to take first loss positions and assume the highest risk in a financing plan. This can play a vital role in unlocking other sources of finance, and together with TA, has catalyzed systemic shifts in climate change mitigation. Alongside TA and capacity building, the non-grant instrument can lend itself to a variety of structuring to address some subset or combination of these barriers.

253. **Conclusion 8: There has been an evolution in the use of the non-grant instrument towards more systematic reflows and a more explicit requirement for returns.** Non-grant projects in earlier cycles were structured to recover principal at best. In later cycles, there was an expectation of a positive financial return. To date \$8.2 million in reflows has been received. GEF-5 and GEF-6 projects have not yet begun generating reflows, and the long timeframes involved in the sorts of activities financed means that reflows would be generated 10-20 years into the future. It Projected reflows in GEF-5 and GEF-6 seem optimistic, particularly in light of

GEF experience which suggests that many non-grant projects set overly ambitious targets for implementation results. should also be noted that there are tradeoffs with returns and reflows based on the development phase of the activity being financed. If used in the context of more upstream activities, then instruments will need to focus more on concessionality, which will sacrifice returns and reflows. For more downstream activities, such as in early-stage and new concept projects, the GEF could expand the use of the non-grant instrument, with potential for greater returns and reflows.

254. **Conclusion 9: GEF country clients and private sector stakeholders each lack awareness of the opportunities for engagement with one another.** As reported through the online survey, the GEF's position, processes and role is insufficiently clear to the private sector. Similarly, GEF recipients have varying degrees of knowledge of the role of private sector in green finance and accessing funds beyond the usual GEF grant instruments. Private sector respondents find it hard to obtain information on the GEF's private sector engagement and the role of Agencies and opportunities for cooperation. Additionally, nearly all stakeholder respondents mentioned that the approval process of the GEF is too slow and complex. This causes uncertainty and deters potential private sector partners from working with the GEF. Private sector respondents expect more clarity to help them better prepare for cooperation with the GEF.

Recommendations

255. Recommendations are forthcoming and will be presented in the OPS6 Final Report.

BIBLIOGRAPHY

Internal Documents

- GEF/C.6/Inf.4, Engaging the Private Sector (1996)
- GEF, GEF strategy for Engaging the private sector (1996) - GEF/C.7/12.
- GEF, Strategy for Engaging the Private Sector (1996) - GEF C7/12.
- GEF/C.13/Inf.5, Engaging the Private Sector in GEF Activities (1999)
- GEF/C.22/Inf.10, Enhancing GEF's Engagement with the Private Sector (2003)
- GEF, Principles for Engaging the Private Sector (2004) – GEF/C.23/11.
- GEF, Strategy to Enhance Engagement with the Private Sector (2006) - GEF/C.28/14.
- GEF/C.28/Inf. 4, Additional Information to Support the GEF Strategy to Enhance Engagement with the Private Sector (2006)
- GEF/C.32/7, The Use of Non-Grant Instruments in GEF Projects: Progress Report (2007)
- GEF/C.33/12, Operational Policies and Guidance for the use of Non-Grant Instruments (2008)
- GEF/ME/C.39/2, Review of the Global Environment Facility Earth Fund (2010)
- GEF/ME/C.39/3, Management Response to GEF Earth Fund Review (2010)
- GEF/C.40/13, Strategy to Engage with the Private Sector (2011)
- GEFEO, Review of GEF Engagement with the Private Sector (2011)
- GEF/C.41/09/Rev.01, Revised Strategy for Enhancing Engagement with the Private Sector (2011)
- GEF/C.42/Inf.08, Operational Modalities for Public Private Partnership Programs (2012)
- GEF, Approach paper, sub-study on GEF Engagement with the Private Sector (2013).
- GEF, Review of GEF Engagement with the Private Sector, Technical Document 13 (2013).
- GEF. Strategy for the GEF (2014). - GEF/C.46/10.
- GEF, Actions Taken to Enhance Private Sector Engagement (2014) – GEF/C.47/Inf.05.
- GEF, GEF-6 Programming Directions (2014) – GEF/R.6/20/Rev.01.
- GEF, GEF-6 Policy Recommendations (2014) - GEF/R.6/21.
- GEF, Co-financing Policy (2014) - GEF/C.46/09.
- GEF, Summary of the Negotiations of the Sixth Replenishment of the GEF Trust Fund (2014) - GEF/C.46/07/Rev.01.
- GEF, GEF-6 Non-Grant Instrument Pilot and Updated Policy for Non-Grant Instruments (2014) – GEF/C.47/06.
- GEF, Annual Portfolio Monitoring Report (2016) – GEF/C.51/03.

GEF IEO, Impact of GEF Support on National Environmental Laws and Policies in Selected Countries (2017).

External Documents

Bannick, Matt, Paul Goldman, Michael Kubzansky and Yasemin Saltuk, Across the Return Continuum (2017).

Castalia Strategic Advisors. Evaluation of Lighting Africa Program – Final Report. Report to International Finance Corporation. (2014)

Climate Investment Funds, Empowering a Greener Report, Annual Report 2015 (2015).

Climate Policy Initiative, The Role of the Climate Investment Funds in Meeting Investment Needs (2016).

Climate Policy Initiative, Global Landscape of Climate Finance 2014 (2015).

Credit Suisse Group AG and McKinsey Center for Business and Environment, Conservation Finance: From Niche to Mainstream: The Building of an Institutional Asset Class (2016).

G20 Climate Finance Study Group, Report to the Finance Ministers (2015).

GIIN, Impact Investment Trends: Evidence of a Growing Industry (2016).

Hamrick, Kelly (Ecosystem Marketplace), State of Private Sector Investment in Conservation 2016: A Landscape Assessment of an Emerging Market (2016).

ICF International, Independent Evaluation of the Climate Investment Funds (2014).

Overseas Development Institute (ODI) and Heinrich Böll Stiftung North America (HBS), Climate Funds Update: The Green Climate Fund: Climate Finance Fundamentals 11, 2016.

SDG Compass, The Guide for Business Action on the SDGs (2015).

World Economic Forum, The Green Investment Report (2013).

World Resources Institute, Public financing instruments to leverage private capital for climate-relevant investment: focus on multilateral agencies (2012).

World Resource Institute, Unlocking Private Climate Investment Focus on OPIC and Ex-Im Bank's Use of Financial Instruments.

World Resources Institute, The Future of the Funds (2017).