OPS5

FIFTH OVERALL PERFORMANCE STUDY OF THE GEF

REVIEW OF GEF ENGAGEMENT WITH THE PRIVATE SECTOR

OPS5 Technical Document #13

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1 Main Conclusions and Recommendations

1.1 Conclusions

1. The main body of the sub-study report contains the detailed analysis of GEF's engagement with the private sector. This first chapter highlights the main conclusions and recommendations.

Conclusion 1: The GEF has engaged successfully with a wide variety of for-profit entities that vary in their industry focus, size, and approach to environmental issues

2. In keeping with the diversity that is to be found within the private sector, the GEF has engaged with a broad range of for-profit business entities. The range extends in size from multinational corporations (MNCs), through large domestic firms and financial institutions to micro, small and medium enterprises (SMEs). Besides corporate entities, institutional arrangements may include public-private partnerships (PPPs), public-private alliances, cooperatives and other joint ownership arrangements.

3. Within the GEF there is no single entity or sector that forms "the private sector". As will be explored further in the portfolio analysis, engagement has been with a broad range of entities. In 2011, within the *Revised Strategy for Enhancing Engagement with the Private Sector* report, the GEF defined private sector engagement as "broad partnerships rather than specific capital investments[1]"

4. GEF's engagement with these entities has been successful with the private sector performing on par with the non-private sector portfolio (~80% of projects rated Moderately Successful or Above). There is also no difference in ratings amongst those projects that used a non-grant modality as opposed to a grant modality.

5. For full size projects the private sector is the third largest source of co-financing with recipient country governments – including various ministries, departments, and agencies, at different tiers of government as the main contributors of co-financing, followed by GEF Agencies.

6. Successful engagement have led to many instances of broader adoption of implementation strategies, technologies, approaches and/or structural arrangements including notable instances of scaling up and market change, particularly in the climate change focal area. Overall, the private sector portfolio out-performs the non-private sector portfolio for achieving market change.

Conclusion 2: GEF funding for a combination of improvements, both with governments in regulatory and policy frameworks and financial intermediaries has led to market changes for private sector participation in environmentally friendly interventions.

1 GEF/C.41/09/Rev.01 Revised Strategy for Enhancing Engagement with the Private Sector 2011 p7

7. Government policies to address environmental degradation include regulations and market-based instruments that may internalize natural capital costs and lower the profitability of polluting activities. In several instances, however, over the past twenty years, governments have increasingly moved to a more enabling role, by creating a framework of policies and institutions that encourages the private sector to be the engine of growth. As presented later in the historical analysis, GEF has been a driving factor in this arena.

8. GEF has categorized its approach for private sector engagement through four intervention models to both engage partners and catalyze investment. Among the models is "Enabling Policy Environments"

9. Projects with PS engagement are significantly more likely to contribute to the development and demonstration of new financial mechanisms and lead to market change. Fifty-two percent of private sector projects have led to market changes compared to only 21% of non-private sector projects.

Conclusion 3: Historical instances of private sector engagement do not match projected prevalence across Focal Areas, all of which clearly identify a role for the private sector.

10. The private sector portfolio developed for OPS5 is made up of 290 projects including 2 enabling activities, 220 full-size projects, and 68 medium-size projects (see Annex B). Among the 290 projects are approximately 80 projects that have used non-grant instruments, this out of a total cohort of over 3000 approved projects in GEF's history. Altogether, these 290 projects represent US $1,402 million in GEF grant investment and US$ 317 million in non-grant investment.

11. UNDP and the World Bank were the lead implementing agencies for the large majority of projects in this portfolio with each implementing approximately 37% of the portfolio. UNEP and UNIDO implemented roughly another 10% each and the remaining 5% of projects were implementing by the regional development banks and the FAO.

12. The assembled body of evaluation suggests that it is easier to direct attention to private sector engagement in Climate Change, followed by Biodiversity, Multifocal and the Chemicals focal areas. While all focal areas have consistently identified the private sector in their focal area strategies (GEF-3, GEF-4, GEF-5 and proposed strategies for GEF-6), it was considerably easier to locate documented examples of engagement from the climate change, biodiversity and ozone depletion focal areas than it was to find project examples for International Waters, Land Degradation or POPs. Likely there are more projects in the International Waters, Land Degradation and POP focal areas in the larger GEF portfolio, however they fail to overtly document private sector engagement and/or are not tagged appropriately.

13. In the developed private sector portfolio, projects in the climate change focal area account for the bulk, both by number of projects and investment volume. Sixty-eight percent of projects in the portfolio are in the CC focal area representing 75

percent of GEF investment in private sector projects and 30 percent of overall GEF investment in climate change projects.

Conclusion 4: The role of business and industry in the promotion of sustainable development has increased over time, however key environmental trends continue to show deterioration supported by public subsidies. The anticipated costs of mitigating actions are well beyond the capacity of public institutions to address.

14. New and expanded corporate sustainability initiatives and growth of sustainable enterprises attest to the growing role of the private sector. While these efforts by pioneering companies reflect "glimmers of hope" on the sustainability landscape, despite the evolving sustainability trends, there is a long way to go before these sustainability trends will become general private sector trends.

15. An increasing number of companies integrate sustainability in their long term vision and mission but for many companies, sustainability is a "nice to have or do" but not its main priority. Perceived higher risk and lower profit margins reinforce this idea. To effectively integrate sustainability in business models there would need to be real pricing of externalities (CO2 emitted, clean water, used, discharges, etc.). The long term issues the world is facing regarding water and food supplies and economic activity influenced by climate change are perceived as imminent by some pioneering companies that are seeking solutions through the use of accounting principles to give better understanding of the implications of the loss of natural capital[2]. As the issue becomes increasingly material to companies, it is expected that loss of natural capital will feature in corporate risk analyses and disclosures[3].

16. Public institutions are often providing subsidies for fossil fuels, unsustainable use of water, fisheries, agriculture and transportation aimed at promoting 'social good' and protecting the interests of the poor especially in developing countries. While on one hand subsidies can be beneficial, such as those aimed at promoting cleaner and more efficient technologies and/or improving poor households' access to modern forms of energy; harmful subsidies made to unsustainable private practices are currently 10 times as high as the funds needed for a sustainable future. Such subsidies can also end up covering operating costs normally borne by the private sector in manufacturing; production and other industrial process as well giving them increased access to energy sources at much cheaper prices. As a result, fossil fuel related energy consumption can be boosted, particularly in developed countries, aggravating emissions and worsening an evolving environmental crisis.

Conclusion 5: The GEF's ability to engage the private sector has diminished as a result of the resource allocation system.

2 Is natural capital a material issue? An evaluation of the relevance of biodiversity and ecosystem services to accountancy professionals and the private sector

3 Is natural capital a material issue? An evaluation of the relevance of biodiversity and ecosystem services to accountancy professionals and the private sector. KPMG, Fauna & Flora International and ACCA. Date unknown.

17. The GEF's ability to engage the private sector diminished during GEF-4 as a result of the then-introduced resource allocation framework (the RAF). GEF-5 engagement has increased slightly but still lags both in the number and dollar volumes of previous phases. The portfolio analysis reveals that investment in private sector projects appears to have peaked in GEF-3 with declining investment amounts in GEF-4 and GEF-5. The number of projects engaging the private sector peaked in GEF-4, as many projects prepared during GEF-3 became effective during GEF-4. Project numbers decline in GEF-5; although it should be noted that the private sector set-aside for GEF-5 has been completely drawn down.

18. Lessons learned from the "Earth Fund" platform, a set-aside designed at the beginning of GEF-4 for engagement with the private sector, revealed that expectations to attract large tranches of private funding to merge with GEF funds did not materialize and were not realistic. As a result the Public-Private Partnership program was re-designed in 2011 for GEF-5 and a project-by-project CEO endorsement requirement was re-introduced. This effectively ended IFC's involvement, the Agency with the longest history of private sector experience, in new engagements with GEF support for GEF-5.

19. The Midterm Evaluation of the System for Transparent Allocation of Resources (STAR) does not have an analysis of STAR's impact on private sector engagement as the portfolio decreased in direct engagement, i.e. private sector as executing agencies, to be negligible for analysis. Both RAF and STAR have led to more active involvement of government agencies.

20. The STAR Midterm Evaluation states that for many Operational Focal Points and countries there has been a shift in empowering them to better program GEF support to their country. As a result of the revised framework, country ownership of the GEF portfolio continues to increase, albeit at the expense of lower engagement with the private sector. With an allocation system like STAR, a strong engagement with for-profit companies needs to be incorporated in national strategies and priorities, following guidance from the conventions.

21. GEF intends for stronger engagement with the private sector in the coming 6th phase. The Secretariat has proposed that in GEF-6, a more holistic and comprehensive approach be undertaken by mainstreaming private sector engagement across GEF focal area strategies.

1.2 Recommendations

22. The research and conclusions from this study lead to the following recommendations for future support:

Recommendation 1: The GEF Project Management Information System (PMIS) should explore possibilities to systematically gather evidence on elements of GEF's private sector engagement without further increasing the reporting and monitoring burden in the GEF

23. GEF projects that have an element of private sector engagement should be easily retrieved from organizational databases. This is far from the case at present. In GEF-6 appropriate resources should be dedicated to strengthening the tagging and retrieval capabilities of the database.

24. In developing the project portfolio, information maintained by the GEF on the use of non-grant instruments was also used along with information from the International Finance Corporation (IFC). Because PMIS does allow 'tagging' of those projects that engage the private sector, in many cases this information is not entered. As a result, many projects that engage the private sector are not indicated as such.

25. Within the portfolio developed (through an analysis of project data in the PMIS, from the Pilot Phase to through GEF-5), "engagement of the private sector" can and is interpreted broadly within the GEF partnership to extend from outreach to private sector during stakeholder consultation to direct loans for enterprises to undertake environmentally friendly improvements to regulatory changes in support of market reforms. Thus, gathering a list of projects that "engages the private sector" is not a straightforward task.

26. There is a need for further definition within the GEF and within it's many strategies on what 'private sector engagement' means. In some instances, entities will bring private sector financing to the table in other instances, not. Depending on GEF's objectives in wanting to engage with the private sector there are tradeoffs to be made about what end of the private sector spectrum GEF should engage with.

27. The extent and type of engagement should also be a standard evaluation question included in project concept forms (Project Identification Form) and terminal and higher portfolio level evaluations. This needs to be further explored as other reviews of OPS5 point to overburdening of the reporting and monitoring systems in the GEF.

Recommendation 2: GEF should consider the "policy environment for private sector" conditions of the countries and regions eligible for GEF support and encourage countries to take this into account in their priority setting and portfolio identification for GEF-6.

28. Regulatory frameworks and environmental policies are indicators of supportive conditions for global environmental benefits. The absence of country commitment to application of compliance standards can affect achievement of results while supportive conditions are a factor in successful private sector participation with GEF.

29. Information on environmental policy frameworks is available for instance, through the GEF Evaluation Office program of country portfolio evaluations or the World Bank's "Doing Business" which collects indicators on policy environment for private sector business, including in the area of low carbon activities.

30. An important part of the green growth agenda is to redirect policy and funding flows toward economic growth that would respond to climate change, biodiversity

loss, land degradation, and other global environmental problems. In countries where the lack of a policy environment is an issue for GEF-supported engagements with the private sector, the GEF and the country concerned should focus on activities necessary to strengthen regulatory and policy frameworks relevant to such engagement.

Recommendation 3: The GEF should build on knowledge of how private sector entities could be involved with the GEF, especially on risk mitigation, market transformation, and recognition/sponsorship.

31. The GEF is in a unique position to act as a knowledge platform providing public and private sectors as well as GEF partners access to solutions to address their environmental challenges. GEF's role in support of innovative approaches and technologies for environmental protection is acknowledged as having the tangential benefit of also creating experience, lessons learned and knowledge of these approaches.

32. GEF needs to gain from and share experiences of engagement with the private sector, including through presence at existing private sector sustainability forums mentioned later in this report. Lessons learned from GEF Agencies and private sector entities could continually be extrapolated and analyzed from relevant terminal evaluations that continue to come in and used to generate awareness of success and failures *vis a vis* this engagement.

33. GEF should also survey or hold specific consultations with private sector entities, including those with whom the GEF has already engaged (listed in Annex D). Consultation with the private sector should include engagement at existing private sector sustainability platforms and fora, such as some of those named in this sub-study as well as GEF-specific consultations. These should be attended by the CEO and/or GEF should consider recruiting additional senior staff with private sector experience in the GEF focal areas to be assigned adequate authority.

34. The GEF should also draw from the existing experiences of GEF Agencies with a higher level of direct private sector finance and transactional experience to better understand, the elements of successful design and implementation in a "private sector" project. The portfolio analysis presented in the body of the report describes the increases in project performance and impact when this occurs.

Recommendation 4: Focal area and multi-focal area approaches should consider how private sector engagements can address sectors that have the most severe impacts on the environment

35. Worldwide, the state of the environment is on a downward trend. Despite innovations and technologies, global GHG emissions worldwide are growing at an ever increasing rate. The OECD estimates that without more ambitious policies than those in force today, GHG emissions will increase by another 50% by 2050.[4] The state of

4 The OECD Environmental Outlook to 2050. OECD. Key Findings on Climate Change (2012).

global biodiversity is equally if not more perilous. In 2005 the Millennium Ecosystem Assessment by UNEP concluded that an unprecedented mass extinction of life on Earth is occurring and that this episode of species extinction is greater than anything the world has experienced for the past 65 million years.

36. The perspective of tackling egregious private sector impact on the environment needs to be considered in future GEF engagement. Relevant strategies for engaging with entities across a spectrum of impact should be explored.

2 Introduction

37. The Global Environment Facility (GEF) provides support to address global environmental concerns related to biodiversity, climate change, international waters, land degradation, the ozone layer and persistent organic pollutants. Since its inception in 1991, the GEF has provided developing countries and countries with economies in transition US $ 10.5 billion in grants. The GEF Evaluation Office has a central role in ensuring the independent evaluation function within the GEF. The Evaluation Office:

- Sets minimum requirements for Monitoring & Evaluation (M&E),
- Ensures oversight of the quality of M&E systems at program and project levels, and
- Shares evaluative evidence within the GEF.

38. The GEF Evaluation Office (GEFEO) is administered by the World Bank but it is independent of its management as well as the management of the GEF. Its Director reports directly to the GEF Council, the GEF governing body. All contracts with the Office are World Bank contracts. More information about the GEF Evaluation Office can be found at Office's website: www.gefeo.org.

39. The objective of overall performance studies is to assess the extent GEF is achieving its objectives and to identify areas for improvements. These studies play a key role in informing the replenishment process of GEF. The GEF Evaluation Office is undertaking the fifth overall performance study of GEF to inform the GEF-6 replenishment process.

40. This sub-study focuses on key question 8 of the OPS5 final report: "What are the trends in involvement the private sector?" GEF's engagement with the private sector has been reviewed as part of previous studies of the GEF's performance. The GEF has undertaken background work on private sector involvement since 1996, when the first strategy for engaging the private sector was finalized.

41. Principles for engaging the private sector were formulated in 2004. More recently, GEF has categorized its approach for private sector engagement through four intervention models to both engage partners and catalyze investment. The GEFSEC has defined these models as follows:

- Enabling policy environments. Policy and regulatory development (e.g., feed-in tariffs for renewable energy, regulatory incentives that guarantee markets for new sustainability innovations and encourage business to make long-term investments, financial regulatory frameworks) that is critical to putting the right incentives in place to steer their activities in an environmentally sustainable manner.
- Incremental financing for risk reduction. Incremental financing—whether through grants, debt, equity, guarantees, structured products or other de-risking mechanisms—for projects that are close to commercialization but require a little push in the right direction. The GEF-5 private sector set-aside of $80 million focused entirely on providing catalytic financing through the use of non-grant instruments. Incremental financing in the form of grants to promote private sector investment has been used on hundreds of traditional GEF projects as well.
- Corporate alliances. GEF has consistently shown success with its agencies in creating alliances to promote environmental objectives. Examples include working with the Rain Forest Alliance to promote sustainable coffee production; working with the Forest Stewardship Council to promote sustainable forestry; with the Marine Stewardship Council to promote sustainable fishing; and with the lighting industry to promote energy efficient lighting. These alliances were particularly effective in developing and documenting industry best practices, standards, and certifications.
- Capacity building and incubation. The GEF is known for providing capacity building assistance for public agencies to enhance policy and regulatory development and implementation. In addition, GEF has also provided capacity building assistance for the private sector, especially smallholders, cooperatives, community organizations, and small and medium enterprises—actors who drive innovation and growth in developing countries.

42. An evaluation of private sector engagement by the GEF was first conducted in 2004. The *Third Overall Performance Study of the GEF (OPS3)*, conducted in 2005, concluded that the GEF had probably missed opportunities for potentially increasing the catalytic effects through GEF projects involving the private sector because of the lack of a focused GEF strategy. Among its recommendations the study urged the GEF to undertake a private sector special initiative, and to prepare a private sector strategy for outreach and communication, as well as risk-sharing arrangements. GEF-EO's evaluation of GEF's *approach* to the establishment of the Earth Fund was conducted in October 2010. The *Review of the Global Environment Facility Earth Fund* noted successful engagements, however overall it suggested a need for greater interaction between GEF and the private sector for both co-financing and governance of the Earth Fund[5].

43. This study starts with a description of methodology. It then sets the stage with a summary of GEF's historical activities in regards to private sector engagement, followed by sustainability trends in the private sector in order to provide a picture of

5 GEF-EO Review of the Global Environment Facility Earth Fund. Full Report. GEF/ME/C.39/Inf.1. October 26, 2010

external circumstances at play while the GEF has also been active. This chapter will be followed by an analysis of the portfolio, including its impact based on GEF's evaluation ratings of completed GEF funded projects that have engaged the private sector partner. Finally this report shall provide findings and recommendations for future GEF private sector engagement in pursuit of global environmental benefits.

2.1 Methodology

44. This evaluation employs several techniques in assessment: systematic literature review, portfolio analysis and consultation with key informants (see Table 1). The Portfolio Analysis explores the historical Project Management Information System (PMIS) database to chart evolution through time. The literature review established evidence on the external trends in engagement of private sector in environmental sustainability. The review also examined GEF Secretariat strategy and policy documents. It also examined the GEF-6 Replenishment documents and Council Meeting documents to determine the evolving importance given to private sector engagement. Consultations were also held with attendees at various GEF events in 2012/13.

45. At various junctures, including a two day workshop in Washington, DC (July 1-2, 2013), this evaluation also engaged with an independent Expert Panel[6] of private sector advisors with experience in private sector environment and sustainability issues, including corporate sustainability and concessional finance. The Expert Panel supported the examination of the business context within which private sector is drawn into environmental issues as well as exploring information on GEF past engagements.

Table 1: Overview of Evaluation Methods

Element	Number reviewed/consulted	Main focus of evaluation
FSPs and MSPs in PMIS	3086 FSP/MSP GEF projects reviewed; 290 extracted as private sector engagement	Trends through GEF Phases (Including efficiency and sustainability)
Terminal Evaluation Reviews (TER)	48 projects (Sampled randomly from 88 projects with TE/TER data)	Confirmation and type of engagement, effectiveness and sustainability
Impact Analysis	476 projects; 72 represent private sector engagement and 404 non-engagement	
Consultative Event Review	11 events in 2012 and 2013	Opinions on engagement
GEF and Agency Document Review	Agency evaluations, literature from Agency and GEF websites.	Effectiveness, efficiency and sustainability of engagement
Key Informant Interviews	10 GEFSEC and GEF Agency Staff	Effectiveness, relevance, efficiency and sustainability of engagement

[6] Dr. Holly Dublin: Member of The B Team - Challenge Specialist; Jules Kortenhorst: Chief Executive Officer, Rocky Mountain Institute; and Shekhar Singh: Sustainability Advisory Council, Tata Power and expert consultant.

2.1.1 Portfolio Analysis

46. The portfolio analysis was developed through a review of all the project data in the GEF's Project Management Information System (PMIS) from the Pilot Phase through to GEF-5. "Engagement of the private sector" can and is interpreted broadly within the GEF partnership and includes outreach to private sector during stakeholder consultation, direct loans for enterprises to undertake environmentally friendly improvements, as well as regulatory changes in support of market reforms. The portfolio of projects displays this diversity of characteristics.

2.1.2 Consultation

47. Consultations consisted of interviews with Focal Points and CSO representatives at events aligned with the Expanded Constituency Workshops in 2012 and 2013. Meetings were also held with the GEF Secretariat and GEF Agencies between March-June 2013 including at the 44th GEF Council meeting.

2.1.3 Systematic Literature Review

48. Separate systematic reviews were conducted of GEF Council Meeting documents (44 meetings), GEF Agency websites and literature, GEF-6 replenishment documents, and the general body of literature on the subject of private sector engagement in environmental sustainability.

2.1.4 Limitations

49. The study relied heavily on the triangulation of evidence from the many quantitative and qualitative sources compiled. There are nonetheless several limitations that the study encountered.

50. From the PMIS, the analysis depended on the extraction of a portfolio which is not tagged as 'private sector engagement', unless a private sector entity is executing the project, which in the instance of GEF5 was negligible (3 percent)[7]. The extended time necessary to develop a portfolio of projects for analysis also means that a compilation of private sector entities engaged by the GEF did not materialize until later in the study, thus leaving no time for engagement with those entities or real-time verifications. Nevertheless there is a high degree of cross-reference between available Agency and Secretariat data to arrive at a comprehensive portfolio. The tagging issue represents a distinct limitation that future studies should address with the support of data management systems. The benefit would also be supportive of future engagement strategies.

51. For the theory of change analysis, the study was also limited in its ability to fully examine the causalities in place that allow private sector engagement projects to make progress to impact, i.e. global environmental benefits. Further exploration of

7 Portfolio Data used for Mid-Term Evaluation of the System of Transparent Allocation of Resources. GEF Evaluation Office. October. 2013

these linkages and causalities would also be beneficial prior to a strategy to guide private sector engagement in GEF6.

3 Historical Overview of GEF's Strategies for Private Sector Engagement

3.1 Defining the Target: Private Sector

52. The GEF has engaged with a broad range of for-profit business formats. The range extends in size from multinational corporations (MNCs), through large national firms and financial institutions to small and medium enterprises (SMEs) and numerous micro-enterprises, for example through the Small Grants Programme.

53. Besides corporate entities, institutional arrangements may include public-private partnerships (PPPs), public-private alliances, cooperatives and other joint ownership arrangements. Examples of GEF's experience with types of for-profit entity are provided in Annex A, along with indications of the employed engagement strategies. It is clear that within the GEF there is no single entity or sector that forms "the private sector". As will be explored further in the portfolio analysis, engagement has been with a broad range of entities. In 2011, within the *Revised Strategy for Enhancing Engagement with the Private Sector* report, the GEF defined private sector engagement as "broad partnerships rather than specific capital investments[8]"

54. To date the sub-classification system has been a description of profit seeking entities encompassing the whole of the private sector. As proposed by a member of the Expert Panel, from the perspective of impact on the environment, entities could also be classified according to *impact*, i.e. 1) Entities that have an inherent potential for adverse impact on the environment (high, medium to low, e.g. extractives to manufacturing); 2) Neutral entities (mostly provision of services, e.g. consultancies); 3) Entities that on balance have inherent potential for positive impact and 4) Nodal industries (those that have potential to influence environmental impact of others, e.g. financial intermediaries).[9]

3.2 Beginnings of Private Sector Engagement - Pilot Phase and GEF 1 (1992-1994; 1994-1998)

55. Engagement with the private sector has been driven by the underlying idea that in order to have long-term and substantive impact on the global environment, private enterprises-the dominant driver of economic activity-must be encouraged to pursue commercially viable activities that also generate global environmental benefits. In this vision, engagement with the private sector is not an end in itself, but a means to a larger goal. [10] As the following discussion will demonstrate, the GEF's core desire

8 GEF/C.41/09/Rev.01 Revised Strategy for Enhancing Engagement with the Private Sector 2011 p7

9 Meeting with Expert Panel. July 1-2, 2013. Washington, DC

10 GEF/C.14/13 GEF Private Sector Strategy 2011, p3

for private sector engagement has remained consistent over time. However, the methodologies and strategies would change and evolve.

56. This chapter will discuss the GEF's strategies for private sector engagement starting with the pilot phase-GEF1 period until GEF5. It will also present the core elements (if available) per period: i.e., a description of the strategy, its objectives, the instruments available, and an illustration of projects started during that period and subsequent results, quoting from project documents of that period.

57. From the onset the Global Environment Facility (GEF) there was recognition of the importance of the private sector for achieving GEF's objectives. The GEF Instrument directed that the GEF would engage the private sector along with other key partners.[11] Initial efforts to involve the private sector in GEF operations were undertaken early during the 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 engaging the private sector.[12]

58. Given the importance of private sector involvement for reaching GEF's global environmental goals, the GEF at the time wanted to devise a strategy to determine how it could most effectively facilitate the involvement of the private sector in eligible recipient countries, either indirectly, by affecting the conditions under which the private sector operates - e.g. by removing market barriers, or compensating for regulatory changes – or directly, by helping the entry of a local firm into a market as yet untested in the recipient country.[13] Another key focus of the GEF's strategy in 1996 was to promote appropriate joint ventures of private sector parties and the search for cost-effective leveraging opportunities.

59. In this early period, GEF support was often acknowledged as crucial in terminal evaluation evidence statements such as the following from an early project in Sri Lanka: "*This project could not have been implemented without GEF grant support that helped catalyzing the solar home system (SHS) and village hydro industries. GEF's initial support will be further leveraged through the RERED project where solar and village hydro programs are being scaled-up. It is also important to note that the subsidy role of the GEF for these two types of subprojects will be reduced over time, so that eventually these subprojects can proceed without such support*."[14]

60. Furthermore, from the India Renewable Resources Development Project, where GEF funding was used to help with early implementation experience, the evaluation states: "*As one of the first renewable energy projects financed by the Bank, the project provides invaluable experience and knowledge on development of market-based approaches to promoting renewable energy through public-private sector partnership.*"[15] The terminal evaluation went on to state "*India now has a robust and growing renewable energy manufacturing, design and engineering, operation and*

11 Instrument for Establishment of the Restructured GEF, Washington, D.C. 1995, Paragraph 28

12 GEF C7/12 Strategy for Engaging the Private Sector, 1996, p. 4.

13 GEF/C.7/12, GEF strategy for Engaging the private sector 1996, p.4

14 Sri Lanka Energy Services Delivery Project, World Bank, 2003, p22 (GEFID #104– Climate Change)

15 India Renewable Resources Development Project (Alternate Energy), World Bank, 2001, p15 (GEFID #76– Climate Change)

maintenance capability compared to the conditions in 1993. This is attributable to the major shift in Government policy towards promoting private sector investments in renewable energy, backed up by renewable energy financing for private sector schemes."[16]

61. Below are additional two case studies that exemplify efforts for market barrier removal from this period and affecting conditions under which the private sector operates; one shows an initiative in the promotion of energy efficient lighting and the second presents an intervention to stimulate photovoltaic business activity, an intervention helping the entry for sale and distribution of photovoltaic technology. Both show the implementation of GEF's strategy and subsequent results. An important lesson learned from this period was the importance of technical assistance in partnership with finance. This was mentioned in the Photovoltaic Market Transformation Initiative (PVMTI) as well as the ELI TE reports. PVMTI stated "Many proposals in response to the initial RFP were weak and poorly written. Since the Program was operating in such an early stage market resources should have been allocated to provide more upfront hand-holding to businesses seeking PVMTI support and to improve the quality of their proposals and their overall capacity which could have led to improved project performance."[17]

Box 1:Efficient Lighting Initiative (ELI)- GEF ID 1439, WB/IFC, GEF Grant 5,650,000, Co financing 33,000,000

This initiative was a market acceleration effort for efficient lighting in 7 countries. ELI contributed to reduced CO2 emissions associated with providing electric lighting services and has generated significant economic benefits for the countries associated with saving electricity. ELI's market interventions led to a decrease in prices, increased product availability, increased demand, and increased quality. The list below gives examples of ELI's impact in transforming markets for energy-efficient lighting An overall increase in CFL sales that generated 26,635,000 MWh of electricity savings and 22,711 T of avoided CO2 emissions, in the period 2000-2010;

- *In Peru, annual sales of compact fluorescent bulbs (CFLs) increased twentyfold, from 250,000 to over 5 million;*
- *In Argentina, the price of CFLs dropped eightfold due to ELI-inspired promotion and competition between lighting manufacturers;*
- *In the Philippines, manufacturers improved the quality of their efficient lighting products to meet ELI specifications;*
- *Electric utilities in Argentina, Peru, the Philippines, and South Africa began selling, and financing, efficient lamps to their customers;*
- *Municipal authorities in the Czech Republic, Latvia, Peru, and South Africa initiated energy-efficient street lighting upgrades;*
- *Thousands of newly trained lighting professionals in seven countries will be able to specify efficient lighting for their clients.*
- *Former South African President Nelson Mandela officiated at the launch of ELI-South Africa. The national attention this drew to ELI helped increase consumer awareness of CFLs. and strengthen ELI's message.*

16 India Renewable Resources, World Bank, 2002, p18 (GEFID #76– Climate Change)

17Terminal Evaluation Review GEF Photovoltaic Market Transformation Initiative. IFC, 2010 (GEFID #112)

- *Across the board, ELI demonstrated substantial market impact with product prices falling (from $23 to $3 in Argentina), sales climbing (by a factor of 21 in Peru), and sales of traditional incandescent lamps tumbling (by 9 percent in South Africa, in a market undergoing widespread electrification).*

In response to groundswell demand from manufacturers, consumers, and national programs, IFC (private sector arm of World Bank Group) used ELI as a springboard to launch a self-sustaining, fee-based, quality certification service for efficient lighting products worldwide, with an emphasis on developing countries. In 2005, using additional GEF grant funding, IFC created the 'ELI Certification Institute', administered by the China Standard Certification Center (CSC), which was selected via a competitive bidding process. The Institute's mandate was to build on institutional partnerships established in the ELI countries to extend product certification to an expanding range of efficient lighting technologies worldwide. This included promoting the adoption of promising new technologies, such as light-emitting diodes (LEDs)

Box 2: Photovoltaic Market Transformation Initiative (PVMTI). GEF ID: 112 Agency WB/IFC, GEF Grant 30,000,000, Co financing 90,000,000

The objective of the Program was twofold: (i) to accelerate the uptake of photovoltaic solar installations in target countries - India, Kenya and Morocco with 5.8 MW installed and (ii) provide examples of replicable business models that could be financed on a commercial basis. PVMTI represented a strategic intervention to stimulate PV business activity in select countries and demonstrate that quasi-commercial financing could accelerate sustainable commercialization and financial viability in the developing world. Previous experiences with highly subsidized or give-away systems had not resulted in system longevity or widespread dissemination of the technology. The program was not successful in achieving the targeted GHG reductions but it did achieve success in the introduction of replicable business models for commercial viability. The PV market opportunities globally have changed substantially since the launch of PVMTI in 1998 and specifically in the three target countries.

In India the solar energy sector has come a long way since the start of the GEF program. New policies such as the National Solar Mission which supports installation and manufacturing for both grid-tied and distributed solar systems combined with regulations by the national and state regulators for renewable energy purchase and feed in tariffs have resulted in a favorable environment for solar. The combination of the significant solar resource available throughout the country and the recent Government focus (The Indian government launched the Jawaharlal Nehru National Solar Mission in 2010 with the ambitious goal of deploying 20 GW of grid connected solar power by 2022) could position India as a major player in the solar PV market. This is in stark contrast to the early stage of the market in 1998 when PV module production was to service a primarily small niche domestic market for rural electrification water pumping and remote application. The Program cannot claim that this overall market growth resulted from GEF supported activities however early GEF initiatives added value and learning to the now promising and flourishing Indian PV market through incubating innovative firms and business models[18].

In Morocco, at the onset, the PV market was very limited. There was minimal interest in renewable energy sources in general and the enabling environment for a sound credit sales model for PV installations was weak. What was promising was expressed interest in the market by the Office Nationale d Electricite ("ONE") as a result of the launch of their rural electrification program. More than a decade on, renewable energy and PV markets in Morocco have transformed in a major way. The country has set a RE target that by 2020, 35% of national electricity supply should be provided by RE. The King has also launched a major project to install 2000 MW of new electrical capacity from solar technology by 2020. While PVMTI was certainly in operation during these developments but it did not have direct RE generated or business models supported. Most country development has been publically supported.

The Kenyan PV market was also viewed as a good showcase for rural solar power demand at the outset of the PVMTI program having evolved commercially and grown exponentially since the mid 1980s. When the Program started about 120000 solar home systems were sold per annum growing at 17% or more at 20000 systems per year. Based on this presumed favorable market background, it was proposed that accessibility of SHSs could be greatly increased if financing mechanisms were made available through the Program. Today Kenya has a large and rapidly growing solar sector with an installed PV base of over 5000 KWp and over a dozen PV companies playing in the

18 GEF Country Portfolio Evaluation for India (1991-2012)

space. However GEF cannot claim that PVMTI was responsible for this market growth. Whilst Kenya was initially perceived as an excellent target for PVMTI originating and closing deals proved more challenging than initially envisaged and PVMTI funds were disbursed to only 2 projects in Kenya which resulted in a very small number of PV systems installed.

3.3 A Shift to Non-Grant - GEF 2 (1998-2002)

62. In 1998, in response to an earlier request of the Council to ensure that the sub projects developed under private sector investment funds would be consistent with GEF operational strategy and policies, including incremental cost approach[19], the Secretariat prepared an information note on funds,[20] both non-profit funds as well as for-profit private sector investment funds. Four concerns about private sector funds were identified in the light of operational experience: concerns about country ownership, cost-effectiveness, conformity with the Operational Programs, and incremental cost. The note proposed that operational criteria be developed (on the basis of an independent evaluation) to maximize the advantages of private sector funds while ensuring conformity with the GEF strategy and policies. [21]

63. In 1999, again 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*.[22] The paper underlined the importance of the private sector in terms of global environmental impact, resources, technology transfer, and the sustainability of global environmental benefits. The paper also noted that while engagement had been increasing, there remained a number of special challenges such as lack of awareness of the GEF and the steps needed to achieve tangible returns through partnership with GEF, the complex approval processes, and the difficulty in maintaining commercial confidentiality given the transparency of GEF processes.[23]

64. The policy paper on the private sector identified several modalities that would be needed for barrier removal, including technical assistance and a range of non-grant financing modalities.[24] This was the first time non-grant modalities were mentioned. The paper set out four modalities for future GEF engagement[25]:

- Grants were aimed at indirect stimulation of private sector reforms through barrier removal activities. These included support for policy reforms, standard setting and other types of capacity building;
- Non-grant modalities included contingent grants, loans to private entities, partial credit guarantees, investment funds and reserve funds. Non-grant modalities were considered most appropriate where projects were considered potentially economic, but where there might be lack of local experience, environmental uncertainties, or

19 Joint Summary of the Chairs, GEF Council Meeting, October 8-10, 1996, GEF/C.8/3, 10(d).

20 Funds and Trust Funds, GEF/C.12/Inf.5.

21 http://www.thegef.org/gef/sites/thegef.org/files/documents/C.23.11_Principles_for_Engaging_the_Private_Sector_FINAL.pdf, p.2

22 GEF/C.13/Inf.5

23 http://www.thegef.org/gef/sites/thegef.org/files/documents/C.23.11_Principles_for_Engaging_the_Private_Sector_FINAL.pdf p.2

24 http://www.thegef.org/gef/sites/thegef.org/files/documents/C.22.Inf_.6_Review_of_GEF_s_Engagement_with_Private_Sector_FINAL.pdf, p.6

25GEF/C.22/Inf.6 2003 p9

other impediments. These modalities were considered to increase the cost-effectiveness of GEF resources by reducing initial outlays, induce higher financial discipline and creating a potential for repayment on the investment.

- Alternative bankable feasibility studies would be devised in situations where potential investors lacked information about alternatives to conventional practice that could provide global environmental benefits at comparable or even lower costs. The bankable study would be financed by GEF, and made available to private sector financiers or other private sector partners for project funding.
- Progressive partnerships meant direct collaboration between GEF and a company or business association, with sharing of risks and project costs. The purpose would be to create a commercial scale demonstration of innovative approaches.

65. Several examples of evaluative evidence of the strategy and importance of GEF's efforts to remove barriers using non-grant instruments are available from the historical portfolio. For example, the terminal evaluation report of the Sri Lanka energy project (2003) states "The credit program component has been central to the design of the project being the main channel to encourage private sector provision of energy services. As lack of access to long-term financing was the key barrier to private sector investments, the credit program design was appropriately targeted at meeting project objectives."[26] . However, not all engagements meet with equal success as exemplified in the case study below (Box 3) concerning GEF's support to SMEs using non-grant financing and technical assistance to facilitate economic incentives for biodiversity conservation.

66. The use of non-grant instruments by Agencies within a project may result in credit guarantees, revolving funds, equity investments, or loans to local entities. These relationships are always between a GEF Agency, its partners, and the beneficiaries. A review of the approximately 80 projects using a non-grant instrument reveals that the most common type used by the Agencies is a revolving fund, in which GEF grant funding is provided to local financial institutions for them to forward invest, with no expectation of reflow to the GEF Trust Fund.

Box 3: Eco Enterprise Fund- GEF ID 1571, Agency: WB/IFC, GEF Grant 1,000,000, Co financing 9,000,000

This was a nine year project that started in 2002. GEF funds provided a one million dollar grant to finance operational costs and technical assistance activities for the Fund's investees. EcoEnterprise Fund was a pioneer in the industry of environment funds, particularly in the area of biodiversity. It used the tools and principles of venture capital to support biodiversity conservation and social development goals, targeting companies with business models that would deliver benefits in a triple-bottom-line. The Fund financed 23 SMEs in 10 countries for a total value of $6.3 million, slightly short of the targetted 30 SMEs. The SMEs were able to receive co-investment from other financial services providers motivated by the Fund's involvement by (leverage) $36 million, and later (after the Fund exited) received follow-up financing in excess of $90 million. Due to their their location around High Conservation Value Areas, the companies contributed to biodiversity conservation by sustainably managing and protecting 535,454 Hectares of land.

A financial review of the performance of the Fund commissioned by World Bank/IFC delivered the following recommendations for future similar funds: (a) The use of senior debt to invest in high risk start-ups limits the

26Sri Lanka Energy Services Delivery Project, World Bank, 2003, p3 (GEFID #104– Climate Change)

potential returns from good investments, and provides only limited downside protection for bad investments. (b) The quality of the entrepreneurs is a key determinant of the investment's eventual failure or success. And (c) Larger deals make more sense from the ease and cost effectiveness of closing the transaction and utilizing the Fund's resources[27].

3.4 More Engagement, More Tools-GEF 3 (2002-2006)

67. At its May meeting in 2002, the GEF Council requested the Secretariat, in consultation with the implementing Agencies, to prepare a Private Sector Strategy, for review and approval by the Council. The GEF Monitoring and Evaluation Office presented a review of instruments and approaches employed in engaging the private sector, assessing results and drawing lessons from the experience, as a prelude to the preparation of the strategy. In 2004 it was recognized that the objectives for private sector engagement would be dependent upon the manner and definition of engagement. It was necessary to clarify what "engagement" actually refers to, and there are several different ways in which GEF can be understood to "engage" the private sector."[28] Engaging the private sector according to the definition could mean any or all of the following:

- *Indirect engagement*. Creating market conditions in recipient countries that – by their very nature -- will promote the activities of certain categories of private firm (e.g., renewable energy firms that are able to take advantage of the outputs of a GEF-funded barrier-removal project -- outputs such as a more equitable energy pricing regime, publicly available information on renewable energy resources, and agreed standards for industrial inputs and renewable energy equipment);
- *Direct engagement*. Treating private firms as eligible project proponents, or direct beneficiaries (e.g., renewable energy firms that seek incremental cost financing to cover increased costs of their own operations in manufacturing competitive renewable energy equipment);
- *Procurement*. Providing private firms with opportunities for procurement in GEF projects (e.g., renewable energy firms which can bid to supply equipment for a GEF-supported rural lighting project proposed by a local authority).

68. The objective for engaging the private sector was that it is a powerful way to achieve global environmental benefits in a sustainable and cost-effective manner. The indicators for success at the impact level with the same indicators for engaging the public sector, i.e. concerning global environmental benefits in the focal areas.

69. To the extent that the private sector is instrumental to achieve global environmental benefits in the focal areas, there would be a need for goals and corresponding indicators for: (a) Bringing about policies and frameworks conducive to private sector approaches to the provision of global environmental benefits; (b) Creating sustainable markets for global environmental goods by identifying, demonstrating, replicating, and mainstreaming innovative private sector

27 Terminal Evaluation Report GEF 1571, IFC, p1, 2010 (GEFID 1571 – Biodiversity)

28 GEF/C.23/11 Principles for Engaging the Private Sector 2004 p3

approaches;(c) Mobilizing private capital that will share the financial risk with GEF of providing global environmental benefits; and (d) Accessing and transferring innovative technology.[29]

70. For these different forms of engagement, GEF had a number of tools at its disposal and were shaped into the following modalities:[30]

- *Communications*. To promote greater opportunities for procurement it can develop, as part of its on-going corporate communications strategy, an information kit on how to work with the GEF and its partner agencies. It can also create a web-based project tracking system both to advertise procurement opportunities and to provide information about the stages of project processing for all interested parties, including the private sector.
- *Projects*. To ensure that all GEF projects (and not just those that are categorized as "private sector" projects) help to create and maintain sustainable markets and advance innovation in accordance with these principles, the *Project Review Criteria* can be amended. In streamlining the project cycle, special attention would be given to the requirements of any private companies that need to be directly engaged so that GEF can increase the speed and predictability of its decisions.
- *Partnerships*. To promote policy frameworks conducive to private sector approaches and to help the creation of, entry to, and transformation of relevant markets, GEF would develop specific strategies. These would be focused on particular sectors and markets and be selective about the private sector and government partners to be engaged.
- *Dialogue*. Dialogue with relevant and motivated industry groups will also be able to bring about changes in corporate strategies. Although this would be largely a non-project activity, clear goals and indicators would be developed to measure how instrumental GEF had been in bringing about any relevant industry or corporate changes.

71. The first of the following case studies is an example of a program focused on increasing access to local financing sources for energy efficiency by direct engagement with Chinese financial intermediaries and utilities. The second case study exemplifies GEF's continuing role in the area of indirect engagement *vis a vis* policy and institutional barriers to create a better regulatory environment for commercially viable wind initiatives in Kazakhstan. Overall, GEF has contributed to approximately 60 engagements with countries on creating an enabling regulatory environment for renewable energies[31]. The third case study again involved a direct partnership with the Kenya Electricity Generating Company Ltd. to enable the development of a technology allowing more exact exploration of geothermal reservoirs.

29 http://www.thegef.org/gef/sites/thegef.org/files/documents/C.23.11_Principles_for_Engaging_the_Private_Sector_FINAL.pdf, p.5

30GEF/C.23/11 Principles for Engaging the Private Sector 2004 p6

31 Key Informant interviews with GEF Secretariat staff May-June 2013

Box 4: China Utility-Based Energy Efficiency Finance Program (CHUEE) - GEF ID 2624, Agency IFC, GEF Grant 16,500,000, Co financing 130,400,000

The main objective of the China Utility-Based Energy Efficiency Finance Program (CHUEE) was to increase overall investments in energy efficiency. To do so, the program put two mechanisms in place: a guarantee mechanism, and technical assistance for finance partners, ESCOs, and end-users. The program further involved Market outreach through information dissemination.

The first round of the scheme involved a USD 15 million fund from the GEF to guarantee the first loss under the loan facilities and to provide the technical training. This in turn enabled the IFC to provide guarantee facilities for over USD 215 million to three main Chinese banks: the Industrial and Commercial Bank of China (ICBC), the Shanghai Pudong Development Bank (SPDB), and the Bank of Beijing (BoB) using the loan guarantee program and technical assistance. Although originally designed as a utilities cooperation program, the scheme evolved into a risk guarantee mechanism, as this was outlined as the main financing gap. This program was consistent with the GEF strategic priorities for climate change: Increased Access to Local Sources of Financing for Renewable Energy and Energy Efficiency and Transformation of Markets for High Volume Products and Processes.

The ongoing Project is now in its third phase. In 2010 the Independent Evaluation Group of the World Bank undertook a review of the project and found the overall impact of the program consisted of GHG reduction and private benefits generated by projects that would not have happened without the program, plus non quantifiable benefits related to demonstration and spillover effects. The latter appear to be emerging—according to results of the IEG survey on the impact of CHUEE. The evaluation reports the program is well known in China, and there is interest among banks to learn from its approaches to the end users—but are hard to estimate. The real quantifiable impacts from the guaranteed loans are estimated at $384 million over a 10-year period since inception of the program. It is possible that the impact is underestimated—more than 68 percent of borrowers indicated in the IEG survey that without the program, they would still have implemented their energy efficiency projects but on a smaller scale or over a longer time frame. The critical factors that affect the magnitude of the benefits are the program's additionality at the bank level, banks' additionality with end users, the size of average CO2 emission reduction per project, and the prices of CO2 and coal (for the energy savings calculations) [32]

Box 5: Wind Power Market Development Initiative - GEF ID 783, Agency UNDP, GEF Grant 2,550,000, Co financing 4,710,000

The development objective of the project was to reduce GHG emissions by facilitating the sustainable development of the wind energy market and to remove the existing barriers to the grid connected wind energy production in Kazakhstan. The barriers identified fell into three broad categories: 1. Awareness information and capacity barriers, 2. Financial barriers and low electricity prices and 3. Policy and institutional barriers.

The project laid the foundation for of an efficient regulatory framework for the development of the wind energy sector and relevant institutional capacity for efficient local implementation. It also expanded the access to information on regulatory framework and other conditions in Kazakhstan for development of commercially feasible investment projects and their funding structure. Thirdly, it resulted in financial decisions and commencement of construction of the first large-scale wind farm in Kazakhstan. One of the results of this effort was the Kazakhstan Wind Atlas published online (www.atlas.windenergy.kz).

The Atlas gives long-term average wind speeds for much of the country. Wind monitoring was conducted in 15 perspective sites and feasibility studies were prepared to facilitate investment decisions. [33] In May 2013, it was announced that Kazakhstan will be getting its first ever wind power plant. To be located in the Akmola region, the 45-megawatt wind facility will have the capacity to generate 172.2 kilowatt-hours of clean power annually. The Eurasian Development Bank and First Wind Power Station LLP (from the Samruk Energy group of companies) will work together to support the period to support the development of the wind project.

32 Assessing the Impact of IFC's China Utility Based Energy Efficiency Finance Program. Independent Evaluation Group. World Bank. 2010

33. Terminal Evaluation: Kazakhstan Wind Power Market Development Initiative.

www.thegef.org/gef/sites/thegef.org/files/gef_prj_docs/GEFProjectDocuments/M&E/TER/FY2011/UNDP/783/125_CCM_Kazak_Wind_TE.pdf p4 (GEFID #738)

Box 6: Joint Geophysical Imaging (JGI) Methodology for Geothermal Reservoir Assessment, GEF ID 1780, Agency UNEP, GEF Grant 979,059, Co financing 1,754,260

Implemented by UNEP and active between July 2002 and June 2008, the Joint Geophysical Imaging (JGI) for Geothermal Reservoir Assessment project received a GEF grant of US$979,059, an additional US$1.22 million from partner Kenya Electricity Generating Company Ltd. (KenGen) and additional cofinancing of US$1.75 million for a total budget of US$2.73 million. The JGI project objective was to generate methods to increase the efficiency of geophysical exploration, thereby reducing the upfront costs of producing this renewable energy and thus increasing its production and reducing carbon dioxide emissions. The project activities centered on:

- *Capacity building through training of KenGen scientists through work-exchange programs as well as studies with second project partner, Duke University and*
- *Design and test of JGI instrument pool of portable equipment - along with laboratory and field validation in Kenya and abroad.*

The Terminal Evaluation was completed in January 2009[34]. In October 2011, the GEF Evaluation Office (GEF EO) undertook to verify information in the terminal evaluation as well as assess the project's progress to beneficial impact. The GEF Evaluation Office was able to independently verify the following project results to date:

- *The JGI-based geophysical exploration probe is now an international standard for mapping methodology and has led to cheaper geothermal kilowatts per hour*
- *Development of equipment now used extensively in Kenya for exploration and other African countries (Rwanda, Ethiopia, Zambia, Comoros) as well as Turkey, Iceland and other areas with geothermal resources*
- *Scaling up of the project by a newly national para-statal entity, the Kenya Geothermal Development Company (GDC)*
- *Capacity sharing by JGI-trained KenGen scientists and technicians*
- *Drilling of additional geothermal wells has taken place*
- *Continued commitment from Kenyan government to the geothermal energy development with 30 percent of the country's electrical power expected to come from geothermal sources.*

3.5 Partnerships and Platforms - GEF 4 (2006-2010)

72. With the introduction of the Resource Allocation Framework (RAF)[35], a system for allocating GEF resources to recipient countries, the GEF Secretariat anticipated an increased country ownership in allocating GEF resources. Pre-empting and reacting to these changes, the GEF began to review its approach to the private sector.

73. Partly to mitigate the risk of reduced private-sector involvement in the GEF, the GEF proposed a Public-Private Partnership Fund in 2005, and set aside $50 million outside the RAF, 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. This was in the context of the "GEF Strategy to Enhance Engagement with the Private Sector" (GEF 2005c). In 2006, a new strategy to enhance engagement with the private sector was finalized considering the newly adopted RAF[36].

34 Terminal Evaluation Report GEF 1780, UNDP, p4, 2009 (GEFID #1780)

35 Under RAF, applicable from 2006-2010, resources were allocated to countries based on their potential to generate global environmental benefits and their capacity, policies and practices to successfully implement GEF projects http://www.thegef.org/gef/RAF

36 http://www.thegef.org/gef/sites/thegef.org/files/documents/C.27.Inf_.8.Rev_.1%20RAF.pdf

74. The 2006 *GEF Strategy to Enhance Engagement with the Private Sector* identified six rationales for seeking private sector engagement: (a) replication; (b) sustainability of global environmental benefits; (c) leveraging human, technological and financial resources; (d) influence on policy and regulation; (e) development and dissemination of technological solutions to environmental problems; and (f) acceleration of research and development.

75. The instruments envisioned in 2006 to achieve this engagement were[37]:

- GEF Public/Private Sector Partnership Fund (Earth Fund),
- Strategic Use of Non-grant/Risk Mitigation Instruments,
- Knowledge Management Tools.

76. The GEF Earth Fund aimed to facilitate engagement with the private sector to promote projects, technologies, and business models that would contribute to the protection of the global environment.[38] Based on interviews with key informants, the introduction of the RAF made it very difficult for IFC to accommodate private-sector requirements for rapid processing speed with GEF approval procedures. The delegated authority within the IFC Earth Fund helped the organization to use GEF funds to finance private sector projects together with co-financing from IFC, which could not have taken place if the projects had to go through GEF project cycle.

77. An EO led evaluation concluded in 2010 that the creation of the Earth Fund did not appear to have been as successful as anticipated due to design weaknesses, a lack of partnership with the private sector at the Platform level, and a slower than expected pace of deployment (Earth Fund evaluation) As a result the Public-Private Partnership program was re-designed in 2011 for GEF-5 and a project-by-project CEO endorsement requirement was re-introduced." [39]. This effectively ended IFC's involvement, an Agency with the longest history of private sector experience, in new engagements with GEF support for GEF-5.

78. In 2012, Ernst & Young undertook a Mid-Term Review of the Earth Fund and concluded that at its mid-term, IFC had met its goal of committing 30% of the IFC-Earth Fund platform within the first 3 years of its life and surpassed the 1:3 leverage goal, achieving 1:7.74. The 15 million from the Earth Fund had mobilized 116 million from IFC commercial and private sector financing[40].

79. The case studies below illustrate project examples from the Earth Fund and highlight GEF's role in attempts at market change in the cocoa industry and GEF's continuing activities in accelerating the development of energy efficient lighting. Both projects are active.

37 Summary of Document GEF/C.28/14 GEF Strategy to Enhance Engagement with the Private Sector 2006 p7

38 The World Bank Group's Partnership with the Global Environment Facility, 2013, p. 12

39 The World Bank Group's Partnership with the Global Environment Facility, 2013, p. xxv

40 IFC Mid-Term Review of the IFC Earth Fund Platform. June 2012 Ernst & Young.

Box 7: Greening the Cocoa Industry Market Transformation, GEF ID 4070, Agency UNEP, GEF Grant 5,000,000, Co financing 15,000,000

This project's objective is to change production and business practices in major cocoa producing countries and cocoa companies, such that they conserve biodiversity in cocoa production landscapes, provide greater long term stability to the cocoa and chocolate industry and increase income for smallholders. Rainforest Alliance (RA) promotes the standard and its accompanying certification scheme, in alignment with market demand. Another objective of the project is to harness the growing private sector commitment to sustainable practices and form a robust Public Private Partnership with two leading chocolate manufacturers, Mars Inc. and Kraft Foods, and several major cocoa trading and processing companies. In line with GEF's objective of accelerating the emergence and replication of projects that will generate global environmental benefits in biodiversity in a streamlined and cost effective manner, this project aims to bring 10% of the world's cocoa supply (350,000 tons, farmed on 750,000 hectares) into more sustainable production systems that will measurably improve biodiversity conservation in tropical ecosystems.[41] In April 2009, Mars committed publicly to certifying all its cocoa and to sourcing 100,000 tons certified by Rainforest Alliance.

***Box 8**: En. Lighten, GEF ID 4421, Agency UNEP, GEF Grant 5,000,000, Co financing 15,000,000*

The UNEP/GEF en.lighten initiative is a public/private partnership between the UNEP, National Lighting Test Centre (NLTC) in Beijing, China, OSRAM and Philips Lighting and was established in 2009 to accelerate a global market transformation to environmentally sustainable, energy efficient lighting technologies, as well as to develop strategies to phase-out inefficient incandescent lamps to reduce CO2 emissions and the release of mercury from fossil fuel combustion[42]. The en.lighten initiative serves as a platform to build synergies among international stakeholders; identify global best practices and share this knowledge and information; create policy and regulatory frameworks; address technical and quality issues; and encourage countries to develop National and/or Regional Efficient Lighting Strategies. As of September 2013, 50 countries spanning Africa, Asia, Europe, Latin America, the Caribbean and the Middle East, have joined the en.lighten Global Efficient Lighting Partnership Programme and agreed to the phase-out of inefficient incandescent lamps by the end of 2016. The National Lighting Test Centre of China became a Partner in 2011. The most recent partner is the Australian Agency for International Development (AusAID), through the Department of Resources, Energy and Tourism of Australia to support developing countries in South-East Asia.

3.6 Technology and Innovation Period - GEF 5 (2010-2014):

80. Subsequent to an evaluation of the Earth Fund, the Council requested the Secretariat to develop a new strategy to engage with the private sector in GEF-5. In the first years of GEF-5, significant efforts were undertaken to re-define a strategy for enhancing public-private partnerships.[43] In May 2011, a new strategy paper was developed to enhance Private Sector engagement. This was further developed in November 2011.

41 Earth Trust Fund PIF Greening the Cocoa Industry, UNEP, 2010 (GEFID #4070 - Biodiversity)

42 http://www.thegef.org/gef/sites/thegef.org/files/gef_prj_docs/GEFProjectDocuments/Climate%20Change/Global%20-%20(4421)%20-%20The%20GEF%20Earth%20Fund-%20Global%20Market%20Transformation%20f/06-10-09%20%20Request%20for%20CEO%20Endorsement%20Earth%20Fund%20GMTEL.pdf p.7

43 GEF/C.41/09/Revised strategy, p.3

81. The revised strategy of November 2011 proposed two objectives:

- Supporting greater access to financing for private sector companies pursuing innovative technologies and business models that yield benefits consistent with GEF focal area objectives;
- Stimulating the development, dissemination and implementation of new technologies.

82. The strategy included three modalities:

- Establishing Public Private Partnership Programs with multilateral development banks to promote use of non-grant instruments that generate reflows;
- Incentivizing use of non-grant instruments that generate reflows within STAR allocation or non-STAR focal area projects through a matching program; and
- Encouraging innovation in small and medium enterprises through a competition and incubation pilot.

83. This strategy prioritizes the expanded use of non-grant instruments as a key tool available to the GEF for building public private partnerships and attracting greater private sector financing, resulting in greater investment in projects for generation and diffusion of technologies and practices that result in increased global environmental benefits.[44]

84. In interviews with the evaluation team, Agency staff emphasized the role that GEF funding has played in projects related to national policy development, innovation, and the initiation of new business lines in the environment sector. For example, IFC staff considers the "unique color, i.e. flexibility" of GEF finance, when blended with IFC's and other partners (including private sector) to have made crucial contributions to innovative and risk-sharing approaches within the Corporation when providing incentives for piloting and demonstration of new technologies and approaches, particularly in climate change and biodiversity.

85. The IADB acknowledged that a GEF grant was extremely important during early stage work of the Clean Technology Fund (see Box 9 below). The GEF grant enabled the promoters to conduct in-depth analysis of companies/technology/risks, prepare a very strong financial plan and business plan and perform in-depth environmental assessment. Other interviewees also stated that GEF had a comparative advantage in testing innovative ideas and approaches for scale up or in expanding the reach of approaches tested.[45]

86. GEF support to innovations in the Biodiversity focal area were propelled with the signing of the Nagoya Protocol on Access and Benefits Sharing (ABS) at the 10th meeting of the CBD. GEF funds will support engagement with industries such as cosmetics, agriculture and pharmaceuticals through the *Nagoya Protocol Implementation Fund (NPIF)* for the conservation and sustainable use of biodiversity. The first project is an effort in Panama (GEF ID:4780) to prospect for nature-based

44 GEF/C41/09/Rev_01/Revised strategy for enhancing private sector engagement, p. 3

45 Key informant interviews. March-June 2013.

products of interest to the pharmaceutical and agro-chemical industries[46]. The recent progress report on the NPIF indicates approval to 3 country-based projects and 1 regional project and expects to engage private companies.[47]

87. The *Clean Tech Fund* case study below illustrates an example of one of the first PPP programs to access the GEF5 private sector set-aside to overcome market barriers.

Box 9: Clean Tech Fund, GEF ID 4959, Agency IADB, GEF Grant 15,000,000 Co financing 266,250,000

This program will make targeted equity investments in funds to promote energy efficiency, renewable energy, and bio-diversity in Latin America. The investments will contribute to energy savings, new renewable energy supply, reduction of greenhouse gas (GHG) emissions, preservation of natural resources, protection of bio-diversity, and development of sustainable business models. Climate change and bio-diversity focal areas will be addressed. The IDB has identified three leading funds for negotiation. Each fund has identified a pipeline of investments in Latin America that will address selected program goals and has already attracted significant private sector investment interest. The GEF funding will be used along with IDB funding and other investor funding to help projects get to close and begin implementation. GEF funding will earn substantial returns consistent with other partners, with returns expected to range from 13% up to 20%[48].

4 Sustainability Trends in the Private Sector

88. The role of business and industry in the promotion of sustainable development has increased over time and continues to grow. New and expanded corporate sustainability initiatives and growth of sustainable enterprises attest to the growing role of the private sector. Innovation has also occurred in the approaches and instruments available to the designers of projects and platforms aimed at global environmental benefits.

89. As one input, this study reviewed the status and trends apparent in the interaction of the private sector with environmental issues, the drivers for such engagement, major initiatives and private sector contributions towards sustainable development. The analysis provides a past, as well as emerging context within which GEF engagement with the private sector has taken place.

90. Many GEF recipient countries are endowed with natural resource assets. Depletion of ecosystem goods and services, such as damages from climate change or land conversion, generates economic, social and environmental externalities. Growing business demand for natural capital, and falling supply due to environmental degradation and events such as drought, are contributing to natural resource constraints, including water scarcity. Over the past two decades, the private sector has played an important role in demonstrating its ability to both drive unsustainable and sustainable development of these services and assets.

46 The project will work on transfer of technology with assistance of private sector partners, including the Eisai Inc, Dow AgroScience, and Centauri Technology Corporation. This joint-venture also involves the Government of Panama.

47 GEF/C.45/Inf.07. October 8, 2013

48 http://www.thegef.org/gef/project_detail?projID=4959

91. Government policies to address environmental degradation include regulations and market-based instruments which may internalize natural capital costs and lower the profitability of polluting activities. In several instances, however, over the past twenty years, governments have increasingly moved to a more enabling role, by creating a framework of policies and institutions that encourages the private sector to be the engine of growth. As presented earlier in the historical analysis, GEF has been a driving factor in this arena.

92. Going forward, the *Global Trends in Renewable Energy Investment 2013*[49] report points to a shift towards regional and local policies. Despite a slowdown in national level policy support in 2012, local governments made increasing use of their authority to regulate, make expenditure and procurement decisions, provide for and ease the financing of renewable energy projects, and influence advocacy and information sharing.

93. The same report names several cities as working with their national governments to advance renewable energy, a phenomenon seen in India, Brazil, China, Indonesia, India, Japan and South Africa. In the EU and USA, cities have also begun organizing themselves from the bottom up. Europe's Covenant of Mayors has seen a significant increase in signatories committing to a 20% CO2 reduction target and plans for climate mitigations, energy efficiency, and renewable energy. In Germany, cities are assessing the impact of the "Energiewende" (energy transition policy) and adopting measures to address the variability of solar and wind power and to shift consumption patterns.

94. The United Nations Secretary-General's High-Level Advisory Group on Climate Change Financing (AGF) set out a schema for understanding the different types of public interventions which can stimulate private sector investment in the area of climate change adaptation and mitigation[50]. A matrix of barriers and instruments identified no less than 12 types of barriers (organized under the categories of "inadequate returns", "risk management", and "inadequate access to finance") and 38 public sector interventions designed to address those barriers. The full UN Report[51] of the Advisory Group states that a number of key environmental trends are showing deterioration and the anticipated costs of mitigating actions are well beyond the capacity of public institutions to address.

95. These same public institutions are often also involved in government subsidies to fuel, water and other externalities for energy, agriculture and transportation aimed at promoting 'social good' and protecting the interests of the poor especially in developing countries. While on one hand subsidies can be beneficial, such as those aimed at promoting cleaner and more efficient technologies and/or improving poor households' access to modern forms of energy, the first report of OPS5 discusses GEF in a changing world where harmful subsidies made to unsustainable practices are

49 **T**he Frankfurt School – UNEP Centre/BNEF report (based on data from Bloomberg New Energy Finance) has become the standard reference for global renewable energy investment figures.

50 United Nations. 2010 Work Stream 7 Paper: Public Interventions to Stimulate Private Investment in Adaptation and Mitigation. Secretary-General's High-Level Advisory Group on Climate Change Financing (AGF). pp. 3, 11-12.

51 United Nations. 2010. Report of the Secretary-General's High-Level Advisory Group on Climate Change Financing (AGF).

currently 10 times as high as the funds needed for a sustainable future. The World Bank has compiled credible estimates of subsidies and transfers that support the (over) use of natural capital, and concludes that such support totals $1.0 to $1.2 trillion annually, including fossil fuel subsidies, water subsidies, fishery subsidies, and transfers to agriculture.

96. Such subsidies can also end up covering operating costs normally borne by the private sector in manufacturing; production and other industrial process as well giving them increased access to energy sources at much cheaper prices.[52] As a result, energy consumption can be boosted, particularly in developed countries, aggravating emissions and worsening an evolving environmental crisis[53].

97. A report by the IMF discusses lessons from energy subsidies, particularly the wide-ranging economic consequences of energy subsidies including distorted resource allocation by encouraging excessive energy consumption, artificially promoting capital-intensive industries, reducing incentives for investment in renewable energy and accelerating the depletion of natural resources and their overall ability to reinforce inequality.[54]

98. Some countries have already taken steps in assessing their subsidies programs in terms of their environmental, social and economic impacts and in reforming their harmful policies. In 2008, UNEP published *Reforming Energy Subsidies: Opportunities to Contribute to the Climate Change Agenda*[55], a report using country case studies to elaborate on the issues and challenges in removing or modifying subsidies on energy that undermine the pursuit of sustainable development.

99. Despite developments such as a CO2 emissions scheme, the increased use of biofuels and the introduction of electrical cars, GHG emissions worldwide are growing at an ever increasing rate. The OECD estimates that without more ambitious policies than those in force today, GHG emissions will increase by another 50% by 2050.[56]

100. The state of global biodiversity is equally if not more perilous. In 2005 the Millennium Ecosystem Assessment by UNEP concluded that an unprecedented mass extinction of life on Earth is occurring and that this episode of species extinction is greater than anything the world has experienced for the past 65 million years and that this mass extinction is due, in large measure, to humankind's unsustainable methods of production and consumption, including the destruction of habitats, expanding cities, pollution, deforestation, global warming and the introduction of "invasive species".

52 Barnes and Halpern, Energy subsidies for the world's poor, pg. 60, http://www.worldbank.org/html/fpd/esmap/energy_report2000/ch7.pdf

53 Environmental harm of hidden subsidies: global warming and acidification. van Beers C, van den Bergh JC. Delft University of Technology. The Netherlands Ambio. 2009 Sep;38(6):339-41.

54 IMF Report, Energy Subsidy Reform: Lessons and Implications. January 2013.

55 United Nations Environment Programme. Division of Technology, Industry and Economics

56 The OECD Environmental Outlook to 2050. OECD. Key Findings on Climate Change (2012).

101. The 2012 *State of the World* reports no differently[57]. Biodiversity is still being lost on all scales, from microorganisms to large mammals and at rapid rates. The loss of biodiversity has not received the same amount of attention as climate change, in part because there is less scientific knowledge and consensus on the subject, but not because it is a less urgent threat to life on Earth.

102. Environmental risks and vulnerabilities are highest in developing country economies due to poverty, bad implementation and/or lack of appropriate environmental policies and governance concerns. An important part of the green growth agenda is to redirect policy and funding flows toward economic growth that would respond to climate change, biodiversity loss, land degradation, and other global environmental problems. Interestingly, the recently established Global Green Growth Institute (GGGI) in South Korea has launched a Public-Private Cooperation (PPC) program[58] designed to facilitate the engagement of the resources and expertise of the private sector, both domestically and internationally, in the implementation of green growth strategies in its developing partner countries.

103. GGGI has two specific two specific roles in mind: 1) to connect developing countries or provinces that have developed rigorous green growth plans with potential providers of capital and technology by rendering these economic plans into specific investment plans in key sectors; and 2) elevate the importance political and business leaders attach to the role of public-private cooperation in strengthening incentives for the internalization of environmental externalities in core business strategies.

104. Responsible engagement in sustainable practices by the private sector will go a long way to mitigating the already harmful effects of prolonged environmental degradation and helping achieve shared prosperity. This chapter focuses on five environmental sustainability trends within pioneering companies, which illustrate the increasing innovation within the private sector for environmental sustainability. These trends are interrelated and together signal a gradual process (see Figure 1).

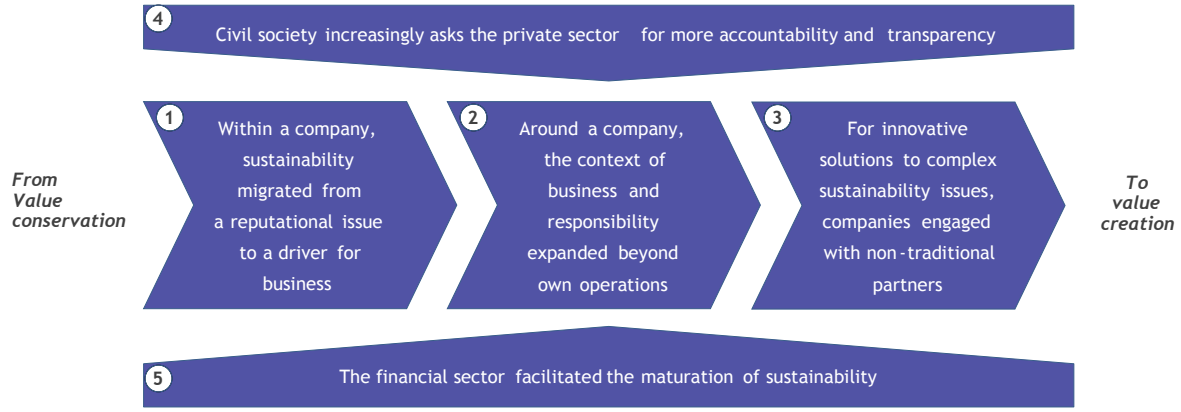
105. The five trends are:

1. Migration of sustainability from a reputational issue to a driver for business
2. Expansion of environmental sustainability beyond own operations
3. Growing engagement with non-traditional partners for sustainability solutions
4. Increased demand for more accountability and transparency by civil society
5. Increased role of the financial sector in facilitating sustainability

57 State of the World 2012: Moving Toward Sustainable Prosperity. The Worldwatch Institute.

58 http://gggi.org/activities/public-private-cooperation/overview/

Figure 1: Inter-relationship between Private Sector Sustainability Trends



106. This chapter analyses these trends by addressing three core elements. First, it describes why and how this trend was developed. Secondly, it provides several examples of successful initiatives and best practices. Thirdly, it addresses some of the current challenges for this trend to further develop.

107. Despite evolving and promising sustainability trends, there is a long way to go before these sustainability trends will become general private sector trends. This chapter, however, demonstrate that sustainability is increasingly embedded in corporate thinking, as companies face growing risks but also opportunities in sustainability. It also shows the crucial role of stakeholders, such as civil society: business schools or financial institutions, in this development. The GEF is also one of those important stakeholders.

4.1 Migration of Sustainability from a Reputational Issue to Driver for Business

108. In the 1990s, companies generally regarded environmental sustainability as a necessary expense rather than a strategic goal. It was separated from profit and usually a reaction to external pressure.[59] Through campaigns and boycotts, the public increasingly expressed its disagreement with certain negative environmental and social impacts of companies. These actions forced companies to respond, especially consumer-facing brands (i.e. Nike, Shell). When companies initiated environmental sustainability actions without external pressure, it was based on philanthropic ideals.

109. Later when leading companies began to structurally manage environmental and social impacts, they experienced rewards from their markets. Front-runners acknowledged the commercial power of sustainability and took a strategic approach to making it a core element of business. Business schools and management experts also started exploring the business case of sustainability and integrated the topic into business and finance curricula. This created a flow of management strategies inspired by the achievements of frontrunners in sustainable business. Successful management

59 Kramer, M., Porter, M.(2006), Strategy & Society - The Link Between Competitive Advantage and Corporate Social Responsibility, in Harvard Business Review December 2006 http://www.mcdonough.com/speaking-writing/cradle-to-cradle

strategies, which showed the benefits of sustainability such as Bottom of the Pyramid (BoP) and Cradle-to-Cradle (C2C), were embraced by the private sector.[60]

110. General Electric and Osram are examples of companies for whom sustainability became a driver for business. Realizing that constrained resources would become a key risk for the company, General Electric launched the Ecomagination program. The program led to 142 different green products and total sales of $105 billion to date.[61]

111. Lighting company Osram, with support from a GEF grant (see Box 8), saw an opportunity in serving the BoP. Given the high kerosene expenses and poor grid access for consumers in developing countries, Osram began producing solar-based, off-grid products. Since the successful launch of its off-grid lighting program called 'Umeme Kwa Wote'[62], Osram has further expanded its products and services to further serve the BoP market base.

112. The private sector also created platforms to cooperate, such as the World Business Council for Sustainable Development (WBCSD) and the UN Global Compact (UNGC). The WBSCD is a coalition of more than 200 leading corporations, set up in 1995 as a private sector initiative to contribute to business as well as to society and environment. WBCSD aims to find business solutions to sustainable challenges, share knowledge and advocate business positions on sustainability issues. The UNGC is a UN initiative launched in 2000 to encourage businesses worldwide to adopt sustainable policies, and to report on their implementation. The Compact is a principle-based framework for businesses, stating ten principles in the areas of human rights, labour, the environment and anti-corruption.

113. Furthermore, tools were developed to track the sustainability performance of companies. Launched in 1999, the Dow Jones Sustainability Index (DSJI) was the first benchmark that tracked companies in terms of economic, social and environmental criteria. By annually publishing a list of frontrunners in different sectors, the DJSI introduced a competitive edge to sustainability for listed companies. Sustainability indices and other financial mechanisms are discussed further under Trend 5.

114. Despite these positive developments, challenges remain. The increasing consumer and stakeholder pressure on those reputations mostly applied to the larger, visible brands, often business to client (B2C) companies. Business to business (B2B) companies with their less visible activities are not as affected by expectations of the public and are less active than B2C companies, while B2B companies often have a bigger impact.[63] Many companies seem to have difficulty to truly integrate sustainability in their business model and show a marginalized approach. And even for those companies who are acknowledged leaders for their sustainable business (e.g. Unilever), one may find unsustainable practices in their operations.[64]

60 Base of the Pyramid Protocol, http://www.bop-protocol.org/index.html

61 GE- Ecomagination, http://www.ecomagination.com/ar2011/index.html#!section=OverviewIntro

62 Osram – Umeme Kwa Wote, bit.ly/17PeSBl

63 B2B Companies, http://www.hbs.edu/faculty/Publication%20Files/12-035.pdf

64 Bill Wilkie , Playing the Big Game: Are We Branding for Sustainability? http://www.sustainablebrands.com/

115. Although some companies have developed sustainability strategies that really affect business, others developed strategies that were merely green wash propositions. An increasing number of companies integrate sustainability in their long term vision and mission but the majority include sustainability for short-term goals. Sustainability for many companies is a "nice to have or do" but not its main priority. Perceived higher risk and lower profit margins will probably enforce this idea.

116. In order to truly integrate sustainability in business models there will need to be some real pricing of externalities (CO2 emitted, clean water, used, discharges, etc.). The long term issues the world is facing regarding water and food supplies and economic activity influenced by climate change is perceived as imminent by some pioneering companies that are seeking solutions through the use of accounting principles to give better understanding of the implications of the loss of natural capital[65].

117. GEF's experiences with payments from ecosystem services could be interesting to regulators and companies undertaking a natural capital approach to a company's demand for natural resources and other ecosystem services[66]. As the issue becomes increasingly material to companies, it is expected that loss of natural capital will feature in corporate risk analyses and disclosures[67].

4.2 Expansion of Environmental Sustainability to Supply Chains

118. Production chains rapidly globalized over the past twenty years, connecting suppliers from emerging markets to Western companies. This led to a complex worldwide supply chains for companies, in which new environmental and social issues surfaced. The public increasingly demanded companies to take responsibility for impact in the entire supply chain[68], instead of just their own operations. Henceforth, the attention for supply chain management would no longer be an internal issue but also external and evolved to a reputational matter. An incident lower in the supply chain can easily be attributed to a larger corporation by the public.

119. Companies in many sectors are exposed to these natural and social capital risks, especially where margins and pricing power are low. Economy-wide, these risks are sufficiently large that the World Economic Forum cites 'water supply crises' and 'failure of climate change adaptation' along with several other environmental impacts among the most material risks facing the global economy[69].

120. To efficiently manage suppliers and to ensure compliance, standardized approaches developed across industries such as food and apparel, for example, in the form of sustainability certifications. Globally, industry-wide or company-wide

65 Is natural capital a material issue? An evaluation of the relevance of biodiversity and ecosystem services to accountancy professionals and the private sector

66 *Organizational Change for Natural Capital Management: Strategy and Implementation. R.Nidomolu, Ph.D. Founder& CEO, InnovaSTrat, Inc.* Natural Capital Series (2013)

67 Is natural capital a material issue? An evaluation of the relevance of biodiversity and ecosystem services to accountancy professionals and the private sector. KPMG, Fauna & Flora International and ACCA. Date unknown.

68 Companies started taking responsibility beyond their own operations through supply chain management Fairtrade International http://www.fairtrade.net/ , UTZ Certified https://www.utzcertified.org/ , Rainforest Alliance http://www.rainforest-alliance.org/

69 Global Risks 2013. Eighth Edition. An Initiative of the Risk Response Network. World Economic Forum 2013.

certification programmes stimulated companies to incentivize their suppliers to improve their sustainability practices through preferred supplier contracts and financing.

121. A well-known worldwide initiative is the World Fair Trade organization (WFTO).[70] Created in 1989, it is a global network with members applying the principles of fair trade to structures. In doing so, they promote sustainable development, justice and fair treatment of suppliers. The WFTO has over 450 members and operates in 75 countries. Another example of an industry-wide certification programme is the Forest Stewardship Council. (FSC). Founded in 1993, the FSC develops standards for sustainable forestry practices, ensures monitoring of certified operations and protects the FSC trademark. In September 2012, some 165 million hectares were certified to FSC's Principles and Criteria 80 countries.[71]

122. GEF support has made also made important contributions to this trend through grants to projects that integrate biodiversity in value chains. As described in Box 7, the *Greening the Cocoa Industry* partnership represents one such initiative. Similarly, the UNDP/GEF project *Biodiversity Conservation in Coffee: Transforming Productive Practices in the Coffee Sector by Increasing Market Demand for Certified Sustainable Coffee (2007-2013)* had as its overall goal to transform the way that the participating coffee companies source coffee by establishing new, environmentally and socially responsible ways of doing business.

123. This project was working with selected coffee companies to scale-up sales of Rainforest Alliance (RA)-certified coffee sourced from six identified countries in Latin America. At the end of the project period, it was anticipated that the participating companies will purchase 1-5 % of their total coffee supplies from RA-certified producers; this would represent at least triple the volume of current RA-certified coffee and a very significant increase in the total global volume of all certified coffee.

124. In the mid-term review of the project (2010), evaluators noted the total area of certified farms worldwide was 48% of the mid-term target and rates of growth in the volume of certified coffee sold were significantly lower than foreseen (at year 4, target was 40% for that year)[72]. A terminal evaluation for the project was expected to be completed in August 2013 but is not yet available for review.

125. These results speak to the challenges with sustainability standards. Amidst the advances there are also downsides; for example confusing the consumer are the number of initiatives that have expanded rapidly, with a current estimation of over 500 of such standards. While standard systems may have been effective in promoting improved corporate management practices, there is also critique regarding whether the practices would have occurred in the first place – i.e., Would it be better to

70 World Fair Trade Organization, http://www.wfto.com/index.php?option=com_content&task=view&id=890&Itemid=292

71 Forest Stewardship Council, https://ic.fsc.org/facts-figures.19.htm

72 Biodiversity Conservation in Coffee: Transforming Productive Practices in the Coffee Sector by Increasing Market Demand for Certified Sustainable Coffee. Mid-Term Evaluation Report. December 2010.

preserve the trees, than log a forest under FSC guidelines? Then there is the question of follow-up in tracking approved companies that could be operating contrary to the spirit of the eco-label.

126. Work in the sustainability standards area should be informed of emerging challenges with certified 'green' labels, which have been criticized as a marketing tool with instances of "watering down". Two of the most well-known standards from the Forest Stewardship Council[73] and the Marine Stewardship Council[74] have both faced allegations of the system certifying forests/fisheries despite evidence the ecosystem/fish are in trouble, or that the industries are harming the environment.

127. Among the emerging issues for certification systems that desire to bring about social and environmental change is the need for transparency in design of criteria and transparency in award and maintenance of certification[75]. Critics question whether certification really helps inform consumers, given there are too many labels, qualification criteria are unclear, potential lack of enforcement and little available evidence of downstream supply chain impact on working conditions, salaries and the environment.[76]

128. The question of impact is also largely one of perspective. This leaves room for companies or certification schemes to subjectively select parameters for impact measurement. To help standardize the landscape there are initiatives such as the Global Reporting Initiative (GRI), an independent institution whose mission is to develop and disseminate globally applicable sustainability reporting guidelines that help organizations to report on the economic, environmental, and social dimensions of their activities, products, and services.

129. GRI, with its sector-specific guidelines and indicators is now the most widely used sustainability reporting framework in the world and the number of sustainability reports continues to increase. The integration of sustainability (environmental, social and governance performance of a company) reporting with financial reporting is the next trend in this continuum[77], with organization such as Organizations such as the International Integrated Reporting Council (IIRC)[78] and the Sustainability Accounting

73 FSC has been monitored since its creation in 1993 by an independent watch institution (FSC-Watch, started by an FSC co-founder). For the past 20 years it has experienced criticisms, e.g. Trading in Credibility: The myth and reality of the Forest Stewardship Council (Rainforest Foundation, UK. 2002). Many of the FSC's challenges are due the tendency to look at each individual logging operation as a separate entity rather than cumulative effects on rainforest ecology.

74 On February 11th and 12th, 2013, NPR broadcast a three-part series focusing on the Marine Stewardship Council, its fisheries assessment and certification program, and seafood sustainability. NPR reported that the MSC certifies seafood that is good for the oceans environment, but some environmental groups argue that the label is misleading, and that as more retailers promise to sell only sustainable-labeled seafood, the program is certifying fisheries that don't deserve it. In September 2012 a joint independent review by WWF/Accenture found that MSC is the leading fisheries certification program in the world (*Smart Fishing Initiative. Comparison of Wild-Capture Fisheries Certification Scheme - Update*. 2012).

75 Sustainability Standards Systems: Change Theory and Emerging Issues: http://www.sustainabilitystandards101.org/

76 High Country News. Caveat emptor with eco-labels. Joseph Taylor. February 8, 2011.

77 'Integrating ESG into the Investment Process' by Remy Briand, Roger Urwin, Chin-Ping Chia, MSCI ESG Research Whitepaper 2011. http//www.msci.com/resources/research/articles/2011/Integrating_ESG_into_the_Investment_Process_Aug_2011.pdf

78 http://www.theiirc.org/

Standards Board (SASB)[79], are rising in prominence among companies and investors alike.

130. Environmental and social impact measurement is also available through IRIS, an initiative of the Global Impact Investing Network (GIIN)[80], a nonprofit organization working in the area of impact investing – i.e., investments into companies, organizations, and funds with the intention to generate measurable social and environmental impact alongside a financial return. The GIIN promotes impact measurement as a fundamental element of impact investing and offers its (International Integrated Reporting Initiative)IRIS metrics[81], an agreed upon set of metrics and database, reviewed with expert working groups and existing third-party standards, as a free public good to support more transparency, credibility and accountability in standard measurement practices across the impact investment market.

131. Despite these opportunities, indeed companies continue to ignore the ecological and social costs of their products (e.g. food and apparel) and for passing on this external cost to society. From the business perspective, a recent survey of the world's largest CEOs[82] revealed that even business leaders saw a plateau effect in sustainability due to lack of making link between sustainability and business value. As discussed in Section 4.1, several initiatives such as natural capital management and its focus on natural capital accounting have started to monetize the ecological and social cost of products and push for a fair pricing system that also includes external costs.

132. The True Price Initiative, founded in 2011, is also developing and testing an evaluation method to monetize social and ecological costs, at company and product level.[83] Amongst its partners are companies, governments and banks such as Akzo Nobel, Rabobank, FMO, Sustainable Trade Initiative, etc. The first company that placed a monetary value on the environmental impacts of its operations and supply chain is Puma. In 2011, the company introduced an environmental profit and loss account (EP&L). This approach helped Puma look at its value chain from a different perspective. The EP&L can serve as a tool to stimulate a shift in commerce, from generating profits with collateral damages to profits with collateral benefits.[84]

4.3 Civil Society Demands More Accountability and Transparency

133. In 1991, Shell was planning to sink oil platform Brent Spar in the open sea based on scientific reports stating deep sea disposal was the best option (also ecologically). Greenpeace did not accept Shell's decision and started a fierce media campaign creating public pressure. Although Shell was rationally right, Greenpeace won the

79 http://www.sasb.org/

80 http://www.thegiin.org/cgi-bin/iowa/home/index.html

81 http://iris.thegiin.org/about-iris

82 The UN Global Compact-Accenture CEO Study on Sustainability 2013

83 The True Price Initiative, http://www.thetrueprice.org/

84 Puma- Environmental Profit and Loss Account, http://about.puma.com/wpcontent/themes/aboutPUMA_theme/financial-report/pdf/EPL080212final.pdf

people's minds and managed to force Shell to onshore dismantling. The incident demonstrated the power of public pressure and started a new way of corporate thinking about the environment.[85]

134. As companies noticed they were appreciated for their sustainability programs, they started communicating their efforts to the public in sustainability reports. At the same time, the public and CSOs discovered these reports useful as a reference for a company's policy and a source to monitor progress of achievements. When rating agencies started using sustainability data for their research, sustainability reporting really took off.

135. Reporting standards (such as the Global Reporting Initiative discussed above) emerged in the early 2000s, enabling stakeholders, including investors, to understand and compare information provided by companies and to do peer-to-peer benchmarks. In the early 2010s, measures for environmental and social return of a company began to be collated by IRIS, mostly used for impact investing.

136. An example of a company with innovations in transparency is Patagonia. In 2008 the company launched the Patagonia Footprint Chronicles, a website that allows customers to trace the components of a product throughout the entire Patagonia supply chain. It provides a view into the entire supply chain with photos of factories, which categories of products are made for Patagonia, stats and factory demographics. Transparency about their supply chain, they believe, can help consumers make an informed choice.

137. As expected, CSOs continue to reveal misbehaviour of companies on the variety of topics considered under sustainability (e.g. taxation, land grabbing, and corruption).[86] Meanwhile, communication and transparency about corporate practices are increasingly important, as there is no way to hide in the current world of social media. The call for reporting and transparency from investors and CSOs may, however, have led to a situation where reporting has become a goal in itself. Given the focus on metrics, companies report on a wide array of topics, many of which are immaterial to them. Companies are overwhelmed by information requests from investors, funders and other organizations. This has increased the time spent on reporting and has made it into a costly exercise. Initiatives such as GRI were highly appreciated at first, but have become very comprehensive and without guidance towards prioritization. This focus on comprehensiveness instead of materiality can be demotivating and, even more importantly, take resources away from the field where they should be: innovation and action in sustainability.

138. As the reporting and data monitoring trend evolved, it has even created a new business in itself with rating agencies, consultancies, accountancies and communication experts specializing in sustainability reporting.[87] There are several external initiatives regarding impact measurement and reporting standards described

85 Total Transparency, http://global-influences.com/scientific/global-politics/total-transparency/

86 International Integrated Reporting Initiative (IRIS), http://iris.thegiin.org/

87 Reforming sustainability reporting, http://www.guardian.co.uk/sustainable-business/reforming-sustainability-reporting-pros-cons

herein. These initiatives are also important to GEF, as they may provide more insight as to how GEF and its partners measure and report impact, particularly *vis a vis* private sector engagement.

4.4 Growing Engagement with Non-Traditional Partners for Sustainability Solutions

139. In an increasingly complex and globalized world, governments, Civil Society Organizations (CSOs) and private sector realize their challenges cannot be solved without collaboration. To meet expectations regarding supply chain responsibility, the private sector must engage with issues that have been traditionally unfamiliar, such as ecological footprint and human rights. At the same time, governments and CSOs are opening up to alternative solutions for the societal and environmental issues they struggle with, such as education, health or utilities.

140. To adequately address these challenges, a trend for new forms of collaboration has been born between unexpected partners (governments, CSOs, foundations, private sector). In these collaborations, each partner brings its unique capability to the table in the effort to tackle the issue at stake. New collaborations also result in a fading distinction between the traditional roles of the various players.[88] This has resulted in situations where CSOs are financing, companies are educating and foundations are advising.

141. New partnerships have enabled companies to meet external expectations on supply chain responsibility while finding new markets for business (e.g. organic coffee). CSOs find new ways for achieving their objectives by actively collaborating with the private sector (e.g. women entrepreneurship). The public sector benefits from these collaborations as it receives support from partners with new insights to tackle societal problems (e.g. unemployment).[89]

142. An example of an initiative set up between non-traditional partners is the Roundtable for Sustainable Palm Oil (RSPO).[90] Established in 2004, the RSPO is a multi-stakeholder organization and certification scheme for sustainable palm oil. Among its members are oil palm producers, processors or traders, consumer goods manufacturers, retailers, banks and CSOs. RSPO helps implementing better plantation development and management, and provides risk analysis tools for investors on palm oil development.

143. Another example is EthioPEA Alliance, an initiative between the government of Ethiopia, PepsiCo, USAID and WFP. The public-private collaboration aims to improve the production of chickpeas by building the capacity of local farmers, installing irrigation systems as well as supporting local millers, processors and packers. Leveraging on the partnerships' expertise, the program addresses malnutrition,

88 New Global Partnerships, http://www.effectivecooperation.org/news-unreport.html

89 Enabling innovative solutions for private and public good, http://www.hks.harvard.edu/mrcbg/CSRI/prog_bid.html

90 Sustainable Palm Oil, http://www.rspo.org

strengthens the supply chain, creates new markets for beneficiaries and improves the overall quality of the soil farmed.[91]

144. Nestle's Nespresso brand redesigned its coffee procurement and partnered with farmers on agricultural practices, paying them a premium for better beans.[92] This approach resulted in shared value: the farmers realized higher yields and decreased their environmental footprint while Nestlé secured access to higher quality coffee.[93] GEF has also been a facilitator of this trend as described in Box 7.

145. Public private partnerships (PPP) between governments and private sector are also on the rise, whereby, corporations can partner with government on projects including, national policy formulation in privatizing economies. In many cases, the partnerships allow an influence based on innovation, which the regulators wish to facilitate. One such example is the case of M-Pesa in Kenya whereby a regulation was adapted in order for a company such as M-Pesa to be able to provide its mobile payment services.

146. Public private partnerships are recognized as necessary particularly in the provision of public infrastructure. In OECD's report *Towards a Green Investment Policy Framework* it states "public-private partnerships (PPPs) offer risk-sharing opportunities for green infrastructure and can be attractive for bankable projects under certain conditions, including the presence of sufficient institutional capacity, stable regulatory and legislative environment, and well-designed PPP contracts – in order to ensure appropriate risk sharing and flexibility. Environmental performance criteria can also be built into PPPs, thus providing a tool to green infrastructure investment and operations"[94]

147. The report goes on to say, "Beyond technology support policies, other factors play a key role for innovation and diffusion, and attracting private sector finance: competition policies, regulatory regimes, education policies, stringency of environmental goals, as well as predictability and flexibility of regulatory regimes. Government may be tempted to "pick winners", but it may be more efficient to support general infrastructure or technologies that support a wide range of applications, such as improved energy storage and grid management"[95]

148. On the other hand it must be noted that there are some challenges in public-private partnerships. Firstly, selecting the right partner is challenging and due to its current popularity, public-private partnerships are sometimes insufficiently thought out before the partnership is formalized. Once in place, partnerships can prove to be

91 Pepsico – Partnership USAID & WFP; http://www.wfp.org/stories/wfp-pepsico-and-usaid-fight-child-malnutrition-ethiopia

92 Nestle- Coffee procurement http://yourgreenspot.com/blog/creating-shared-value-%E2%80%93-the-future-of-business

93 Ecolaboration, the Nespresso platform for sustainable innovation http://www.nestle.com/csv/case-studies/AllCaseStudies/Ecolaboration-Nespresso-platform-sustainable-innovation

94Corfee-Morlot, J. *et al.* (2012), "Towards a Green Investment Policy Framework: The Case of Low-Carbon, Climate-Resilient Infrastructure", *OECD Environment Working Papers*, No. 48, OECD Publishing. http://dx.doi.org/10.1787/5k8zth7s6s6d-en p43

95Corfee-Morlot, J. *et al.* (2012), "Towards a Green Investment Policy Framework: The Case of Low-Carbon, Climate-Resilient Infrastructure", *OECD Environment Working Papers*, No. 48, OECD Publishing. http://dx.doi.org/10.1787/5k8zth7s6s6d-en p45

inefficient and ineffective due to careless partner selection and hasty set up. Secondly, differences between parties are often complex.[96]

149. GEF's contribution to this trend through the experience of a UNDP project called Biodiversity Conservation in the Tropical Dry Forest and South Pacific Coastal Marine Zone of Nicaragua: Building Public-Private Alliances is instructive. This project intended to contribute to conservation of a globally important wildlife refuge through actions which included implementation of a new model of shared management of the refuge by local residents and other stakeholders. The Final Evaluation[97] noted slow but steady change in the attitude of residents and immediate neighbors towards the refuge, and the identification and development of community groups supportive of the shift to sustainable livelihoods in the refuge. However, the evaluation also drew attention to the insufficient consideration in the project design of the role of the state, especially the lack of commitment within the government and MARENA to ensure effective application of existing legal instruments pertaining to conservation in protected areas.

150. In the example above, the failing was on the part of the public partners, however many attempts at non-traditional partnerships have also failed as a company enters into the partnership for no other reason than to enhance their reputation (green washing), while the core activities of the company are not made more sustainable as a result of the partnership. Even when the partnership is aimed at bettering the company's products or processes, it may not always be possible for the company to live up to the ambitions. It is easy for companies to declare their commitment to a partnership but more difficult to live up to their promises, especially when the bottom line is threatened.

151. As both external and GEF activities have demonstrated, partnerships have great potential for solving sector-wide issues. When they work they can be very powerful, but many of the largest sectors/issues (e.g. oil, gas, agriculture, mining) are still waiting to experience reduced environmental stress and/or enhanced environmental conditions through a non-traditional sector approach. In this respect GEF, with its global network and financing capability, could play a prime "honest broker"/convening role in the creation and participation of new non-traditional partnerships or scaling up existing partnerships.

4.5 Increased Role of the Financial Sector in Facilitating Sustainability

152. CSOs and advocacy groups not only put pressure on companies directly, but also began revealing the link between environmental degrading projects and their financiers. Due to the relationship between market returns and reputational damage, the financial sector is an effective leverage mechanism for civil society to influence corporate agendas. As a result, several financial institutions have included

96 Watkins, M., Edwards M.& Thakrar U., Winning the influence game, Wiley 2003

97 UNDP. Final Evaluation of Project – Biodiversity Conservation in the Tropical Dry Forest and South Pacific Coastal Marine Zone of Nicaragua: Building Public-Private Alliances. Terminal Evaluation Report, June 2010.

environmental, social and governance criteria (ESG) along with financials in investment for several decades[98].

153. The social investment movement, initially faith-based and an anti-apartheid divestment movement evolved to include screening against companies with negative impacts, i.e., "sin stocks"; companies involved with alcohol, gaming and/or the weapons. Over the last two decades, socially responsible investing, or SRI, the most applied and well-known term and also used inter-changeably with the term sustainable investment; has evolved further still to make a value-based proposition for ESG integration. Interest from mainstream investors continues to grow in the terms of ESG integration, as there is growing awareness of the material impact on financial performance, particularly for asset holders, like pension funds which have long term liabilities.

154. Many of these institutional investors are represented in an international network of 1,200 investors (representing US$ 35 trillion in assets) which applies six Principles for Responsible Investment (PRI)[99]. Implemented by UNEP-FI[100], the initiative also works with the UN Global Compact. While there has yet to be verification of the application of the responsible investment policies, the rapid growth in signatories since its inception signals interest to include a sustainability perspective into finance.

155. The banking sector too has introduced environmental and social financing standards for project finance over a threshold of $10million. The Equator Principles (EPs).[101] based on the IFC's environmental and social performance standards, are a set of criteria for environmental and social risk mitigation in project finance that support responsible risk decision-making in due diligence. Established in 2003, the EPs are currently adhered to by 78 institutions in 35 countries, covering over 70% of international project debt finance in emerging markets[102]. In the last ten years, the affiliation of Equator Principles Financial Institutions (EPFIs) has organically evolved from a loose collection of financial institutions each independently implementing the EPs to an organization that is looked to within the financial industry and by its stakeholders for leadership on environmental and social risk management. A 2011 external review of the EPs concluded that the Principles have done a great to catalyze ESG risk management systems within banks but at the same time several challenges such as going beyond project finance, improved implementation, transparency and the Secretariat's capacity/structure needed to be addressed in order for the initiative to meet its ambitions[103].

156. Financial tools to track the sustainability performance of companies have also grown quickly over a short period of time. As initially presented under the first trend,

98 The Forum for Sustainable and Responsible Investment, http://www.ussif.org/

99 UNPRI: Recognizing the growing view among investment professionals that ESG issues can affect the performance of investment portfolios, the UN coordinated the development of the Principles of Responsible Investment (PRI)—a framework for investors on how to consider ESG issues when fulfilling their fiduciary (or equivalent) duty of maximizing financial performance. www.unpri.org.

100 www.unepfi.org

101 The Equator Principles, http://www.equator-principles.com

102 http://www.equator-principles.com/index.php/about-ep

103 Equator Principles Strategic Review Final Report. Suellen Lazarus and Alan Feldbaum. ERM. ebruary 2011

the Dow Jones Sustainability Index (DSJI)[104], launched in 1991 was the first benchmark that tracked companies in terms of economic, social and environmental criteria. By annually publishing a list of frontrunners in different sectors, the DJSI introduced a competitive edge to sustainability for listed companies. Now more than twenty sustainability indices exist around the world, including stock exchanges in emerging markets (Brazil, China, India, Mexico, and South Africa).

157. Some of the exchanges themselves have joined the Sustainable Stock Exchanges, a UN initiative aimed at exploring how stock exchanges can enhance corporate transparency. And In 2012, the World Federation of Exchanges (WFE) published the first 'sustainability disclosure ranking of the world's stock exchanges. A second iteration of the rankings will be launched at the end of October 2013 in Mexico in parallel with the 53rd assembly of the WFE[105].

158. GEF has supported this trend with its projects involving financial intermediaries. For example, encouraging national banks to finance energy efficiencies within Chinese utilities as described in Box 4. This program was also undertaken using a similar model of appropriate financing with technical assistance in Czech Republic, Slovak Republic, Estonia, Latvia, Lithuania and other countries in Central and Eastern Europe[106]. Furthermore, initiatives such as the Environmental Business Finance Program (EBFP), whose objective it is to engage financial intermediaries in the financing of SMEs that contribute to global environmental benefits supported a similar initiative with BBVA Bank in Peru and its on-lending to SMEs for RE and EE improvements; as well as some of the world's first forays into financing SMEs with ecosystem conservation benefits, partnering with Conservation International to support the predecessor to what is now Verde Ventures[107].

159. By demonstrating the viability of sustainable energy finance, GEF's support has made crucial, even transformative market contributions to mainstreaming for energy efficiency and clean energy projects. In aggregate these projects, pioneered with GEF funding, have subsequently been developed into important business lines for financial institutions, e.g. IFC.

160. In the report, *Review of Sustainable Finance Supported with Concessional Financing*, independent evaluators discuss the Hungary Energy Efficiency Co-Financing Program, supported with GEF funds to provide a $4.25 million first loss partial guarantee covering up to 50 percent of individual loan losses. "Concessional funding provided risk coverage in this investment and no IFC funds were invested in the project. IFC had no investment experience in sustainable energy financing and started with a conservative approach."[108]

104 Dow Jones Sustainability Indexes, http://www.sustainability-indices.com/

105 http://www.world-exchanges.org/insight/views/measuring-sustainability-disclosure-world%E2%80%99s-stock-exchanges

106 Closing the Gap. GEF Experiences in Global Energy Efficiency. Ming Yang. World Bank Group. 2013.

107 GEF invested $1 million through the International Finance Corporation's Small and Medium Enterprise Program. This was the seed funding used by Conservation International (CI) to Verde Ventures. http://www.conservation.org/global/verdeventures/Pages/partnerlanding.aspx

108 Review of IFC Sustainable Energy Finance Investments Supported with Concessional Funding January 2012 p16

161. Now called Sustainable Energy Finance, the renewable energy/efficiency finance program at IFC has become a major ongoing product line that continues to help financial institutions to develop new business lines dedicated to energy efficiency, water efficiency, and renewable financing in emerging markets. Even further on the external landscape, sustainable finance is increasingly being taken up as a line of business, for example by Banco General in Panama.[109] In 2009, the bank put together a green credit facility for corporate clients in Panama.

162. A GEF grant also supported innovation in carbon finance with IFC and Standard and Poor's development of the world's first Carbon Efficiency Index for emerging markets[110]. Launched in 2009, the Index is intended to encourage carbon-based competition among emerging market companies and giving efficient companies access to long term investors. While S&P and IFC successfully developed the investment tool, it was unable to attain a critical mass of investments for launch as a commercial product. This was due to several reasons most of which revolved around the perception of increased risk and lack of a historical performance record. Tracking of this index since its launch, however, shows that the index has outperformed its - carbon optimized counterpart[111]. Especially if this trend continues, it confirms the viability of such products, portending possible future investments, and possibly incentivizing listed companies in emerging markets to disclose and improve their carbon efficiency.

163. Similar indices have also been subsequently replicated in some markets such as Brazil where BM&FBOVESPA and the Brazilian Development Bank (BNDES) decided, in a joint initiative, to create a new market index—a Carbon Efficient Index (ICO2). Launched in 2010, this index comprises the shares of companies participating in a national index that have agreed to join this initiative, by adopting transparent practices with respect to their greenhouse gas emissions (GHGs). In 2012, the BSE Ltd (formerly Bombay Stock Exchange) launched the Greenex, India's first carbon-efficient index[112].

164. While integration of ESG into investment decisions remains small in comparison to the entire universe of assets under management (socially responsible investing (SRI) accounts for only 7% of global assets under management), the initiatives described above have helped to ensure that sustainability has entered mainstream business behaviour for the financial sector, either in the form of a value proposition or review for risk analysis.

165. A recent study estimates that responsible investment will become "mainstream" by 2015, reaching between 15%-20%t of total assets under management[113]. Amongst most institutions engaged in environmental finance, there is recognition that in order to address environmental degradation problems, there would need to be massive

109 Banco General- Green Credit Lines, http://www.iadb.org/en/news/news-releases/2009-11-24/idb-approves-green-facility-for-banco-general-of-panama,5987.html

110 http://us.spindices.com/indices/equity/sp-ifci-carbon-efficient-us-dollar

111 Mid-Term Review of the IFC Earth-Fund Platform. Ernst & Young. 2012.

112 http://www.bseindia.com/downloads/about/abindices/file/BSE-GREENEX%20Factsheet.pdf

113 Responsible Investing: a Paradigm Shift. From Niche to Mainstream. http://www.booz.com/media/file/Responsible-Investing-Paradigm-Shift.pdf

reallocations of private sector capital to more sustainable practices. The financial sector can play an important enabling role here. In sum, there is great potential in the financial sector as a driver for change, but there still are many serious steps to take.

5 Portfolio analysis

5.1 Methodology

166. The evidence presented in this portfolio overview draws on three 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. The second is the GEF Evaluation Office's internal project performance database (TER Database), which contains ratings on outcomes and sustainability of outcomes for projects that have been evaluated through the Office's Annual Performance Reports (APRs). The third source is an in-depth desk review of Terminal Evaluation (TE) reports and Terminal Evaluation Review (TERs) for 48 projects known to have engaged the private sector.

167. In developing the project portfolio, information maintained by the GEF on the use of non-grant instruments was also used along with information from the International Finance Corporation (IFC). Because PMIS does allow 'tagging' of those projects that engage the private sector, in many cases this information is not entered. As a result, many projects that engage the private sector are not indicated as such.

168. Within the portfolio developed (through an analysis of project data in the PMIS, from the Pilot Phase to through GEF-5), "engagement of the private sector" can and is interpreted broadly within the GEF partnership to extend from outreach to private sector during stakeholder consultation to direct loans for enterprises to undertake environmentally friendly improvements to regulatory changes in support of market reforms. Thus, gathering a list of projects that "engages the private sector" is not a straightforward task.

169. To ensure that the portfolio excluded as few projects as possible with private sector engagement, the selection process included review of project titles, co-financiers and executing agencies as well as review of project descriptions and in some cases review of project documents. This process resulted in a list of 290 projects that have (or will be) implemented with the involvement of private sector partners. A separate analysis of the complete non-grant portfolio of 81 projects, known to be 100 percent intended for private sector engagement, is also presented[114].

170. Eighty-eight of these 290 private sector projects are also included in the Evaluation Office's TE Review database, with 73 projects having ratings on project

[114] While the GEFSEC originally identified 83 projects which used non-grant financing, two of those projects (782:Co-generation of Electricity and Steam Using Sugarcane Bagasse and Trash/Cuba and 2681: Promotion of Renewable Energy Use for Development of Rural Communities /Tajikistan) were, in fact, dropped before the CEO endorsement stage and are thus excluded from the analysis in this document."

outcomes. The other 15 projects did not have sufficient information in the TE reports to assign performance ratings. Terminal evaluation (TE) reports and outcome ratings were also available for 24 of the 81 non-grant projects in the portfolio. 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 cost-effectiveness.

171. For a more insightful look into the models and mechanisms of private sector engagement in GEF projects, beyond what could be gleaned from the PMIS and performance analyses described above, an additional desk review of evaluation documents for 48 projects was conducted. The sample of 48 projects was drawn from the larger population of 88 private sector projects for which we have TER data. This desk review primarily relied on the TE reports of actual project implementation and outcomes as well as the extent of actual private sector engagement in terms of the number of private sector entities identified, co-financing contributions, and the variety of mechanisms used to target the private sector. The review also explored the types of lessons learned from private sector projects and the factors affecting outcomes for these projects.

5.2 Overview of Private Sector Portfolio

172. The private sector portfolio identified for OPS5 is made up of 290 projects including 2 enabling activities, 220 full-size projects, and 68 medium-size projects (see Annex B). Among the 290 projects are approximately 80 projects that have used non-grant instruments, this out of a total cohort of over 3000 approved projects in GEF's history. Altogether, these 290 projects represent US $1,402 million in GEF grant investment and US$ 317 million in non-grant investment.

173. UNDP and the World Bank were the lead implementing agencies for the large majority of projects in this portfolio with each implementing approximately 37% of the portfolio. UNEP and UNIDO implemented roughly another 10% each and the remaining 5% of projects were implementing by the regional development banks and the FAO. Table 2 presents the number of projects and the corresponding GEF grant amounts and non-grant amounts by Agency.

Table 2: Distribution of private sector projects and investment (US $ million), by Agency			
Implementing Agency	*Number of Projects*	*Non-Grant Investment*	*Total GEF Grant*
ADB	3	3.90	13.3
AfDB	1	20.00	20.
EBRD	4	17.90	37.86
FAO	1	-	7.09
IADB	8	32.16	54.77
UNDP	107	62.12	353.05
UNEP	29	17.70	85.1
UNIDO	29	9.80	104.72
World Bank Group[115]	108[116]	153.51	726.46
Total	290	317.09	1,402.34

174. The private sector portfolio comprises about 15% of the broader GEF portfolio in terms of total investment. In terms of the number of projects, this private sector portfolio is only 9% of the total of 3114 GEF projects.

5.2.1 Time Trends

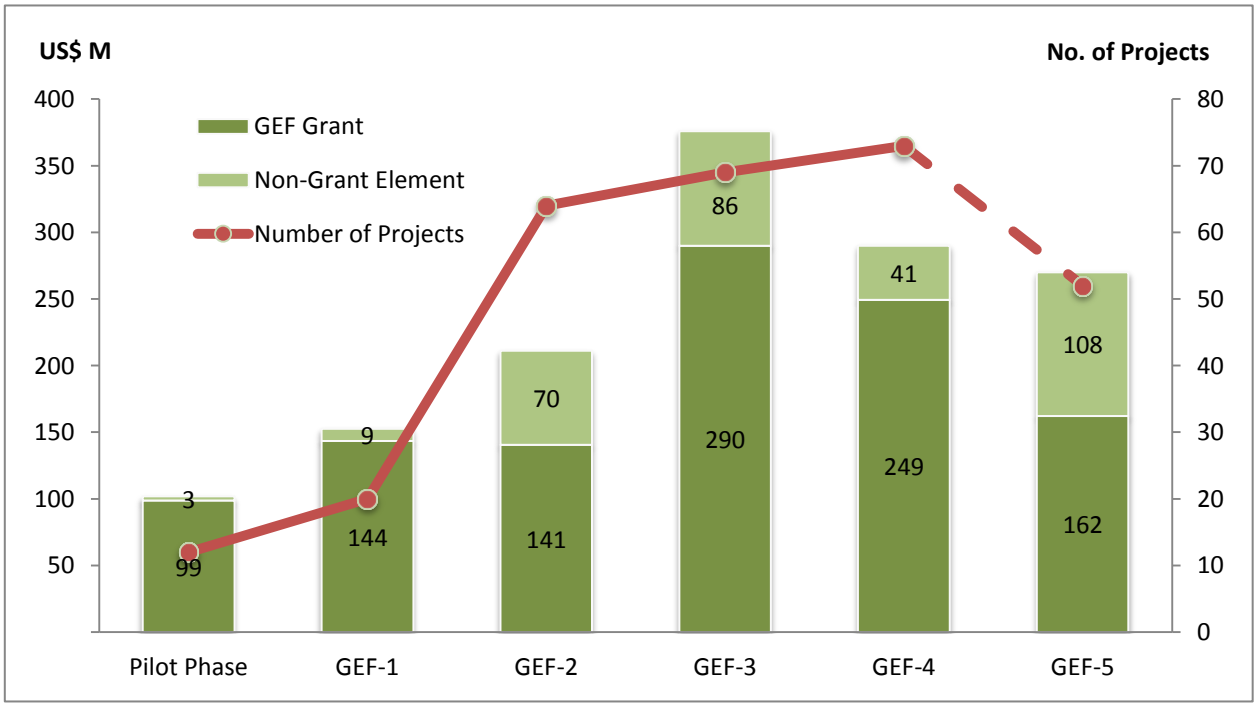
175. In keeping with what is known about the implications of RAF and STAR on private sector engagement, the portfolio analysis reveals that investment in private sector projects appears to have peaked in GEF-3 with declining investment amounts in GEF-4 and GEF-5. The trends are illustrated in Table 3 and Figure 2 below. The number of projects engaging the private sector peaked in GEF-4, as many projects prepared during GEF-3 became effective during GEF-4. Project numbers decline in GEF-5; although it should be noted that the private sector set-aside for GEF-5 has been completely drawn down and private sector engagement projects are in preparation or in the early stages of implementation. As a result, there is some uncertainty about both the exact number of projects and actual investment. For this reason, Figure 2 shows a dashed line for the number of projects going into GEF-5.

Table 3: Comparison with the broader GEF portfolio							
	GEF Phases						*Total*
($US million)	*Pilot Phase*	*GEF-1*	*GEF-2*	*GEF-3*	*GEF-4*	*GEF-5*	
GEF Private Sector Engagement Portfolio							
Number of Projects	12	20	64	69	73	52	290
Non-Grant Element ($)	3.0	9.2	70.5	85.8	40.8	107.8	317.1
Investment ($)	102.0	152.8	211.3	376.0	290.2	270.1	1,402.3
GEF Project Portfolio (Excluding Projects with Private Sector Engagement)							
Number of Projects	101	353	559	794	698	319	2824

[115] IBRD and IFC, as members of the World Bank Group have implemented GEF projects.
[116] This total number of projects includes sub-projects, such as those under Earth Fund and EBFP.

Investment ($)	589.0	981.1	1,580.2	2,494.2	2,422.0	1,566.1	9,631.6
Private Sector Projects as Percentage of Total GEF Portfolio	11%	5%	10%	8%	9%	14%	9%
Private Sector Investment as Percentage of Total GEF Investment	15%	14%	15%	16%	12%	19%	15%

Figure 2: Private Sector Engagement – Investment and number of projects, by phase



176. Although investment in private sector projects dipped in GEF-4, both in absolute terms and to only 12% of the total portfolio, in GEF-5 it has increased to 19% of the total project portfolio. However caveats apply given the planning or early implementation stage of these projects. Actual investments may turn out to be higher or lower than anticipated at appraisal. Nevertheless, this may be an indication that private sector engagement is becoming increasingly consolidated into fewer but larger projects enabling projects to capitalize on some economies of scale during implementation.

5.2.2 Modality and Focal Area

177. The tables below show how, in the private sector portfolio, full-size projects greatly outnumber medium-size projects by 3-to-1 (Table 4). Seventy-five percent of the private sector portfolio (220 projects) is made up of full size projects.

Table 4: Size distribution of private sector portfolio							
Project Size	*GEF Phases*						*Total*
	Pilot Phase	*GEF-1*	*GEF-2*	*GEF-3*	*GEF-4*	*GEF-5*	
Enabling Activity (EA)	1		1				2
Medium Size Project (MSP)		1	22	18	18	9	68
Full Size Project (FSP)	11	19	41	51	55	43	220
Total	12	20	64	69	73	52	290

178. Table 5 shows this disparity between medium-size projects and full-size projects in investment dollars.

Table 5: Comparison of investment ($US million), by size and focal area										
GEF Investment	**Project Size**			**GEF Focal Area**						
	EA	*MSP*	*FSP*	*BD*	*CC*	*IW*	*LD*	*MF*	*OD*	*POP*
Private Sector Portfolio	3	55	1,344	128	1,019	57	20	132	1	45
GEF Project Portfolio	361	461	8,462	3,199	2,329	1,174	515	1,989	194	548
Private Sector as Percentage of Total	1%	11%	14%	4%	30%	5%	4%	6%	1%	8%

179. Projects in the climate change focal area account for the bulk of the private sector portfolio, both by number of projects and investment volume. Sixty-eight percent of projects in the portfolio are in the CC focal area representing 75 percent of GEF investment in private sector projects and 30 percent of overall GEF investment in climate change projects. Climate change projects as a proportion of the private sector project portfolio dropped from 70% in GEF-3 to 53% in GEF-4, but have risen again in GEF-5 to 79%. From Table 6 it is clear that climate change projects have always featured heavily in the private sector portfolio. Other EO studies[117] reveal high levels of engagement with private sector in the POPs and ODS areas, but because these projects are not tagged as such in the PMIS, the ability to capture them in a portfolio is limited

Table 6: Focal area distribution of projects in the private sector portfolio							
Focal Area	**GEF Phases**						*Total*
	Pilot Phase	*GEF-1*	*GEF-2*	*GEF-3*	*GEF-4*	*GEF-5*	
Biodiversity (BD)	1	3	11	12	18	3	48
Climate Change (CC)	9	14	45	48	39	41	196

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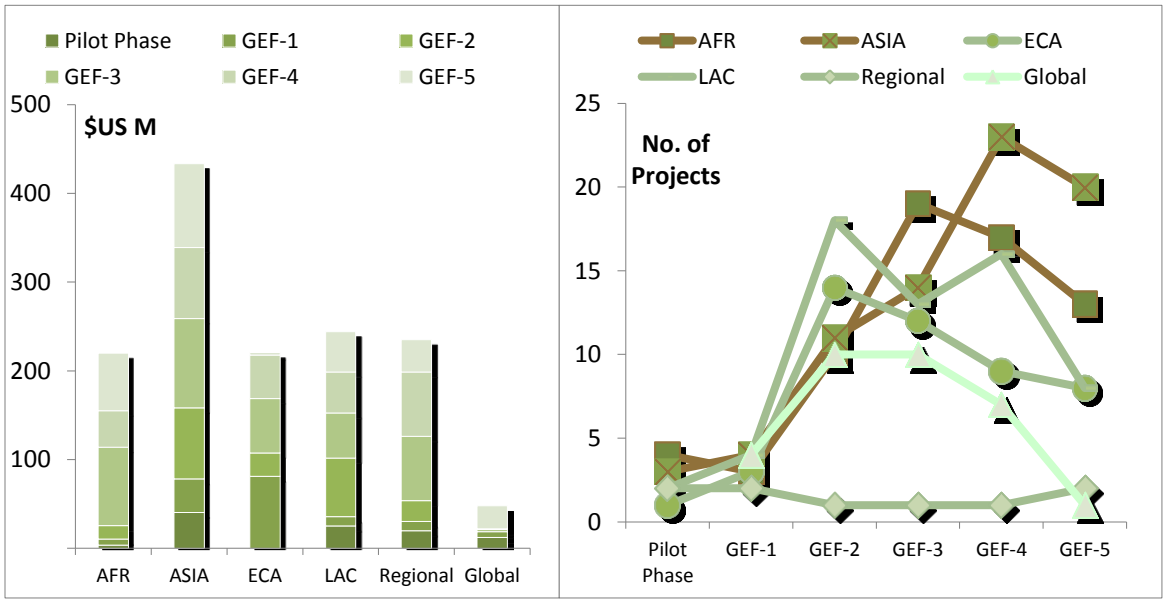
International Waters (IW)	2		3	5	2		12
Land Degradation (LD)				1	3		4
Multi Focal Area (MF)		2	3	2	7	3	17
Ozone Depletion (OD)		1				1	2
Persistent Organic Pollutants (POP)			2	1	4	4	11
Total	12	20	64	69	73	52	290

5.2.3 Regional Distribution of Projects and Investment

180. The geographical distribution of private sector projects and investments is influenced by local economic conditions and the executing capacities of both private sector and government partners. Based on the current portfolio analysis, projects with private sector engagement are predominately concentrated in Asia with regard to both investment dollars and numbers of projects. Africa is second in terms of numbers of projects, but only $220 million or 16% of the total private sector investment has been allocated to African projects. Eastern & Central European (ECA) based projects were heavily funded in the GEF-2 phases. As more and more of these countries acceded to the EU and gain access to global financial markets, the proportion of GEF funding going to ECA nations in subsequent phases has declined. The graphs below show these shifts.

Figure 3: Regional distribution of investment and projects, by GEF phase



5.3 Non-Grant Project Portfolio

181. The private sector portfolio includes 81 projects that have directly or indirectly (through a third party or a revolving fund) used non-grant instruments[118]. This list of

118 The GEFSEC identified 84 projects in the non-grant portfolio. One project was counted twice and two of those projects (782:Co-generation of Electricity and Steam Using Sugarcane Bagasse and Trash/Cuba and 2681: Promotion of Renewable Energy Use for Development of Rural Communities /Tajikistan) were, in fact, dropped before the CEO endorsement stage and are thus excluded from the analysis in this document." New projects have also been endorsed and added to the portfolio, however they are not include in this analysis. The current count of projects receiving GEF funds in a non-grant mechanism is at 86.

81 projects is based on project information provided to the Evaluation Office by the GEF Secretariat, and is not based on PMIS data. Table 7(below) shows how the amount of GEF grant and non-grant investment in projects has varied with GEF phase. There was a sharp drop in the number of non-grant projects during GEF-4. The 15 projects developed under GEF-5 have a higher ratio of non-grant-to-grant investment than projects developed in previous GEF phases.

Table 7: Projects with non-grant investment vehicle

($US Million)	*GEF Phases*						*Total*
	Pilot Phase	*GEF-1*	*GEF-2*	*GEF-3*	*GEF-4*	*GEF-5*	
Number	3	8	22	27	6	15	81
Non-Grant Element ($)	3.0	9.2	70.5	85.8	40.8	107.8	317.1
GEF Investment ($)	16.0	104.1	125.8	191.0	81.0	142.3	660.2
Non-Grant to Grant Ratio	19%	9%	56%	45%	50%	76%	48%

182. As with the broader private sector portfolio, the bulk of the non-grant portfolio is dominated by full-size climate change projects as shown in Table 8. Sixty-eight of the non-grant projects were developed and implemented in the climate change focal area. Most of these projects have been implemented through UNDP or IFC as a member of the World Bank Group in Eastern Europe & Central Asia and Asia regions.

Table 8: Distribution of non-grant projects, by size, region, focal area and agency

		GEF Phases						*Total*
		Pilot Phase	*GEF-1*	*GEF-2*	*GEF-3*	*GEF-4*	*GEF-5*	
Size	MSP			4	4		2	10
	FSP	3	8	18	23	6	13	71
Region	AFR	1		4	6		3	14
	ASIA	2	1	5	4	1	5	18
	ECA		1	10	8	1	4	24
	LAC		1	2	6	3	2	14
	Regional		1				1	2
	Global/CEX		4	1	3	1		9
Focal Area	BD			1	4	1		6
	CC	3	6	21	21	3	14	68
	IW				1	1		2
	MF		2		1	1	1	5
Agency	Asian Development Bank (ADB)						1	1
	African Development Bank (AfDB)						1	1
	EBRD					1	2	3
	IADB				1	2	1	4

	UNDP	3	3	12	10	1	3	32
	UNEP				5	1		6
	UNIDO						4	4
	World Bank Group		5	10	11	1	3	30
	Total	3	8	22	27	6	15	81

183. Most projects have used a variety of non-grant instruments and new project financing vehicles are continuously being developed. However this report identifies four broad types of non-grant financing tools:

- **Contingent (non-traditional) grants**, where funding is disbursed or must be repaid if certain conditions are met.
- **Loans to** , including hard loans, concessional loans, contingent loans, and revolving funds.
- **Guarantees**, such as credit, risk, or performance guarantees.
- **Equity** investment or participation in a company.

184. Most projects reviewed here used a combination of these tools, but loans and guarantees were the most commonly used non-grant financing vehicles. As shown in Table, loans, particularly, instrument revolving funds for small-scale lending were the most frequently used non-grant modality, followed by credit guarantees; often these tools were used in combination. Contingent grants and direct equity investments were less frequently used to finance projects.

Table 9: Frequency of use of different non-grant vehicles.

Type of Non-Grant Vehicle	*Percentage of Projects*
Contingent Grant	17%
Loans	51%
Guarantees	47%
Equity	10%

5.4 Performance of the Private Sector Portfolio

185. Eighty-eight projects of the private sector portfolio, representing US $326 million of GEF grant investment, were also evaluated and in the TER database allowing for an analysis of outcomes and sustainability. Of these, 73 projects are rated on outcomes and 72 projects are rated on the likelihood of sustainability of outcomes.

5.4.1 Quality of Project Outcomes

186. Both the private sector and the general GEF portfolios have comparable levels of performance with 85 percent of the private sector portfolio and 84 percent of the general portfolio evaluated as “Moderately Satisfactory or Above” on project

outcomes (Table 7 below). However, the performance of the private sector portfolio indicates steady improvement in outcome achievement since the Pilot Phase. In GEF-3, ninety-six percent of the private sector projects were rated "Moderately Satisfactory or Above" on outcomes, compared to 86% in GEF-2 and 70% in GEF-1.

Table 10: Project performance on achievement of outcomes

	GEF Phases						Total
	Pilot Phase	*GEF-1*	*GEF-2*	*GEF-3*	*GEF-4*	*GEF-5*	
GEF Private Sector Engagement Portfolio							
Number	8	13	44	23	-	-	88
Number Rated on Outcomes	4	10	36	23	-	-	73
Number Rated MS or Above	2	7	31	22	-	-	62
Percentage Rated MS or Above	50%	70%	86%	96%	-	-	85%
GEF Project Portfolio (Excl. PS Engagement)							
Number	25	82	189	153	29	-	478
Number Rated on Outcomes	8	57	166	153	29	-	413
Number Rated MS or Above	6	47	134	133	25	-	345
Percentage Rated MS or Above	75%	82%	81%	87%	86%		84%

5.4.2 Sustainability and cost-effectiveness

187. On the measures of sustainability and cost-effectives (Table 11 and Table 12) the differences between the private sector portfolios and other GEF projects are, on average, negligible. Sixty-three percent of the private sector projects had ratings of Moderately Likely or Above on the sustainability of outcomes compared to 60 percent of the broader GEF portfolio. Similarly, 75 percent of private sector projects and 76 percent of non-private sector projects were considered to be Moderately Satisfactory or Above on cost-effectiveness

Table 11: Distribution of ratings on the sustainability of outcomes for projects with private sector engagement

Rating	*Private Sector Projects*	*% of Private Sector Projects*	*Non-Private Sector Projects*	*% of Non-Private Sector Projects*
Unlikely	8	11%	40	10%
Moderately Unlikely	19	26%	115	29%
Moderately Likely	30	42%	184	46%
Likely	15	21%	57	14%
Number Rated	72		396	

Table 12: Distribution of ratings for cost-effectiveness of projects

Rating	*PS Projects*	*% PS Projects*	*Non- PS Projects*	*% Non- PS Projects*
Highly Unsatisfactory	1	2%	3	1%

Unsatisfactory	5	8%	17	5%
Moderately Unsatisfactory	9	15%	63	18%
Moderately Satisfactory	17	28%	118	34%
Satisfactory	19	32%	126	36%
Highly Satisfactory	9	15%	21	6%
Number Rated	60		348	

5.5 Review of Terminal Evaluation Reports

188. To better analyze the dynamics and extent of private sector engagement in the portfolio, a review of Terminal Evaluation Reports was conducted using a sample of 48 projects taken from the 88 private sector projects for which TE/ TER data exists. The review instrument (see Annex C) 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 questions on the roles these entities played in the projects. Aspects of project design are assessed through questions on the (i) models of engagement, (ii) specific strategies for engagement, and (iii) interventions addressing market drivers.

189. Private sector participation at the project design stage varies with the extent of private engagement and role of private sector entities in execution. Participation of private sector partners at preparation stage, even for projects that intend to engage the private sector is not mandatory.

190. In the review of terminal evaluation reports for 48 projects known to engage the private sector, only 33 percent of projects in the TE, documented consulting or formally involving private sector partners in developing the project (Table 13). For 46 percent of projects there was no documentation of consultation with private sector partners and for another 21 percent there is insufficient information in the evaluation reports to gauge the role of private sector partners in project design. These signals of low involvement within a portfolio known to have engaged private sector indicate a need for more comprehensive collection of information and documentation on the role of the private sector.

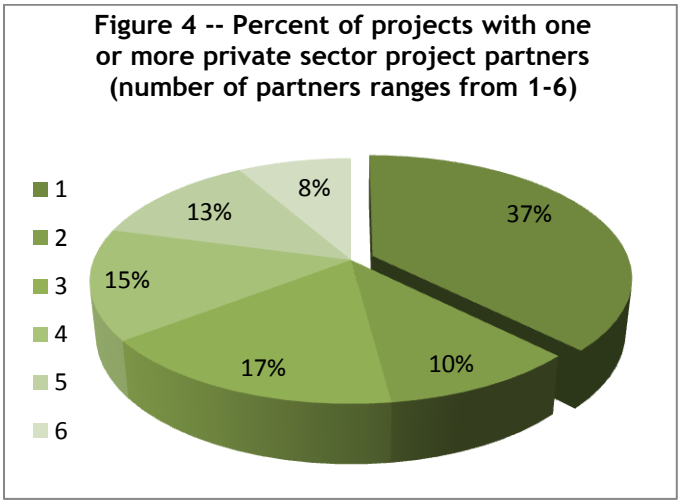
Table 13: Involvement of private sector firms or entities in project design process

Private Sector Involvement in Project Design	*Number of Projects*	*Percentage of Projects*
Unable to assess	10	21%
No Involvement	22	46%
Yes, PS Involved	16	33%
Total	48	

191. The role of the private sector entities in project execution and implementation is also variable in its documentation. Implementation arrangements for projects with private sector engagement tend to be quite complex with multiple project partners who can also be co-financiers. Only 2 out of the 48 projects reviewed had a relatively

'simple' implementation arrangement wherein private sector operators were only contracted to deal with solid waste collection and haulage, and had no other role in project execution.

192. Figure 4 shows that the large majority of projects, 63 percent, involved multiple private sector entities, with 21 percent having 5 or more identified private sector partners involved in the project. Only 37 percent of the project reviewed had a single private sector entity participating in the project.



193. As indicated below in Table 14 and Annex A, the GEF has been successful in engaging a wide variety of private sector actors from: capital providers, financial intermediaries, individuals/entrepreneurs, market facilitators, multinational corporations (MNCs), national corporations, SMEs, micros and others. These different actors are engaged with GEF projects in different roles.

194. Capital providers and financial intermediaries tend to be co-financiers or lead executing agencies for projects. Market facilitators including industry associations, independent regulators, and quasi-autonomous non-governmental organizations (QUANGOs) with sector specific mandates, can fulfill a variety of roles from co-financing to being implementing partners. Multinational corporations and national corporations, similarly play a variety of roles in GEF projects, whereas SMEs and individuals/entrepreneurs are largely viewed as beneficiaries. Annex D presents a list of specific companies, firms, banks, and other private sector entities with whom the GEF has engaged and the projects in which they participated.

Table 14: Number of private sector participants in GEF projects, by role and type

Role	*Capital Provider*	*Financial Intermediary*	*Individual Entrepreneur*	*Market Facilitator*	*MNC*	*NC*	*SME*	*Other (UA)*	*Total*
Beneficiary		2	9		2	8	16	4	41
Cofinancier	12	1		5	4	6	4	12	44
Contracted Operator							1		1
Executing Agency	4	8		2	3	1		2	20
Implementing Partner		2		2	1	3		2	10

Other	1	1		3	3	2	3	5	18
Total	17	14	9	12	13	20	24	25	134

195. Co-financing by private sector actors was also analyzed for each of the 48 projects, see Table 15. The information presented is drawn directly from terminal evaluation reviews. Based on the analysis of reported co-financing contributions by private sector actors for these 48 projects, co-financing can be divided into three categories. The first is where private sectors provide zero co-financing either cash or in-kind towards project execution. In these projects all investment risk is borne by government or multilateral investors (i.e. GEF). The second category is where private sector actors provide large amounts of (mostly) cash co-financing, over $1M, towards execution of large scale projects. This effectively means that risks are pooled among both private sector and public sector actors, and the general risk status for these projects may be viewed as non-critical. The third category includes all the smaller-scale projects where private sector actors may contribute both small cash investments and well as in-kind contributions to facilitate project execution.

196. PMIS data coding on co-financing does not always fully display private sector co-financing. For example, in many cases when local banks are providing financing, the PMIS codes these as “others.” The GEF Secretariat working with the Evaluation Office has developed a co-financing dataset after removing data errors and adding more complete information. As part of this data cleaning process, judgement on re-categorization of source was made when the original PMIS data was not precise. The Evaluation Office has used the revised co-financing database in developing OPS5 Technical Document 21 -- Cofinancing. From the perspective of private sector engagement, a notable finding from TD 21 is that for full size projects "the recipient country governments – including various ministries, departments, and agencies, at different tiers of government – are the main contributors of co-financing, followed by GEF agencies, and then by private sector sources.

197. The order of the share of these co-financing sources remained the same from GEF-3 to GEF-5 (TD 21, Table 10). During this period governments contributed 34% to 45% of co-financing, GEF Agencies contributed 24% to 29%, and the private sector 15% to 16%. Bilateral accounted for 4% to 7% and CSO contributions were 2% of the total.

Table 15: Type and amount of co-financing reported for private sector portfolio

Co-financing Type	**Co-Financing Categories (US$)**								*Total*
	None	*$0 - 10k*	*$101k - 500k*	*$11k - 50k*	*$501k - 1M*	*$51k - 100k*	*Over $1M*	*Unable to Assess*	
Cash		1			1	2	8		12
In-kind			2			1			3
Cash & In-kind			2		3	1	5		11
No co-financing	18			1				1	20
Unable to Assess								2	2
Percentage of Total	38%	2%	8%	2%	8%	8%	27%	6%	

5.5.1 GEF Intervention Models

198. As indicated in Section 2, GEF has categorized its approach for private sector engagement through four intervention models to both engage partners and catalyze investment.

199. Using these categorizations, the analysis of the terminal evaluation reports and terminal evaluation reviews for the 48 projects in our sample indicates, as per Table 16, that the most commonly applied engagement models are those that support enabling policy environments and those that build capacity. Incremental financing models are less commonly used, but are typically associated with larger leverage in terms of both GEF investment and co-financing. Corporate alliance models have been the least frequently used.

Table 16: Distribution of projects by private sector engagement model

Private Sector Engagement Model	Number of Projects	Percentage of Projects
Enabling policy environments	22	45%
Incremental financing	13	27%
Corporate alliances	5	10%
Capacity building and incubation	21	43%

200. Within these models, GEF projects use varying strategies to engage different types of private sector actors, whether subsidies (through government partners), public-private partnerships[119], public financing aids, seed financing, micro-grants programs, or indirect engagement through support for harmonization of national policies and regulatory frameworks. Figure 5 below illustrates the relative frequencies of each type of strategy. In our sample of projects, PPPs, public financing aids, and indirect engagement are among the most commonly used strategies. Table 17 shows how frequently these strategies are used under each of the four types of engagement models. Incremental financing models for example, largely rely on public financing aids to private sector actors, whereas enabling policy environment models utilize a variety of strategies from PPPs, PPAs, to financing aids.

119 In this analysis public-private partnerships refer to ventures jointly capitalized and operated by both public and private actors. Public-private alliances (PPA) refer to co-management arrangements or certification schemes in which the public sector is involved in venture but not in a financing role. Public financing aids include loans or investments by publicly owned or operated funds or banks to private sector entities.

Figure 5: Percentage of projects employing each engagement strategy

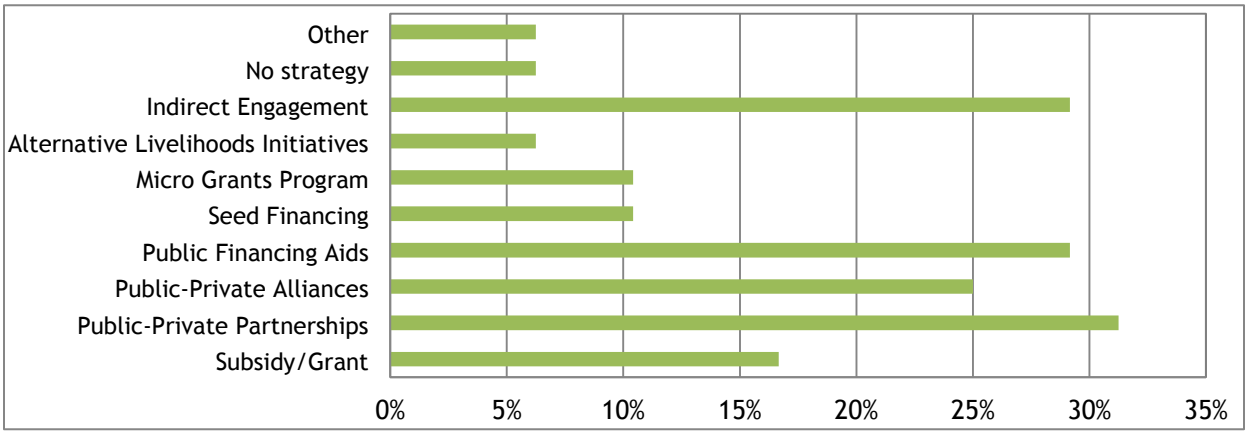


Table 17: Frequency of use of different strategies, by type of engagement model

Strategies for Private Sector Engagement	*Enabling policy environments*	*Incremental financing*	*Corporate alliances*	*Capacity building and incubation*
Subsidy/Grant	3	4	2	3
Public-Private Partnerships	8	5	0	7
Public-Private Alliances	7	0	2	5
Public Financing Aids	8	11	0	2
Seed Financing	4	0	0	1
Micro-Grants Program	0	3	0	2
Alternative Livelihoods Initiatives	0	0	0	3
Indirect engagement	6	5	2	6
No strategy	2	0	1	1
Other	1	1	0	2

201. This analysis also considered the efforts of GEF projects that engage the private sector in targeting market drivers of environmental degradation. The term "driver" is used to describe the underlying causes of environmental change. Drivers can be direct or indirect, and vary in nature and scope but can be broadly grouped together as demographic, economic and social, science and technology, conflict and governance.

202. GEF projects that engage the private sector are often designed to address economic drivers of environmental degradation, particularly the supply and demand for energy, natural resources, and transportation. In targeting economic drivers, projects can intervene in markets to either reduce demand or supply for the goods and services that degrade the environment, or shift demand and supply for such goods and services to more sustainable sources, as outlined below:

- **Reducing market demand** for products or services with negative environmental externalities. Initiatives include development of legal or regulatory frameworks such as energy efficient building codes, zoning or land use policies, and improving environmental governance.

- **Shifting market demand** to sustainable alternatives with little or no detrimental environmental effects. Initiatives include price signaling through congestion charging, variable rate energy metering and consumer environmental education initiatives.
- **Increasing supply-side efficiency and reducing waste** in producing goods or services for the market. Initiatives include CAFÉ standards, cleaner fuels, provision of higher yield seed varieties and plant upgrades for more efficient energy generation.
- **Shifting supply to sustainable sources** with no, or much lower, negative environmental externalities. Initiatives include incentives/credits for cleaner fuels, renewable energies, sustainable resource management or production technologies, land restoration, infrastructure investments in mass transit, and investment in renewables.

203. Table 18 below shows how frequently projects used these four types of interventions to target various market drivers of environmental degradation. Only 4 of the reviewed projects did not attempt to target any market driver. The level of achievement is highest for those interventions seeking to shift market supply to sustainable sources, for example, a switch from traditional coal power to hydropower in electricity generation.

204. One reason why supply-side measures appear to be more effective overall than demand side measures might be due to the fact that supply side measures only need to target a limited group of stakeholders. There are relatively few suppliers of energy in a given country who can be reached through a single project. But the number of energy consumers can be in the tens of millions and effective consumer outreach to promote more efficient energy use and reduction in demand can be more operationally and politically challenging.

Table 18: Targeting market drivers of environmental degradation

Engagement Goals	*Number of Projects*		*Achievement Rate*
	Targeted	*Achieved*	
Reducing market demand	9	5	56%
Shifting market demand to sustainable alternatives	11	6	55%
Increasing supply-side efficiency	14	9	64%
Shifting supply to sustainable sources	18	12	67%
No such intervention/No evidence found/UA	4	0	0%

5.6 TER Review: Non-Grant Project Portfolio

205. Terminal evaluation (TE) reports and outcome ratings were available for 24 of the 81 non-grant projects in the portfolio. This small sample size does not permit assessment of significant differences between non-grant projects and the broader portfolio. Therefore the findings discussed in this section cannot be interpreted as trends. Nevertheless the analysis presented here does raise some interesting issues and highlights potential avenues for further evaluation.

206. Overall, 83 percent of the 24 non-grant projects for which outcome ratings are available are rated as Moderately Satisfactory or Above on the quality of project

outcomes (Table). This is compared to 86 percent of the other 49 projects in the private sector portfolio, which are rated, and 84 percent of the broader GEF portfolio of 345 projects for which ratings data is available. From the outcomes perspective, the performance of the non-grant portfolio is largely comparable to the performance of the overall private sector portfolio and the non-private sector projects (Table 20).

Table 19: Terminal evaluation reports for non-grant projects and outcome ratings

Terminal Evaluations Reviewed	*GEF Phases*						*Total*
	Pilot Phase	*GEF-1*	*GEF-2*	*GEF-3*	*GEF-4*	*GEF-5*	
Number	2	4	13	5	-	-	24
Percent Rated MS or Above on Outcomes	50%	75%	85%	100%	-	-	83%

207. The ratings on sustainability are similarly comparable across all three sets of projects. However the ratings on project cost-effectiveness, or efficiency, do show some differences, with the private sector non-grant projects have the lowest rated performance on this parameter. However, because the sample size is small, this cannot be interpreted as a clear trend.

Table 20: Ratings on outcomes, sustainability and cost-effectiveness

Portfolio	*Outcomes*		*Sustainability*		*Cost-Effectiveness*	
	Number Rated	*% MS or Above*	*Number Rated*	*% ML or Above*	*Number Rated*	*% MS or Above*
Private Sector Non-Grant	24	83%	23	57%	21	57%
Private Sector Grant Only	49	86%	49	65%	39	85%
Non-Private Sector	413	83%	396	61%	348	76%

208. Analysis of the engagement model used in the projects that had a non-grant funding element shows that these projects were largely directed towards incremental financing and capacity building and incubation (Table 1). Only one project with non-grant funding used a corporate alliance engagement model. Of the projects which received funding only through grant vehicles, the majority used engagement models focused on building enabling policy environments, and very few supported the incremental financing engagement model.

Table 1: Distribution of projects by private sector engagement model

Private Sector Engagement Model	Number	Percentage of All Projects	Percent of Non-Grant Projects	Percent of Grant Only Projects
Enabling policy environments	22	45%	36%	52%
Incremental financing	13	27%	40%	8%
Corporate alliances	5	10%	4%	16%
Capacity building and incubation	21	43%	40%	40%

5.6.1 Lessons Learned

209. Even while the private sector portfolio demonstrates performance ratings on par with the general portfolio (85% of projects rated Moderately Satisfactory or Above), an analysis (Table 22) of the 'lessons learned' from the terminal evaluations of the 48

projects in our sample reveals areas for future improvement and issues that affect implementation and outcomes. Among these are project design, funding and financial planning, and stakeholder engagement. These are key factors frequently mentioned in lessons learned sections of terminal evaluations as affecting the outcome and sustainability of projects.

Table 22: Key issues addressed in lessons learned or noted as factors affecting project outcomes

Key Factors	*Percentage of Projects*	
	Addressed in Lessons Learned	*Noted as Affecting Outcomes*
Project Design	63%	47%
Capacity to Execute the Project	27%	39%
Funding and Financial Planning	53%	41%
Baseline Information	6%	2%
Monitoring & Evaluation	20%	18%
Stakeholder Engagement	55%	47%
Capacity Building	12%	29%
Legal and Institutional Framework	20%	18%
Infrastructure Building and Maintenance	0%	2%
Country Ownership or Alignment to National and Regional Priorities	16%	27%
Effects on Local Population	20%	10%
Need for Follow-Up	2%	2%

210. A selection of quotes from terminal evaluations follows to illustrate the issues noted in the lessons learned section regarding design and implementation issues. One report stated: "Delays often start already in the project formulation phase. Again, going from formulation to finally getting GEF approval is a process that can take years with the danger that by the time the project is finally approved the set of barriers it seeks to address and the policy environment may have changed." [120] The example of the Public-Private Alliances project in Nicaragua also discussed insufficient consideration of the State in project design.

211. The terminal evaluation of a project in Central and South America (redirecting commercial investment decision to cleaner technology) noted "*IA should spend more time and resources in the design of projects, so the project can address the appropriate issues to reduce the need for changes due to unforeseen circumstances.*"[121] The Terminal Evaluation for the project also stated: "*The resources put into project design should be increased at UNEP to avoid too many changes during implementation and to optimize project outputs and results.*"[122]

212. Evaluation Office reports have also mentioned GEF's challenges regarding project design and implementation: "Since before 1999, the GEF has tried to develop more effective approaches for engaging the private sector in its projects. The draft private

120 IBID

121Terminal Evaluation Review, GEFEO, 2003 (GEFID# 611)

122 Desk Evaluation Of The Project: Redirecting Commercial Investment Decisions To Cleaner Technology - A Technology Transfer Clearing House, UNEP, 2002 (GEFID# 611)

sector strategy presented to the Council in June 2006 pointed out that "The challenge in involving the private sector in projects consistent with the GEF project cycle and operational procedures is fundamental."[123]

213. The report continues with "The GEF Activity Cycle is widely regarded as complex, long, and costly. Almost since the GEF began, the need to streamline and simplify the cycle has been highlighted by numerous evaluations, the overall performance studies, the GEF Council, and many of the GEF's partners and stakeholders."[124] The cycle time discrepancy causes an issue with private sector engagement opportunities as noted later in the joint report, "delays jeopardize co-financing, since partners—including the private sector—lose interest in the GEF project in the absence of a dynamic process of project approval."[125] GEF continues to experience challenges with the GEF project cycle, and meeting milestones. Unless addressed, future opportunities for engagement with the private sector could be hampered.

214. While lessons specific to legal and institutional framework arose only 20 percent of the time within this sample, mention should be made of sample statements such as from the International Waters project: *Slovenia EBRD/GEF Environmental Credit Facility*. The main objectives of the Facility were the reduction of nutrient load and other water pollutants in the Danube River Basin and the demonstration of a project concept based on financial intermediary/private sector partnership in pollution reduction. Participating entities included commercial banks (which received loan funds from the EBRD) and companies and municipal entities (which became sub-borrowers of funds to invest in water pollution reduction and prevention projects). Although some of the expected results materialized, the promotion and demonstration of innovative water pollution reduction technologies did not occur. The final evaluation[126] suggested a major reason for this was the *absence of an effective legal and regulatory framework supporting the achievement of full compliance with environmental standards*.

215. Lessons learned were further analyzed on the basis of whether project funding was delivered through a grant vehicle only, or through a combination of grant and non-grant (loan or credit) vehicles (Table3). Some factors such as 'project design' and 'monitoring & evaluation' were more frequently addressed in lessons learned for the non-grant projects. But 'stakeholder engagement' and 'legal and institutional framework' were less likely to be discussed in lessons learned. This is consistent with the fact that non-grant projects typically use incremental financing or incubation engagement models. Efficient project design and impact monitoring are crucial issues for these engagement models. At the same time, these engagement models have a lower degree of involvement by government stakeholders. Country ownership is more frequently cited in lessons learned for the grant-only projects; however this same

123 http://www.thegef.org/gef/sites/thegef.org/files/documents/Joint_Eval-GEF_Activity_Cycle_and_Modalities.pdf 33

124 http://www.thegef.org/gef/sites/thegef.org/files/documents/Joint_Eval-GEF_Activity_Cycle_and_Modalities.pdf 2

125 http://www.thegef.org/gef/sites/thegef.org/files/documents/Joint_Eval-GEF_Activity_Cycle_and_Modalities.pdf p64

126 GEF-EO. The Catalytic Role of the GEF – Case Study: The Slovenia EBRD/GEF Environmental Credit Facility. OPS4 Technical Document #4, prepared by Marie-Karin Godbout, Le Groupe-Conseil Baastel Ltée, January 2009.

factor appears to be more important in affecting the outcomes for non-grant rather than grant-only projects.

Table 23: Factors addressed in lessons learned or affecting outcomes

Key Factors	*Addressed in Lessons Learned*		*Noted as Affecting Outcomes*	
	Grant Only	*Non-Grant*	*Grant Only*	*Non-Grant*
Project Design	52%	72%	48%	44%
Capacity to Execute the Project	24%	28%	40%	32%
Funding and Financial Planning	52%	52%	44%	36%
Baseline Information	4%	8%	4%	0%
Monitoring & Evaluation	16%	24%	24%	12%
Stakeholder Engagement	64%	40%	52%	40%
Capacity Building	16%	4%	24%	28%
Legal and Institutional Framework	24%	12%	20%	12%
Infrastructure Building and Maintenance	0%	0%	4%	0%
Country Ownership or Alignment to National and Regional Priorities	24%	8%	20%	32%
Effects on Local Population	20%	20%	12%	8%
Need for Follow-Up	0%	4%	0%	4%

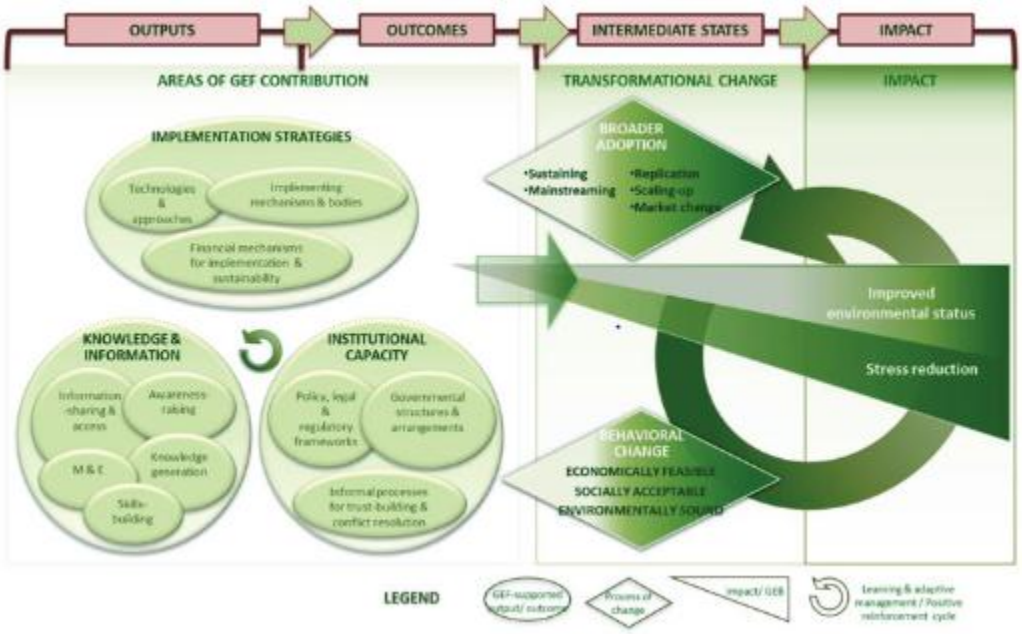
5.7 Theory of Change: Private Sector

216. A Theory of Change (TOC) systematically examines the elements and causal links that constitute the activity/strategy in order to understand and describe the logic of how an activity/strategy is expected to lead to the desired results. In preparation for OPS5, the GEF Evaluation Office has developed a General Framework or the GEF TOC drawing on a large amount of evaluative evidence gathered over the years (See OPS5 Technical Document 2).

217. The purposes of the General Framework for GEF's TOC framework are to classify GEF activities and locate them within the intended causality chain towards the generation of GEBs; establish links between different elements of GEF support as well as be-tween GEF activities and contributions of other actors; assess GEF contribution to progress to-wards GEBs, including the GEF's interaction with other actors; and identify constraints on further GEF contributions to progress towards GEBs.[127]

218. The framework, outlined below, classifies GEF support into three categories that are interdependent and in most cases realize their full potential through their interaction with each other.

127 Evaluation of GEF Focal Area Strategies. GEF Evaluation Office. 2013.



219. A specific GEF project, including those that engage with the private sector, often features a combination of elements from different categories:

- **Knowledge and information**, including activities to support the generation and sharing of pertinent knowledge and information, awareness-raising activities, improvement of technical skills, as well as monitoring and evaluation.
- **Governance capacity**, encompassing support for the development and formulation of policy, legal and regulatory frameworks at the appropriate scales of intervention, assistance for the improvement of governmental structures and processes, as well as support for informal mechanisms for trust-building and conflict resolution.
- **Implementation strategies**, covering a broad range of activities including investments in physical assets, establishment of financing mechanisms and organizational arrangements, as well as improvements of sustainable management approaches, among many others. This category entails the testing and demonstration of new technologies, instruments and approaches, as well as efforts to support broader deployment of proven strategies.

220. The General Framework also identifies five general categories of ways towards broader adoption (within or beyond the limits of direct GEF influence):

- **Sustaining**: Technologies/approaches originally supported through the GEF activity continue to be implemented beyond actual project duration through integration into the regular activities and budget of the government and/or other stakeholders.
- **Mainstreaming**: Information, lessons, or aspects of a GEF initiative are incorporated into a broader initiative such as policies, institutional reforms, and behavioral transformations.

- **Replication**: Results of GEF activities are reproduced at a comparable scale, often in different geographical areas or regions.

- **Scaling-up**: Results of GEF activities are expanded to address concerns at larger geographical, ecological or administrative scales.

- **Market change**: GEF activity catalyzes market transformation, which might encompass technological changes, policy and regulatory reforms, and financial instruments that increase demand for goods and services likely to contribute to global environmental benefits.

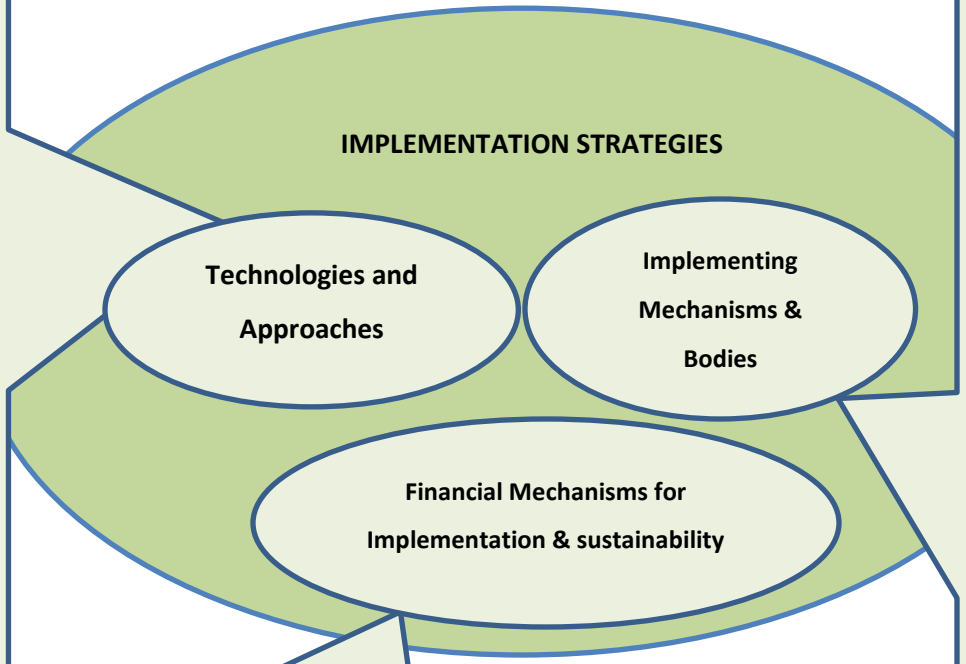
221. Broader adoption goes hand in hand with behavioral change, meaning sustained and significant changes in stakeholder choices towards more environment-friendly actions. The TOC framework highlights the reinforcing interactions between broader adoption, behavioral change and environmental improvements.

222. A theory of change for GEF engagement with the private sector has never been made explicit. In an effort to describe further the elements and causal links reflected in GEF private sector engagement, future studies should attempt to reconstruct the theory of change based on elements of the portfolio, evidence on causal pathways and correspondence with observed sustainability trends in the private sector.

223. Figure 6-8 shows specific private sector examples for the general categories of GEF activities as proposed by the General Framework and the causal chain implicit in several GEF focal area strategies.

Figure 6: Areas of GEF Private Sector Contribution

- **India: Coal Bed Methane Capture Commercialization Utilization (GEF ID- 325) -** Introduced technology to recover and use wasted clean energy (methane).
- **Poland: Coal-to-Gas Project (GEF ID- 67)** Introduced inter-fuel substitution & technological innovations to promote coal to gas conversions in small & medium boilers.
- **Kenya - Joint Geophysical Imaging Technology (UNEP/GEF ID- 1780)**- Supported development of technology to increase efficiency of geophysical exploration of geothermal reservoirs to increase production and lower the cost of geothermal energy.
- **India: Optimizing Development of Small Hydel Resources in Hilly Areas (GEF ID-386)** - Developed a package of commercially viable and environmentally sound technologies for generation of hydroelectric power.
- **Development of a Strategic Market Intervention Approach for Grid Connected Solar Energy Technologies (EMPower Phase II) Project** Partnerships can be crucial in delivering programs or projects, especially where the private sector entity brings institutional knowledge and technical resources. This UNEP project relies on its partnering with utilities and IPPs in pushing ahead development of concentrated solar power (CSP) and photovoltaic (PV) projects.



- **Turkey: GEO Fund** provides geological risk mitigation Insurance for accelerating the use of geothermal energy by private sector.
- The **China Utility Energy Efficiency (CHUEE)** program was designed to stimulate energy investments through guarantees directed to EE portfolios, and advisory services directed to FIs and market players such as utilities, equipment vendors and ESCOs. CHUEE has been exceptionally successful in enabling the rapid scale-up of sustainable energy investments and securing leverage of donor funds (see Box 4).

- Several GEF-funded projects in the Biodiversity focal area feature creation of alternative income generation opportunities. Two UNDP projects in Samoa (the **Marine Biodiversity Protection** and Management project and the **South Pacific Biodiversity Conservation** programme) met their objectives by establishing four community-managed protected areas in Samoa and focusing attention on ecotourism opportunities.
- A long term financing fund developed into a private institution. The **Brazil: Brazilian Biodiversity Fund (GEF ID 126) -** Originally hosted by Getulio Vargas Foundation, FUNBIO remains an active private non-profit that hosts funds and provides services for conservation & sustainable use of biodiversity.

Figure 7: Areas of GEF Private Sector Contribution (cont'd)

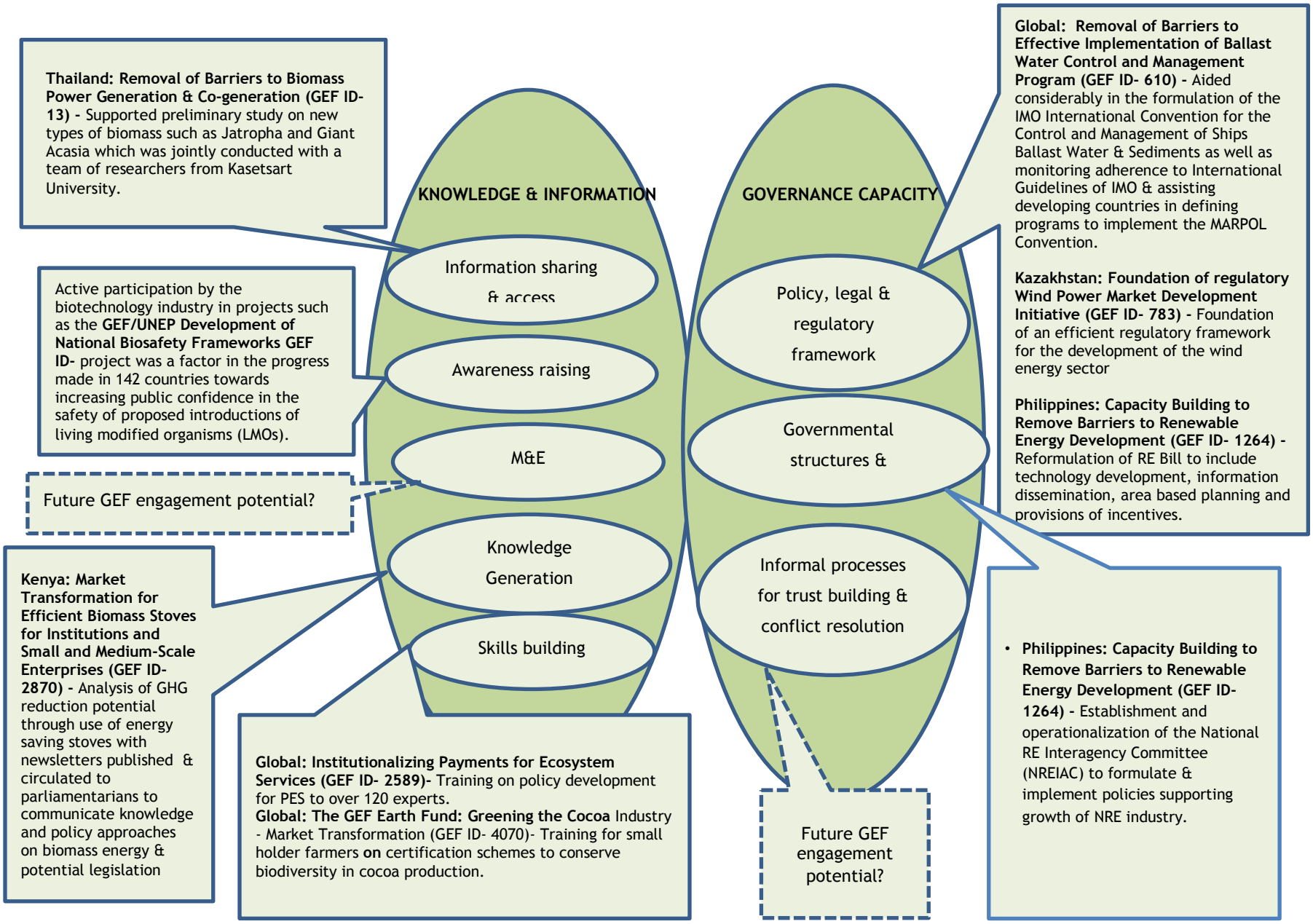
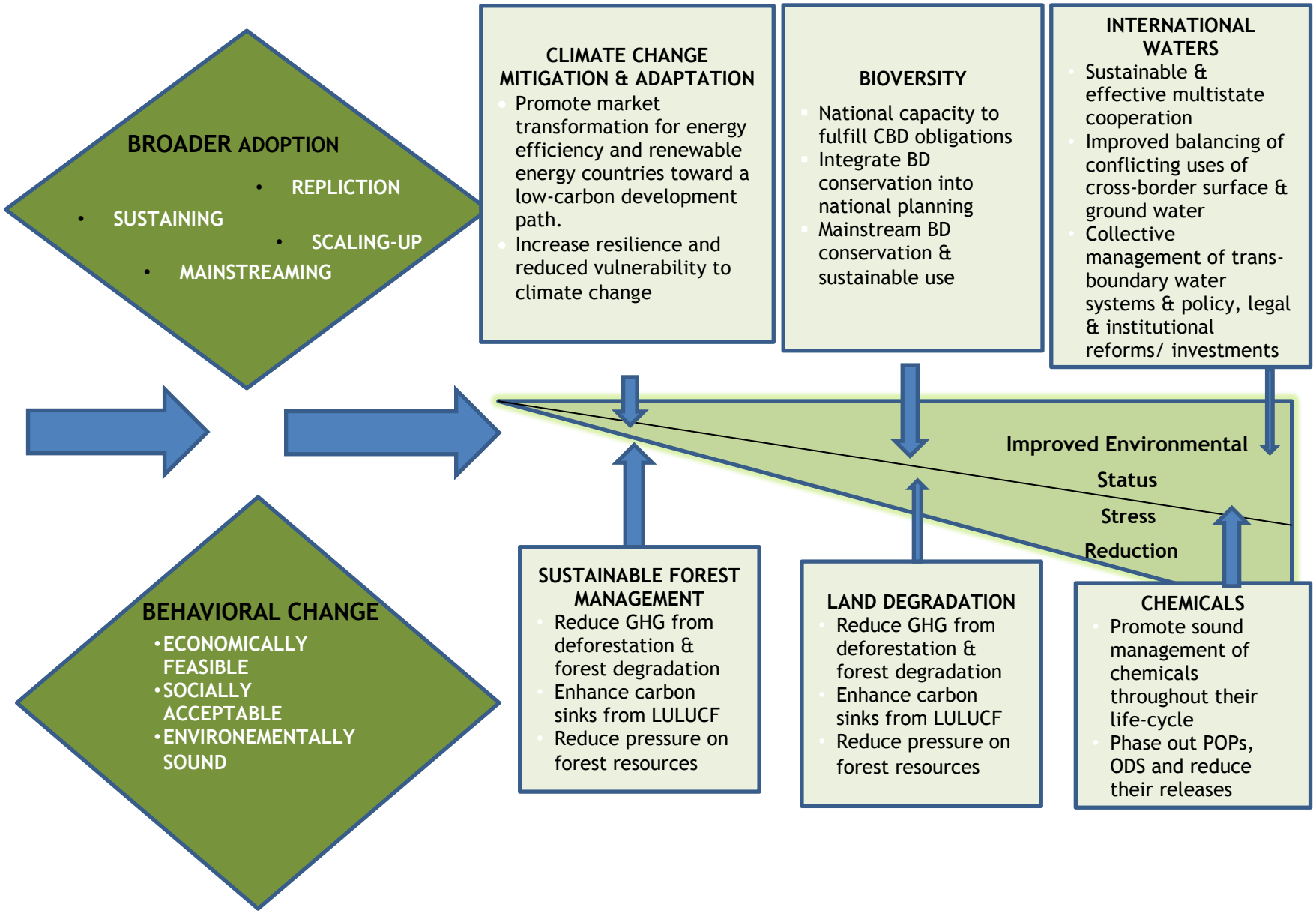


Figure 8: Transformational Change



224. Many GEF private sector interventions have demonstrated broader adoption. Some of these are also explored in OPS5 Technical Documents on Progress to Impact and a few examples are provided below.

Mainstreaming:

225. As part of the *Amazon Protected Areas Program* (ARPA), the GEF established an endowment fund intended to support the long-term financial sustainability of protected areas established with support from the GEF project. In 2012, the Protected Areas Fund (FAP)[128] has a capitalization of over $USD 56 million from the initial $24 million at project close in 2008, including recent deposits from Brazilian private sector entities. As a result of having "graduated" its management processes, two ARPA protected areas (PA) will, for the first time, be supported through FAP funds. In the years between Phase I and Phase II of the project, financial support was provided from Brazilian actors (public and private), amongst others[129]. A 20 million Brazilian Real (BRL) contribution from the Amazon Fund[130] was the bridging finance between ARPA phase I and II. The Amazon Fund is expected to grow with contributions from REDD+ related activities from well managed PA and may be a substantial source of resources for the PAs as the recent contribution to ARPA has shown. At the Rio+20 summit in June 2012, the Brazilian Environment Minister also announced the initiative "Commitment to the Amazon", led by WWF and partners, to fundraise US $250 million, from public and private donors under the aegis of the ARPA for the FAP; the aim being to capture sufficient funds to ensure permanent financing for the protection of 40 million hectares representing 10% of the area of the Brazilian Amazon.[131]

Replication

226. Once environmental actions were seen to have positive competitive benefits, replication was propelled by the private sector in the UNDP/UNIDO *Energy Conservation and GHG Emissions Reduction in Chinese Township and Village Enterprises (TVE) project*. Beyond the eight pilot TVEs, replication was intended at 118 other enterprises. This was achieved in addition to an estimated 500 self-replications in China as well as unconfirmed self-replications in Bangladesh, India, Pakistan and USA[132].

227. *Building Chiller Replacement* (GEFID 540) in Thailand demonstrated how the non-CFC chiller replacement market could be created by a small investment through an initial replacement of only 17 CFC chillers. The financial attractiveness of the energy efficiency gains, as well as the highly economical costs of new chillers, provided the ideal environment and incentive for replicating the benefits of the

128 http://www.programaarpa.org.br/pt/sustentabilidade/fap.html

129 KfW provided bridge financing to ARPA in between Phases I and II and is the largest external donor in Phase II.

130 http://www.amazonfund.gov.br/FundoAmazonia/fam/site_en/Esquerdo/Projetos/Lista_Projetos/ARPA

131 http://wwf.panda.org/what_we_do/where_we_work/amazon/

132 GEF-EO. The Catalytic Role of the GEF – Case Study: Energy Conservation and GHG Emissions Reductions in Chinese Township and Village Enterprises in China. OPS4 Technical Document #3, prepared by National Centre for Science and Technology Evaluation, People's Republic of China, June 2009. UNDP/UNIDO. Energy Conservation and GHG Emissions Reductions in Chinese Township and Village Enterprises – Phase II Final Independent Evaluation. June 2007

project. As per the terminal evaluation, the CFC chiller replacement market in Thailand had expanded from virtually non-existence before the project to some 25% of the total new chiller installations by 2005. At that rate, up to two-thirds of the remaining 700-800 CFC chillers operating in the country were expected to be replaced by 2010.

228. *Capacity Building for environmentally sound management of PCBs in Romania* (GEFID 2715) helped enhanced national capacity for PCB regulation and lowered market barriers to appropriate disposal of PCBs. The project design accounted for the necessary buy-in from the private sector, which was essential for reforming this sector. Additionally, Romania's bid for accession to the EU provided an incentive for the government to ensure that standards for POPs were up to the level for accession to the EU. The project was successful in ensuring broad adoption of techniques to appropriately use and dispose of PCB-containing waste through industry engagement and financial mechanisms. The financial mechanism effectively lowered market barriers for firms of all sizes and reduced the cost of appropriate PCB disposal.

Scaling-up

229. Sustainable Energy Finance for Energy Efficiency and Renewable Energy: As briefly discussed in Chapter 3 on Sustainability Trends, GEF has supported a series of sustainable energy finance projects whose objective is to support the enabling framework, institutional capacity and necessary financing mechanisms by channeling GEF finance through local financial institutions to SMEs and public buildings such as residential complexes and schools. These projects ranging in countries from the former Soviet Union (Ukraine, Georgia, Armenia, Belarus, Azerbaijan, Russia)to several in Asia-Pacific (Philippines, Vietnam, China, Vanuatu, Marshall Islands) and Latin America (Mexico, Peru) have been scaled up by many of the financial intermediaries the GEF worked with as well as banking institutions that GEF has never worked with. For one example, Banco General in Panama is in the process of integrating sustainability in its operations. In 2011, the bank put together a green credit facility for corporate clients in Panama backed by US$ 20 mln from the Inter-American Development Bank. The project is a great success and the approved project portfolio added up to already $ 75 mln by Q3 2013, mostly for energy efficiency and sustainable construction.

Market Change:

230. Country reports[133] published in consort with the GEF Impact Evaluation of the Phase-Out of Ozone-Depleting Substances in Countries with Economies in Transition[134] reveal that private sector commitment to ODS phase-out was a critical driver for the success of the GEF assistance in *Phase-out of Ozone Depleting Substances in Economies in Transition* project investments. The impact evaluation states that the

133GEF-EO. GEF Impact Evaluation of the Phase-Out of Ozone-Depleting Substances in Countries with Economies in Transition. Volume Two: Country Reports. *Impact Evaluation Information Document No. 18.* October 2009.

134 GEF-EO. GEF Impact Evaluation of the Phase-Out of Ozone-Depleting Substances in Countries with Economies in Transition. Volume One: Theory of Change. *Impact Evaluation Information Document No. 17.* October 2009.

ODS portfolio has been characterized by strong private-sector involvement from the early stages of project design through implementation. The ODS phase-out associated with GEF projects, an estimated 20,000 tonnes since 1991, made a substantial contribution to the more than 95% reduction in ODS consumption the 18 CEITs have achieved since 1991. These reductions, in addition to the overall success of the Montreal Protocol, have made significant progress in reversing ozone depletion. Continuing private-sector participation will be needed to recover and recycle HCFCs and increase the market penetration of non-ODS alternatives in refrigeration, and to invest in destruction facilities or other options for safe and cost-effective disposal of ODS. With such efforts, by 2065, ODS phase-out efforts are expected to return the ozone layer to pre-1980 levels.

231. GEF has been a long supporter of the global transformation of markets to efficient lighting. Developed and emerging countries around the world have set up energy efficient lighting programs to address both environmental and energy security issues. GEF's support in this realm began with the ELI project (see Box 1) which operated in seven countries and in several instances, as a result of ELI, manufactures entered markets and established local. Another example is GEF's support to the Lighting Africa initiative, which takes a similar approach as ELI in the African continent, with the added benefit of energy access. The program is now being scaled up by IFC to undertake the same model of market transformation to efficient lighting in India). Most recently, working with UNEP, the En.Lighten initiative works with two key private sector partners, OSRAM and Philips, both of whom are contributing significant in-kind co-financing, and providing policy and technical information and networks, to establish a global network of expertise including task forces with representatives of governments, private sector, civil society, and technical and academic organizations). It is anticipated one of the task forces will be on policy, regulation and voluntary initiatives. Collectively, these efforts have contributed to change the global market place from incandescent to more efficient lighting.

5.7.1 Private Sector Portfolio Progress to Impact

232. A review of progress to impact conducted by GEFEO was also extrapolated to the private sector portfolio and is described in this next section. Differences between projects with private sector engagement and those without are also explored. The projects in the GEFEO progress impact study[135] were drawn from the OPS4 and OPS5 cohorts so there is only partial overlap between the private sector portfolio discussed in this document and the overall portfolio. Nevertheless, the study found overlap on 72 projects (see Annex E. Trends are presented for environmental and socio-economic impacts as well as broader adoption and project products.

233. Viewed in aggregate, 87% of the projects with private sector engagement and 81% of the non-private sector projects had environmental impacts whether leading to stress reduction or status change (Table 7). Both the private sector (PS) and non-private sector have comparable rates of environmental impacts when taken in

135 OPS5 Technical Document #2: Impact of the GEF. http://www.thegef.org/gef/sites/thegef.org/files/EO/TD2_Impact%20of%20the%20GEF.pdf

aggregate. However, when viewed in terms of local stress reduction vs. systemic stress reduction, the projects with private sector engagement are more successful at addressing systemic environmental stresses. On the other hand, the PS projects are less effective than non-PS projects in reducing local stresses.

Table 24: Number of projects showing environmental impact at different scales

Environmental Impact (% showing)	*PS - Engagement*	*No-PS Engagement*	*Total*
Number Assessed	*62*	*315*	*377*
Local Stress Reduction	47%***	69%	66%
Local Environmental Status Change	11%***	27%	25%
System Stress Reduction	44%***	22%	26%
System Environmental Status Change	5%	5%	5%
TOTAL (ANY ENV IMPACT)	87%	81%	82%

234. Socio-economic impacts shown in Table25 follow a similar pattern. Projects with PS engagement are more effective in leading to system wide impacts rather than local impacts. System wide change appears to be an area of comparative advantage for projects with PS engagement.

Table 25: Number of projects showing socio-economic impact at different scales

Socio-economic Impact (% showing)	*PS - Engagement*	*No-PS Engagement*	*Total*
Number Assessed	*55*	*267*	*322*
Local Positive Change	51%*	64%	62%
System Positive Change	24%***	9%	12%
TOTAL (ANY SOCIO-ECONOMIC IMPACT)	75%	73%	74%

235. The PS and non-PS projects are comparable across 3 out of 4 measures of broader adoption (Table26). Both groups have similar rates of mainstreaming, replications, and scaling-up. However, the projects with PS engagement are significantly more likely to lead to market change. Fifty-two percent of PS projects have led to market changes compared to only 21% of non-PS projects.

Table 26: Number of projects showing broader adoption

Broader Adoption Channel	***PS - Engagement***			***No-PS Engagement***			*Total*
	N	*Showing*	*Percent*	*N*	*Showing*	*Percent*	
Mainstreaming	66	47	71%	379	289	76%	76%
Replication	69	31	45%	366	181	49%	49%
Scaling-Up	67	15	22%	351	92	26%	26%
Market Change	62	32	52%***	281	58	21%	26%

***** Significant at 99% confidence level, ** Significant at 95% confidence level, **Significant at 90% confidence level.**

236. The contribution of projects to *outcomes that drive impacts* was also assessed (Table 27). Projects with PS engagement are significantly more likely to contribute to the development and demonstration of new financial mechanisms. This finding confirms the finding above that private sector engagement is crucial for initiating market changes.

237. Projects with PS engagement however are less effective at broadening the participatory base in projects through the establishment of structures for stakeholder participation or new implementing mechanisms/bodies for carrying out project activities. They are also significantly behind contributing to trust-building among projects stakeholders.

Table 27: Number of projects showing contribution to frameworks, structures, and mechanisms

Contributing to….	***PS - Engagement***			***No-PS Engagement***			*Total*
	N	*Showing*	*Percent*	*N*	*Showing*	*Percent*	
Legal-Policy-Regulatory Frameworks	70	50	71%	387	289	75%	74%
Administrative Structures	71	31	44%	378	186	49%	48%
Structures for Stakeholder Participation	70	40	57%***	376	291	77%	74%
Trust Building-Conflict Resolution	68	22	32%*	347	152	44%	42%
Technologies/Approaches	71	66	93%	384	344	90%	90%
Implementing Mechanisms/Bodies	69	24	35%***	378	198	52%	50%
Financial Mechanisms	71	48	68%*	374	196	56%	55%

***** Significant at 99% confidence level, ** Significant at 95% confidence level, **Significant at 90% confidence level.**

6 Bibliography

GEF, Approach paper, sub-study on GEF Engagement with the Private Sector (2013).

GEF, Funds and Trust Funds (1998) GEF/C.12/Inf.5.

GEF, GEF strategy for Engaging the private sector (1996) - GEF/C.7/12.

GEF, Impact of the GEF (2013)

GEF, Instrument for Establishment of the Restructured GEF (1995).

GEF, Joint Evaluation of the GEF Activity Cycle and Modalities (2007).

GEF, Joint Summary of the Chairs, GEF Council Meeting, October 8-10, 1996 (1996) - GEF/C.8/3, 10(d).

GEF, Principles for Engaging the Private Sector (2004) – GEF/C.23/11.

GEF, Private Sector Strategy (2011) - GEF/C.14/13.

GEF, Resource Allocation Framework (2005).

GEF, SE Efficient Lighting Initiative (ELI) Final report (2009).

GEF, Strategy for Engaging the Private Sector (1996) - GEF C7/12.

GEF, Strategy to Enhance Engagement with the Private Sector (2006) - GEF/C.28/14.

GEF, Terminal Evaluation Report GEF 1571 (2010).

GEF, Terminal Evaluation Review GEF Photovoltaic Market Transformation Initiative (2010).

IFC, CHUEE Executive Summary, (2005).

IFC, Review of IFC Sustainable Energy Finance Investments Supported with Concessional Funding (2012).

MIEEIP, Malaysian Industrial Energy Efficiency Improvement Project (2008)

OECD, The OECD Environmental Outlook to 2050. Key Findings on Climate Change (2012).

UNEP, Desk Evaluation Of The Project: Redirecting Commercial Investment Decisions To Cleaner Technology - A Technology Transfer Clearing House (2002)

UNEP, Earth Trust Fund PIF Greening the Cocoa Industry (2010)

UNDP, Market Transformation for Highly Efficient Biomass Stoves for Institutions and Medium-Scale Enterprises in Kenya, (2011).

World Bank, India Renewable Resources Development Project (Alternate Energy) (2001).

World Bank, India Renewable Resources (2002).

World Bank, Sri Lanka Energy Services Delivery Project (2003).

World Bank, Senegal Sustainable And Participatory Energy Management Project (2005).

World Bank, The World Bank Group's Partnership with the Global Environment Facility (2013).

Annex A: Examples of the GEF's Experience with Different Types of Private Sector Entities and Engagement Strategies

Business Format	*Example(s), Project, Country(ies)*	*Direct Engagement Strategy*	*Information Source(s)*
Micro-enterprises	An individual or individuals who pursue a livelihood which has relevance to a GEF-supported project. In the UNDP Coastal Zones Project, this could be a turtle egg-digger who conducts his activity to sell to a local restaurant and/or for subsistence.	Outreach, consultation and participation – if possible leading to a Public-Private alliance which might share management of the wildlife refuge	Final Evaluation of Project: Biodiversity Conservation in the Tropical Dry Forest and South Pacific Coastal Marine Zone of Nicaragua: Building Public-Private Alliances. UNDP. Final report, June 2010.
Public-Private Partnerships (PPPs)	Water Funds (not formal PPPs but some elements present); key players in EF platform "IADB/TNC Water Funds"; Latin America and the Caribbean	Multiple platform implementation responsibilities; entities in receipt of private sector co-financing	Review of the Global Environment Facility Earth Fund Annex I: Descriptions of the Earth Fund Platforms. September 14, 2010.
Public-Private Partnerships (PPPs)	Conservation Agreements (not formal PPPs but some elements present); key players in EF platform "WB/CI Conservation Agreements"; locations not known	Multiple platform implementation responsibilities	Review of the Global Environment Facility Earth Fund Annex I: Descriptions of the Earth Fund Platforms. September 14, 2010.
Public-Private alliances	Proposed public-private co-management entity (Friends of Chacocente); UNDP Coastal Zones Project; Nicaragua	Consultation, capacity building, support for alternative income generation activities	Final Evaluation of Project: Biodiversity Conservation in the Tropical Dry Forest and South Pacific Coastal Marine Zone of Nicaragua: Building Public-Private Alliances. UNDP. Final report, June 2010.
Cooperatives and Other Joint Ownership Enterprises	Participatory co-management model: Villagers' Associations for the Management of Wildlife Reserves (AVIGREFs); UNEP Building Scientific and Technical Capacity – West African Biosphere Reserves Regional Project; Benin	Consultation, capacity building, support for alternative income generation activities	GEF Country Portfolio Evaluations: Benin (1991-2007), Evaluation Report No. 41. October 2008

Annex A (cont'd): Evidence of Relationships or Roles played by the Private Sector in Small Grants Program (SGP) Country Programs

Relationships/Role Played by the Private Sector in SGP	*Examples of SGP Country Programs/Projects*	*References*
1. SGP efforts to cultivate relationships with the private sector contributed to numerous institutional reforms and policy changes in the recipient countries to address global environmental issues	Mexico Organic Honey in Yucatan, Mexico	**GEF Country Portfolio Evaluations: Benin (1991-2007)**, Evaluation Report No. 41. October 2008, Box 4.2
2. Business interests can play a role in the replication and scaling up of SGP initiatives in order to achieve global benefits	Ghana assistance for women's groups with new technologies to produce shea butter soap for the Japanese market	GEF-EO/UNDP-EO. **Joint Evaluation of the GEF Small Grants Programme Country Program Case Study Ghana**. June 2007, p.48
3. SGP efforts toward securing global environmental benefits while also addressing the livelihood needs of local populations	Mt Kenya Community Management of Protected Areas Conservation (COMPACT) project; Agrobiodiversity in Wandzin project and Project Clean in Krzyzowki, Poland	GEF-EO/UNDP-EO. **Joint Evaluation of the GEF Small Grants Programme Country Program Case Study Kenya**, Box 3.1 and GEF-EO/UNDP-EO. **Joint Evaluation of the GEF Small Grants Programme**. Evaluation Report No. 39, June 2008, Box 4.4; GEF-EO/UNDP-EO. **Joint Evaluation of the GEF Small Grants Programme Country Program Case Study Poland**, Boxes 4.5 and 4.6
4. SGP efforts to form relationships with the private sector that contribute in-kind or financial resources (i.e., co-financing)	Pakistan one-year partnership with British Petroleum; Partnerships in Environmental Management in the Seas of South East Asia (PEMSEA) project	GEF-EO/UNDP-EO. **Joint Evaluation of the GEF Small Grants Programme Country Program Case Study Pakistan**. June 2007, pp. 44, 49; GEF-EO/UNDP-EO. **Joint Evaluation of the GEF Small Grants Programme**. Evaluation Report No. 39, June 2008
5. SGP efforts to form relationships with the private sector that bring a business perspective onto the National Steering Committee	Belize composition of the National Steering Committee during 1993-2004	GEF-EO/UNDP-EO. **Joint Evaluation of the GEF Small Grants Programme Country Program Case Study Belize**. June 2007, p.18
6. Although NGOs and CBOs are the primary beneficiaries of SGP grants, business interests (such as cooperatives or industry associations) may also be recipients	Industry association primary partner in the Egypt Energy Conservation for Mitigating Climate Change project; cooperatives feature in four of the sampled Belize projects	GEF-EO/UNDP-EO. **Joint Evaluation of the GEF Small Grants Programme Country Program Case Study Egypt**. June 2007, p.21; GEF-EO/UNDP-EO. **Joint Evaluation of the GEF Small Grants Programme Country Program Case Study Belize**. June 2007, p.47
7. For older SGP country programs which are facing graduation, a private-sector perspective may be necessary for the program to successfully navigate into an era of post-SGP funding	Turkey SGP Country Program	GEF-EO/UNDP-EO. **Joint Evaluation of the GEF Small Grants Programme Country Program Case Study Turkey**. June 2007, p.40

Annex B: List of Projects

GEF ID	Project Type	Project Name	In TE Review Sample[136]	Impact Study[137]
8	FP	Rural Energy	No	No
13	FP	Removal of Barriers to Biomass Power Generation and Co-generation	Yes	Yes
20	MSP	Conservation Planning for Biodiversity in the Thicket Biome	No	Yes
27	MSP	Creation and Strengthening of the Capacity for Sustainable Renewable Energy Development in Central America	No	No
59	FP	Ship-Generated Waste Management	Yes	No
67	FP	Coal-to-Gas Project	Yes	Yes
76	FP	Alternate Energy	No	No
91	FP	Small and Medium Scale Enterprise Program (IFC)	No	No
96	FP	Efficient Lighting Project (PELP)	No	No
104	FP	Energy Services Delivery	No	No
111	FP	Energy Efficiency Co-Financing Program	No	No
112	FP	Photovoltaic Market Transformation Initiative (IFC)	Yes	Yes
118	FP	Sustainable and Participatory Energy Management	Yes	Yes
119	FP	Solar Home Systems (SHS)	No	No
120	FP	Terra Capital Biodiversity Enterprise Fund for Latin America (IFC)	No	No
126	FP	Brazilian Biodiversity Fund	Yes	Yes
135	FP	Small and Medium Scale Enterprise Program (IFC, first replenishment)	No	No
267	FP	Energy Efficiency Improvements and Greenhouse Gas Reductions	Yes	Yes
295	FP	Uganda photovoltaic pilot project for rural electrification	No	No
314	FP	A Program for Rural Electrification with Renewable Energy Using the Popular Participation Law	Yes	Yes
325	FP	Coal Bed Methane Capture and Commercial Utilization	No	No
369	EA	Building Capacity in the Maghreb to Respond to the Challenges and Opportunities Created by National Response to the Framework Convention on Climate Change	No	No
371	FP	Decentralized Wind Electric Power for Social and Economic Development (Alizes Electriques)	No	No
376	FP	Control of Greenhouse Gas Emissions through Energy Efficient Building Technology in West Africa	No	No
377	FP	Community Based Rangeland Rehabilitation for Carbon Sequestration	Yes	No
386	FP	Optimizing Development of Small Hydel Resources in Hilly Areas	Yes	Yes
391	FP	Fuel Efficiency in the Road Transport Sector	Yes	Yes
398	FP	Pollution Control and Other Measures to Protect Biodiversity in Lake Tanganyika	No	No
407	FP	Inventory, Evaluation and Monitoring of Botanical Diversity in Southern Africa: A Regional Capacity and Institution Building Network	Yes	Yes
444	FP	Energy and Water Sector Reform and Development	No	Yes
448	FP	Industrial Energy Efficiency Improvement Project	Yes	Yes
449	FP	Photovoltaic-Based Rural Electrification in Peru	No	Yes
466	MSP	Promotion of Biodiversity Conservation within Coffee Landscapes	No	Yes
490	MSP	Kibale Forest Wild Coffee Project	Yes	No
519	FP	Efficient Lighting Initiative (Tranche I)	No	No
540	FP	Building Chiller Replacement Program	Yes	Yes

136 Projects which were sampled for desk review of terminal evaluation reports.

137 Projects for which impact data was available.

GEF ID	Project Type	Project Name	In TE Review Sample[136]	Impact Study[137]
569	MSP	Efficient Street Lighting Program	Yes	No
570	MSP	Energy Efficiency Market Development	No	Yes
571	MSP	Low-Cost/Low-Energy Buildings in the Czech Republic	Yes	Yes
590	FP	Elimination of Ozone Depleting Substances in the Production of Household Refrigerators and Freezers	No	No
595	FP	Solar Development Group (SDG)	Yes	Yes
610	FP	Removal of Barriers to the Effective Implementation of Ballast Water Control and Management Measures in Developing Countries	Yes	Yes
611	MSP	Redirecting Commercial Investment Decisions to Cleaner Technologies – A Technology Transfer Clearinghouse	No	No
622	FP	Energy Conservation and GHG Emission Reduction in Chinese Township and Village Enterprises (TVE), Phase II	Yes	Yes
636	FP	Barrier Removal for Cross Sectoral Energy Efficiency	No	Yes
641	FP	Barrier Removal to Renewable Energy Programme	No	No
644	MSP	El Triunfo Biosphere Reserve: Habitat Enhancement in Productive Landscapes	No	No
646	FP	Market Development for Solar Water Heaters	Yes	Yes
652	FP	CEPALCO Distributed Generation PV Power Plant	No	No
658	FP	Removing Barriers to the Increased Use of Biomass as an Energy Source	No	No
660	MSP	Barrier Removal to Secure PV Market Penetration in Semi-Urban Sudan	No	No
667	FP	Renewable Energy and Energy Efficiency Fund (IFC)	No	No
671	FP	Ecomarkets	No	Yes
773	MSP	Caribbean Archipelago Biosphere Reserve: Regional Marine Protected Area System	No	Yes
784	FP	Methane Capture and Use (Landfill Demonstration Project	Yes	Yes
786	FP	Krakow Energy Efficiency Project	No	No
819	MSP	Fuel Cell Bus and Distributed Power Generation Market Prospects and Intervention Strategy Options	No	No
840	FP	Caribbean Renewable Energy Development Programme	No	Yes
843	FP	Removal of Barriers to Rural Electrification with Renewable Energy	Yes	Yes
844	MSP	Valdivian Forest Zone: Private-Public Mechanisms for Biodiversity Conservation	Yes	Yes
847	MSP	Renewable Energy and Forest Conservation: Sustainable Harvest and Processing of Coffee and Allspice	No	Yes
851	EA	Expedited financing for (interim) measures for capacity building in priority areas.	No	No
857	MSP	Renewable Energy Systems in the Peruvian Amazon Region (RESPAR)	No	Yes
868	MSP	Establishment of Private Natural Heritage Reserves in the Brazilian Cerrado	Yes	Yes
882	FP	Removing Barriers to Improving Energy Efficiency of the Residential and Service Sectors	Yes	Yes
883	FP	Energy Efficiency Project	Yes	Yes
920	FP	Technology Transfer Networks, Phase 1	Yes	Yes
922	FP	Baltic Sea Regional Project, Tranche 1	Yes	Yes
935	FP	Barrier Removal to Namibian Renewable Energy Programme, Phase I	No	No
938	FP	Power and Communications Sectors Modernization and Rural Services Project (PROMEC)	No	Yes
941	FP	Demonstration of Fuel Cell Bus Commercialization in China (Phase II-Part I)	No	Yes
944	FP	Energy Efficiency Project	Yes	Yes
948	FP	Vilnius Heat Demand Management Project	No	Yes
966	FP	End Use Energy Efficiency Project	Yes	Yes
967	FP	Private Sector Led Development of On-Grid Wind Power in Tunisia	No	No

GEF ID	Project Type	Project Name	In TE Review Sample[136]	Impact Study[137]
1016	FP	Development of National Implementation Plans for the Management of Persistent Organic Pollutants (POPs)	No	Yes
1061	MSP	Inka Terra: An Innovative Partnership for Self-Financing Biodiversity Conservation & Community Development	No	No
1084	FP	Caribbean: Mainstreaming Adaptation to Climate Change	No	Yes
1089	FP	Asian Conservation Company (ACC)	No	No
1096	FP	Energy Management and Performance Related Energy Savings Scheme (EMPRESS)	No	Yes
1103	FP	Efficient Lighting Market Transformation Project	No	Yes
1137	FP	Promoting the Use of Renewable Energy Resources for Local Energy Supply	Yes	Yes
1144	FP	Komodo National Park Collaborative Management Initiative	No	No
1158	FP	Energy Reform and Access Project	No	No
1196	FP	Transformation of the Rural Photovoltaics (PV) Market	No	Yes
1198	FP	Biomass Energy for Heating and Hot Water Supply	Yes	Yes
1199	FP	Removal of Barriers to Biomass Power Generation, Part I	No	No
1209	FP	Rural Electrification and Renewable Energy Development	No	No
1237	FP	Energy Conservation Project, Phase II	No	No
1245	FP	Renewable Energy-based Rural Electrification	No	No
1264	FP	Capacity Building to Remove Barriers to Renewable Energy Development	Yes	Yes
1265	FP	Polish Energy Efficiency Motors Programme	Yes	Yes
1281	FP	Solar and Wind Energy Resource Assessment	No	Yes
1291	FP	Renewable Energy Resources Project	Yes	Yes
1310	MSP	Building Wider Public and Private Constituences for the GEF in Latin America and the Caribbean: Regional Promotion of Global Environment Protection through the Electronic Media	Yes	Yes
1316	MSP	Energy Efficiency Co-Financing Program 2 (HEECP2)	No	No
1335	FP	Bioenergy for Sustainable Rural Development	No	No
1358	FP	Renewable Energy-based Electricity Generation for Isolated Mini-grids	No	No
1361	FP	Generation and Delivery of Renewable Energy Based Modern Energy Services in Cuba; the case of Isla de la Juventud	No	No
1397	MSP	Private Land Mechanisms for Biodiversity Conservation in Mexico	Yes	Yes
1413	MSP	Energy Efficiency Measures in the Honduran Commercial and Industry Sectors	Yes	Yes
1430	MSP	Support for the Implementation of the Stockholm Convention on Persistent Organic Pollutants	No	No
1439	FP	Efficient Lighting Initiative (ELI)	No	No
1471	MSP	Improving Management of NGO and Privately Owned Nature Reserves and High Biodiversity Islands in Seychelles	Yes	Yes
1485	MSP	Poison Dart Frog Ranching to Protect Rainforest and Alleviate Poverty	No	No
1491	MSP	Lalkisale Biodiversity Conservation Support Project	No	No
1532	FP	Electric Cooperative System Loss Reduction Project	No	No
1541	FP	Commercializing Energy Efficiency Finance (CEEF) - Tranche I	No	No
1558	MSP	Obtaining Biofuels and Non-wood Cellulose Fiber from Agricultural Residues/Waste	No	No
1571	MSP	EcoEnterprises Fund	No	No
1591	FP	Regional Program of Action and Demonstration of Sustainable Alternatives to DDT for Malaria Vector Control in Mexico and Central America	No	Yes
1609	FP	Renewable Energy Enterprise Development - Seed Capital Access Facility	No	No
1615	FP	Geothermal Energy Development Program, GeoFund	No	No
1646	MSP	Cost Effective Energy Efficiency Measures in the Russian Educational Sector	Yes	Yes

GEF ID	Project Type	Project Name	In TE Review Sample[136]	Impact Study[137]
1685	FP	FC-1: Fuel Cells Financing Initiative for Distributed Generation Applications (Phase 1)	No	No
1702	MSP	Rehabilitation and Expansion of Small Hydro-Plants on the River Raba in Hungary	No	No
1735	MSP	Conservation of Dry Forest and Coastal Biodiversity of the Pacific Coast of Southern Nicaragua: Building Private-Public Partnerships	Yes	Yes
1794	MSP	Removing Obstacles to Direct Private-Sector Participation in In-situ Biodiversity Conservation	No	Yes
1838	MSP	Energy and Environment Upgrading of the Industrial Park of Sidi Bernoussi Zenata, Casablanca	No	Yes
1839	FP	Private Sector/GEF Co-financing of Global Warming Mitigation in Cameroon through Biomass Conservation, Restoration	No	No
1859	MSP	Conservation of the Eg-Uur Watershed	No	Yes
1897	FP	Building Integrated Photovoltaic (BIPV) Technology Application Project	No	No
1899	FP	Regional Programme on Electrical Energy Efficiency in Industrial and Commercial Service Sectors in Central America	Yes	Yes
1900	FP	Large Scale Renewable Energy Development Project	No	No
1904	MSP	Small Scale Hydro Power Development in Haiti	No	No
1905	FP	Development of an Energy Efficiency Program for the Industrial Sector for Tunisia	No	No
1916	FP	Marine Aquarium Market Transformation Initiative (MAMTI)	No	No
2000	FP	Environmental Business Finance Program (EBFP)	No	No
2105	FP	Conservation and Sustainable Use of Biodiversity in the Dalmatian Coast through Greening Coastal Development	No	No
2108	FP	Philippines Sustainable Energy Finance Program	No	No
2111	FP	Russian Sustainable Energy Finance Program	No	No
2117	FP	Energy Efficiency Project	Yes	Yes
2119	FP	African Rift Geothermal Development Facility (ARGeo)	No	No
2129	FP	Demonstrating and Capturing Best Practices and Technologies for the Reduction of Land-sourced Impacts Resulting from Coastal Tourism	No	No
2138	FP	Livestock Waste Management in East Asia	No	No
2139	FP	SIP: Transboundary Agro-Ecosystem Management Programme for the Kagera River Basin (Kagera TAMP)	No	No
2174	FP	Commercializing Energy Efficiency Finance (CEEF) - Tranche II	No	No
2188	MSP	East Asian Seas Region: Development and Implementation of Public Private Partnerships in Environmental Investments	No	Yes
2194	MSP	Developing the Legal and Regulatory Framework for Wind Power in Russia	No	Yes
2244	MSP	Building the Local Capacity for Promoting Energy Efficiency in Private and Public Buildings	No	Yes
2256	FP	Barrier Removal to Namibian Renewable Energy Programme (NAMREP), Phase II	Yes	Yes
2355	FP	Agricultural Productivity and Sustainable Land Management	No	No
2376	FP	Renewable Energy Project (RREP)	No	No
2423	MSP	Assessment of Existing Capacity and Capacity Building Needs to Analyze POPs in Developing Countries	Yes	Yes
2489	FP	Rural Infrastructure (Electrification Sector)	No	No
2531	FP	Sustainable Energy Program	No	No
2538	MSP	Assessment of Risk Management Instruments for Financing Renewable Energy	Yes	Yes
2554	FP	Energy Efficiency Codes in Residential Buildings and Energy Efficiency Improvement in Commercial and Hospital Buildings in Morocco	No	No
2555	FP	Promotion of a Wind Power Market	No	No
2589	FP	Institutionalizing Payments for Ecosystem Services	Yes	Yes
2607	FP	Rural Electrification	No	No
2611	FP	Integrated Energy Services for Small Localities of Rural Mexico	No	No
2618	FP	Biodiversity and Agricultural Commodities Program (BACP), Phase 1	No	No

GEF ID	Project Type	Project Name	In TE Review Sample[136]	Impact Study[137]
2619	FP	Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation	No	No
2624	FP	China Utility-Based Energy Efficiency Finance Program (CHUEE)	No	No
2670	FP	Central American Markets for Biodiversity (CAMBio): Mainstreaming Biodiversity Conservation and Sustainable use within Micro, Small and Medium-sized Enterprise Development and Financing	No	No
2806	MSP	Promoting Payments for Environmental Services (PES) and Related Sustainable Financing Schemes in the Danube Basin	No	No
2820	FP	Supporting the Development and Implementation of Access and Benefit Sharing Policies in Africa	No	No
2870	MSP	Market Transformation for Efficient Biomass Stoves for Institutions and Small and Medium-Scale Enterprises	Yes	Yes
2886	FP	Energy Development and Access Project (formerly) Development of Renewable Energy and Energy Efficiency	No	No
2900	FP	GEF- Development Marketplace Partnership	No	No
2918	FP	Sustainable Energy Development Project (SEDP)	No	No
2926	FP	Environmentally Sound Management and Disposal of Obsolete POPs Pesticides and Other POPs Wastes	No	No
2939	FP	Solar Water Heating Market Transformation and Strengthening Initiative, Phase 1	No	No
2941	FP	Market Transformation for Energy Efficiency in Buildings	No	No
2944	FP	Sustainable Energy Financing	No	No
2950	FP	Lighting the "Bottom of the Pyramid"	No	No
2996	FP	Portfolio Approach to Distributed Generation Opportunity (PADGO) (Phase 1)	No	No
3005	MSP	CleanTech Fund	No	No
3181	MSP	Pollution Reduction through Improved Municipal Wastewater Management in Coastal Cities in ACP Countries with a Focus on SIDS	No	No
3282	FP	Establishment of PCB Waste Management and Disposal System	No	No
3357	FP	The GEF Earth Fund (formerly GEF Public-Private Partnership Fund)	No	No
3359	FP	Promoting Renewable Energy in Mae Hong Son Province	No	No
3376	FP	SIP: Private Public Sector Partnership on Capacity Building for SLM in the Shire River Basin	No	No
3386	MSP	SIP: Innovations in Micro Irrigation for Dryland Farmers	No	No
3418	MSP	Mainstreaming Biodiversity Management into Medicinal and Aromatic Plants Production Processes	No	No
3445	FP	SFM: Integrated Community-based Forest and Catchment Management through an Ecosystem Service Approach (CBFCM)	No	No
3461	FP	Promoting Sustainable Transport Solutions for East Africa	No	No
3540	FP	Industrial Energy Efficiency in Key Sectors	No	No
3541	FP	TT-Pilot (GEF 4): Phase Out HCFCs and Promotion of HFC-free Energy Efficient Refrigeration and Air-Conditioning Systems in the Russian Federation Through Technology Transfer	No	No
3558	FP	SP-SFIF: West Africa Regional Fisheries Program (WARFP)	No	No
3565	FP	Market Transformation of Energy Efficient Appliances in Turkey	No	No
3597	FP	RUS Improving Urban Housing Efficiency in the Russian Federation	No	No
3626	FP	PAS: The Micronesia Challenge : Sustainable Finance Systems for Island Protected Area Management - under the GEF Pacific Alliance for Sustainability	No	No
3732	FP	Demonstration of BAT and BEP in Fossil Fuel-fired Utility and Industrial Boilers in Response to the Stockholm Convention on POPs	No	No
3753	FP	Sustainable Financing of the Protected Area System in Mozambique	No	No
3766	FP	Testing a Prototype Caribbean Regional Fund for Wastewater Management (CReW)	No	No
3791	FP	Energy Efficiency Standards and Labels in Peru	No	No
3800	FP	LGGE Policy Reforms and Market Transformation of the Energy Efficient Buildings Sector in the I.R. Iran	No	No
3801	FP	Strengthening the Implementation of the Biological Diversity Act and Rules with Focus on its Access and Benefit Sharing Provisions	No	No
3803	FP	Environmentally Sound Management of Medical Wastes in India	No	No

GEF ID	Project Type	Project Name	In TE Review Sample[136]	Impact Study[137]
3825	FP	Mountains and Markets: Biodiversity and Business in Northern Pakistan	No	No
3844	FP	Sustainable Rural Biomass Energy	No	No
3849	MSP	Improving the Financial Sustainability of the Carpathian System of Protected Areas	No	No
3855	MSP	Strengthening the Implementation of Access to Genetic Resources and Benefit-Sharing Regimes in Latin America and the Caribbean	No	No
3876	MSP	SPWA-CC: Promotion of Energy Efficiency Lighting in Public, Commercial and Residential Buildings	No	No
3889	FP	Mainstreaming biodiversity conservation through low-impact ecotourism in the SINAP	No	No
3901	MSP	LGGE: Energy Efficiency in Public Buildings (EEPB)	No	No
3908	FP	CF Industrial Energy Efficiency for Malaysian Manufacturing Sector (IEEMMS)	No	No
3921	FP	Promoting Sustainable Energy Production and Use from Biomass in Pakistan	No	No
3922	FP	SPWA-CC: Promoting Renewable Energy Based Mini Grids for Productive Uses in Rural Areas in The Gambia	No	No
3930	FP	Energy Efficiency Standards and Labels in Colombia (S&L Colombia)	No	No
3937	FP	SPWA-CC: Promoting Mini Grids Based on Small Hydropower for Productive Uses in Sierra Leone	No	No
3941	FP	IND-BD Mainstreaming Coastal and Marine Biodiversity Conservation into Production Sectors in the Malvan Coast, Maharashtra State	No	No
3946	MSP	Ensuring Financial Sustainability of the Protected Area System	No	No
3947	MSP	Catalyzing Financial Sustainability of the PA System	No	No
3951	FP	Expanding FSC Certification at Landscape-level through Incorporating Additional Eco-system Services.	No	No
3958	MSP	SPWA-CC: Promoting Development of Multi-purpose Mini-hydro Power Systems	No	No
3959	FP	SPWA-CC: Promoting renewable energy based mini-grids for rural electrification and productive uses	No	No
3973	FP	Armenia Energy Efficiency Project	No	No
4000	FP	PAS: Low Carbon-Energy Islands - Accelerating the Use of Energy Efficient and Renewable Energy Technologies in Tuvalu, Niue and Nauru	No	No
4004	FP	Mini-Grids Based on Small Hydropower Sources to Augment Rural Electrification	No	No
4005	MSP	SPWA-CC: Promoting Renewable Energy-based Grids in Rural Communities for Productive Uses	No	No
4020	MSP	Market Policy and Legislative Development for Mainstreaming the Sustainable Management of Marine and Coastal Ecosystems in Lebanon	No	No
4027	MSP	Global Partnership with Fisheries Industry for the Sustainability of Living Aquatic Resources	No	No
4035	FP	MENARID: Ecotourism and Conservation of Desert Biodiversity	No	No
4037	FP	TT-Pilot (GEF-4): Overcoming Policy, Market and Technological Barriers to Support Technological Innovation and South-South Technology Transfer: The Pilot Case of Ethanol Production from Cassava	No	No
4042	FP	TT-Pilot (GEF-4): Climate Change Related Technology Transfer for Cambodia: Using Agricultural Residue Biomass for Sustainable Energy Solutions	No	No
4070	FP	The GEF Earth Fund: Greening the Cocoa Industry - Market Transformation	No	No
4080	FP	SPWA-BD: Participatory Biodiversity Conservation and Low Carbon Development in Pilot Ecovillages in Senegal	No	No
4096	FP	Promoting Sustainable Biomass Energy Production and Modern Bio-Energy Technologies	No	No
4099	FP	Removal of Barriers to Solar PV Power Generation in Mauritius, Rodrigues and the Outer Islands	No	No
4129	FP	TT-Pilot (GEF-4)- Green Truck Demonstration Project	No	No
4132	FP	TT-Pilot (GEF 4): Promotion and Development of Local Wind Technologies in Mexico	No	No
4147	MSP	Industrial Energy Efficiency in Ecuador	No	No
4171	FP	Energy for Sustainable Development in Caribbean Buildings	No	No
4176	FP	Encouraging the Establishment and Consolidation of an Energy Service Market in Chile	No	No
4191	FP	Promoting Ecotourism to Strengthen the Financial Sustainability of the Guatemalan Protected Areas System (SIGAP)	No	No

GEF ID	Project Type	Project Name	In TE Review Sample[136]	Impact Study[137]
4213	FP	Sustainable Use of Biogas from Agro Industrial and Solid Waste Applications	No	No
4217	FP	Chiller Energy Efficiency Project	No	No
4224	FP	GEO: Turkey Geofund	No	No
4236	MSP	GHG Assessment Methodologies in Public Transport	No	No
4257	FP	The GEF Earth Fund: IFC Earth Fund Platform	No	No
4259	FP	The GEF Earth Fund: Conservation Agreement Private Partnership Platform	No	No
4260	FP	The GEF Earth Fund: Public-Private Funding Mechanisms for Watershed Protection	No	No
4283	MSP	PAS: PNG Energy Sector Development Project	No	No
4285	MSP	Promoting Energy Efficiency Technologies in Beer Brewing Sector in Burkina Faso	No	No
4336	FP	Lighting One Million Lives in Liberia	No	No
4345	FP	Renewable Energy for Rural Livelihood (RERL)	No	No
4348	FP	Reducing GHG Emissions through a Resource Efficiency Transformation Programme (ResET) for Industries in Kazakhstan	No	No
4421	FP	The GEF Earth Fund: Global Market Transformation for Efficient Lighting	No	No
4427	FP	Russia Energy Efficiency Financing (REEF) Project	No	No
4431	MSP	Increasing Climate Change Resilience of Maldives through Adaptation in the Tourism Sector	No	No
4459	FP	Development of Sustainable Renewable Energy Power Generation (SREPGen)	No	No
4477	FP	Comprehensive Reduction and Elimination of Persistent Organic Pollutants in Pakistan	No	No
4497	FP	Development of Renewable Energy, Energy Efficiency and Electrification of Suriname	No	No
4512	FP	Pilot Asia-Pacific Climate Technology Network and Finance Center	No	No
4514	MSP	Greening the COP17 in Durban	No	No
4586	FP	Mainstreaming Biodiversity Conservation in Tourism Sector Development in Jordan	No	No
4590	FP	Delivering Multiple Global Environment Benefits through Sustainable Management of Production Landscapes	No	No
4599	FP	Building adaptive capacity to catalyze active public and private sector participation to manage the exposure and sensitivity of water supply services to climate change in Sierra Leone	No	No
4614	FP	Hospital Waste Management Support Project	No	No
4626	FP	Geothermal Power Generation Program	No	No
4631	FP	Watershed Approach to Sustainable Coffee Production in Burundi	No	No
4682	FP	SolarChill Development, Testing and Technology Transfer Outreach	No	No
4683	FP	ARCTIC: Targeted Support for Energy Efficiency and Renewable Energy in the Russian Arctic	No	No
4725	FP	Solomon Islands Water Sector Adaptation Project (SIWSAP)	No	No
4741	FP	Integrated and Environmentally Sound PCBs Management in Ecuador	No	No
4745	FP	Promoting Utility-Scale Power Generation from Wind Energy	No	No
4753	FP	Sustainable Energy Initiative for Industries	No	No
4780	MSP	Promoting the application of the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing in Panama	No	No
4784	FP	Introduction of Energy Management System Standard in Ukrainian Industry	No	No
4785	FP	Promoting Investments in the Fight Against Climate Change and Ecosystems Protection Through Integrated Renewable Energy and Biomass Solutions for Productive Uses and Industrial Applications	No	No
4786	FP	Promoting market based development of solar PV mini grids for productive uses in rural areas	No	No
4788	FP	Promoting Business Models for Increasing Penetration and Scaling up of Solar Energy	No	No
4801	FP	Promotion of Non-fired Brick (NFB) Production and Utilization	No	No
4828	MSP	Introduction of ODS Alternatives in Agriculture and in Post-harvest Sector	No	No

GEF ID	Project Type	Project Name	In TE Review Sample[136]	Impact Study[137]
4840	FP	Energy Efficient Production and Utilization of Charcoal through Innovative Technologies and Private Sector Involvement	No	No
4866	FP	Promoting Energy Efficiency in Industrial Heat Systems and High Energy-consuming (HEC) Equipment	No	No
4884	FP	Nationally Appropriate Mitigation Actions in the Energy Generation and End-Use Sectors	No	No
4889	FP	Promotion of the Development and Utilization of Renewable Energy Resources in Mauritania	No	No
4890	FP	Towards a Green Economy in Uruguay: Stimulating Sustainable Production Practices and Low-emission Technologies in Prioritized Sectors	No	No
4900	FP	Scale Up of Access to Clean Energy for Rural Productive and Domestic Uses	No	No
4918	FP	Partial Risk Sharing Facility for Energy Efficiency	No	No
4921	FP	Efficient and Sustainable City Bus Services	No	No
4923	FP	Promotion of Mini & Micro-hydro Power Plants & Energy Efficient Cook Stove in Agro-forestry	No	No
4929	FP	AfDB-PPP Public-Private Partnership Program	No	No
4959	FP	IDB-PPP MIF Public-Private Partnership Program	No	No
5038	MSP	Implementation of BAT and BEP for Reduction of UP-POPs Releases from Open Burning Sources in Armenia	No	No
5055	FP	ASTUD: Mongolia Urban Transport Development Investment Program	No	No
5063	FP	Catalysing the Use of Solar Photovoltaic Energy	No	No
5086	FP	Achieving Low Carbon Growth in Cities through Sustainable Urban Systems Management in Thailand	No	No
5087	FP	Organic Waste Streams for Industrial Renewable Energy Applications in India	No	No
5088	FP	Conserving Biodiversity in Coastal Areas Threatened by Rapid Tourism and Physical Infrastructure Development	No	No
5143	FP	PPP-EBRD South Eastern Mediterranean EE/ ESCO Markets Platform (PROGRAM)	No	No
5145	MSP	GEF UNIDO Cleantech Programme for SMEs	No	No
5157	MSP	ESCO Moldova - Transforming the market for Urban Energy Efficiency in Moldova by Introducing Energy Service Companies (ESCO)	No	No
5170	MSP	Discovering Nature-Based Products and Building Capacities for the Application of the Nagoya Protocol on Access to Genetic Resources and Benefit Sharing	No	No
5211	FP	Integrated Water Harvesting Technologies to Adapt to Climate Change Induced Water Shortage	No	No
5316	MSP	Promotion and Up-scaling of Climate-resilient, Resource Efficient Technologies in a Tropical Island Context	No	No

Annex C: Terminal Evaluation Review Instrument

	Question	Response Choices
1	Is there at least minimal evidence for private sector engagement in this project?	Yes, No
2	Provide the names of up to 6 private sector firms or companies appearing as participants in this project. If there are more than 6, select those that are most involved in the project. For entities not named, enter "Unspecified Private Sector Firm, Enterprise, Bank, etc.	Open ended response.
3	Classify the same 6 private sector entities, based on evidence in the TE/TER, by project role and type of entity.	Role: Executing Agency, Cofinancier, Beneficiary, Implementing Partner, Other, Unable to Assess (UA) Type: Multinational corporation, National corporation, SME, Individual/Entrepreneur, Capital provider, Financial intermediary, Market Facilitator, Unable to Assess (UA)
4	Taken altogether, what type(s) of cofinancing was contributed by CSO actors?	None, Cash, In-Kind, Both Cash & In-Kind, Unable to Assess (UA)
5	What was the total cofinancing amount from private sector entities?	None, 0-10K, 11-50K, 51-100K, 101-500K, 501-1M, Over 1M, UA
6	Which of the four engagement models described above best describes this project's approach to private sector engagement? (Select all that apply.)	1. Enabling policy environments 2. Incremental financing 3. Corporate alliances 4. Capacity building and incubation
7	What mechanisms did the project use to engage the private sector? (Select all that apply.)	1. Unable to assess 2. Direct Subsidy/Grant to private companies 3. Public-Private Partnerships 4. Public-Private Alliances 5. Public Financing Aids 6. Cooperatives/Joint Ownership Enterprises 7. Small/Micro Grants Program 8. Alternative Livelihoods Initiatives 9. Indirect engagement 10. No strategy 11. Other (please specify)
8	GEF projects may be designed to target market drivers of environmental degradation through the four types of interventions described below. For each of these types of interventions, based on review of the TE/TER, please note whether this type of intervention was targeted as an expected project output or outcome, and whether it was achieved. (Select all that apply.)	1. Reducing market demand 2. Shifting market demand to sustainable alternatives 3. Increasing supply-side efficiency 4. Shifting supply to sustainable sources 5. No such intervention/No evidence found/Unable to assess
9	Was a private sector firm or entity consulted or formally included in the project design process?	Unable to Assess, Yes, No
10	What types of government entities participated in this project? (Select all that apply.)	1. Local or state government office/agency 2. National government agency or national ministry 3. Regional (multi-national) coordinating commission or body No government participation 4. Other (please specify)
11	What was the role of government entities in this project? (Select all that apply.)	1. Unable to assess 2. Executing Agency (either sole or in collaboration) 3. Cofinancier 4. Implementing partner 5. Beneficiary 6. No government involvement

	Question	Response Choices
		7. Other (please specify)
12	What other types of organizations played a role in designing or executing this project, or were beneficiaries of this project? (Select all that apply.) National non-governmental organization	1. National non-governmental organization 2. International non-governmental organization Community based organization 3. Indigenous people's group 4. Other (please specify)
13	In the TER project outcomes are given ratings on a scale of Highly Satisfactory to Highly Unsatisfactory. If the project received a Satisfactory rating or higher on outcomes what were the key contributing factors? If the project received lower ratings, what key factors prevented the project from achieving a Satisfactory rating on outcomes? (Select up to 3 key factors.)	1. Capacity to Execute the Project 2. Stakeholder Engagement 3. Country Ownership or Alignment to 4. National and Regional Priorities 5. Funding and Financial Planning 6. Capacity Building 7. Effects on Local Population 8. Baseline Information 9. Legal and Institutional Framework 10. Need for Follow-Up
14	Do the key lessons learned address any of the following issues? (Select all that apply.)	1. Capacity to Execute the Project 2. Stakeholder Engagement 3. Country Ownership or Alignment to 4. National and Regional Priorities 5. Funding and Financial Planning 6. Capacity Building 7. Effects on Local Population 8. Baseline Information 9. Legal and Institutional Framework 10. Need for Follow-Up
15	Do any key lessons learned have implications for private sector engagement?	Open ended response.
16	Summarize additional information about the role of private sector in this project.	Open ended response.
17	Whichprojectevaluationdocuments wereconsultedinanswering this questionnaire?	1. Terminal Evaluation Report (TE) 2. GEF EO Terminal Evaluation Report (TER) Agency Terminal Evaluation Report (TER) 3. Other (please specify)

Annex D: List of (Private Sector) Entities Engaged

GEF ID	*Firm Name*	*Firm Role*	*Firm Type*
13	Gulf Electric Company	Beneficiary	Multinational Corporation
13	Japan Bank for International Cooperation	Cofinancier	Capital Provider
13	Bank of Ayudhya / Krungsri	Beneficiary	Financial intermediary
13	Thai Military Bank	Beneficiary	Financial intermediary
13	Industrial Finance Corporation of Thailand	Cofinancier	National Corporation
59	Unnamed private sector operators (waste collectors, haulers)	Contracted operator	Small or Medium Enterprise
112	Shell	Other	Multinational Corporation
112	SREI	Other	National Corporation
112	Muramati Solar	Other	Financial intermediary
112	SELCO	Other	Small or Medium Enterprise
112	SPM	Other	Small or Medium Enterprise
118	PAMECAS (Senegalese Micro-Credit Institution)	Executing Agency	Financial intermediary
118	Unnamed private improved-stove manufacturers and retailers	Beneficiary	Small or Medium Enterprise
126	FUNBIO	Executing Agency	Capital Provider
126	Getulio Vargas Foundation	Executing Agency	Capital Provider
267	Unspecified Private Sector Firm	Beneficiary	Small or Medium Enterprise
314	Fondo de Desarrollo del Sistema Financiero y de Apoyo al Sector Productivo	Cofinancier	Capital Provider
314	FONDA-PRO (SFV)	Cofinancier	Capital Provider
314	Alisei (MCH - micro hyrdoelectric plant)	Cofinancier	Small or Medium Enterprise
314	Other MCHs	Cofinancier	Small or Medium Enterprise
377	Unnamed private landholders	Beneficiary	Individuals/entrepreneurs
386	Unspecified Private Sector Firm	Beneficiary	UA (Unable to assess)
391	Toyata	Other	Multinational Corporation
391	Shell	Other	Multinational Corporation
407	National Botanical Institute (NBI)	Cofinancier	UA (Unable to assess)
448	Malaysian Pulp and Paper Manufacturers Association	Beneficiary	Individuals/entrepreneurs
448	Malaysia Rubber Products Manufacturers Association	Beneficiary	Individuals/entrepreneurs
448	Federation of Malaysian Manufacturers	Beneficiary	Individuals/entrepreneurs
490	Small coffee farmers	Beneficiary	Individuals/entrepreneurs
490	KRAV Control (certifying agent)	Implementing Partner	Market Facilitator
490	Uganda Coffee Trade Federation	Executing Agency	Market Facilitator
540	Grand Hyatt	Beneficiary	Multinational Corporation
540	Amarin Plaza Chiller No. 3	Beneficiary	Small or Medium Enterprise
540	Unspecified Private Sector Firm	Beneficiary	Small or Medium Enterprise
569	IFC	Executing Agency	Financial intermediary
569	Power utility companies	Implementing Partner	National Corporation
569	Engineering firms (multiple)	Beneficiary	National Corporation
569	Lighting equipment manufacturers (multiple)	Beneficiary	National Corporation
569	Pan American Engineering Association	Other	Market Facilitator
571	Unspecified Private Sector Firm	Cofinancier	Capital Provider

GEF ID	Firm Name	Firm Role	Firm Type
595	AstroPower	Other	Capital Provider
595	Triodos Bank Fund	Cofinancier	Market Facilitator
595	Rabo Bank Sustainability Fund	Cofinancier	Capital Provider
610	International Chamber of Shipping (ICS)	Cofinancier	Market Facilitator
610	International Association of Independent Tanker Owners (INTERTANKO)	Cofinancier	Market Facilitator
610	International Association of Ports and Harbours (IAPH)	Other	Market Facilitator
610	National ship owners associations	Other	Market Facilitator
610	Private oil companies	Implementing Partner	Multinational Corporation
622	Brick/Cement making plants	Beneficiary	National Corporation
646	Unspecified private enterprises (vendors, manufactures of solar water heaters)	Beneficiary	Small or Medium Enterprise
646	Moroccan Solar & Wind Industry Association	Cofinancier	Market Facilitator
646	Electric Utility (Distributor)	Cofinancier	National Corporation
646	Unspecified local investors	Cofinancier	Capital Provider
784	Unspecified Private Investors	Cofinancier	Capital Provider
843	Unspecified Private Sector Firm	Cofinancier	Multinational Corporation
844	Unspecified Private Sector Firm	Beneficiary	National Corporation
868	Private Natural Heritage Reserves	Beneficiary	National Corporation
882	Croatian Bank for Reconstruction and Development	Executing Agency	Financial intermediary
882	IFC	Executing Agency	Capital Provider
882	Unspecified private building owners	Beneficiary	Individuals/entrepreneurs
882	Private industrial/commercial firms	Beneficiary	Small or Medium Enterprise
883	Unspecified industrial energy consumers	Beneficiary	National Corporation
883	Energy Efficiency Finance Facility	Executing Agency	Financial intermediary
883	Romanian Energy Efficiency Fund	Executing Agency	Capital Provider
883	Commercial banks	Implementing Partner	Financial intermediary
920	Heat and Power Associates Polska	Cofinancier	UA (Unable to assess)
920	FondElec C.E.E.	Cofinancier	UA (Unable to assess)
920	Janus Foundation	Cofinancier	UA (Unable to assess)
922	SIDA	Executing Agency	UA (Unable to assess)
922	HELCOM	Executing Agency	Multinational Corporation
922	International Baltic Sea Fisheries Commission (IBSFC)	Executing Agency	UA (Unable to assess)
922	Foreign Multilateral Institutions	Cofinancier	Multinational Corporation
922	WWF	Cofinancier	Multinational Corporation
922	NEFCO	Cofinancier	National Corporation
944	Hrvatska Elektroprivreda (for-profit energy services provider - ESCO)	Executing Agency	National Corporation
944	Croatian Bank for Reconstruction and Development	Executing Agency	Financial intermediary
944	Unspecified housing cooperatives	Beneficiary	Small or Medium Enterprise
944	Unspecified commercial enterprises	Beneficiary	Small or Medium Enterprise
966	Unspecified Private Sector Firm, Enterprise, Bank, etc.	Cofinancier	UA (Unable to assess)
966	Unspecified Private Sector Firm, Enterprise, Bank, etc.	Beneficiary	UA (Unable to assess)
1137	Geothermia, Ltd. (licencse owner)	Beneficiary	National Corporation
1137	German Bank for Reconstruction (KfW)	Executing Agency	Financial intermediary
1137	Local banks	Cofinancier	Financial intermediary
1137	SHPP Owners and Developers	Beneficiary	Small or Medium Enterprise
1137	SHPP Investors	Cofinancier	Capital Provider
1198	Uzda VOLAT-1 company	Beneficiary	Small or Medium Enterprise

GEF ID	Firm Name	Firm Role	Firm Type
1198	Pragma-plus	Beneficiary	Small or Medium Enterprise
1198	Energotekhno	Beneficiary	UA (Unable to assess)
1264	Unspecified Private Sector RE developers	Beneficiary	Small or Medium Enterprise
1265	Manufacturers of electric motors (names not specified)	Cofinancier	Market Facilitator
1291	Unspecified private sector developers	Beneficiary	Small or Medium Enterprise
1291	Unspecified private sector banks	Implementing Partner	Financial intermediary
1291	Croatian Bank for Reconstruction and Development	Executing Agency	Financial intermediary
1291	Croatian Electricity Company	Implementing Partner	National Corporation
1310	International Technology Development Group (ITDG)	Other	UA (Unable to assess)
1310	Non Governmental Organisation (NGO)	Beneficiary	UA (Unable to assess)
1310	Television Trust for the Environment (TVE)	Executing Agency	Multinational Corporation
1310	CICEANA	Other	UA (Unable to assess)
1310	Video Resource Centre (VRC)	Executing Agency	Multinational Corporation
1310	TV Cultura	Cofinancier	UA (Unable to assess)
1397	Tinker Foundation	Cofinancier	Capital Provider
1397	J.P. Morgan	Cofinancier	Capital Provider
1397	Overbrook Foundation	Cofinancier	Capital Provider
1397	PRONATURA.	Cofinancier	UA (Unable to assess)
1413	Honduran Business Council for Sustainable Development (CEHDES)	Executing Agency	Market Facilitator
1413	Unspecified private sector enterprises (commercial or industrial)	Beneficiary	Small or Medium Enterprise
1471	Nature Seychelles	Cofinancier	National Corporation
1471	Aride Island	Cofinancier	National Corporation
1471	Cousine Island	Cofinancier	UA (Unable to assess)
1471	Island Conservation Society (Seychelles - ICS),	Other	UA (Unable to assess)
1646	Private sector participation is expected but not enough documentation is available to ascertain names or the details of involvement.	Other	UA (Unable to assess)
1735	Unspecified private land owners	Beneficiary	Individuals/entrepreneurs
1735	Private Reserves Network	Implementing Partner	Market Facilitator
1735	Private tourism operators/investors	Beneficiary	Small or Medium Enterprise
1735	Beekeeping cooperative	Beneficiary	Individuals/entrepreneurs
1735	Tourism cooperative	Beneficiary	Individuals/entrepreneurs
1899	GTZ/GESTA, the Netherlands	Cofinancier	Multinational Corporation
1899	Private Sector	Cofinancier	Capital Provider
1899	PEEST 4 Hivos	Cofinancier	UA (Unable to assess)
1899	PREPCA Hivo	Cofinancier	UA (Unable to assess)
1899	ASI/El Salvador	Cofinancier	UA (Unable to assess)
1899	MOTIVA (Finland-Panama)	Cofinancier	UA (Unable to assess)
2117	Banks eg Tokuda, DSK, International Asset Bank	Executing Agency	Financial intermediary
2256	Bank Windhoek	Other	National Corporation
2423	Unspecified Private Corporations	Beneficiary	National Corporation
2538	Andlug Consulting, 3C Climate Change Consulting	Implementing Partner	UA (Unable to assess)
2538	Dresdner Bank	Implementing Partner	National Corporation
2538	Unspecified private industries	Cofinancier	Small or Medium Enterprise
2589	Unspecified private sector firms	Implementing Partner	UA (Unable to assess)
2870	Private Schools in Kenya	Beneficiary	Small or Medium Enterprise
2870	Rural Technology Enterprises	Cofinancier	Small or Medium Enterprise
2870	Tree Biotechnology Project	Cofinancier	National Corporation

Annex E: Private Sector Portfolio Projects Reviewed for Progress to Impact

GEF ID	*GEF Phase*	*Focal Area*	*Size*	*Project Name*	*Repli-cation*	*Scaling-Up*	*Main-streaming*	*Market Barriers*
13	2	CC	FP	Removal of Barriers to Biomass Power Generation and Co-generation in Thailand	Yes	No	Yes	Yes
20	2	BD	MSP	Conservation Planning in Thicket Biome	No	No	Yes	No
67	PP	CC	FP	Coal to Gas Conversion	No	No	Yes	Yes
112	1	CC	FP	Photovoltaic Market Transformation Initiative (IFC)	Yes	Yes	Yes	Yes
118	1	CC	FP	Sustainable and Participatory Energy Management (PROGEDE)	No	No	Yes	Yes
126	PP	BD	FP	Brazilian Biodiversity Fund	Yes	No	Yes	
267	1	CC	FP	Energy Efficiency Improvement and Greenhouse Gas Reduction	No	No	Yes	Yes
314	1	CC	FP	A Program for Rural Electrification with Renewable Energy Using the Popular Participation Law	No	No	No	No
386	PP	CC	FP	Optimizing Development of Small Hydel Resources in the Hilly Regions of India	Yes	No	Yes	No
391	PP	CC	FP	Fuel Efficiency in the Transport Sector (FERT)	Yes	No	No	Yes
407	1	BD	FP	Inventory, Evaluation and Monitoring of Botanical Diversity in Southern Africa: A Regional Capacity and Institution Building Network	Yes	No	Yes	No
444	1	CC	FP	Energy and Water Sector Reform and Development Project	No	No	No	No
449	1	CC	FP	Photovoltaic-Based Rural Electrification in Peru	No	No	Yes	No

GEF ID	*GEF Phase*	*Focal Area*	*Size*	*Project Name*	*Repli-cation*	*Scaling-Up*	*Main-streaming*	*Market Barriers*
466	1	BD	MSP	Promotion of Biodiversity conservation within Coffee Landscapes	Yes	Yes	Yes	Yes
540	2	CC	FP	Building Chiller Replacement Project	Yes	Yes	Yes	Yes
570	2	CC	MSP	Energy Efficiency Market Development - Cote D'Ivoire	No	No	No	No
571	2	CC	MSP	Low-Cost/Low-Energy Buildings in the Czech Republic	No	No	No	Yes
595	2	CC	FP	Solar Development Group (SDG)	No	No	No	No
610	2	IW	FP	Removal of Barriers to the Effective Implementation of Ballast Water Control and Management Measures	Yes	Yes	Yes	No
622	2	CC	FP	Energy Conservation and GHG Emissions Reduction in Chinese Township and Village Enterprises - Phase II	Yes	Yes	Yes	Yes
636	2	CC	FP	Cross Sectoral Energy Efficiency and Barrier Removal of Barriers to ESCO Operation				No
646	2	CC	FP	Morocco Market Development for Solar Water Heaters	No	No	Yes	No
671	2	BD	FP	ECOMARKETS PROJECT	Yes	Yes	No	Yes
773	2	BD	MSP	Caribbean Archipelago Biosphere Reserve: Regional Marine Protected Area (MPA) System	No	No	Yes	
784	2	CC	FP	Methane Capture and Use (Landfill Demonstration Project)	Yes	Yes	No	Yes
840	2	CC	FP	Caribbean Renewable Energy Development Programme	No	No	Yes	No
843	2	CC	FP	Barrier Removal for Rural Electrification with Renewable Energies	No	No	Yes	Yes
844	2	BD	MSP	Valdivian Forest Zone: Private-Public Mechanisms for	Yes	Yes	Yes	

GEF ID	*GEF Phase*	*Focal Area*	*Size*	*Project Name*	*Repli-cation*	*Scaling-Up*	*Main-streaming*	*Market Barriers*
				Biodiversity Conservation				
847	2	MF	MSP	Renewable Energy and Forest Conservation: Sustainable Harvest and Processing of Coffee and Allspice	No	No	Yes	No
857	2	CC	MSP	Renewable Energy Systems in the Peruvian Amazon Region (RESPAR)	No	No	No	
868	2	BD	MSP	Establishment of Private Natural Heritage Reserves (RPPNs) in the Brazilian Cerrado	No	No	Yes	Yes
882	2	CC	FP	Removing Barriers to Improving Energy Efficiency of the Residential and Service Sectors	Yes	No	Yes	No
883	2	CC	FP	Energy Efficiency – Romania	Yes	No	Yes	Yes
920	2	MF	FP	Technology Transfer Sustainable Alternatives Network	Yes	No	No	No
922	2	IW	FP	Baltic Sea Regional Project – Phase I	Yes	Yes	Yes	Yes
938	2	CC	FP	Power And Communications Sectors Modernization And Rural Services Project (promec)	No	No	Yes	No
944	2	CC	FP	Energy Efficiency Project	No	No		Yes
948	2	CC	FP	Vilnius Heat Demand Management Project	No	Yes	No	
966	3	CC	FP	End Use Energy Efficiency Project (EUEEP)	Yes	No	Yes	Yes
1016	2	PP	FP	Development of National Implementation Plans for the Management of Persistent Organic Pollutants (POPs)	No	No	Yes	
1084	2	CC	FP	Mainstreaming Adaptation To Climate Change Project (MACC)	No	No	Yes	
1096	3	CC	FP	Energy Management and Performance Related Savings	Yes	Yes	Yes	Yes

GEF ID	*GEF Phase*	*Focal Area*	*Size*	*Project Name*	*Repli-cation*	*Scaling-Up*	*Main-streaming*	*Market Barriers*
				Scheme (EMPRESS)				
1103	3	CC	FP	PELMATP: Efficient Lighting Market Transformation Project PELMATP	No	No	Yes	Yes
1137	3	CC	FP	Georgia - Promoting the Use of Renewable Energy Resources for Local Energy Supply	Yes	No	Yes	No
1196	3	CC	FP	Transformation of the Rural Photovoltaic (PV) Market in Tanzania	No	No	Yes	Yes
1198	3	CC	FP	Biomass Energy for Heating and Hot Water Supply	Yes	No	Yes	Yes
1264	2	CC	FP	Capacity Building to Remove Barriers to Renewable Energy Development	No	No	Yes	Yes
1265	2	CC	FP	Polish Energy Efficient Motors Program (PEMP)	No	No	Yes	Yes
1281	2	CC	FP	Solar and Wind Energy Resource Assessment - SWERA	Yes	No	Yes	Yes
1291	2	CC	FP	Renewable Energy Resources Project	No	No	Yes	Yes
1310	2	MF	MSP	Building Wider Public and Private Constituencies for the GEF in Latin America and the Caribbean: Regional Promotion of Global Environment Protection through the Electronic Media	Yes	No	Yes	Yes
1397	2	BD	MSP	Private Land Mechanisms For Biodiversity Conservation In Mexico	Yes		Yes	
1413	3	CC	MSP	Energy Efficiency Measures in the Honduran Commercial and Industrial Sectors (PESIC)	No	No	Yes	Yes
1471	3	BD	MSP	Improving Management of NGO and Privately Owned nature Reserves and High Biodiversity Islands	Yes		No	No

GEF ID	*GEF Phase*	*Focal Area*	*Size*	*Project Name*	*Repli-cation*	*Scaling-Up*	*Main-streaming*	*Market Barriers*
1591	2	PP	FP	Regional Program of Action and Demonstration of Sustainable Alternatives to DDT for Malaria Vector Control in Mexico and Central America	No	No		No
1646	2	CC	MSP	Cost Effective Energy Efficiency Measures in the Russian Educational Sector	Yes	No		
1735	3	BD	MSP	Conservation of Dry Forest and Coastal Biodiversity of the Pacific South of Nicaragua: Building Private-Public Partnerships	No	Yes	No	No
1794	3	BD	MSP	Removing Obstacles to Direct Private-Sector Participation in In Situ Biodiversity Conservation	No	No	No	No
1838	3	CC	MSP	Energy and Environment Upgrading of the Industrial Park of Sidi Bernoussi Zenata, Casablanca	No	No	No	No
1859	3	BD	MSP	Conservation of the Eg-Uur Watershed	Yes	No	Yes	No
1899	3	CC	FP	Regional Programme on Electrical Energy Efficiency in Industry and Commercial Service Sectors in Central America / Energy Efficiency in El Salvador, Nicaragua, Costa Rica, Panama (PEER)	No	No	Yes	Yes
2117	3	CC	FP	Energy Efficiency Bulgaria	No	Yes	Yes	Yes
2188	3	IW	MSP	Development and Implementation of Public Private Partnerships in Environmental Investments	Yes	Yes	No	No
2194	3	CC	MSP	Developing the Legal and Regulatory Framework for Wind Power in Russia	No	No	No	Yes
2244	3	CC	MSP	Building the Local Capacity for Promoting Energy Efficiency in Private and Public Buildings	Yes	No	No	No

GEF ID	*GEF Phase*	*Focal Area*	*Size*	*Project Name*	*Repli-cation*	*Scaling-Up*	*Main-streaming*	*Market Barriers*
2256	3	CC	FP	Barrier Removal to Namibian Renewable Energy Program (NAMREP) Phase II	No	No	Yes	Yes
2423	3	PP	MSP	Assessment of existing capacity and capacity building needs to analyze POPs in developing countries	Yes	No	Yes	No
2538	3	CC	MSP	Assessment of Financial Risk Management Instruments for Renewable Energy Projects	No	No	No	No
2589	3	BD	FP	Institutionalizing Payments for Ecosystem Services	Yes	Yes	Yes	No
2870	3	CC	MSP	Market Transformation for Efficient Biomass Stoves for Institutions and Small and Medium-Scale Enterprises	No	No	Yes	No

Annex F: GEF Projects Using a Non-Grant Instrument

GEF ID	*Project Name*	*Type of Non-grant Instrument*
540	Building Chiller Replacement Program	Loan
786	Krakow Energy Efficiency Project	Guarantee Facility
883	Energy Efficiency Project	Contingent grant with revolving funds
994	Energy Efficiency Project	Contingent grant with revolving funds
1237	Energy Conservation Project, Phase II	Guarantee Facility
1291	Renewable Energy Resources Project	Contingent loan
1615	Geothermal Energy Development Program , GeoFund	Guarantee
2117	Energy Efficiency Project	Loan and partial credit guarantee
2531	Sustainable Energy Program	Partial credit guarantee and revolving fund, loan
667	Renewable Energy and Energy Efficiency Fund (IFC)	Guarantee facility, debt or lease finance facilities, capital cost buy-downs
112	Photovoltaic Market Transformation Initiative (IFC)	Loan, Equity and Guarantees
135	Small and Medium Scale Enterprise Program (IFC, first replenishment)	Loan and Equity
1571	EcoEnterprises Fund	Loan
1541	Commercializing Energy Efficiency Finance (CEEF) - Tranche I	Guarantees
1485	Poison Dart Frog Ranching to Protect Rainforest and Alleviate Poverty	Equity
2000	Environmental Business Finance Program (EBFP)	Loan and guarantee
1061	Inka Terra: An Innovative Partnership for Self-Financing Biodiversity Conservation & Community Development	Grant and Concessional loan
2111	Financing Energy Efficiency in the Russian Federation (FEER)	Guarantee and credit lines
2624	China Utility-Based Energy Efficiency Finance Program (CHUEE)	Guarantee and loan
2944	Sustainable Energy Financing	Risk sharing Fund (RSF) for loan provision
595	Solar Development Group (SDG)	Private Equity Fund
91	Small and Medium Scale Enterprise Program (IFC)	Loan and Equity Fund
111	Energy Efficiency Co-Financing Program	Partial credit guarantee, contingent grants and low-cost loan
2119	African Rift Geothermal Development Facility (ARGeo)	Contingent grant with revolving fund covering drilling insurance

314	A Program for Rural Electrification with Renewable Energy Using the Popular Participation Law	Revolving fund
448	Industrial Energy Efficiency Improvement Project	Revolving fund
660	Barrier Removal to Secure PV Market Penetration in Semi- Urban Sudan	Guarantee
622	Energy Conservati on and GHG Emission Reduction in Chinese Township and Village Enterprises (TVE), Phase II	Loan & Revolving fund
658	Removing Barriers to the Increased Use of Biomass as an Energy Source	Revolving fund
641	Barrier Removal to Renewable Energy Programme	Partial credit guarantee
646	Market Development for Solar Water Heaters	Partial credit guarantee
13	Removal of Barriers to Biomass Power Generation and Cogeneration	Partial credit guarantee
843	Removal of Barriers to Rural Electrification with Renewable Energy	Guarantee
882	Removing Barriers to Improving Energy Efficiency of the Residential and Service Sectors	Partial credit risk guarantee
935	Barrier Removal to Namibian Renewable Energy Programme, Phase I	Partial credit guarantee
1264	Capacity Building to Remove Barriers to Renewable Energy Development	Loan, Guarantees & Micro finance
1265	Polish Energy Efficiency Motors Programme	Revolving fund
1646	Cost Effective Energy Efficiency Measures in the Russian Educational Sector	Revolving fund
1198	Biomass Energy for Heating and Hot Water Supply	Revolving fund
1137	Promoting the Use of Renewable Energy Resources for Local Energy Supply	Revolving fund
1199	Removal of Barriers to Biomass Power Generation, Part I	Subordinate credits/guarantee/contingent financing
1413	Energy Efficiency Measures in the Honduran Commercial and Industry Sectors	Partial credit risk guarantee
1245	Renewable Energy-based Rural Electrification	Partial credit risk guarantee
2670	Central American Markets for Biodiversity (CAMBio): Mainstreaming Biodiversity Conservation and Sustainable use within Micro, Small and Medium-sized Enterprise Development and Financing	Partial credit risk guarantee
2105	Conservation and Sustainable Use of Biodiversity in the Dalmatian Coast through Greening Coastal Development	Partial credit risk guarantee
2256	Barrier Removal to Namibian Renewable Energy Programme (NAMREP), Phase II	Partial credit guarantee
267	Energy Efficiency Improvements and Greenhouse Gas Reductions	Partial credit guarantee
386	Optimizing Development of Smal Hydel Resources in Hilly Areas	Revolving fund
377	Community Based Rangeland Rehabilitation for Carbon Sequestration	Revolving fund
1335	Bioenergy for Sustainable Rural Development	Revolving fund
782	Co-generation of Electricity and Steam Using Sugarcane Bagasse and Trash	Partial credit guarantee
391	Fuel Efficiency in the Road Transport Sector	Revolving fund

2681	Promotion of Renewable Energy Use for Development of Rural Communities	Revolving fund
2941	Market Transformation for Energy Efficiency in Buildings	Performance risk guarantee
3626	The Micronesia Challenge : Sustainable Finance Systems for Island Protected Area Management	Revolving Fund
1609	Renewable Energy Enterprise Development – Seed Capital Assistance Facility	All grant
1361	Generation & Delivery of Renewable Energy Based Modern Energy Services: Isla de la Juventud	Grant to initial investments with repayment to revolving fund
2619	Financing EE & RE in Eastern Europe	All grant
2939	Solar Water Heating Market Strengthening and Transformation Initiative	Credit risk guarantee
1358	Renewable Energy Based Electricity Generation for Isolated Minigrids	Grant to initial investments with repayment to revolving fund
3766	Testing a Prototype Caribbean Regional Fund for Wastewater Management (CReW)	Revolving Fund
4801	Towards a Green Economy in Uruguay: Stimulating Sustainable Production Practices and Low-emission Technologies in Prioritized Sectors	Revolving Fund
4890	Towards a Green Economy in Uruguay: Stimulating Sustainable Production Practices and Low-emission Technologies in Prioritized Sectors	Revolving Fund
4626	Geothermal Power Generation Progarm	Revolving Fund
1316	Energy Efficiency Co-Financing Program 2 (HEECP2)	Partial Risk Guarantee
1532	Electric Cooperative System Loss Reduction Project	Partial Risk Guarantee
3005	CleanTech Fund	Grant
3558	West Africa Regional Fisheries Program (WARFP)	Loan & Guarantee
3597	RUS Improving Urban Housing Efficiency in the Russian Federation	Credit Line
4176	Encouraging the Establishment and Consolidation of an Energy Service Market in Chile	Partial Credit Guarantee
4257	IFC Earth Fund	Mixed
4348	Reducing GHG Emissions through a Resource Efficiency Transformation Programme (ResET) for Industries in Kazakhstan	Loan
4427	Russia Energy Efficiency Financing (REEF) Project	Loan
4431	Increasing Climate Change Resilience of Maldives through Adaptation in the Tourism Sector	Grants or Equity Investment
4512	Pilot Asia-Pacific Climate Technology Network and Finance Center	Equity Investments

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