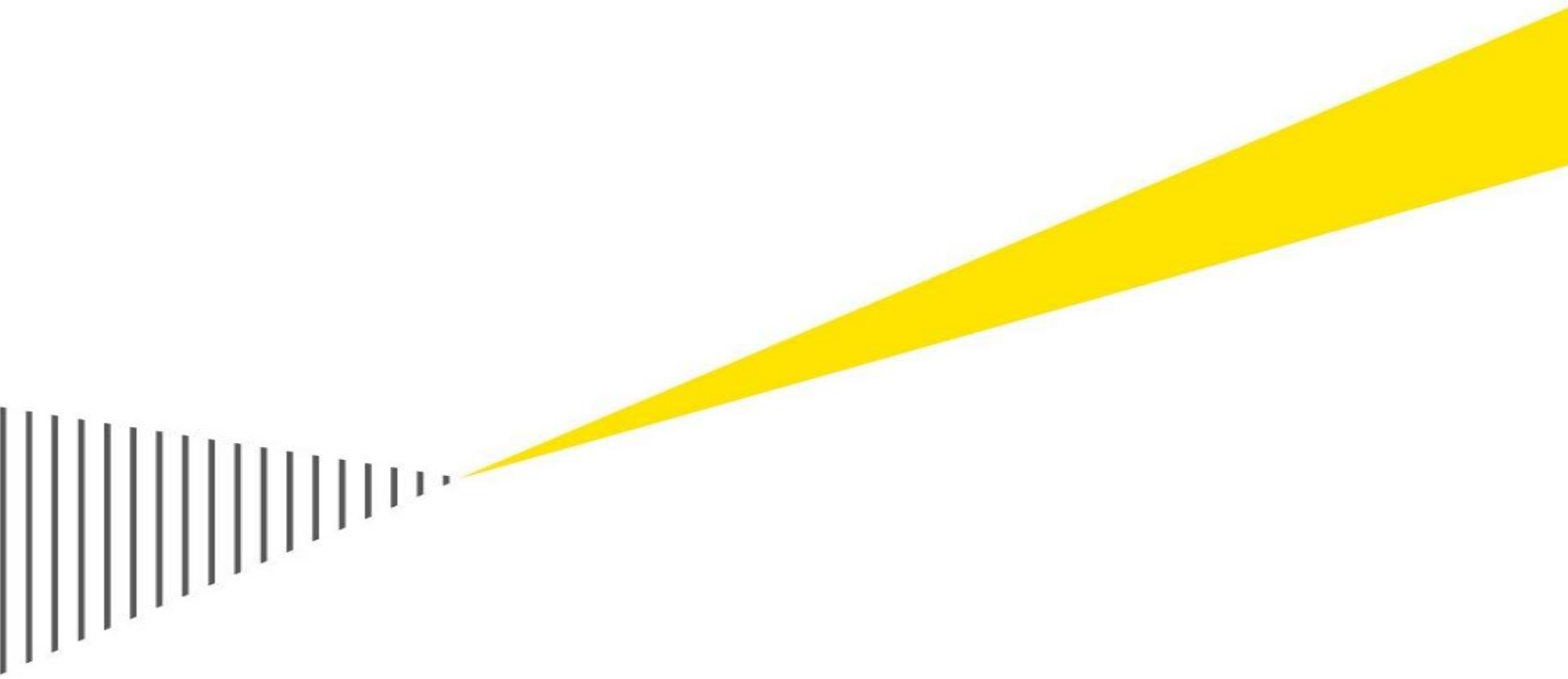
# Terminal Review of the Earth Fund Platform

# Final Evaluation Report

August 2016



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# List of Abbreviations

| | |
|---|---|
| AMC | Asset management company |
| AREAS | Africa Renewable Energy Advisory Services |
| AS | Advisory services |
| BCF | Blended climate finance |
| BD | Biodiversity |
| BFC | Blended Finance Committee |
| BPI | Bank of the Philippines Islands |
| CC | Climate change |
| CDP | Carbon Disclosure Project |
| CIF | Climate investment funds |
| CP | Clean production/Cleaner production |
| CPF | Cleaner Production Facility |
| CSP | Concentrated solar power |
| EDGE | Excellence in Design for Greater Efficiencies |
| EE | Energy efficiency |
| EM | Emerging markets |
| ESCO | Energy Service Company |
| FI | Financial institution |
| FinMech | Financial Mechanisms for Sustainability |
| FY | Fiscal Year |
| GEF | Global Environment Facility |
| GHG | Greenhouse gas |
| GOGLA | Global Off-Grid Lighting Association |
| GPS | Global Product Specialist |
| GSMA | Groupe Speciale Mobile Association (association of mobile operators worldwide) |
| IFC | International Finance Corporation |
| IFC EF | IFC Earth Fund Platform |
| IHS | International Housing Solutions |
| IRC | Investment review committee |
| IS | Investment services |
| KM | Knowledge management |
| MASEN | Moroccan Agency for Solar Energy |
| MNO | Mobile network operator |

| | |
|---|---|
| MTR | Mid-term review |
| NEMP | National Electrification Master Plan |
| NGIM | Non-Grid Implementation Mechanism |
| PE | Private Equity |
| RE | Renewable energy |
| RECCIPE | Research and Engagement on Private Equity Investing in Climate Change Abatement |
| RSF | Risk sharing facility |
| SE | Sustainable energy |
| SEF | Sustainable energy finance |
| SME | Small and medium-sized companies |
| TSP | Technical service provider |
| UN | United Nations |
| USD | United States' Dollar(s) |
| VC | Venture capital |

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# Executive Summary

This evaluation report includes the analysis, main findings and recommendations from the Terminal Review of the IFC's Earth Fund Platform, conducted by Ernst & Young at the request of IFC. The Terminal Review was prepared between October 2015 and May 2016.

The evaluation was focused on the following three aspects:

- Progress Against Key Program/Projects Objectives and Expected Results
- Efficiency and Effectiveness of Program/Projects Operations and Management:
- Identification and Dissemination of Lessons Learned

The evaluation is based on the insights gathered through reviews of documents and the allocation of funds and complemented with stakeholder interviews at program and project level.

## The IFC Earth Fund Platform and its key objectives

The IFC EF Platform was established as the first platform under the GEF (Global Environment Facility) Earth Fund in 2008. The primary objective of the Platform was to support private sector projects that would generate global environmental benefits in fields aligning with the GEF's focal areas. The Platform represented a blended finance approach involving 'blending' concessional funds alongside IFC's own. The Platform became operational in June 2008 and closed in June 2014.

The IFC EF Platform had four key objectives:

- A minimum of $30m of projects funded (both IFC EF and private sector) within three years of IFC Earth Fund operations, or minimum of 30% of funds deployed;
- Growth of the IFC Earth Fund Platform beyond initial capitalization of $40m;
- Replication effect of projects supported under the IFC EF;
- Adequately addressed environmental problems associated with the GEF Strategic Programs and Operational Programs that the IFC EF supports.

## The IFC Earth Fund Platform portfolio

Under the IFC EF, 14 projects have been supported (five Investment Services and nine Advisory Services projects). The current portfolio of projects totals $39 million in funds from the Platform and covers 16 countries. The total project costs sum to $1,068 million; $1,019 million for Investment Services and $48.6 million for Advisory Services. Concessional financing totals $38.1 million, with $28.6 million in IFC EF Platform commitments for Investment Services projects and $9.5 million in IFC EF Platform commitments for Advisory Services projects.

Of the nine Advisory Services projects under the IFC Earth Fund Platform, five projects have already been completed while the other four are ongoing. The five completed projects – *AREAS South Africa*, *Green Power for Mobile Global 2*, *Brazil Environmental Permits*, *RECCIPE*, *Carbon Index* – were generally considered successful in providing proof of concept. Of the four ongoing projects, three are considered to be on track - *Lighting Global*, *Green Buildings PDP*, *Global Cleaner Production Facility*, while one has been indicated as underperforming – *SEF Mexico*.

For Investment Services projects, one Investment Services project under the IFC Earth Fund Platform is completed (*Techcombank*), while the other four are ongoing. Three projects currently in progress - *IHS*, *Ouarzazate*, *BPI SEF II* have achieved or are on course to achieve their set objectives. For one project – the *Cleantech Innovation Facility* - objectives have not been met to date.

Some key characteristics of the portfolio include:

- An estimated 75% of funding committed was for Investment Services projects.

- 7 out of 14 projects had a global scope, representing around a third of funds disbursed.
- An estimated 70% of the portfolio supported scale-up initiatives of previously successfully tested technologies, financial products or business models to encourage widespread adoption.
- The lifespan of Advisory Services projects is between 2 and 6 years, representing around 3 to 4 years on average. Investment projects typically have a longer lifetime, ranging from 6 to 15 years, representing around 11 years on average.

## Main findings and recommendations

**Both GEF and IFC considered that the IFC EF Platform was very successful. Both GEF and IFC appreciated the Platform's capacity to combine GEF, IFC and other private sector funds in order to invest in projects generating returns and achieving environmental benefits.** Without IFC's expertise to identify bankable projects and partnerships, the GEF would not have been able to invest in such innovative projects. Furthermore, the Platform provided lessons learned for GEF which contributed to the development of the GEF-5 and the GEF-6. The IFC EF Platform helped the IFC finance projects they would not have been able to undertake on their regular commercial balance sheet. The experience of the IFC-EF platform also shaped IFC's approach to Blended Finance, including development of the Blended Finance Principles and the governance of Blended Finance operations at IFC.

While the Earth Fund will not continue in its current form, the Terminal Review provides lessons for both the GEF and IFC in future work, as well as broader lessons for similar blended finances approaches. Based on these, six main recommendations are proposed for future initiatives using blended finance, notably for cleantech investment and market transformation.

## Progress Against Key Program/Projects Objectives and Expected Results

**Progress against key program and projects objectives and expected results was considered highly successful in relation to funds deployment co-financing and adequately addressing environmental issues. The replication effect of projects was high or is currently promising; market impacts are ongoing.**

**Funds deployment**

- **Program-level objective:** A minimum of $30m of projects funded (both IFC EF and private sector) within three years of IFC Earth Fund operations, or minimum of 30% of funds deployed
- **Results and conclusion:** Achievements in relation to this objective are considered highly successful, as nearly all funds allocated for the platform were disbursed

**Co-financing**

- **Program-level objective:** Growth of the IFC Earth Fund Platform beyond initial capitalization of $40m
- **Project-level objective:** Minimum leverage for GEF funds of 1:3 (GEF: other funding)
- **Results and conclusion:** Achievements in relation to this objective are considered highly successful, with the overall Platform leverage ratio above 1:3.

**Replication effect of projects**

- **Project-level objective:** Replication effect of projects supported under the IFC EF
- **Results and conclusion:** In general, project replicability was high or is currently promising. Some projects faced implementation challenges, which reduced their replicability. It was not possible to fully assess project replicability as 8 of 14 projects supported under the Platform are ongoing and market impacts are only expected to be seen in the coming years. In this context, this objective is considered partially achieved at the time of this evaluation.

**Adequately address environmental issues**

- **Project-level objective:** Adequately address environmental problems associated with the GEF Strategic Programs and Operational Programs that the IFC EF supports
- **Results and conclusion:** Achievements in relation to this objective are considered highly successful. All are projects aligned with one or more GEF Strategic Programs and environmental benefits to date largely exceed original targets on a project-level basis.

## Efficiency and Effectiveness of Program/Projects Operations and Management

The key lessons of the IFC EF Platform for GEF related to the importance of allowing for flexibility in structuring programs for the use of concessional funds, the need to clearly define reporting and reflow expectations as well as the possibilities for the use of delegated authority. This helped inform the structuring of GEF-5 and GEF-6 programming periods.

**Specific recommendations for GEF**

The GEF should allow flexibility in program development to support blended finance and mobilize private sector co-financing, as well as to adapt to evolving market conditions to ensure program sustainability and meaningful market impact in GEF focal areas.

When developing new programs, the GEF should ensure an appropriate balance of delegation on the part of the donor and transparency on the part of the implementing agency.

The IFC Earth Fund allowed the IFC to build experience in blended finance, including refining the financing structure for these types of projects and developing a robust governance structure. The Fund also demonstrated that it could capitalize on existing IFC procedures and standards to maximize the impact of GEF funds invested.

**Specific recommendation for IFC**

IFC should play to its strengths in continuing to work on blended finance.

A key finding in this context includes the importance of confirming knowledge related to the current market, regulatory and project context is up to date before launching a project or allocating funds in order to ensure project success. A few projects faced difficulties related to market, regulatory or project context, which could have potentially been avoided if the ongoing validity of the project context was challenged and the project adjusted in consequence.

**Recommendation for IFC and GEF**

To ensure project success, before launching a project or allocating funds, IFC and the GEF should confirm that present knowledge related to the current market, regulatory and project context are still valid.

## Identification and Dissemination of Lessons Learned

While knowledge sharing took place between GEF and IFC, helping both organizations to learn lessons about blended finance approaches, knowledge exchange seemed to be lacking amongst Project Officers on their experiences with IFC EF Platform-funded projects. This type of exchange, to learn from project challenges and success factors could be useful for future project development and assisting Project Officers in addressing management challenges in their projects.

Another key finding related to the importance of dissemination and knowledge sharing activities both internally and externally to maximize impact.

**Specific recommendation for IFC**

IFC should ensure knowledge management and dissemination of lessons learned and best practices internally and externally.

# 2. Introduction

This evaluation report includes the analysis, main findings and recommendations from the Terminal Review of the IFC's Earth Fund Platform, conducted by Ernst & Young at the request of IFC. The Terminal Review was prepared between October and December 2015.

The Terminal Review involved a review of program and project-level documents as well as interviews with program and project-level contacts.

The Terminal Review focused on the following key objectives:

1

**Objective : Assess and report on project level accomplishments and/or progress towards results**

KEY QUESTIONS : What progress was achieved against key program/projects objectives and expected results ? How efficiently and effectively have the programs/projects been managed?

2

**Objective : Identify lessons related to private sector interventions in climate change mitigation and adaptation as well as the operations of the IFC-EF**

KEY QUESTION : Are there "good practice" lessons from the implementation of the projects that could be used for knowledge dissemination?

3

**Objective : Identify lessons regarding the management of similar funds to feed into the development and establishment of similar activities in the future**

KEY QUESTION : What are the lessons for management of similar funding structures going forward?

# 3. The IFC Earth Fund Platform

This section provides an overview of the Platform's background, design and objectives, as well as governance structure.

## Program background and design

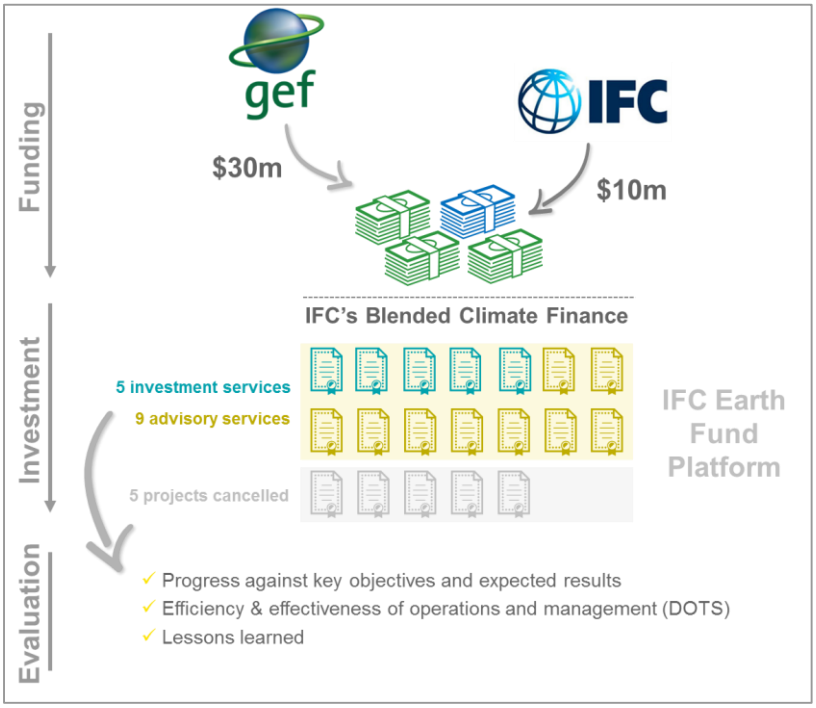
The IFC EF Platform was established as the first platform under the GEF Earth Fund. The primary objective of the Platform was to support private sector projects that would generate global environmental benefits in the area of climate change. It sought to leverage IFC's capacity to draw in private sector investments in fields aligning with the GEF's focal areas.

The IFC EF received an initial capitalization of $40m: $30m from the GEF Earth Fund and $10m from IFC.

When the overall IFC Earth Fund Platform was approved, IFC received delegated authority from the GEF to approve IFC Earth Fund projects governed by IFC's policies and procedures. This exempted IFC Earth Fund projects from the GEF project-cycle procedures, increasing flexibility, and speeded up the decision-making process.

The Fund became operational in June 2008 and closed in June 2014.

Figure 1: Structure of the IFC EF Platform




IFC and the GEF recognized that market transformation is a long-term process that is unlikely to be achieved through a single project, but requires long term support. Furthermore, both organizations recognized that the private sector plays a central role in driving market change. As a result, the IFC EF was supposed to focus its interventions on creating *"lasting change in market behavior by removing identified barriers,"* such as access to finance, lacking technical capacity or insufficient market knowledge, particularly by focusing on testing and pilot interventions and scale-up interventions:[1]

- **Testing and piloting interventions** – Support demonstrations that show the ability to mitigate or eliminate the perceived risk associated with new technologies, financial products, and business models.
- **Scale-up interventions** – Support scale-up initiatives of previously successfully tested technologies, financial products, or business models to encourage widespread adoption.

## Program objectives

[1] GEF (2010) IFC–Earth Fund Platform 2010 Annual Report

The IFC EF Platform has four key objectives:

- Minimum of $30m of projects funded (both IFC EF and private sector) within three years of IFC Earth Fund operations, or minimum of 30% of funds deployed;
- Growth of the IFC Earth Fund Platform beyond initial capitalization of $40m;
- Replication effect of projects supported under the IFC EF;
- Adequately addressed environmental problems associated with the GEF Strategic Programs and Operational Programs that the IFC EF supports.

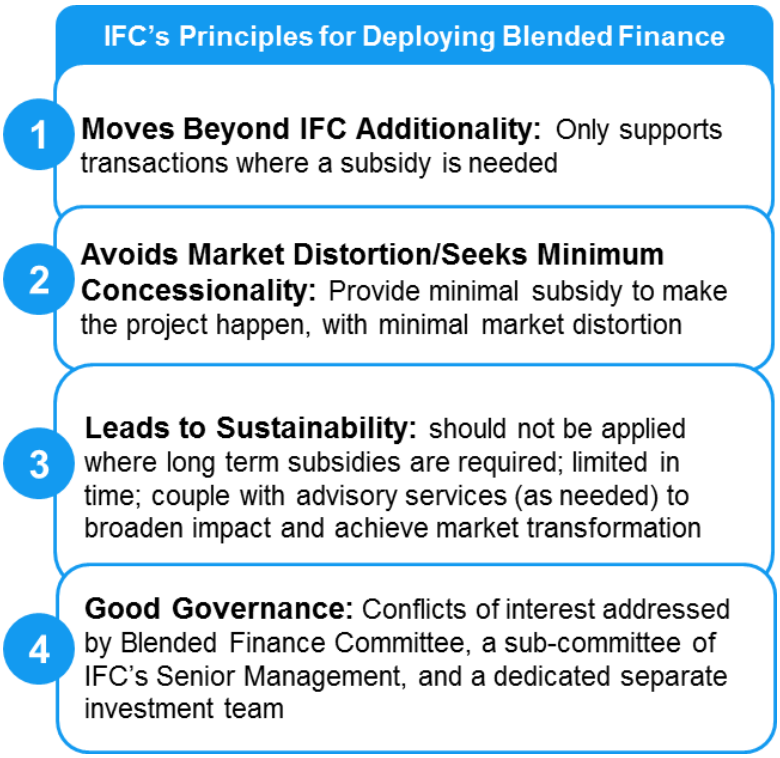
## IFC EF Platform governance

Within the context of the IFC Earth Fund Platform, delegated authority is in place, with IFC responsible for project selection, as well as project management, financial management, monitoring and evaluation as well as other management and support functions, while the GEF has an observer role.

The IFC EF program is managed by **IFC's Blended Climate Finance (BCF) Unit** (formerly the Financial Mechanism Unit, "FinMech"). The BCF Unit focuses on managing the donor relationship as well as ensuring that IFC investment and advisory staff are aware that Earth Fund funds can be accessed, thereby developing a pipeline of projects for IFC EF Platform funding.

Blended finance involves 'blending' concessional funds alongside IFC's own. Concessional funds are offered at terms more favorable than market terms. These donor funds are leveraged by IFC's own resources and can be deployed as concessional loans, guarantees, equity and grants for projects that would generally not be taken up by the private sector alone due to high project risks, technology costs, or technology risk. BCF staff work with IFC investment and advisory services teams throughout the project cycle to capitalize on operational efficiencies and to ensure that the donor program benefits from IFC's well-established risk management procedures.

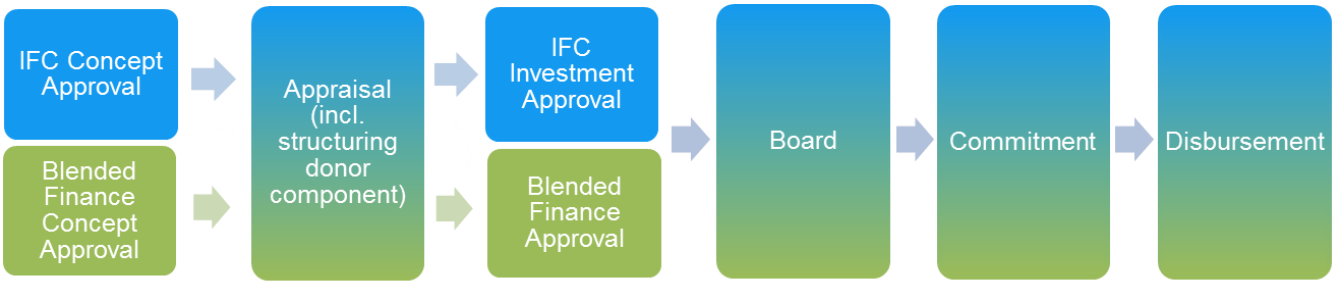
Figure 2: IFC Principles for Deploying Blended Finance




Ensuring appropriate governance is an important component to effective blending operations. Thus, once projects are identified to be in need of concessional support, they are reviewed by IFC's Blended Finance Committee (BFC), which is a senior level committee, made up largely of Directors and headed by an IFC Vice-President. This

committee's role is to help make decisions on how to use donor concessional funds and integrate them according to IFC's blended finance approach. This approach requires that projects using concessional finance must adhere to IFC's Blended Finance principles, notably those of additionality, governance, minimum concessionality (minimum subsidy), sustainability and transparency (see Figure 2). A GEF observer participates in the BFC. The project approval process for Blended Finance investments is illustrated in Figure 3.

**Figure 3: Basic IFC Blending Process for Investment Services**



# 4. Looking back on the Mid-Term Review

This section looks back on the outcomes and recommendations of the Mid-Term Review, including issues such as the pace of IFC EF funding, eligibility criteria, delegated authority and communication between the GEF and IFC.

In 2012, EY undertook a Mid-Term Review of the IFC Earth Fund Platform (covering the period January 2009 to January 2012) and concluded that at its mid-term, IFC had met its goal of committing 38% of the IFC EF within the first 3 years of its life and surpassed the 1:3 leverage goal, achieving 1:7. The $15 million allocated from the Earth Fund for eight projects had mobilized $116 million from IFC commercial and private sector financing.[2] The key recommendations from the Mid-Term Review (MTR) and the changes made following these recommendations are summarized in Table 1 below.

Table 1: Recommendations and observed changes following on the Mid-Term Review

| Recommendations from the Mid-Term Review | Changes made or observed following on the Mid-Term Review |
|---|---|
| **Increase the pace of IFC EF fund commitment during its final term.** | Since the Mid-Term Review, the pace of IFC EF fund commitment has increased: the current project portfolio totals $39 million, compared with $15 million at mid-term. The program has nearly achieved its objectives of committing $40 million. |
| **Keep project eligibility criteria broad and limit changes.** Efforts should be made to ensure that in the second half of the IFC EF, the growth of the project portfolio is not hindered by overly stringent eligibility criteria. | After the Mid-Term Review, IFC checked in with the GEF on a regular basis to ensure that both organizations were aligned on project eligibility criteria. |
| **Confirm the definition of delegated authority**. In light of an evolving GEF strategy related to delegated authority for GEF funds, the status of the delegated authority structure and the eligibility criteria for the IFC EF need to be reaffirmed. | In response to concerns regarding the role of the GEF representative in IFC operations as well as the status of the delegated authority arrangement, a positive common working method was established around the time of the Mid-Term Review. Both the GEF and IFC decided to re-affirm the full delegation of the IFC EF Platform Fund authority to IFC. This authority allows the BCF Unit to move eligible IFC EF Platform projects forward at the pace of IFC's project cycle. |
| **Improve communications between IFC and the GEF Secretariat.** For example, IFC could organize a presentation of the IFC annual report to the GEF. | IFC prepared and provided to the GEF Secretariat an annual report each year. When requested by the GEF Secretariat, IFC has briefed the Secretariat and the CEO on the IFC EF Platform.<br>IFC planned to wait until having more concrete results to share before hosting a major knowledge sharing event. As many projects have begun generating results, this Terminal Evaluation could be an opportunity to share results from across the IFC EF portfolio. IFC envisions sharing additional information as projects continue to generate results. |

[2] GEF IEO, "Review Of GEF Engagement With The Private Sector", 2013

# 5. The IFC Earth Fund portfolio

This section provides a characterization and analysis of the current portfolio of projects financed within the context of the IFC Earth Fund Platform and their achievement of key objectives.

## Introducing the IFC Earth Fund Platform project portfolio

Under the IFC EF, 14 projects have been supported (5 Investment Services and 9 Advisory Services projects).[3] The current portfolio of projects totals $38.1 million in funds from the Platform and covers 16 countries. Total project costs sum to $1,068 million; $1,019 million for Investment Services and $48.6 million for Advisory Services. Concessional financing totals $38.1 million, with $28.6 million in IFC EF Platform commitments for Investment Services projects and $9.5 million in IFC EF Platform commitments for Advisory Services projects.

The IFC Earth Fund Platform was split between two types of projects – Advisory Services and Investment Services.

IFC's **Advisory Services (AS) projects** support advisory style work such as research, consulting, capacity building and training for its private and public sector clients. Funding for AS projects is not only monetary but can also be partly in-kind, provided by project partners. AS projects under the IFC EF were intended to help clients overcome market barriers including lack of capacity, lack of information availability as well as high perceived risk and high upfront project costs. Examples include providing technical assistance, such as for companies providing modern lighting services for un-electrified populations, or to promote sustainable energy lending among financial institutions.

IFC's **Investment Services (IS) projects** under the IFC EF provided loans, risk-sharing facilities and equity for cleantech-related projects and services, such as risk-sharing for an EE/RE credit line and an equity investment into a solar CSP installation. In general, Investment Services projects address market barriers related to high perceived risks and/or high upfront costs.

Table 2 below summarizes the current IFC EF Platform project portfolio, split by project status, including information on the type of project, alignment with GEF strategic programs, type of intervention, brief description, project start date, total project cost and IFC EF funds approved. Projects are ordered by start date (newest to oldest) and projects still in progress are separated from those which have been completed. Annex 4 provides a snapshot of how the portfolio aligns with GEF's Strategic Programs.

Following the table, analysis is provided characterizing the portfolio, the fulfilment of portfolio's key objectives and lessons learned.

[3] Five other projects (4 IS, 1 AS) were initially approved, but were cancelled for various reasons including failure to reach an agreement on pricing, inability for sponsor to obtain sufficient risk coverage, delay because of regulatory changes, etc. The amount of IFC EF Platform funding approved for these projects totaled to $26.4 million.

Table 2: Current IFC Earth Fund Platform Project Portfolio

| Project Title | Type | Area | Type of intervention[4] | Brief description | Project Start (FY) | Total Project Cost[5] | EF (GEF) Funds Approved | Leverage of EF (GEF) funds | IFC funds approved |
|---|---|---|---|---|---|---|---|---|---|
| **In progress** | | | | | | | | | |
| **IHS** | IS | South Africa | Testing / piloting | An equity investment into a leading real estate development firm to promote the development of affordable "green" homes in South Africa | 2014 | $50,000,000 | $10,000,000 | 1:3 | $21,250,000 |
| **Ouarzazate** | IS | Morocco | Scale-up | An equity investment to support a concentrated solar power plant development in Morocco | 2014 | $840,600,000 | $10,000,000 | 1:83.1 | $10,000,000 |
| **Lighting Global** | AS | Global | Scale-up | Program and technical support for companies that provide modern lighting services for un-electrified populations | 2014 | $4,940,840 | $695,000 | 1:6.1 | - |
| **Green Buildings PDP** | AS | Global | Testing / piloting | Development of a web platform and software to help housing developers meet green building standards | 2014 | $4,307,000 | $1,000,000 | 1:3.3 | - |
| **BPI SEF II** | IS | Philippines | Scale-up | A risk sharing facility to support a leading financial institution in | 2012 | $70,600,000 | $2,600,000 | 1:26.5 | $35,300,000 |

[4] Market barriers addressed by intervention and activity: Scale-up Initiatives or Testing & Piloting Initiatives
[5] For ongoing projects, financial data reflect the budget approved. For completed projects, financial data reflect the actual budget at the end of the project.

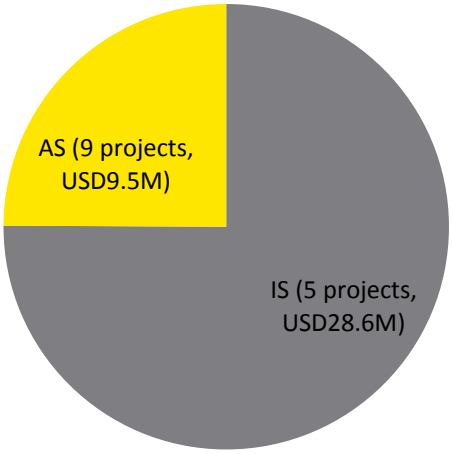
| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | the Philippines in their lending business for SE projects | | | | | |
| **Mexico SEF** | AS | Mexico | Scale-up | A technical assistance program to promote sustainable energy lending amongst financial institutions in Mexico | 2012 | $1,345,500 | $800,000 | 1:0.7 | - |
| **Cleantech Innovation Facility** | IS | Global | Scale-up | An investment into a cleantech venture capital fund managed by IFC to support early stage cleantech companies operating in challenging geographies and markets | 2011 | $20,000,000 | $5,000,000 | 1:3 | $15,000,000 |
| **Global Cleaner Production Facility** | AS | Global | Scale-up | A global cleaner production facility to support CP projects | 2010 | $29,593,051 | $5,797,350 | 1:4.1 | - |
| **Completed** | | | | | | | | | |
| **AREAS South Africa** | AS | South Africa | Testing / piloting | A technical assistance program to help South Africa meet its targets for universal electrification | 2013 | $1,275,456 | $196,390 | 1:5.5 | - |
| **Green Power for Mobile Global 2** | AS | Global | Scale-up | A technical assistance program to increase the deployment of RE and EE technologies for mobile network tower base stations | 2012 | $3,418,680 | $350,000 | 1:8.8 | |
| **Brazil Env. Permits** | AS | Brazil | Testing / piloting | A technical assistance program to improve the regulatory environment for sustainable forestry in Brazil | 2012 | $659,826 | $182,959 | 1:2.6 | - |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Techcom-bank** | IS | Vietnam | Scale-up | A senior loan to a financial institution in Vietnam to encourage energy efficiency and cleaner production lending | 2010 | $37,000,000 | $1,000,000 | 1:36 | $24,000,000 |
| **RECCIPE** | AS | Global | Testing / piloting | Support capital allocation to investment funds in climate change-related sectors | 2010 | $1,245 000 | $200,000 | 1:5.2 | - |
| **Carbon Index** | AS | Global | Testing / piloting | Development of a carbon efficiency index | 2009 | $1,837 257 | $272,257 | 1:5.8 | - |

Characterizing the IFC Earth Fund Platform project portfolio

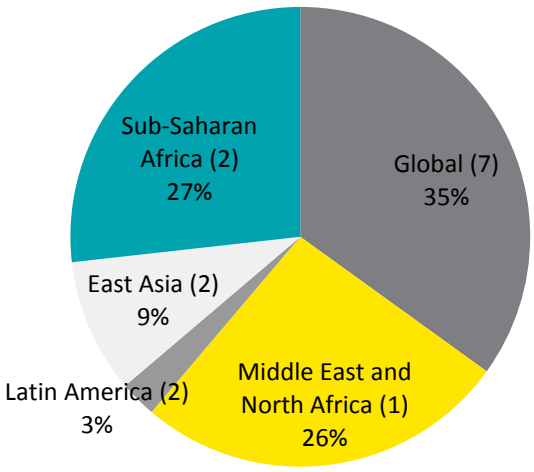
## An estimated 75% of funding committed was for Investment Services projects.

Figure 4: Distribution of the IFC Earth Fund Platform project portfolio by project type (in total EF funds disbursed and number of projects)



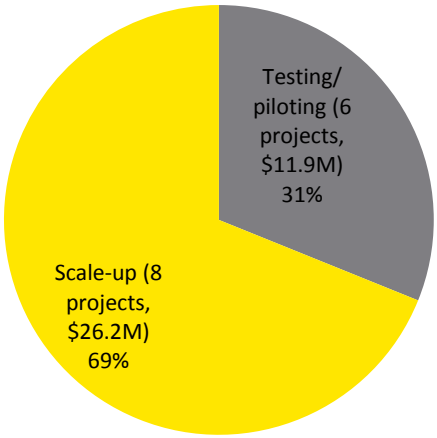

## 7 out of 14 projects had a global scope, representing around a third of funds disbursed.

Figure 5: Distribution of the IFC Earth Fund Platform project portfolio by region (in % of EF funds disbursed and number of projects in parenthesis)



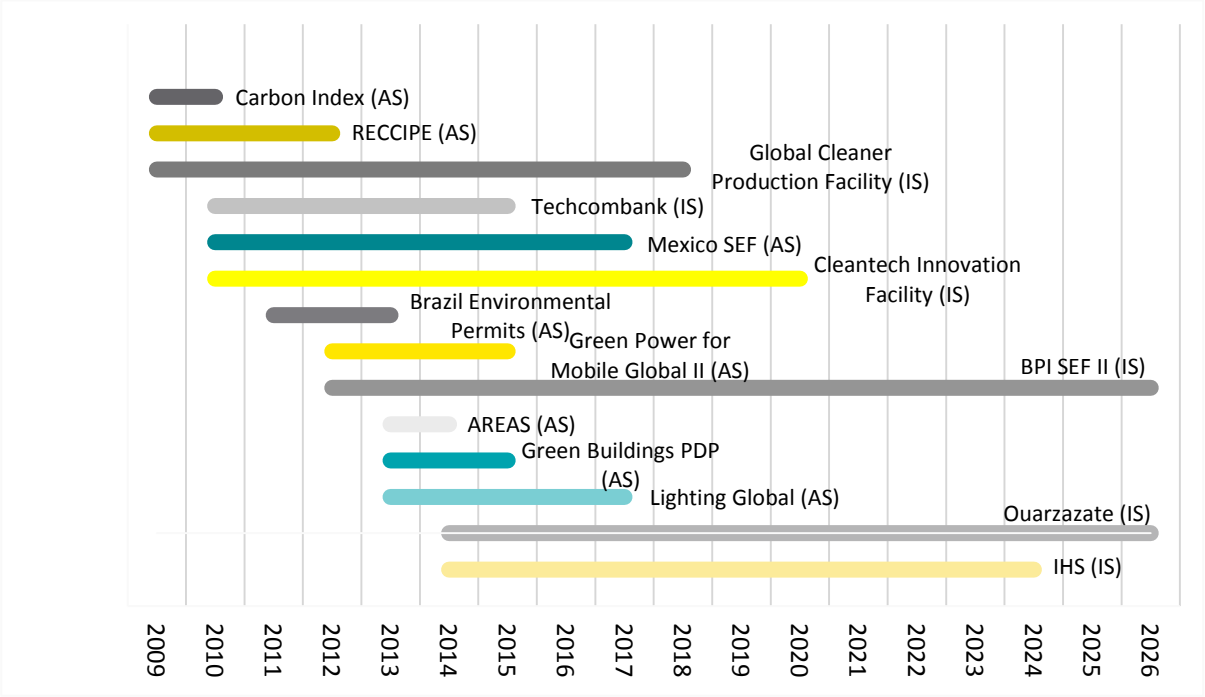
## An estimated 70% of the portfolio supported scale-up initiatives of previously successfully tested technologies, financial products, or business models to encourage widespread adoption.

Figure 6: Type of market barriers addressed across the IFC Earth Fund Platform project portfolio (in number of projects, amount and % of EF funds disbursed)




## The lifespan of Advisory Services projects is between 2 and 6 years, representing around 3 to 4 years on average. Investment projects typically have a longer lifetime, ranging from 6 to 15 years, representing around 11 years on average.

Figure 7: Timeline of the IFC Earth Fund Platform project portfolio



## Assessing project and portfolio outcomes and lessons learned

**Portfolio performance**

***Overall***

Table 3 below summarizes the performance of the IFC Earth Fund Platform project portfolio in relation to key Platform objectives, notably:[6]

- Growth of the IFC Earth Fund Platform beyond initial capitalization of $40m: Individual projects under Platforms will achieve a minimum leverage for GEF funds of 1:3 (GEF: other funding);
- Replication effect of projects supported under the IFC EF;
- Adequately addressed environmental problems associated with the GEF Strategic Programs and Operational Programs that the IFC EF supports.

In complement to the projects' alignment with the GEF Strategic Programs, achieved or expected environmental benefits are also indicated.

Projects are ordered by start date (newest to oldest) and split out by project status (in progress or completed).

**Table 3: IFC Earth Fund Platform Project Portfolio performance against key objectives**

| Project Title | Type of project | Leverage of EF (GEF) funds | Replicability | GEF Strategic Program(s)[7] | Achievements against target environmental benefits[8] |
|---|---|---|---|---|---|
| **IHS** | IS | 1:4 | Although the project is very recent, several commitments for green housing have already been made. | CC1 (EE- buildings) | No information/not measurable yet |
| **Ouarzazate** | IS | 1:83.1 | The project has successfully helped ACWA enter the CSP market in Morocco. This has encouraged them to continue to develop similar projects in Morocco and elsewhere. | CC3 (RE) | Achieved |
| **Lighting Global** | AS | 1:6.1 | The project is expanding geographically, while successfully engaging companies and certifying new products. Market replication appears promising. | CC1 (EE -buildings) | Surpassed |
| **Green Buildings PDP** | AS | 1:3.3 | The project is expanding geographically. Market replication appears promising. | CC1 (EE -buildings) | No information/not measurable yet |
| **BPI SEF II** | IS | 1:26.5 | The project successfully scaled-up SEF in the Philippines and a follow-on investment was approved in 2015. The potential for market replication is high. | CC1 (EE -buildings), CC2 (EE – industry), CC3 (RE), CC4 (biomass), CC5 (transport) | Surpassed |

[6] The other objective in relation to "Minimum of $30m of projects funded (both IFC EF and private sector) within three years of IFC Earth Fund operations, or minimum of 30% of funds deployed" was not considered relevant at a project level and is analyzed only at the program level, in the following section.

[7] Climate change-related themes aligned with GEF Strategic Programs: CC1: Promoting EE in residential and commercial buildings, CC2: Promoting EE in the industrial sector, CC3: Promoting market approaches for RE, CC4: Promoting sustainable energy production for biomass, CC5: Promoting sustainable systems for urban transport, CC6: Management of Land Use, Land Use Change and Forestry

[8] Individual project level outcomes are not available for public disclosure yet, but the evaluation team has verified these achievements.

| Project Title | Type of project | Leverage of EF (GEF) funds | Replicability | GEF Strategic Program(s)[7] | Achievements against target environmental benefits[8] |
|---|---|---|---|---|---|
| **Mexico SEF** | AS | 1:0.7 | The project failed to provide proof of concept due to unfavorable market conditions. | CC2 (EE – industry), CC4 (biomass) | Not Achieved |
| **Cleantech Innovation Facility** | IS | 1:3 | The project struggled to identify projects to invest in. Market replication of small-scale investments in very challenging economic environments appears difficult. | CC1 (EE -buildings), CC2 (EE – industry), CC3 (RE), CC4 (biomass), CC5 (transport) | Not Achieved |
| **Techcombank** | IS | 1:36 | The project provided proof of concept and IFC has been approached by 4 other local banks expressing interest in developing a similar loan program. | CC2 (EE – industry) | Achieved |
| **Global Cleaner Production Facility** | AS | 1:4.1 | The Global CP supported several regional programs. Market replication is high. | CC2 (EE – industry) | $CO_2$: Not Achieved<br><br>Water: Surpassed |
| **AREAS South Africa** | AS | 1:5.5 | The project provided proof of concept by leading to the adoption of an electrification strategy and succeeding to engage both private and public actors. | CC3 (RE) | Surpassed |
| **Green Power for Mobile Global 2** | AS | 1:8.8 | The project successfully scaled up renewable energy use by mobile network operators and engaged several other types of companies. | CC2 (EE – industry), CC3 (RE) | Surpassed |
| **Brazil Environmental Permits** | AS | 1:2.6 | The project failed to provide proof of concept. Market replication appears unlikely. | CC6 (forestry) | Not achieved |
| **Techcombank** | IS | 1:36 | The project provided proof of concept and IFC has been approached by 4 other local banks expressing interest in developing a similar loan program. | CC2 (EE – industry) | Achieved |
| **RECCIPE** | AS | 1:5.2 | The project launched 2 funds and provided proof of concept; market replication appears promising. | CC1 (EE - buildings), CC2 (EE – industry), CC3 (RE), CC4 (biomass), CC5 (transport), CC6 (forestry) | Achieved, Knowledge product, no direct GHG benefits |

| Project Title | Type of project | Leverage of EF (GEF) funds | Replicability | GEF Strategic Program(s)[7] | Achievements against target environmental benefits[8] |
|---|---|---|---|---|---|
| **Carbon Index** | AS | 1:5.8 | The project provided proof of concept and other indices have been developed globally since. | CC3 (RE) | Achieved, Knowledge product, no direct GHG benefits |

A detailed analysis of the IFC EF Platform's fulfilment of key objectives is provided in Table 4 in Section 6.

**General performance**

***Advisory Services projects***

**Of the nine Advisory Services projects under the IFC Earth Fund Platform, five projects have already been completed while the other four are ongoing.**

**The five completed projects – AREAS South Africa, Green Power for Mobile Global 2, Brazil Environmental Permits, RECCIPE, Carbon Index – were generally considered successful in providing proof of concept.**

- The **Africa Renewable Energy Advisory Services (AREAS) South Africa** project led to the development of a National Electrification Roadmap and supporting mechanisms, resulting in increased electricity access and reduction of $CO_2$ emissions. The support of the South African Department of Energy as well as the strong stakeholder relations that developed were key to the success of the project.
- The **Green Power for Mobile Global 2** project aimed at scaling up the deployment of renewable energy (RE) and energy efficiency (EE) technologies in mobile network operator (MNO) tower base stations, frequently powered by diesel generators in rural areas. Following on a successful pilot, the project involved supply chain participants in 12 countries with technical training, market analysis and feasibility studies. Project objectives included mobilizing financing for green tower sites, reduction of $CO_2$ emissions and renewable energy generation. Overall project results were deemed very successful, with positive results obtained substantially ahead of schedule, eventually surpassing the project's targets. Key project success factors included the strong partnership with an industry association allowing knowledge dissemination through the private sector and the implication of a broad set of industry stakeholders, increasing project scope and efficiency.
- **Brazil Environmental Permits** took place in the Brazilian State of Acre. Its initial objective was to reduce the number of days required for local firms to comply with environmental permitting regulations for forest management and construction activities. However, due to a lack of willingness and capacity by the State of Acre's government, the project was not able to change the existing legal framework. In this context, the project demonstrated flexibility by developing a website to inform a broad audience of stakeholders on the permit application process. Many aspects of the project were classified as partly unsatisfactory and a limited impact was achieved on sustainably managed land and GHG emissions, although the website was useful in spreading knowledge and encouraging companies to follow the permit application process.
- The **Research and Engagement on Climate Change Investment in Private Equity (RECCIPE)** project took place on a global scale and worked to develop a commercially sustainable information tool to enable institutional investors to increase their capital allocations to emerging markets (EMs) in private equity (PE) and venture capital (VC) funds, particularly in climate change-related sectors. The development of the tool helped establish two investment products which raised private sector capital, totaling nearly $600 million, from a variety of investors and also contributed to creating a common framework for climate change investments by publishing industry standards and benchmarks. The project was considered highly successful, with demonstrably high replicability. One of the key success factors for the project was the collaboration across donor organizations, which led to significant scale and faster progress than expected, allowing for early engagement in market opportunities.
- The **Carbon Index** project took place on a global scale and involved providing financial and technical assistance to conduct research for developing a carbon-optimized index and encouraging disclosure of carbon emissions by emerging market companies. The project developed the first global emerging markets Carbon Efficiency index, raised awareness regarding climate-friendly investments and led to a number of replications.

**Of the four ongoing projects, three are considered on track - Lighting Global, Green Buildings PDP, Global Cleaner Production Facility, while one has been indicated as underperforming – SEF Mexico.**

- **Lighting Global** worked on a global scale to support the expansion and delivery of IFC's off-grid country lighting programs, notably supporting the development of self-sufficient local industries via work with sector-wide institutions. Project objectives include working with client companies and assisting credit facilities to provide working capital for beneficiary companies, reduction of $CO_2$ emissions and increasing access to modern energy. The project has been expanding geographically and to date is highly successful, above and beyond targets set, in part due to market growth for off-grid lighting. Success factors include strong coordination amongst national-level project coordinators and knowledge sharing across countries, as well as the strong engagement of the private sector and collaboration with the industry associations.
- The **Green Buildings Products Development Platform (PDP)** has a global scope and was designed to support the EDGE Green Building Market Transformation Initiative, which aims to create new pathways for green growth using the innovative green building assessment tool EDGE (Excellence in Design for Greater Efficiencies). The project has been very successful to date and is proceeding on schedule. Expected outcomes include reduction of $CO_2$ emissions, and development of an increasing number of buildings in line with green buildings standards. A key success factor for the project to date has been its comprehensiveness; instead of working on regulation or voluntary initiatives, the project provides a complete menu of interventions targeting key decision makers (buyers, developers and builders, banks, and governments).
- The **Global Cleaner Production (CP) Facility** is an umbrella program that supports regional IFC teams to catalyze investments into cleaner production and resource efficiency practices at the firm level. The key objectives of the Facility are capacity building and co-funding for regional implementation as well as knowledge management with specific objectives for financing and environmental impacts. A total of 12 projects have been funded by the Facility to date; 5 are completed and 7 are still active. The Facility has largely exceeded expectations in relation to co-funding and knowledge sharing.
- The **Mexico SEF (Sustainable Energy Finance) Program** is a program promoting the implementation of sustainable energy (SE) projects in Mexico, via capacity building, awareness-raising and proposing regulatory reforms. Objectives relate to supporting local financial institutions and providing financing for sustainable energy projects that will result in reduced GHG emissions. The program's performance was flagged as unsatisfactory during the last supervision cycle as objectives have not been met, despite efforts to engage with several local banks. To date no financial institution has engaged in financing sustainable energy. Challenges faced related to unfavorable existing market conditions, in which banks have few incentives to enter high risk sectors involving SMEs and sustainable energy. However, work with the Association of Mexican Banks has raised awareness among banks regarding the potential business opportunities from financing SE projects and was considered one of the valuable outcomes of this program.

**Investment Services projects**

**One Investment Services project under the IFC Earth Fund Platform is completed (Techcombank), while the other four are ongoing. Three projects currently in progress - IHS, Ouarzazate, BPI SEF II have achieved or are on course to achieve their set objectives. For one project – the Cleantech Innovation Facility, objectives have not been met to date.**

- The **Techcombank** project involved providing an EE senior loan to a financial institution in Vietnam to increase the financing available for cleaner production (CP) and energy efficiency (EE) projects. The project consisted of a $25 million loan from IFC and the Earth Fund to Techcombank: $1 million was lent by the Earth Fund and $24 million was lent by IFC. The Earth Fund loan was convertible into a grant if Techcombank on-lent $50 million to companies for CP and EE investments, with at least half of the

borrowers being SMEs, by the loan's termination date. Project objectives related to portfolio size, lending to SMEs, resource and energy efficiency, and $CO_2$ emissions reduction. A $37 million portfolio was built by Techcombank, who in consequence earned and received a performance bonus of $745,000 from the Earth Fund; the project was considered successful and replicable.

- The **International Housing Solutions (IHS)** project takes place in South Africa and is a private equity fund providing equity to affordable green home developments, in order to promote the development of affordable green homes that will meet IFC's EDGE green building standards. Project objectives include certification of homes with green technologies and reduction of GHG emissions. While the investment is very recent, a first positive result is that the IFC Earth Fund Platform participation helped the fund reach its first financial closing. Furthermore the IFC Earth Fund Platform contribution has been replicated by an additional investment by KfW, thereby more than doubling the number for green homes.
- The **Ouarzazate** project is focused on Morocco and provides an equity investment to co-finance a 160 MW concentrated solar power (CSP) plant with storage. The development of the Ouarzazate project is expected to drive down CSP capital costs, generate renewable energy and lead to GHG emission reduction. The plant became fully operational in February 2016.
- The **Bank of Philippine Islands (BPI) SEF II** project is a risk sharing facility (RSF) with the Bank of the Philippine Islands (BPI) that aims to increase the financing available for small-scale renewable energy (RE) and energy efficiency (EE) projects in the Philippines. The project builds on the existing Philippines Sustainable Energy Finance Program (PSEFP). Project objectives are to expand the existing RSF and increase financing of RE and EE projects, leading to $CO_2$ reductions. The overall project performance is very satisfactory; the utilization made of the funds has been very high and the project partner has been very engaged. Following on the project, the partner financial institution now wants to integrate the product in its portfolio to tackle new market opportunities. A key project success factor has been the commitment of the bank, which has committed to having SEF as part of its business strategy and a differentiating element; preliminary advisory work with BPI also helped develop technical capacity for launching SEF.
- The **Cleantech Innovation Facility** has a global scope and invests in early-stage, innovative cleantech companies that target challenging markets and geographies. The venture investments support companies that demonstrate a high level of innovation and potential environmental and social impact, but which have weak or limited sales records, untried business models, technologies with a limited track record, and limited investment capital from local markets. Facility objectives are to enable investments over a three year period and lead to reduction of $CO_2$ emissions; the facility was extended for a fourth year. To date, the facility has been rather unsuccessful, with only two investments committed against an objective of five. Challenges faced by the Cleantech Innovation Facility were linked to difficulties in identifying eligible projects. This was partly due to immature markets in the targeted countries, leading to a limited project pipeline, which combined with project characteristics (small, high-risk) and selection requirements (including environmental benefits), led to the identification of very few potential projects.

**Focus: Lighting Global**

***The Lighting Global project has been highly successful to date, exceeding targets for reach and impact. Its success can be attributed to:***

- ***Strong knowledge sharing practices across countries, thereby ensuring a standard approach and allowing new country programs to become operational quickly***
- ***Engagement with industry associations to maximize impact***
- ***Strong growth in the off-grid lighting market***

***Context and objectives***

Lighting Global is the World Bank Group's platform supporting sustainable growth of the international off-grid lighting market as a means of increasing energy access to people not connected to grid electricity in Africa, Asia and the Pacific region.

The project seeks to support an effective and efficient expansion and delivery of the IFC's off-grid country lighting programs globally. It involves:

- Working with lighting sector companies to help distribute and manufacture Lighting Global certified products
- Supporting the development of credit facilities to support lighting sector companies
- Supporting the development of self-sufficient industry-focused institutions certifying off-grid lighting products.

Main market barriers addressed via the project relate to lack of market knowledge, and quality standards and verification schemes for off-grid lighting.

***Project characteristics***

| | |
|---|---|
| **Type of project** | Advisory Services |
| **Geographic Focus** | Global |
| **Project timeline** | December 2013 - June 2017 |
| **Total project cost** | $4,940,840 |
| **EF (GEF) Funds approved** | $695,000 |
| **Leverage of EF (GEF) Funds** | 1:6:1 |

***Project activities***

In order to foster comprehensive market development, several actors are included in the project, all along the supply chain: the Global Off-Grid Lighting Association (GOGLA), manufacturers, distributors, and other development partners.

Lighting Global helps these actors expand the circulation of their quality-verified products. This is done by providing them with privileged access to market intelligence reports, business to business linkages, facilitation of access to finance, participation in consumer education campaigns and general business development support. 25 entities have been supported by Lighting Global, and around 50 certified products have been brought to the market. The program has allowed over 26 million people to gain access to modern energy.

***Project results to date***

While the project is still ongoing, initial results have been impressive and the project is considered highly successful, above and beyond targets set, in part due to market growth for off-grid lighting.

| | |
|---|---|
| **Financing facilitated** | $27.5 million in financing has been facilitated, coming close to the $30 million target. |
| **Certified entities** | 25 entities (target: 20), have brought 48 certified products to the market (target: 70). |
| **CO2 reductions** | Estimated at an average of 426,088 tons of $CO_2e$ per year over the lifetime of the project. |
| **Access to energy** | Over 26 million people have received access to modern energy (defined as greater than tier 1 energy access as defined by the Sustainable Energy For All's Multi-Tier Global Tracking framework), much more than the original target. |

***Project success factors and challenges encountered***

Project success factors to date are related to effective knowledge sharing across countries and engagement with relevant actors, notably:

- A strong connection between country-level program leaders allowed for central coordination and a harmonized approach and a common knowledge platform allowed knowledge transfer and information sharing amongst countries.
- Strong private sector engagement was an important factor in project success. This was facilitated by early consultation of the private sector, thereby allowing identification of market potential.
- Collaboration with the industry association (GOGLA) was important in gathering and sharing sector-level data and mobilizing sector actors.

The project's main challenge has been dealing with an increase in lower quality off-grid lighting products that are either generic or counterfeit copies of good quality market leader products. This has occurred at the same time as manufacturers of branded products are shifting to higher quality lighting products.

While there has been a general acceptance of the Lighting Global quality standards, challenges have arisen when governments have adopted them without collaboration with Lighting Global. This can be problematic and cause more harm than good through poor design and implementation of initiatives for their roll out.

However, this situation reflects a positive movement of a range of actors recognizing the critical role that quality lays and shows that governments are becoming convinced of the value of incentivizing quality in national markets.

***Lessons learned***

Main lessons learned to date relate to the meaningfulness of using a common knowledge management platform for global programs as well as the strong market impact achieved by working with professional associations, notably:

- For global projects, a common knowledge management platform is meaningful to transfer expertise from one country to another. Calls or meetings with the global team need to be organized on a regular basis to share knowledge, thereby ensuring projects can learn from each other and be as effective as possible.
- Knowledge of the sector and markets should be communicated broadly, including to relevant professionals in the sector, to help catalyze market change. For instance, the development of a website with information on technologies, innovation or successful business models (updated once or twice a year) can help achieve this goal.
- Providing Advisory Services in emerging market technologies such as off-grid solar ensures IFC a leadership role in assisting other donors in understanding market needs.
- Working with professional associations to develop higher quality standards encouraged the engagement of local producers, leading to stronger market impact and adoption of the standards.

*Photo credit: lightingglobal.org*

**Lessons learned**

Based on review of the available documents and interviews with project actors, some lessons learned have been identified across the IFC EF Platform project portfolio. These reflect one or more projects in each case, as detailed below, and have been considered more broadly applicable to future similar contexts. The lessons learned have been grouped around a few key themes:

- Project development and structuring
- Role and impact of Advisory Services projects
- Dissemination and knowledge sharing
- Good practice for Facilities

It is interesting to note that the majority of lessons learned are related to project development and structuring, highlighting to what extent the project development phases are important to ensure project success. Those projects facing challenges occurred at the implementation stage or in relation to the market context, but could potentially have been identified at the project development and structuring stage.

***Project preparation and development***

**Confirming knowledge related to the current market, regulatory and project context is up to date before launching a project or allocating funds helps ensure its success**

A few projects faced difficulties related to market, regulatory or project context, which could potentially have been avoided if the ongoing validity of the project context was challenged and the project adjusted in consequence. Examples include:

- The Mexico SEF project, in which additional preliminary studies may have helped identify in advance the challenging context of the Mexican banking sector. The AREAS South Africa project faced some political risks, which could have been better considered in the project development and design phase.
- Similarly, the Brazil Environmental Permits project faced challenges related to the regulatory and political context, as well as the main client project champion's departure from the project due to the political context, leading to limited impact for the project. These challenges, closely linked with local elections, could potentially have been identified and their risk most clearly assessed in advance. However, the project proved to be flexible, taking an alternative approach (e.g. a website to inform stakeholders when policy reforms could not be achieved) to make up for the lack of progress against the original objectives.
- The Carbon Index project, while overall quite successful, could have profited from further preliminary investigations on whether the market was ready for an emerging markets carbon index, as well as research on the best partners with whom to engage.

**Selecting the right partner and ensuring engagement of relevant stakeholders is crucial to project success. In this context, professional associations can be a meaningful lever for engaging with industry stakeholders.**

Professional or industry associations help provide credibility and allow access to relevant industry contacts and organizations. Furthermore, their existing outreach activities can be leveraged by the IFC Earth Fund Platform in its engagement or awareness-raising activities, leading to more impact. Examples include:

- In the AREAS South Africa project, the Director of the Department of Energy was a champion for the project and now continues to champion the implementation of the Roadmap developed, ensuring the sustainability of program benefits. In the Green Power for Global Mobile II project, finding a high-level champion within the Operator's organization (preferably the CEO) to champion Green Power helped to boost the project's impact.
- In the Green Power for Global Mobile II project, collaborating with a professional association (e.g. GSMA, the association of mobile operators) has been crucial to engaging industry stakeholders. Similarly, in the

context of the Lighting Global project, working with professional associations to develop higher quality standards encouraged the engagement of local producers, leading to stronger market impact and adoption of the standards.

- In the BPI SEF II project the local bank (Bank of the Philippine Islands) was a very committed partner to including Sustainable Energy Finance as part of its business strategy, considering it a differentiating element. This commitment was the key success factor for the project.

**In some cases, projects faced challenges because the market was not sufficiently mature to support follow on projects**

Certain projects faced challenges due to market conditions, notably an insufficiently mature market.

- This was the case of the Carbon Index Project, which was ahead of its time. It served as a proof of concept; however, it could have had more market impact if the market was more mature and investors could have been identified to launch a fund tracking the index. Since project closure the market has evolved and market demand for this type of investment strategy considering climate change risk and encouraging decarbonization has strongly developed.
- The Cleantech Innovation Facility faced challenges in identifying eligible projects; this appears to be partly due to innovative cleantech markets not being mature enough in the targeted countries leading to a very limited pipeline of deals. The lack of maturity in the market combined with deals which were small, high risk, and aligned with environmental goals, led to identification of very few potential projects. Possibilities for addressing this type of challenge include either broadening project selection criteria or undertaking deeper thematic market assessments and market intelligence before launching such a facility.

**The IFC EF was well placed to respond to investment and advisory projects that met its objectives**

The ability of the IFC-Earth Fund Platform to support projects globally in a flexible manner was critical to the development of innovative investments and the successful use of Earth Fund Platform funds and the outcomes and impacts that they are generating. Most donors' strategies may focus only on specific countries or regions, which place limits on the abilities to use the funds to their fullest potential.

IFC EF's position in investing early in certain areas or technologies helped demonstrate viability and encourage other participants to join the market, as well as giving IFC a leadership role in assisting other donors in understanding market needs. This is notably the case for IHS, in which IFC's early investment led to a follow on KfW investment and for Lighting Global, in which the Earth Fund's Advisory Services in emerging market technologies such as off-grid solar ensure a leadership for IFC in assisting other donors.

***Role and impact of Advisory Services projects***

**Advisory work has a crucial role for building awareness, technical capacity and catalyzing investment from the private sector**

In the Green Power for Global Mobile II project, the upfront advisory work funded by the IFC Earth Fund was crucial for catalyzing investment from the private sector. In the BPI SEF II project, advisory work helped lay the groundwork for the local bank to develop their technical capacity to launch sustainable energy financing and engage with the private sector.

**Market impact is larger when Advisory Services projects are coupled with or supported by (IFC) investment funds**

- In the context of the Carbon Index, the project was considered innovative and successful in developing an emerging markets carbon efficiency index. While the project increased overall market awareness and met

most objectives set, it did not identify investors for a fund tracking the index, limiting its impact. Potential investors contacted (including IFC itself), did not provide financing; this appears to be partly related to the organizational separation at the time between the financing and advisory teams at the time, which has since evolved.

- In the RECCIPE project, based on the experience with the Carbon Index project, investment support was provided by the IFC to launch an investible private equity product, focused on climate change-related investment in emerging markets. IFC investment sent a strong signal to the market and gave the fund credibility, encouraging other investors to participate.
- Similarly, in the Green Buildings PDP project, collaboration of advisory teams with investment teams was essential to ensuring the scaling-up of projects in the long term.

***Dissemination and knowledge sharing***

**There is significant potential of benefiting from dissemination of project results amongst IFC EF Platform projects internally, beyond the scope of project reporting documents, as well as externally; this could benefit both IFC and other actors**

- The existence of a knowledge management platform as well as frequent meetings in the context of the Global Cleaner Production Facility contributed to the sharing of expertise and knowledge, which was a key project success factor, allowing harmonious development of many regional programs simultaneously. The knowledge transfer across the regions positively impacted the steady improvement of programs in almost all regions.
- For Lighting Global, a common knowledge platform was considered particularly meaningful in the context of global projects to transfer expertise from one IFC team to another when implementing new projects, through training and other dissemination events.

***Good practice for financing facilities***

**In the development of financing facilities, some lessons learned on good practice were identified from the Global Cleaner Production Facility. These include:**

- Having a small amount of time set aside for administering project budget and overseeing implementation was helpful
- Allowing operations officers flexibility in allocating funds among projects under the facility seemed to represent a well-adapted and efficient model
- A Knowledge Management platform and frequent meetings contributed to sharing of expertise and knowledge, which is useful for the development of simultaneous projects

# 6. Overall program performance

This section summarizes the findings of the Terminal Review. It is structured around the following three areas:

- Progress against key program/project objectives and expected results
- Efficiency and Effectiveness of Program/Projects Operations and Management
- Identification and Dissemination of Lessons Learned

## Progress Against Key Program/Project Objectives and Expected Results

### Overall

While the GEF's initial vision of the Earth Fund as a hybrid institution that would absorb private sector funds directly never materialized, the IFC EF Platform was very successful in establishing a mechanism for investing GEF funds alongside IFC funds and mobilizing investments from commercial investors in projects that generate returns and achieve environmental benefits. Without IFC's expertise to identify bankable projects and partnerships, the GEF would not have been able to invest in such innovative projects. Furthermore, the Platform provided lessons learned and helped develop the approach for the GEF-5 and the GEF-6.

From an IFC perspective, the program has been highly successful. It enabled investments in projects that achieve environmental benefits and received significant co-investment from IFC and other private sector investors. IFC-EF Platform helped the IFC finance projects they would not have been able to undertake on their regular commercial balance sheet.

IFC EF's position in investing early in certain areas or technologies helped demonstrate viability and encourage other participants to join the market, as well as giving IFC a leadership role in assisting other donors in understanding market needs. This is notably the case for IHS, in which IFC's early investment led to a follow on KfW investment.

The experience of the IFC-EF platform also shaped IFC's approach to Blended Finance, including development of the Blended Finance Principles and the governance of Blended Finance operations at IFC. The table below summarizes key program objectives and achievements and progress made to date.

**Legend:**

Achieved

Partially achieved

Not achieved

Table 4: IFC Earth Fund Platform progress towards key objectives

| Key objective | Fulfilment level | Achievements and progress to date |
|---|---|---|
| **Funding-related** | | |
| **Funds deployment**<br><br>Minimum of $30m of projects funded (both IFC EF and private sector) within three years of IFC Earth Fund operations, or minimum of 30% of funds deployed |  | **Funds deployment**<br><br>The objective of disbursing a minimum of 30% of funds within three years of IFC Earth Fund operations was successfully achieved in 2012.<br><br>At Platform closure in June 2014, 97.5% of disbursements was achieved ($39 million of a possible $40 million).<br><br>**Conclusion**<br><br>Achievements in relation to this objective are considered highly successful, as nearly all funds allocated for the platform were disbursed. |
| **Co-financing**<br><br>Growth of the IFC Earth Fund Platform beyond initial capitalization of $40m<br><br>Project-level objective: Minimum leverage for GEF funds of 1:3 (GEF: other funding) |  | **Overall co-financing and leverage ratios**<br><br>The $39 million committed in the context of the IFC EF Platform attracted $103 million in IFC co-financing and $925 million in third party co-financing. This totals to $1,028 million in co-financing (IFC and third party). This results in an *overall leverage ratio for the Platform* of 1:27 in relation to GEF.<br><br>It should be noted, however, that one project, the Ouarzazate project, has an unusually high leverage ratio (1:83) which distorts the overall picture. After excluding that project, the overall leverage ratio for the portfolio is 1:7.<br><br>Leverage by project was assessed for Investment Services projects; all leverage ratios were above 1:3, in line with the Platform objective.<br><br>This reflects in part the success of the Platform in identifying co-financing sources and in part the fact that the IFC contributed at both a program and project level. This result indicates that the Platform was successful in mobilizing private sector finance.<br><br>It should be noted that one criterion for project selection was an anticipated leverage ratio of 1:3 for GEF funds.<br><br>**Conclusion**<br><br>Achievements in relation to this objective are considered highly successful, with the overall Platform leverage ratio above 1:3. |

| Key objective | Fulfilment level | Achievements and progress to date |
|---|---|---|
| **Impact-related** | | |
| **Replication effect of projects**<br><br>Replication effect of projects supported under the IFC EF | ***Selection of projects based on replicability-related criteria***<br><br>  <br><br>***Replicability achieved to date***<br><br>  | **Project replicability**<br><br>Projects were initially selected for their degree of innovation, replicability and scalability. Market replicability of projects in the portfolio is generally high or promising. Most projects led to the development of similar projects in other countries or regions or additional work with other actors in the same region. However, certain projects resulted in low replicability due to market challenges:<br><br>• **Cleantech Innovation Facility:** The project failed to identify a sufficient number of projects to invest in (only two investments made, compared to an initial objective of 15 investments).<br>• **Mexico SEF:** The project failed to provide proof of concept due to unfavorable market conditions, where local banks had access to significant amounts of cheap money and made high margins on their existing portfolios.<br>• **Brazil Environmental Permits:** The project failed to provide proof of concept. The State of Acre's government did not demonstrate a proactive and organized approach to the project, due to their focus on State selections and responding to an emergency status for massive floods. Market replication appears unlikely.<br><br>The market barriers and practical challenges faced by certain projects are discussed in lessons learned (see above – in Section 5) and in the detailed project descriptions in Annex 4.<br><br>**Conclusion**<br><br>In general, project replicability was high or is currently promising. Some projects faced implementation challenges, which reduced their replicability. It is difficult to fully assess project replicability as 8 of 14 projects supported under the Platform are ongoing and market impacts are only expected to be seen in the coming years. In this context, this objective is considered partially achieved at the time of this evaluation. |

| Key objective | Fulfilment level | Achievements and progress to date |
|---|---|---|
| **Adequately address environmental issues**<br><br>Adequately address environmental problems associated with the GEF Strategic Programs and Operational Programs that the IFC EF supports | ***Alignment of projects with GEF Strategic Programs***<br>  <br>***Environmental benefits achieved to date***<br>  | **Alignment with GEF Strategic Programs**<br><br>While the Platform was designed with an all-inclusive approach in relation to the GEF focus areas (e.g. climate change, biodiversity, international waters), projects financed were primarily related to climate change mitigation.<br><br>This has not been an issue for the GEF as it sees this as a reflection of the market context. Following the financial crisis in 2009, the market slowed down and it was more difficult to identify eligible projects. When investments began to pick up speed again, those which were the easiest to identify and the most bankable were those related to climate change mitigation.<br><br>Over the course of the Platform, the GEF learned that for certain types of projects (international waters, biodiversity), it was harder to identify private sector partners with relevant projects and a good financial track record, aligned with IFC and the GEF requirements.<br><br>All projects funded under the Platform aligned with one or more of the GEF Strategic Programs. Nine of the projects aligned with only one GEF Strategic Program; the other five projects aligned with two or more Programs. The most common GEF Programs represented across the project portfolio were: CC2 - Promoting EE in the industrial sector (7 projects), CC3: Promoting market approaches for RE (7 projects), and CC1 - Promoting EE in residential and commercial buildings (6 projects). Annex 4 presents detail on the alignment between GEF Strategic Programs and the project portfolio.<br><br>**Environmental benefits - targets and achieved to date**<br><br>Targets by project for $CO_2$ reduction and water reduction were set for the projects in the IFC Earth Fund Platform. As some projects under the Platform are still active, for a certain number of projects information on achieved environmental benefits is not yet available; data is only available on expected benefits. However, it is available on achieved environmental benefits for ten projects (4 Investment Services, 6 Advisory Services).<br><br>The targets for environmental benefits are:<br><br>• Total GHG emission reduction – 3,232,936 tons/year<br>• Total water use reduction – 9,405,301 $m^3$/year<br><br>To date, even though achieved environmental benefits have been reported for half of the projects supported by the IFC Earth Fund Platform, environmental benefits exceed targets:<br><br>• Total GHG emission reduction – 3,135,924 tons/year (97% achievement in relation to target)<br>• Total water use reduction – 15,033,789 $m^3$/year (160% |

| Key objective | Fulfilment level | Achievements and progress to date |
|---|---|---|
| | | achievement in relation to target)<br>Interestingly, to date, advisory projects surpass environmental impact objectives while investment projects lag. This may reflect the nature of the projects and also the fact that the impacts from investment projects are often expected years after project closure.<br>It should also be noted that environmental benefits to date reflect only a portion of the project portfolio, as some results are not yet available. In this context, the total amount of environmental benefits achieved by the IFC Earth Fund Platform may even more highly exceed original targets if the other portion of the portfolio performs at or above target-levels.<br>It should be noted that water use reduction targets and achieved benefits only relate to sub-projects within the Global Cleaner Production Facility. This Facility has been highly successful in catalyzing water reduction among resource-intensive companies in target markets, largely surpassing its initial goals.<br>Some projects also led to additional related benefits, such as renewable energy generation, access to energy, as well as social benefits including housing and job creation.<br>**Conclusion**<br>Achievements in relation to this objective are considered highly successful. All are projects aligned with one or more GEF Strategic Programs and environmental benefits to date largely exceed original targets on a project-level basis. |

Above and beyond the four main Platform objectives, our team also evaluated the IFC Earth Fund Platform on some additional criteria and dimensions which we identified as relevant to its performance and operations, including:

- Eligibility criteria
- Balance between Investment and Advisory Services projects
- Adequate governance structure

The table below shows our assessment of the IFC Earth Fund Platform for these dimensions.

**Legend:**

Achieved

Partially achieved

Not achieved

**Table 5: Evaluation of IFC Earth Fund Platform in relation to additional evaluation criteria**

| Key objective | Fulfilment level | Achievements and progress to date |
|---|---|---|
| **Eligibility criteria**<br>Approved projects meet eligibility criteria:<br>*(i) Whether the activities within the project are GEF-eligible activities (eligible within the strategic programs under the IFC EF)*<br>*(ii) Whether the GEF funds are adequate to address identified market barriers*<br>*(iii) Whether the project is aligned with the strategic pillars of the IFC EF platform (scaling or testing business models/technologies)*<br>*(iv) Whether the project is consistent and aligned with IFC's mainstream activities*<br>*(v) Whether there is adequate co-financing and leverage from non-GEF sources.* |  | Within the context of the IFC Earth Fund Platform, delegated authority is in place, with IFC responsible for project selection, and the GEF providing technical guidance in an observer role.<br>At the beginning of the Platform, the roles of each organization were not clear and there was a lack of common understanding between the GEF and IFC on the eligibility criteria. However, around the time of the MTR, roles were clarified and reaffirmed, and a common understanding on eligibility criteria ensured.<br>During FY13/14, the BCF Unit reviewed 19 projects eligible for funding under the IFC Earth Fund Platform criteria, requesting over $42 million in IFC EF Platform funding. Of these projects, seven were approved by the BFC, signifying a 37% approval success rate. This approval rate was an improvement over previous years (when it was closer to 16-17%), suggesting an improvement by the BCF team over the rest of the fund in identifying and pursuing projects, as well as better clarification of project acceptance criteria by the GEF. |
| **Balance between Investment and Advisory Services projects**<br>Commitment of estimated 75% to Investment Services projects, 25% to Advisory Services projects |  | Based on the GEF's desire to ensure reflows from the IFC Earth Fund Platform, a general guideline for a 75/25 split between Investment Services and Advisory Services projects was established at Platform launch. This was implemented via a split of the $40 million envelope for the IFC EF Platform into $30 million for Investment Services projects and $10 million for Advisory Services projects. |

| Key objective | Fulfilment level | Achievements and progress to date |
|---|---|---|
| | | To date, $28.6 million in IFC EF funding has been committed for 5 Investment Services projects and $9.49 million for 9 Advisory Services projects, representing roughly a 75/25 split, aligned with these guidelines. |
| **Ensure adequate governance structure**<br><br>*(including safeguards against conflict of interest)* |  | An adequate governance structure for the IFC EF Platform appears to have been in place.<br><br>Within the context of the delegated authority arrangement, IFC was responsible for project selection, while the GEF provided technical guidance in an observer role. The GEF appreciated IFC's investment and financing expertise. Furthermore, the IFC investment process was much easier and more streamlined than the GEF process, allowing for decisions to take place at a more accelerated pace.<br><br>For managing the IFC EF Platform, IFC used the same selection process as for other IFC projects, i.e. IFC has a number of policies and processes in place, covering project governance, due diligence, granting, pricing, etc. The different tracking systems have a number of built-in checks, covering division of roles, proper allocation of overhead, procurement activities, etc.<br><br>IFC also has governing rules and principles for using blended finance, which are applied when determining the amount of GEF funding per project. These include for example, following the rule of minimum concessionality and not investing more than the amount invested by IFC, to avoid over-subsidies to IFC. |

## Efficiency and Effectiveness of Program/Projects Operations and Management

### Role division between IFC and the GEF

Within the context of the IFC Earth Fund Platform, delegated authority was in place, with IFC responsible for project selection, as well as project management, financial management, monitoring and evaluation as well as other management and support functions, while the GEF provides technical guidance in an observer role. The role of the GEF observer allowed the GEF to provide its technical guidance on the alignment of the investments with the GEF focal areas and programmatic directions, while leaving the IFC investment committee to undertake due diligence on financial aspects of potential projects. The role of the GEF observer has not changed since the Mid-Term Review (MTR).

From an IFC perspective, an ongoing challenge is the GEF's desire to have information about projects at a detailed level at an early stage.

### Confidentiality on IFC expected returns

From a GEF perspective, an ongoing challenge was that information on IFC's expected return on their share of the investment was considered as propriety information based on IFC's internal policies. GEF sought this information for their internal decision-making. This issue was addressed with IFC on a case-by-case basis.

This issue is not limited to IFC, but a challenge for GEF's work with other implementing agencies. However, some alternative approaches have been put in place such as receiving information on the range of returns received in the past for similar types of projects.

### Reporting and reflow expectations

The IFC has always responded to the GEF's requests for information and provided annual reports. The annual reports are useful for the GEF to understand the Platform's advancement and learn more about the different projects supported, which helped the GEF identify opportunities for supporting similar projects.

However, the GEF considers that reporting requirements for reflows were not sufficiently formalized in GEF-4, including for the IFC Earth Fund Platform. GEF sees this not as a lack on the part of IFC, but rather as a lack of foresight by the GEF Secretariat. In the context of the IFC Earth Fund Platform, reflows are expected to be returned to the GEF at the end of the project. In GEF-5 and 6, GEF has implemented a reflow schedule, formalizing a calendar with all repayment dates, which is reassuring and helpful for both the GEF Secretariat and GEF trustees. In this context, reporting on reflows takes place on a quarterly basis.

### Standard management approach

The IFC EF Platform's projects are managed in the same way as other IFC Advisory and Investment Services projects. For these projects, IFC has a number of policies and processes in place that cover project governance, due diligence, granting, pricing, etc. The accounting and finance systems in use have a number of built-in checks, covering division of roles, proper allocation of overhead, procurement activities, etc.

The financial management systems used for managing the Advisory and Investment Services projects under the IFC EF Platform are the same systems used more generally by IFC for project tracking and accounting. The systems show the source of financing for each project, indicated by donor. Controls are in place to track project spending, via charge codes with locked maximum amounts.

The supervision cycle for Investment Services projects is quarterly, while the supervision cycle for Advisory Services projects is semi-annual, aligned with broader IFC policy.

## Identification and Dissemination of Lessons Learned

### Delegated authority

Within the context of the IFC Earth Fund Platform, delegated authority is in place, with IFC responsible for project selection, as well as project management, financial management, monitoring and evaluation as well as other management and support functions, while the GEF provides technical guidance in an observer role.

With this approach, the GEF considers that the effort expended by the GEF for the IFC EF Platform was limited after the initial development phases. As IFC investment process is much easier and more streamlined than the GEF process, working with organizations such as IFC allows the GEF to invest large amounts of money, with GEF agencies making decisions at a more accelerated pace.

Based on this experience, the GEF proposed limited delegated authority for the GEF-5 and the GEF-6 and formalized it in the GEF procedures. In this context, if all investment plans can be determined at the beginning of the program and are fully consistent with the GEF focal areas, the implementing agency receives approval for all investments in advance (e.g. Investment in ESCOs in the Middle East). However, if the proposal from the implementing agency is more generic (e.g. energy or cleantech investments), the agency must bring each investment to the GEF for technical concurrence. This approach poses a challenge to IFC, as the project-by-project 'technical concurrence' approach is not suited to the IFC project cycle.

### Flexibility in structuring programs for the use of concessional funds

The GEF considers that a major lesson learned from the IFC EF Platform is that the program needs to be able to adapt to evolving market conditions. Implementing agencies of the GEF, the broader market context and the private sector are continually changing. It is therefore important to build in flexibility in similar future investment programs to avoid implementing agencies returning money because it is no longer aligned with initial overly rigid eligibility criteria.

Over time the GEF has structured programs and projects with different priorities regarding grants and investments in their financing strategies. If a program is all grant or all investment-focused, the implementing agency is required to identify additional financial resources to fill in gaps, which can hinder timely project launch. In this context, the IFC Earth Fund model is interesting as it had flexibility designed into it, with specific amounts set aside for advisory services projects and investment services projects. This ensured that a certain percentage of the portfolio generated reflows.

### Building experience on blended finance

From an IFC perspective, a key lesson was learning how to use blended finance, including how to refine the financing structure for these types of projects and how to develop a robust governance structure. The experience with the IFC-EF platform enabled IFC to establish and test operational procedures, policies, and governance systems when using concessional finance in private sector investments and streamline investments with future sources of concessional funds. When new sources of concessional climate finance became available such as the Climate Investment Funds, and other bilateral funds such as the IFC-Canada Climate Change Program, IFC was in a position to systematically take in and invest these funds into projects. At present, the BCF unit has roughly $700 million in funds under management for climate-smart investments.

From a GEF perspective, the IFC Earth Fund Platform has been a very positive experience and a trendsetting experience. The GEF considers that the Platform helped the GEF to develop a greater awareness of the possibilities for using an investment model for projects rather than just using grant funding to support projects. For GEF, their experience with the IFC Earth Fund Platform laid the foundation for GEF's work in GEF-5 and GEF-6 and contributed to structuring their approach in these programs.

## Knowledge management and dissemination

IFC prepared and provided to the GEF Secretariat an annual report each year. When requested by the GEF Secretariat, IFC briefed the Secretariat and the CEO on the IFC EF Platform.

IFC also planned to wait until having more concrete results to share before hosting a major knowledge sharing event. As many projects have begun generating results, this Terminal Evaluation could be an opportunity to share results from across the IFC EF portfolio. IFC envisions sharing additional information as projects continue to generate results.

The GEF did not organize any specific dissemination events related to the IFC Earth Fund Platform. However, GEF was satisfied with the annual reports from IFC on the IFC EF Platform. The GEF includes documentation from the Earth Fund on the GEF website and regularly uses case studies from IFC Investment Services projects in brochures and presentations. IFC has yet to publically release reports or marketing materials focused on the Earth Fund Platform.

While knowledge exchange did take place between GEF and IFC, helping both organizations to learn lessons about blended finance approaches, knowledge exchange seemed to be lacking amongst Investor and Advisory Officers on their experiences with IFC EF Platform-funded projects. This type of knowledge exchange could help those working to develop new projects to identify which types of activities could be eligible for IFC EF Platform or similar funding, as well as to understand what types of projects have succeeded or failed in the past. Similarly, on a more operational level, sharing lessons learned can be useful to help Officers best manage projects and address potential risks, learning from other projects' failures and successes.

## Next steps

The Earth Fund Platform was considered innovative and successful by both GEF and IFC and represented a new approach which provided lessons; however, the GEF has chosen a different approach to funding in the future.

The GEF's approach to involving the private sector has changed in GEF-6, with certain conditions which make IFC participation more difficult. In GEF-6 a funding cap of $15 million per investment project is in place; this limits IFC's possibility to take a portfolio approach. Transaction costs are higher for programs of this size. Similarly, from IFC's perspective, another challenge is that the non-grant pilot instrument under the GEF-6 involves a project-by-project approach, which does not align with IFC's operating methods.

In light of GEF's movement towards using concessional funding on a project-by-project approach in GEF-6, the GEF does not at the moment plan to create another hybrid fund directly blending private sector funds. Furthermore, there seems to be a large appetite for a concessional finance role for agencies like the GEF to assist private sector actors. According to the GEF, this approach is proving to be very valuable for further developing environmental investments. The GEF also sees a trend in which donor funds could be used in an increasing investment-based model, with investments generating reflows rather than a pure grant approach, in which returns are not expected.

# 7. Recommendations

While the Earth Fund will not continue in its current form, the Terminal Review provides lessons for both the GEF and IFC in future work, as well as broader lessons for similar blended finances approaches. Based on these, the following five main recommendations are proposed for future initiatives using blended finance, notably for cleantech investment and market transformation. The recommendations are split into those aimed at both IFC and GEF, those solely intended for IFC and those solely aimed at GEF. The term 'donor' below is used to designate organizations providing concessional funding, the GEF or others.

**Recommendations for IFC and GEF**

Recommendation #1: To ensure project success, before launching a project or allocating funds, IFC and the GEF should confirm that present knowledge related to the current market, regulatory and project context are still valid

- While research was undertaken at the project development stage, a number of projects in the IFC EF Platform portfolio faced difficulties related to the actual local market, regulatory or project context, which could potentially have been avoided if these conditions were verified and the assumptions on which the project was based were challenged. This is especially the case in situations where uncertainties may exist in knowledge of the current local context or where additional potential risks were identified.

**Specific recommendations for IFC**

**Recommendation #1: IFC should play to its strengths in continuing to work on blended finance**

- Due its experience with the IFC Earth Fund Platform and similar GEF-funded programs, IFC established and tested operational procedures, policies, and governance systems for the use of concessional finance in private sector investments. IFC's long standing experience in this area, established processes and expertise have allowed it to take in and invest concessional funds from other sources, such as the Climate Investment Funds.
- IFC should continue to capitalize on its added value in this area (its dedicated team, processes and governance systems in place and experience), to continue to develop blended finance models, notably for projects with environmental benefits.
- In this context, IFC should ensure a focus on its key competencies when identifying and developing blended finance projects. For example, in the IFC EF Platform, private equity-based projects such as RECCIPE seemed to work well, whereas projects on a very small scale in the Cleantech Innovation Facility, not a typical domain of IFC, represented a challenge.
- IFC is well positioned to address the challenges of the implementation of the Green Climate Fund and the development by an increasing number of institutional investors of climate pledges that involve organizations divesting from coal and boosting their sustainable energy investments. Furthermore, there is a growing need for countries and corporations in emerging markets to build their "2°C" strategy, which could feasibly be supported with blended finance.

**Recommendation #2: IFC should ensure knowledge management and dissemination of lessons learned and best practices internally and externally**

- Internally, undertaking knowledge management and dissemination activities from individual project experiences, to be shared with other Investment and Advisory Officers could help increase the efficiency of project identification and development, as well as provide important management and operational

lessons for optimizing project implementation. For example, this could take place via sharing sessions (e.g. brown bag lunch sessions), allowing for discussion and exchange.

- Externally, knowledge management and dissemination activities on blended finance programs or projects undertaken by IFC could be useful for catalyzing market transformation and could serve as a marketing tool, allowing IFC to build additional partnerships for blended finance with donors providing concessional financing. In this context, developing a website to share information could be useful.
- It may be important to allocate specific resources or build in specific processes, at a fund and project level, to ensure that knowledge management and dissemination activities take place. For example, robust knowledge sharing activities were a crucial element in the success of such global projects as the Global Cleaner Production Facility and Lighting Global.

**Specific recommendations for GEF**

**Recommendation #1: The GEF should allow flexibility in program development to support blended finance and mobilize private sector co-financing, as well as to adapt to evolving market conditions to ensure program sustainability and meaningful market impact in GEF focal areas**

- Blended finance is a relevant approach for financing projects which could not be supported in a commercial financing context, making it particularly suited for projects with environmental side-benefits.
- Arrangements between the donor and implementing agencies must be flexible enough to adapt to evolving market conditions and private sector expectations, thereby avoiding implementing agencies returning money due to overly rigid criteria and ensuring market impact where commercial investors are unable or unwilling to invest. Blended finance should serve as a complementary approach to commercial financing.
- While the market has shifted over time, with an increasing number of commercial investors investing in environmentally-related projects (e.g. renewable or energy efficiency projects), a blended finance approach remains relevant for projects with new technologies or new issues, including environmental issues (e.g. land degradation) which are still perceived as having a high level of risk or facing capacity-related challenges. This type of approach provides flexibility, which is crucial for successfully making innovative investments.
- In this context, IFC and the GEF have a role to play in continuing to further develop and focus on cutting-edge projects and themes to catalyze market transformation and replication, contributing to their uptake and generalization amongst other commercial financing actors.
- An issue of key importance in this context is deciding on a primarily investment-focused or advisory-focused approach and striking an appropriate balance, based on the objectives of the donor and the implementing agency. While use of funds in investment projects ensures the generation of reflows and can catalyze market growth, it could be argued that advisory projects have the capacity to achieve strong impact with local private sector actors by building awareness, technical capacity and catalyzing investment from the private sector, in ways not possible via investment-style projects.
- Furthermore, a key concern is the regular review or revisions to the program scope to ensure that criteria and projects identified align with market conditions and lead to investment in innovative projects. For example, in the context of the IFC Earth Fund Platform, the scope was revised at Mid-Term to focus solely on climate change-related investments, as an insufficient number of mature or relevant projects had been identified in relation to other themes such as biodiversity or forestry. Biodiversity and forestry projects could be supported through a future blended finance program due to the increasing level of maturity of projects in these areas and their still limited amount of support from commercial investors (e.g. Natural Capacity Financing Facility set up by the EIB, or the Land Degradation Fund Natixis Asset Management is launching with the UN).

**Recommendation #2: When developing new programs, the GEF should ensure an appropriate balance of delegation on the part of the donor and transparency on the part of the implementing agency**

- Delegation of authority by donors to an implementing agency allows for the donor to provide their clear preferences or expectations of development impacts that they want to achieve with their funds, while leveraging the financial expertise and robust existing processes in place at the implementing agency. This allows for quicker project approvals and implementation, increasing the potential for impact.
- However, the possibility of delegation of authority must have a counter-part in terms of transparency on the part of the implementing agency. The level and exact form of transparency should be discussed between the donor and the implementing agency to identify an appropriate balance in terms of effort on the part of the implementing agency and information required on the part of the donor. In the case of private sector investments, any reporting obligations to the donor/funder must take into account the need for client confidentiality and non-disclosure of commercially sensitive information. Options include submission of an annual report, external evaluations, etc. In the context of the IFC EF Platform IFC already provides these types of reporting and feedback to the GEF. However, when working with new implementing agencies or launching new programs, the GEF should ensure that transparency obligations and any other specific expectations, such as timeframe for reflows, are formalized.

# Annex 1: Bibliography

| Program level | Documents reviewed |
|---|---|
| **IFC documents** | IFC Earth Fund Project Document, 2008<br>IFC Earth Fund strategic Document, 2008<br>IFC Earth Fund annual reports, 2010-2014<br>IFC Earth Fund Mid-Term Review, 2012 |
| **GEF documents** | GEF Approval for reallocation of GEF contributions to the IFC Earth Fund Platform, 2011<br>GEF Review of the Global Environment Facility Earth Fund, 2011<br>GEF Revised strategy for enhancing engagement with the private sector, 2011 |
| | |
| **Project level** | **Documents reviewed** |
| **AREAS South Africa** | Approval form , 2012<br>Implementation plan, 2012<br>Supervision documents, 2012-2014<br>Completion document, 9/2014 |
| **BPI SEF II** | FinMech IRC form , 3/2012 |
| **Brazil Environmental Permits** | FinMech IRC form , 2011<br>Implementation plan, 2011<br>Supervision documents, 2012-2014<br>Completion document, 5/2015 |
| **Carbon Index** | Approval form , 1/2009<br>Supervision documents, 2009-2010<br>Final report, 10/2010<br>Completion document, 5/2011 |
| **Cleantech Innovation Facility** | Approval form, 2010 |
| **Global Cleaner Production Facility** | Approval form, 10/2009<br>Supervision documents, 2012-2015<br>Puertas Finas, Completion document, 06/2015<br>CP for CSA, Supervision document, 09/12<br>Russian REF, Supervision document, 09/2015<br>Ukraine CP, Supervision document, 09/2015<br>SEF Nepal, Completion document, 10/2014<br>UEFA Program, Completion document, 12/2015<br>SE Padgo SL TA, Completion document, 05/2015<br>Clean-Pas SSA, Completion document, 07/2015<br>CP for Companies, Supervision document, 09/2015<br>China Water AS, Supervision document, 09/2015<br>REF ECA Region, Supervision document, 09/2015 |
| **Green Buildings PDP** | Approval form, 2013<br>Implementation Plan, 9/2013<br>Supervision documents, 2014-2015 |
| **Green Power for Mobile Global 2** | Implementation plan, 2012 |

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|---|---|
| | Supervision documents, 2012-2014<br>Completion document, 2/2015 |
| **IHS** | Approval form, 5/2014 |
| **Lighting Global** | Approval form, 2013<br>Concept note, 10/2013<br>Implementation plan, 11/2013<br>Supervision documents, 2014-2015 |
| **Mexico SEF** | Approval form, 1/2011<br>Supervision documents, 2011-2015 |
| **Ouarzazate** | Approval form, 4/2014 |
| **RECCIPE** | Approval form, 6/2009<br>Supervision documents, 2010-2011<br>Completion document, 12/2012<br>Final evaluative note, 2/2015 |
| **Techcombank** | Approval form, 2010 |

# Annex 2: List of interviewees

| Program and GEF level | Interviewee (Organization, Role) |
|---|---|
| **Program** | Joyita Mukherjee, IFC, Senior Operations Officer |
| **Program** | Yulia Guzairova, IFC, Associate Financial Officer |
| **GEF** | David Rodgers, GEF, Senior Climate Change Specialist |
| **Project level** | **Interviewee (Organization, Role)** |
| **AREAS South Africa** | Panos Vlahakis, IFC, Senior Operations Officer |
| **BPI SEF II** | Neelam Patel, IFC, Associate Investment Officer |
| **Brazil Environmental Permits** | Alvaro Quijandria, IFC, Head |
| **Carbon Index** | Brunno Maradei, former IFC, Operations Officer<br>Euan Marshall, IFC, Head<br>Laird Reed, IFC, Senior Investment Manager |
| **Cleantech Innovation Facility** | Shir Naveh, IFC, Portfolio Officer<br>Ricardo Gonzalez, IFC, Investment Officer |
| **Global Cleaner Production Facility** | Alexander Sharabaroff, IFC, Operations Officer |
| **Green Buildings PDP** | Corinne Figueredo, IFC, Senior Investment Officer |
| **Green Power for Mobile Global 2** | Jeremy Levin, IFC, Senior Energy Specialist |
| **IHS** | Ricardo Gonzalez, IFC, Investment Officer |
| **Lighting Global** | Russell Sturm, IFC, Head |
| **Mexico SEF** | Michael Steidl, IFC, Senior Operations Officer |
| **Ouarzazate** | Neelam Patel, IFC, Associate Investment Officer |
| **RECCIPE** | Euan Marshall, IFC, Head |
| **Techcombank** | Shir Naveh, IFC, Portfolio Officer<br>Ricardo Gonzalez, IFC, Investment Officer<br>Hanh Nam Nguyen, IFC, Principal Investment Officer<br>Loan Mai Thi Cung, IFC, Associate Investment Officer<br>Ha Thanh Thi Vu, IFC, Program Assistant |

# Annex 3: Interview protocols

## Interview guide for GEF officials

| **A. Progress Against Key Program Objectives and Expected Results** |
|---|
| What was your role/implication in the IFC Earth Fund Platform? |
| The Mid-Term Review of the IFC Earth Fund Platform recommended clarifying the GEF's role and its interactions with IFC. Were specific actions put in place in relation to this recommendation? |
| Could you confirm program objectives?<br>*Program level objectives:*<br>*General objective: To enable the private sector to access GEF Funding for the purpose of accelerating the emergence and replication of projects that will generate global environmental benefits in the areas of Climate Change, Biodiversity and International Waters in a streamlined and cost effective manner.*<br>*Specific objectives:*<br>• *Co-financing: Minimum leverage requirement of 1:3*<br>• *Replication effect of projects*<br>• *Adequately addressed environmental issues*<br>*Operational objectives:*<br>• *30% of funds deployed within three years of operation (Achieved in 2012)*<br>• *Approved projects meet eligibility criteria*<br>• *Adequate governance structure*<br>– *Safeguards against conflicts of interest*<br>• *Ensure that IFC investment and advisory staff can access funds from IFC Earth Fund Platform* |
| How would you assess progress made in relation to meeting the program's objectives? |
| What added value does the IFC EF provide above and beyond other programs? Compared to other GEF Earth Fund platforms? |
| How does the IFC EF fit in with the overall strategy of the GEF Earth Fund and its other platforms? |
| In what way does the GEF see the IFC EF as different from/complementary to other GEF funded initiatives aimed at the private sector? |
| In your opinion, what are the most significant results which have been achieved and are anticipated in the overall program? |
| **B. Efficiency and Effectiveness of Program Operations and Management** |
| **General** |
| How would you assess the alignment of the program benefits with the level of effort expended by the GEF Secretariat? By IFC? |
| What aspects of the IFC EF have been particularly effective? What changes could make it more effective? |
| Were there any major adjustments made by the GEF or IFC during the program execution that helped lead to success? Likewise, were there any adjustments that were identified but not made which created challenges? |
| **1. The project approval process** |

| |
|---|
| Was the IFC EF (BCF unit) efficient and effective in ensuring that all approved project were in line with the GEF's objectives and met the eligibility criteria? Or would it have been more effective if each project was been brought to the GEF Council for approval? |
| **2. Monitoring and evaluating approved projects** |
| Was there an efficient and effective program management reporting system in place to keep track of program performance (financial, economic, environmental, social, development)? |
| What indicators were most relevant from the GEF's perspective for tracking program impact? |
| What was the frequency of progress reporting? What form did it take? (informal exchanges, formal presentations, etc.) |
| **C. Identification and Dissemination of Lessons Learned** |
| What knowledge dissemination activities have occurred between the IFC EF and the GEF Earth Fund and the GEF Secretariat? Have these exchanges resulted in improved understanding of how to address market barriers, the deployment of concessional funds to drive catalytic climate mitigation and adaptation projects, the support of IS and AS projects in challenging markets, etc.? |
| Have the results of the IFC EF been integrated into the "GEF knowledge management system"? If so, has this information provided value to the GEF in supporting similar initiatives? |
| What types of changes have been made in approach or strategy at program-level based on recommendations from the MTR and the GEF global program reviews? |
| Has the GEF's experience with the IFC-Earth Fund platform informed or guided the GEF's thinking in private sector engagement or the GEF's non-grant instrument initiative under the GEF-6? |

## Interview guide for IFC staff concerned with the program level (e.g. Blended Climate Finance Unit)

| A. Progress Against Key Program Objectives and Expected Results |
|---|
| Which projects did you oversee for the IFC-Earth Fund Platform? |
| Could you confirm our understanding of program-level objectives?<br>*Program level objectives:*<br>*General objective: To enable the private sector to access GEF Funding for the purpose of accelerating the emergence and replication of projects that will generate global environmental benefits in the areas of Climate Change, Biodiversity and International Waters in a streamlined and cost effective manner.*<br>*Specific objectives:*<br>• *Co-financing: Minimum leverage requirement of 1:3*<br>• *Replication effect of projects*<br>• *Adequately addressed environmental issues*<br>*Operational objectives:*<br>• *30% of funds deployed within three years of operation (Achieved in 2012)*<br>• *Approved projects meet eligibility criteria*<br>• *Adequate governance structure*<br>– *Safeguards against conflicts of interest*<br>• *Ensure that IFC investment and advisory staff can access funds from the IFC Earth Fund Platform* |
| How would you assess progress made in relation to meeting the program's objectives? |
| How many Investment Services projects have led to market transformation? How many Advisory Services projects have led to market transformation? |
| Has the program achieved (or will achieve) its intended impacts in terms of generating global environmental benefits?<br>*Global environmental objectives:*<br>• *Reduce over 3.3 million tons of GHG emissions annually upon completion*<br>• *Reduce 8.4 million M3 of water use per year*<br>• *Lead to 1.73 million MWh of renewable energy produced and energy saved*<br>• *Provide 3 million people with access to clean energy* |
| What were the key elements of the program that helped generate successful outcomes? What factors limited the program from achieving better results? |
| To what extent did the project you oversaw manage to engage the private sector? |
| How would you assess the degree of innovation, replicability and scalability of the project you oversaw? |
| What were the key elements of the projects you oversaw that helped generate successful outcomes? What factors limited these projects from achieving better results? |

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| Did the projects you oversaw achieve social, economic or other development-related benefits worth citing, such as job creation, financing access, increased technical capacity, etc.? |
| **B. Efficiency and Effectiveness of Program Operations and Management** |
| **General** |
| Are there any variations on or recommended changes to the program's structure that would have made it more effective? |
| Which projects have been the most cost-effective operations (by country, region or thematic area of work)? Were there any operations that were not cost effective and/or were there any instances in which a high level of effort was required for operations with minimal outcomes/impacts? |
| **1. The project approval process** |
| How would you assess the efficiency and effectiveness of the project approval process? Could any elements of the project approval process be improved? |
| **2. Engaging with IFC investment and advisory staff** |
| How would you assess the alignment of the program benefits with the level of effort expended by BCF staff? |
| How would you assess the efficiency and effectiveness of interactions with IFC regional and global staff in various investment and advisory departments? Were these interactions fluid and timely? Could this communication and outreach have been improved in any way? |
| **3. Monitoring and evaluating approved projects** |
| Is there a program-level M&E system? What does this system include? (e.g. monitoring, reporting, data collection and management, feedback and learning) |
| What types of efficiency/effectiveness-related metrics are tracked at the program-level? |
| How frequently does reporting on program-level performance take place? |
| **C. Identification and Dissemination of Lessons Learned** |
| What would you cite as "good practice" lessons learned from program implementation, which could be useful for similar programs on climate change-related financing? |
| How are "good practices" identified? Are these diffused to all program participants? |
| What aspects of the program were favorable in facilitating its implementation? What aspects of the program were unfavorable in facilitating its implementation? |
| What types of changes have been made in approach or strategy at program-level based on recommendations from the MTR and the GEF global program reviews? More broadly, how has the M&E system been used to change or improve the decision-making process? |
| Do you consider that these changes were effective? |
| What are the lessons for management on similar funding structures going forward? |

## Interview guide for IFC investment and advisory staff in charge of IFC EF supported projects

| **A. Progress Against Key Project Objectives and Expected Results** |
|---|
| We were informed that you managed and/or supported this project, which received support under the IFC Earth Fund Platform.<br><br>What was your role/implication in this project? |
| According to the IFC, the objectives of the project were:<br><br>How would you assess the project's fulfillment of its objectives? |
| To what extent did the project manage to engage the private sector? |
| How would you assess the degree of innovation, replicability and scalability of the project? |
| What key improvements/changes could be made to improve the project's impact? |
| How would you assess the project's performance against its climate change targets? Does the project achieve economic benefits worth citing (e.g. job creation)? Does it achieve social benefits worth citing (e.g. energy access)? Does it achieve development benefits worth citing (e.g. technical capacity)? |
| What drivers and limiting factors impacted the project's capacity to meet its climate change targets? To drive broader social, economic or other development-related benefits? |
| Would the project have taken place without the use of concessional funds available from the GEF? |
| Given that the project is a pilot (or scale-up), what are the prospects for future uptake of the project output? Has the project prepared the client to scale up or replicate these efforts? What sort of additional support might be required to ensure successful uptake? |
| *For projects related to financial intermediaries only:* Would you consider that the project has achieved or made progress towards enhancing technical capacity and raising awareness among FIs or other market players about business opportunities in environmentally sustainable business practices? |
| **B. Efficiency and Effectiveness of Projects Operations and Management** |
| **General** |
| Are there any variations on or recommended changes to the project's structure that would have made it more effective? |
| *Advisory Services Projects:* Does the Technical Assistance offered to the project beneficiary seem relevant and efficient? |
| **1. The project approval process** |
| *Investment Services Projects:* Do you think that the IFC EF played a determining role in attracting co-investors? |
| **2. Engaging with IFC BCF Unit staff** |
| How did the IFC Earth Fund Platform (BCF Unit) support IFC investment and advisory officers? |
| How would you assess the alignment of project benefits with the level of effort expended by you and your team? |
| **3. Monitoring and evaluating approved projects** |
| Is there a project-level M&E system? If so, what types of efficiency/effectiveness-related metrics are tracked? |
| How frequently does reporting on project performance indicators take place? |

| C. Identification and Dissemination of Lessons Learned |
| --- |
| What do you identify as the 'good practice' lessons learned from project implementation which could be applied to similar projects or climate change-oriented funds? |
| Were any 'good practice' lessons identified which could be applied to overall program functioning? |
| Once good practices in management or capacity building are identified, how are they shared internally and/or externally? Who are they shared with? Are there specific processes in your unit for sharing, or is this done in an ad-hoc manner? |
| What sorts of outreach activities have been undertaken to communicate the project results to relevant stakeholders, notably IFC or the GEF? |

## Interview guide for project beneficiaries (client companies / client financial institutions)

| |
|---|
| **A. Progress Against Key Project Objectives and Expected Results** |
| What was your role/implication in this project? |
| According to IFC, the objectives of the project were:<br>Were these objectives achieved?<br>What is the progress made towards achieving these objectives? |
| How would you assess the degree of innovation, replicability and scalability of the project? |
| What types of environmental benefits are generated by the project? What types of social benefits are generated by the project? What types of economic benefits are generated by the project? |
| What were the key elements of the project that helped the project generate successful outcomes? What factors limited the project from achieving better results? |
| **B. Efficiency and Effectiveness of IFC's Project Operations and Management** |
| **General** |
| What was your experience in working with IFC during the project approval process? |
| What were the reporting obligations that you had to provide to IFC? How efficient and effective was the project reporting system? |
| **Investment Services** |
| Do you think that IFC played a determining role in helping find investors to support your project? |
| What are the main benefits of IFC support as opposed to any other instruments/financiers? |
| Are there any downsides to being supported by IFC, rather than by any other funds/donors? |
| Has IFC country program team also provided technical assistance to you for this project? To what extent was that support helpful? |
| **Advisory Services** |
| Did you benefit from Technical Assistance from any other stakeholders (Government, NGOs, consulting firms, etc.)? |
| What was your impression of the quality of the technical assistance provided through the project? |
| What would you suggest to change in the project operation, management or involvement, to make the most of this support? Has IFC's technical assistance provided value for your operations? |
| Which types of assistance provided by IFC was most relevant and useful? The least relevant and useful? Why? |
| **C. Identification and Dissemination of Lessons Learned for IFC** |
| What suggestions would you give IFC to improve their involvement and management in similar projects? |

# Annex 4: Alignment of portfolio with GEF Strategic Programs

***Alignment with GEF Strategic Programs (focal environmental areas)***

Each project aligns with at least one, but often multiple strategic program areas. The IFC EF Platform covers all components of the GEF's Strategic Programs. The Strategic Programs most represented in the IFC Earth Fund Portfolio were those related to EE and RE, as can be seen below.

Table 6: Alignment of IFC Earth Fund Platform project portfolio with GEF Strategic Programs

| | **GEF Strategic Program** | | | | | |
|---|---|---|---|---|---|---|
| | **CC1** : Promoting EE in residential and commercial buildings | **CC2**: Promoting EE in the industrial sector | **CC3**: Promoting market approaches for RE | **CC4**: Promoting sustainable energy production for biomass | **CC5**: Promoting sustainable systems for urban transport | **CC6**: Management of Land Use, Land Use, Change and Forestry |
| **Investment** | | | | | | |
| Ouarzazate | | | ✓ | | | |
| International Housing Solutions | ✓ | | | | | |
| Bank of Philippine Islands | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Cleantech Innovation Facility | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Techcombank | | ✓ | | | | |
| **Advisory** | | | | | | |
| Lighting Global | ✓ | | | | | |
| Green Buildings Product Development Project (PDP) | ✓ | | | | | |
| AREAS South Africa | | | ✓ | | | |
| Green Power for Mobile Global 2 | | ✓ | ✓ | | | |

| | GEF Strategic Program | | | | | |
|---|---|---|---|---|---|---|
| | **CC1** : Promoting EE in residential and commercial buildings | **CC2**: Promoting EE in the industrial sector | **CC3**: Promoting market approaches for RE | **CC4**: Promoting sustainable energy production for biomass | **CC5**: Promoting sustainable systems for urban transport | **CC6**: Management of Land Use, Land Use, Change and Forestry |
| Brazil Environmental Permits | | | | | | ✓ |
| Mexico SEF Program | | ✓ | | ✓ | | |
| Cleaner Production Facility | | ✓ | | | | |
| RECCIPE | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Carbon Index | | | ✓ | | | |
| *Total by strategic program* | *6* | *7* | *7* | *4* | *3* | *2* |

# Annex 5: IFC EF Project descriptions

*Projects are ordered by start date (newest to oldest) and split out by project status (in progress or completed).*

***In progress***

| **International Housing Solutions** | | | |
|---|---|---|---|
| **Project timeline** | June 2014 – June 2024 | **Total project cost** | $50,000,000[9] |
| **Geographic Focus** | South Africa | **EF (GEF) Funds approved** | $10,000,000 |
| | | **Leverage of EF (GEF) Funds** | 1:4 |
| **Type of project** | Investment Services | **IFC funds approved** | $21,250,000 |
| **Overview** | International Housing Solutions (IHS) South Africa Fund II (the "Fund") is a private equity fund that provides equity to affordable green home developments. The EF investment in the Fund aims to promote the development of affordable "green" homes that will meet IFC's EDGE green building standards. The project is co-invested alongside IFC's own account investment in the Fund. | | |
| **Objectives** | If successful, the Project will demonstrate the viability of cost-efficient green technologies to home buyers and to developers, resulting in green technologies being provided in the standard design of the homes, which will lower GHG emissions from future housing stock to be built in South Africa.<br>The following quantitative objectives were set:<br>• The subsidy from the EF equity investment, together with the one subsequently provided by KfW, will help provide the green technologies for at least 5,000 homes (including 1,600 homes based on EF's investment only) that will be certified in accordance with IFC's EDGE green building standard.<br>• On completion of the green homes, there will be a reduction in greenhouse gas (GHG) emissions. | | |
| **Market Barrier Addressed** | • Lack of incentives for developers to incur additional upfront costs for the integration of green technologies in buildings<br>• Home buyers, especially in the affordable segment, are often unwilling to pay the extra costs required for green building technologies until cost savings are well established. | | |
| **Project partners and roles** | **International Housing Solutions:** Fund Manager<br>**Green Building Council South Africa:** Certifies green housing projects | | |
| **Current project status and expected developments** | • Ongoing | | |

[9] Estimated based on the capital of the Fund that will be invested in green homes

| | |
|---|---|
| **Main results and project achievements to date** | While the investment is very recent, a first positive result is that EF helped the fund reach its first financial closing. Its contribution has been replicated by the KfW, thereby increasing the target for green homes to 5,000 homes.<br>EF's funds are well engaged towards having a positive impact on green housing. To date four commitments have been made by the Fund, three of which are for green developments. A pipeline is already in place for further developments.<br>Besides environmental impacts, the project's social benefits for local communities include the creation of jobs, an increased access to housing, and an increased supply in construction material. |
| **Achieved environmental benefits** | Not available as investments in green housing are still at a commitment phase |
| **Project success factors and challenges encountered** | The main challenge faced by the project is the uncertainty regarding the capability of the fund manager to implement green technologies. To mitigate this issue, an incentive system has been built into the project and the IFC team is working closely with the fund manager to ensure that the targeted number of green homes is built.<br>Another challenge for the project is the potential lack of appetite from buyers to purchase this type of homes. It is expected that this issue will resolve itself as the case that green homes are in the best interest of the owner is made.<br>The partnership with the Green Building Council seems to be working as expected. A first project has already been certified by the Green Building Council, who also engages local stakeholders in green building initiatives. |
| **Lessons learned** | It is still too early in the project to identify lessons learned. However, IFC's early investment in this project did seem to help demonstrate viability, therefore leading to a follow on investment from KfW. |

<table>
<tr><th colspan="4">Ouarzazate</th></tr>
<tr><td>Project timeline</td><td>IFC and Earth Fund Commitment: June 2014<br>Commercial operations: end of 2015</td><td>Total project cost</td><td>$840,600,000</td></tr>
<tr><td rowspan="2">Geographic Focus</td><td rowspan="2">Morocco</td><td>EF Funds approved</td><td>$10,000,000</td></tr>
<tr><td>Leverage of EF funds</td><td>1:83.1</td></tr>
<tr><td rowspan="2">Type of project</td><td rowspan="2">Investment services</td><td>Leverage of IFC and EF funds</td><td>1:41</td></tr>
<tr><td>IFC funds approved</td><td>$10,000,000</td></tr>
<tr><td>Overview</td><td colspan="3">Ouarzazate, a 160 MW concentrated solar power (CSP) plant with storage in Morocco, is the largest CSP plant to be built in the developing world to date.<br>The IFC EF Platform’s equity investment to co-finance the plant is expected to support the regional CSP market and possibly transform the region’s energy mix. Ouarzazate’s success is expected to encourage CSP project developers to continue to develop similar projects in Morocco and elsewhere.</td></tr>
<tr><td>Objectives</td><td colspan="3">The project is expected to drive down CSP capital costs, both in Morocco and elsewhere, through scaling and demonstration efforts.<br>The following objectives were set for the project:<ul><li>Generate up to 488 GWh of renewable energy per year</li><li>Lead to an estimated GHG emission reduction of 313,000 tons $CO_2e$/year</li></ul></td></tr>
<tr><td>Market Barrier Addressed</td><td colspan="3"><ul><li>Limited track record of CSP technologies, especially compared with more traditional power plant technologies, increases risk for developers and financiers</li><li>Due to the low scale of CSP deployments, capital costs (especially for CSP storage systems) can be prohibitively high for developers.</li><li>CSP is largely untested in emerging markets, as developed countries such as the US and Spain account for the vast majority of installed capacity.</li></ul></td></tr>
<tr><td>Project partners and roles</td><td colspan="3">ACWA Power International: Leader of the consortium in charge of constructing and operating the plant<br>MASEN (Moroccan Agency for Solar Energy): In charge of the realization of the Morocco Solar Plan. MASEN has multiple roles. They organized the bid (through which ACWA was selected), serve as an active shareholder, are the power off-taker, and mobilized all the debt financing in the project.<br>IFC: co-invested equity in the project</td></tr>
<tr><td>Current project status and expected developments</td><td colspan="3"><ul><li>Ongoing - The Project's Power Purchase Agreement was signed in November 2012. Construction began in September 2013, and the CSP plant is expected to be fully operational in 2016.</li></ul></td></tr>
<tr><td>Main results and project</td><td colspan="3">The project implementation is proceeding as expected so far and the plant is expected to be operational by 2016. The project has successfully helped ACWA enter the CSP market</td></tr>
</table>

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| **achievements to date** | in Morocco. This has encouraged them to continue to develop similar projects in Morocco and elsewhere. |
| **Achieved /Expected environmental benefits** | As the project is not yet completed, achieved environmental benefits are not yet available. |
| **Project success factors and challenges encountered** | The main success factors so far include:<br>• ACWA has already been involved in a similar project in South Africa (Bokpoort project). Consequently, it can replicate the good practices learned there and benefits from information sharing with the Moroccan project.<br>• The intervention of IFC has been helpful in the governance of this complex public/private project, by acting as an intermediary to prevent and/or address potential conflicts of interest (especially due to MASEN's position as a public entity with multiple roles in the project). |
| **Lessons learned** | The main lesson learned so far include:<br>• The IFC EF can play an important role in the governance of projects. In investment projects, together IFC and the IFC EF as shareholders can act as intermediaries between private and public shareholders, acting to prevent any conflicts of interest.<br>• IFC and the IFC EF have used the same financial retribution model and divestment rules, thereby increasing the alignment of their interests in the project. |

| **Lighting Global** | | | |
|---|---|---|---|
| **Project timeline** | December 2013 - June 2017 | **Total project cost** | $4,940,840 |
| **Geographic Focus** | Global | **EF (GEF) Funds approved** | $695,000 |
| | | **Leverage of EF (GEF) Funds** | 1:6.1 |
| **Type of project** | Advisory Services | **IFC funds approved** | - |
| **Overview** | The project will support the effective and efficient expansion and delivery of IFC's off-grid country lighting programs globally. It supports the development of a self-sufficient local industry sector, notably via work with industry-based institutions, thereby allowing IFC's exit from providing direct industry support within three years after the project's start.<br>The Lighting Global program and its regional affiliate programs work to build markets capable of bringing high quality, affordable modern off-grid lighting products to off-grid consumers. This means supporting client companies to expand markets for their quality-verified products. These client companies can become Program Associates once one of their products meet the Lighting Global Quality Standards. Program Associates benefit from specific services such as market intelligence services or access to financing. Examples of Program Associates are listed in the 'Project Partners and roles' section below. | | |
| **Objectives** | The project's overall objective is to support the development of at least six IFC country off-grid programs in three regions. These IFC programs are in turn expected to:<br>• Work with at least 20 client companies to help distribute and manufacture 70 Lighting Global certified products<br>• Support the development of credit facilities that provide working capital finance for at least 10 beneficiary companies<br>• Support the development of self-sufficient, industry-focused institutions that will certify off-grid lighting products and generate income among at least 30 members<br>Impacts which will be reported solely as Lighting Global impacts (net of the impacts leveraged through each of the regional country programs) include:<br>• Avoidance of 170,000 tons of $CO_2e$ per year<br>• Access to modern energy for 3 million people<br>• $8 million in sales of clean lighting devices<br>• $30 million in financing facilitated (including $15 million by IFC) | | |
| **Market Barrier Addressed** | • Lack of market knowledge in target countries by product developers and manufacturers<br>• Lack of reliable and thorough third party quality verification of lighting products to provide investors, producers, donors, country government with quality benchmarks<br>• Lack of country-based quality standards that incentivize good quality products and increase barriers to entry for poor quality products<br>• Customer base unfamiliar with benefits of off-grid lighting products and unsure of product quality | | |

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| | • Inventory shortage leading to product supply constraints<br>• Market sustainability concerns including the lack of infrastructure to support end-of-product-life e-waste recycling and waste management |
| **Project partners and roles** | IFC EF's main counterpart is the Global Off-Grid Lighting Association (GOGLA), an industry association that represents the industry on policy issues and of launching industry-wide initiatives such as end-of-product life recycling and waste management efforts.<br><br>26 companies are also involved as Program Associates, including 26 manufacturers such as:<br>**Azuri:** UK producer of solar light kits, which allow users to access power on a pay-as-you-go basis<br>**d.light:** US based, world's largest producer of Pico PV off-grid lighting products<br>**Futura Sun:** Italian based designer and producer of PV panels and a range of Pico PV lighting products plus larger integrated PV power stations<br>**Greenlight Planet:** US/India based, second largest producer of Pico PV off-grid lighting products and a new range of smaller solar lighting systems<br>**OmniVoltaic:** Chinese/US based company specializing in wide range of Pico PV products to solar home systems with optional PAYG integration<br>**Panasonic:** Japanese electronics giant exploring Pico PV products sector<br>**Philips:** Dutch electronics giant exploring Pico PV products sector<br><br>Three large-scale distributors with operations in multiple countries are also involved:<br>**Solar Sister:** US social enterprise empowering women as sellers of off-grid lighting products<br>**Sunny Money:** UK social enterprise that is the largest seller of off-grid lighting products in Africa – targeting subsidized sales to school children<br>**Total Access To Solar:** Off-grid lighting initiative of the French Petroleum giant, using re-fueling stations as "energy hubs" to provide last mile distribution channels in Africa and South East Asia |
| **Current project status and expected developments** | • Ongoing |
| **Main results and project achievements to date** | It is too early to draw definitive conclusions on the achievement of the project. Although the project started 2 years ago, Lighting Global had only recently had access to the EF funds.<br>Preliminary results show that the project is building a roster of Associates at a good pace, similarly to the number of products being tested and certified.<br>Lighting Global is also quickly expanding geographically. Approvals were received for country programs in Nigeria, a program has been launched and staffed in Ethiopia, and another one is under development in Myanmar.<br>While the project had ambitious initial targets, it has managed to be highly successful, above and beyond targets set, in part due to market growth for off-grid lighting. The off- |

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| | grid lighting market is booming; this might not have been expected when the program was designed.<br>Results to date include:<br>**Financing facilitated:** $27.5 million in financing has been facilitated, coming close to the $30 million target.<br>**Certified entities:** 49 companies (target: 20), have brought 111 quality verified products to the market (target: 70). |
| **Achieved environmental benefits** | **$CO_2$ reductions:** An average of 426,088 tons of $CO_2e$ per year over the lifetime of the project<br>**Access to energy:** Over 25 million people have received access to modern energy (defined as greater than tier 1 energy access as defined by the Sustainable Energy For All's Multi-Tier Global Tracking framework), much more than the original target. |
| **Project success factors and challenges encountered** | The key project success factors identified include:<br>• Strong connection between the people in charge of the programs in the different countries and central coordination and harmonization of approaches by the Lighting Global "umbrella". A common knowledge management platform allows the transfer of expertise from one country to another, instead of countries developing the program on their own. Also Lighting Global acts as a central repository of specific knowledge on global companies and their products, easing access to this knowledge across all programs.<br>• Strong engagement of the private sector. An early consultation of the private sector identified the market potential and demonstrated the relative performance of the technology.<br>• Collaboration with the industry association (GOGLA) to gather and share aggregated data on sales volumes and revenues generated from a representative sample of companies across the sector on a twice annual basis.<br>The project's main challenge has been dealing with an increase in lower quality products that are either generic or counterfeit/copycat compared to good quality market leaders. This has occurred simultaneously to the market for manufacturers of branded products shifting to higher quality lighting products. There has been a general acceptance of the Lighting Global quality standards and the parallel IEC technical specifications by the sector. The challenges have come when governments adopt the quality standards but need close collaboration with Lighting Global to avoid doing more harm than good through poor design/implementation of initiatives to roll out standards.<br>Overall, this reflects a positive movement of private sector companies, developing country governments, standards agencies and international donors all recognizing the critical role that quality plays and also demonstrates that governments are buying into the value of incentivizing quality in national markets. |
| **Lessons learned** | Main lessons learned include:<br>• For global projects, a common knowledge management platform is meaningful to transfer expertise from one country to another. Calls or meetings with the global team need to be organized on a regular basis to share knowledge, thereby ensuring projects can learn from each other and be as effective as possible. |

| | |
|---|---|
| | • Knowledge of the sector and markets should be communicated broadly, including to relevant professionals in the sector, to help catalyze market change. For instance, the development of a website with information on technologies, innovation or successful business models (updated once or twice a year) can help achieve this goal.<br>• Providing Advisory Services in emerging market technologies such as off-grid solar ensures IFC a leadership role in assisting other donors in understanding market needs.<br>• Working with professional associations to develop higher quality standards encouraged the engagement of local producers, leading to stronger market impact and adoption of the standards. |

| Green Buildings Products Development Platform (PDP) | | | |
|---|---|---|---|
| **Project timeline** | Pre-implementation: July - Sept 2013<br>Implementation: Oct 2013 - Sept 2015<br>Post-implementation : Oct - Dec 2015 | **Total project cost** | $4,307,000 |
| **Geographic Focus** | Global | **EF (GEF) Funds approved** | $1,000,000 |
| | | **Leverage of EF (GEF) Funds** | 1:3.3 |
| **Type of project** | Advisory Services | **IFC Funds Approved** | - |
| **Overview** | This project is a global program designed to support the EDGE Green Building Market Transformation Initiative. The project is a comprehensive, corporate-wide initiative that aims to create new pathways for green growth in the built environment using the innovative green building assessment tool EDGE (Excellence in Design for Greater Efficiencies). EDGE can determine the financial viability of a green building project at an early design stage. The program addresses market failures by engaging with multiple green building stakeholders such as developers, builders, regulators and financial institutions.<br>The multi-faceted project includes:<br>• Implementation of a green building rating program, which will leverage EDGE as a building rating tool and certification scheme<br>• Advisory services to governments on regulatory frameworks and green building codes<br>• Investment and advisory services for builders to construct green buildings<br>• AS and IS services for banks to provide financing to support green growth | | |
| **Objectives** | Specific objectives included:<br>• After 7 years, the program is expected to avoid the emission of 5 million tons of $CO_2e$ per year.<br>• After 7 years, 20% of buildings in target markets are expected to abide by green buildings standards. | | |
| **Market Barrier Addressed** | • Isolated and disjointed public and private sector green buildings initiatives, especially in developing countries<br>• Lack of awareness by consumers and developers of the benefits of green buildings<br>• Government regulations, if existent, are generally complex and difficult to implement<br>• Lack of adequate tools to achieve quantifiable, concrete and implementable measures | | |
| **Project partners and roles** | **IFC Advisory services:** Provided funding<br>**Canada Climate Change Program:** Provided funding<br>**Other partners include**: 2 global certification providers; 5 local certification providers; Proparco; FMO; CDC; several construction industry associations; TERI in India. | | |
| **Current project status and expected developments** | • Ongoing | | |

| | |
|---|---|
| **Main results and project achievements to date** | Overall, the project has been highly productive and is proceeding on schedule. The EDGE software went live in early 2015. It is freely publically available worldwide. The software supports certification in about 100 countries and has been calibrated in detail for the following countries: South Africa, Peru, Colombia, India, Vietnam, Costa Rica, and Indonesia. 26,000 unique users have visited the website, of which 3,400 are registered on the platform, which is deemed a big success given there has been no concerted effort to advertise it. In addition, five clients have committed to IFC's green building standards, including Tsemex Hotel, Samhi Barque, Adana Health, and Marriott Bolivia.<br>The next step is to support the market penetration of the 7 licensed certification providers (including local providers in India, Indonesia, Vietnam, Costa Rica and South Africa) and license a provider in Philippines. |
| **Achieved environmental benefits** | **$CO_2$ reductions**: Goals are expected to be achieved beginning in 2020 (7 years after project start); therefore environmental benefits information is not yet available |
| **Project success factors and challenges encountered** | The key project success factors identified were:<br>• Comprehensiveness of the project: Instead of working on regulation or voluntary initiatives, the aim was to deliver a complete menu of intervention that would target key decision makers (buyers, developers and builders, banks, and governments).<br>• Availability of funding for a global program: The EF provided money for a global program in contrast to most donors which usually only provide money at a country- level.<br>• Flexibility of the funding: The project benefited from flexible conditions on how funds can be used (grant, direct expenses for the IT tool etc.).<br>• Excellent collaboration with financial institutions: The work relationship with financial intermediary banks and investment groups reinforced funding opportunities for green buildings. |
| **Lessons learned** | Main lessons learned include:<br>• For projects with a program rollout between investment services and advisory services and where business lines must coordinate closely, it would be useful if the IFC IT reporting platform allowed for work across business lines.<br>• IFC should not hesitate to put its name on certification programs and tools developed by its advisory business lines. This leads to increased visibility and recognition.<br>• The intervention of the EF is crucial for the financing of global programs, where other donors' strategies may focus on specific countries or regions. |

| **Bank of Philippine Islands (BPI) SEF II** | | | |
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| **Project timeline** | Project commitment: May 2012 | **Total project cost** | $70,600,000 |
| **Geographic Focus** | Philippines | **EF (GEF) Funds approved** | $2,600,000 |
| | | **Leverage of EF (GEF) Funds** | 1:26.5 |
| **Type of project** | Investment Services | **IFC Funds approved** | $35,300,000 |
| **Overview** | BPI SEF II is a risk sharing facility (RSF) with the Bank of the Philippine Islands (BPI) that aims to increase the financing available for small-scale renewable energy (RE) and energy efficiency (EE) projects in the Philippines. The project builds on the existing Philippines Sustainable Energy Finance Program (PSEFP). | | |
| **Objectives** | The goal of EF funding to BPI SEF II is to develop a portfolio of small scale RE and EE loans through the expansion of the existing RSF by up to $70.6 million, and lead to a reduction of over 100,000 tons of CO2e per year. | | |
| **Market Barrier Addressed** | • Lack of suitable financing and capability by local FIs to process sustainable energy deals<br>• Project developers, particularly those of small and medium scale clean energy projects, lack the necessary financial acumen and relationships with the banking sector that are necessary to scale up their business<br>• Steep learning curve for end-users of EE and small scale RE equipment | | |
| **Project partners and roles** | **Bank of the Philippine Islands** (BPI): Benefited from the RSF and built a loan portfolio for RE and EE projects | | |
| **Current project status and expected developments** | • Ongoing | | |
| **Main results and project achievements to date** | The overall project performance is very satisfactory. The portfolio of investments made by BPI included in the RSF has been high, the project partner has been very engaged, and now wants to integrate the product in its portfolio to tackle new market opportunities. | | |
| **Achieved environmental benefits** | **$CO_2$ reductions:** The project has achieved its target emissions reductions of over 100,000 tons of CO2e per year and is on track to surpass it. | | |
| **Project success factors and challenges encountered** | The key project success factors were:<br>• Selecting the right partner - BPI is very committed to having SEF as part of its business strategy and as a differentiating element which gives it a competitive advantage in the marketplace.<br>• Preliminary advisory work laid the groundwork for BPI to develop their technical capacity for launching SEF. | | |

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| | • Risk sharing facilities are a strong competency of IFC. In 2010, a report on sustainable energy financing (including credit lines) provided an insightful summary of lessons learned which contributed to this RSF's level of performance. |
| **Lessons learned** | Main lessons learned include:<br>• Well planned preliminary advisory work can lay the groundwork for a more efficient implementation and investment activity.<br>• Good outcomes can be achieved when the partner financial institution has the same strategic interest as the financial partner (i.e. the FI wants to integrate the product in its portfolio to tackle new market opportunities).<br>• IFC teams have very strong expertise in risk sharing facilities, and can consequently develop effective investment tools. |

| **Mexico Sustainable Energy Finance (SEF) Program** | | | |
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| **Project timeline** | Pre-implementation: Dec 2010 - Feb 2011<br>Implementation: Feb 2011 - June 2014<br>Post-implementation: July 2014 - June 2016 | **Total project cost** | $1,345,500 |
| **Geographic Focus** | Mexico | **EF (GEF) Funds approved** | $800,000 |
| | | **Leverage of EF (GEF) Funds** | 1:0.7 |
| **Type of project** | Advisory Services | **IFC Funds approved** | - |
| **Overview** | The Mexico Sustainable Energy Finance (SEF) project is a program that promotes the implementation of sustainable energy (SE) projects in Mexico. The Mexico SEF project aims at:<br>• Building the capacities of financial institutions (FIs) to identify and assess SE projects<br>• Building the capacities of technical service providers (TSPs) and renewable energy project developers to provide better services in support of SE projects<br>• Proposing regulatory reforms to improve SEF market conditions<br>• Raising awareness among companies (particularly SMEs) on the benefits and opportunities related to SE<br>The project had a positive impact in terms of policy dialogue and awareness-raising, but the market conditions made it difficult to engage FIs in direct actions with the SE sector. | | |
| **Objectives** | The following objectives were set for the project:<br>• Incorporate at least two FIs into the project<br>• Channel at least $40 million to at least 40 SE projects by project completion (and $80 million to 80 SE projects five years later)<br>• Support at least 15 TSPs through training events by project completion<br>• Identify and finance at least 30 SE projects by working with participating TSPs and FIs by project completion (and 50 projects five years later)<br>• Avoid at least 161,588 $tCO_2e$ per year by project completion | | |
| **Market Barrier Addressed** | • Lack of suitable financing due to lack of Mexican banks' in-house technical capacity<br>• Lack expertise of local service providers and renewable energy project developers<br>• Lack of information about available technologies and regulatory barriers | | |
| **Project partners and roles** | **Association of Mexican Banks**: Served as a platform for the promotion of sustainable finance | | |
| **Current project status and expected developments** | • Completed and in post-implementation phase | | |
| **Main results and project achievements to date** | The project managed to raise awareness among banks regarding the potential business opportunities from financing SE projects. By using the Association of Mexican Banks as an entry point, many conversations were initiated with several banks which have shown interest in SE investments. For instance, the number of participants in events organized by the project was three times more than expected (623 against an objective of 200). | | |

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| | Despite efforts to engage with several local banks regarding SE financing, the overall objectives of the program were not achieved. No FI has engaged in the financing of SE projects. This has been mainly due to unfavorable market conditions in Mexico.<br>Nonetheless, the structure of the program (i.e. a mix of investments by FIs, regulatory adaptations and technical services to support SE projects) and lessons learned is thought to be of value for other Latin American countries. |
| **Achieved environmental benefits** | **$CO_2$ reductions:** The target of 161,588 $tCO_2e$ per year avoided will probably not be met because no dedicated financing for SE projects has been launched. |
| **Project success factors and challenges encountered** | The key project success factor identified was that the project worked directly with the Association of Mexican Banks and was able to reach a large number of FIs in Mexico.<br>The main challenges faced during the project were:<br>• Difficulty in engaging FIs because of very unfavorable existing market conditions (no need for additional funds, financial products or clients). The Mexican banking sector is dominated by branches of multinational banks such as BBVA, Citibank, HSBC and Santander, and only one large local bank (Banorte). These banks benefit from an access to significant amounts of cheap money and make high margins on their existing consumer portfolio. As a consequence, these banks have few incentives to enter risky sectors like SMEs and SE.<br>• A reduced budget as it was not possible to engage any FIs and secure client fees ($208,000 client fees were foreseen, i.e. 15% of the total budget of $ 1,345,000)<br>• A changing legal environment creating uncertainties for the project development of SE projects |
| **Lessons learned** | Main lessons learned include:<br>• When approaching companies to promote the program, it is important to approach champions in strategic areas and at management level.<br>• Market and mapping studies are important for a project's success, and the time dedicated to these matters should be set accordingly.<br>• If support actions are part of the project (e.g. training sessions), suitable organizations to carry out these actions should be identified early in the project. |

| **Cleantech Innovation Facility** | | | |
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| **Project timeline** | Investment period: June 2010 – June 2013<br>Follow-on investment: June 2013 – June 2015<br>End of the pilot life: June 2020 | **Total project cost** | $20,000,000 |
| **Geographic Focus** | Global | **EF (GEF) Funds approved** | $5,000,000 |
| | | **Leverage of EF (GEF) Funds** | 1:3 |
| **Type of project** | Investment services | **IFC Funds approved** | $15,000,000 |
| **Overview** | The Cleantech Innovation Facility invests in early-stage, innovative cleantech companies that target challenging markets and geographies. These venture investments support companies that:<br>• Have weak or non-existent sales track records, untried business models, technologies with a limited track record, and limited investment capital from local capital markets<br>• Demonstrate a high level of innovation and a high environmental and social impact potential<br>Ultimately the project aims at catalyzing cleantech market growth in developing regions. | | |
| **Objectives** | The goals of the facility include:<br>• Enabling up to 5 equity and quasi equity investments during a 3 year period<br>• Reducing GHG emissions of roughly 300,000 tons a year | | |
| **Market Barrier Addressed** | • Only a small fraction of global cleantech venture capital is invested in developing countries<br>• Local venture capital markets, especially for early-stage cleantech companies, are sparse or non-existent in many developing countries | | |
| **Project partners and roles** | **IFC:** Manages the facility | | |
| **Current project status and expected developments** | • Ongoing – initial 3 year investment period has been extended 1 more year until August 2016. | | |
| **Main results and project achievements to date** | Overall, the facility has been rather unsuccessful, with only two investments committed against an objective of 5. Among those two projects, a transaction in Tanzania (OGE) is in progress of being cancelled, while the funds for the other prospect (Ecolibrium) have been disbursed. | | |
| **Achieved environmental benefits** | **CO2 reductions:** Target has not been achieved as the total number of target investments have not been realized. | | |
| **Project success factors and** | IFC teams struggled to find deals under this facility for three main reasons:<br>• The market is not well developed. IFC only found limited quality projects and quality co-investors. | | |

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| **challenges encountered** | • The transaction costs were very high for such small deals.<br>• IFC is quite reluctant to investing in such small-scale and risky projects, and is very conservative in terms of risk management. |
| **Lessons learned** | Main lessons learned include:<br>• IFC's investment criteria appears to be restrictive especially in terms of profitability and existence of sales track records, when it comes to innovative and emerging markets, leading to very limited projects pipeline under this facility. It is important to take into account the specific characteristics of innovative projects in the definition of investment criteria (e.g. rate of return on investment, payback period) of specialized investment vehicles such as venture capital.<br>• Conducting a detailed pre-implementation market analysis is important to ensure that sufficient investment projects have been identified.<br>• The venture stage investment model promoted within this facility may have required simplified transaction procedures compared to business as usual equity investments. The procedures in place are mostly adapted to large scale projects or organizations, whereas organizations reviewed for investment in this context were smaller, making transaction costs too high for this type of small deals. |

| Global Cleaner Production Facility | | | |
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| **Project timeline** | August 2009 – 2018 | **Total project cost** | $29,593,051 |
| **Geographic Focus** | Global | **EF (GEF) Funds approved** | $5,797,350 |
| | | **Leverage of EF (GEF) Funds** | 1:4.1 |
| **Type of project** | Advisory Services | **IFC Funds approved** | - |
| **Overview** | The Global Cleaner Production (CP) Facility is an umbrella program that supports regional IFC teams to catalyze investments into cleaner production/resource efficiency practices at the firm level. These programs encourage companies in developing countries to adopt CP technologies and processes that conserve resources and reduce waste, pollution, and GHG emissions. | | |
| **Objectives** | The Global CP Facility has three overarching objectives:<br>• Capacity Building for regional implementation: Support the creation and strengthen the expertise of regional teams with a target of 6 IFC regions to have approved CP programs and capable staff by the end of FY12.<br>• Co-funding for regional implementation: Provide co-funding for regional entities. The Global CPF does not report on outcome and impact indicators, as reporting takes place at a regional level.<br>• Knowledge Management: Create a strong knowledge management (KM) base and support effective knowledge transfer across the regions. Indicators under monitoring will include the number of meetings organized for IFC advisory and investment staff, the number of collective taskforces organized, the number of deliverables for internal and external use, and the percentage of active users on the web platform iCollaborate.<br>More specific objectives are:<br>• Value of financing facilitated (US$): $150 million;<br>• Value of IFC financing facilitated: $100 million;<br>• GHG emissions expected to be avoided: 300,000 metric tons/year;<br>• Energy use expected to be avoided: 600,000 MWh/year<br>• Water use expected to be avoided: 10 million cubic meters/year;<br>• Costs expected to be avoided: $30 million<br>Note that the regional programs supported by the CP Facility each report on their impacts, and are expected to cumulatively achieve the following impacts within two years after completion of the respective programs. | | |
| **Market Barrier Addressed** | • Lack of understanding by companies about the financial impact of CP investments on operating costs<br>• Limited in-house technical expertise within companies to identify and implement CP projects<br>• Lack of knowledge about appropriate CP technologies and related potential cost savings<br>• Lack of access to appropriate financing | | |
| **Project partners and roles** | **IFC:** Regional programs interact with each other and with the Global CP Facility to share funding and knowledge.<br>The projects under the Facility are the following: | | |

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| | • Puertas Finas (Mexico - completed)<br>• SEF Nepal (Nepal - completed)<br>• UEFA Program (Kenya - completed)<br>• SE Padgo SL TA (Sri Lanka - completed)<br>• Clean PAS SSA (South Africa - completed)<br>• CP for CSA (India, Nepal, Bangladesh, Sri Lanka - active)<br>• Russia REF (Russian Federation – active)<br>• Ukraine CP (Ukraine – active)<br>• CP for companies (MENA – active)<br>• China Water AS (China – active)<br>• REF ECA Region (Eastern Europe – active)<br>• LAC MAS REF (active) |
| **Current project status and expected developments** | • The Global CPF is active.<br>• Regional CP programs are at different stages of activity. Of the entities reporting on the specific objectives mentioned above, 5 are completed and 7 are still active. |
| **Main results and project achievements to date** | The Global CPF has largely exceeded expectations regarding its three overarching objectives:<br>• Knowledge management: 20 follow-on IFC projects benefited from the KM project (the target was 6); 90% of active practice group participants reported timely and convenient access to required information (vs target at 75%), 24 meetings took place (vs target at 20), 1,500 deliverables were produced (vs target at 900).<br>• Co-funding: 27 regional projects received funding from the facility (vs 18 targeted).<br>• Capacity building: 16 CP programs were implemented on a regional level.<br><br>At the regional level, programs were successful in mitigating the risk of lack of engagement from the private sector, which had been identified at project inception. The value of financing facilitated for environmentally friendly projects reached $631,997,214. The costs avoided based on the implementation of environmental measures amount to $33,699,912. |
| **Achieved environmental benefits** | **$CO_2$ reductions:** 682,532 $CO_2$e tons per year<br>**Renewable energy produced:** 351,849 MWh per year<br>**Energy consumption avoided:** 1,097,488 MWh per year |
| **Project success factors and challenges encountered** | The key project success factors identified were:<br>• The knowledge sharing processes in place allowed harmonious development of many regional programs simultaneously. The knowledge transfer across the regions positively impacted the steady improvement of programs in almost all regions.<br>• The definition of a set of indicators specific to knowledge sharing practices allowed precise monitoring. |
| **Lessons learned** | Main lessons learned include:<br>• Flexible money allocation and leaving this allocation at the discretion of policy officers is important to ensure a consistent and targeted investment approach.<br>• The rather long duration of the facility allowed enough time to properly deal with administrative procedures, thereby limiting the risk of incidents and potential unexpected delays. |

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| | • A Knowledge Management platform and frequent meetings contributed to sharing of expertise and knowledge, which is useful for the development of simultaneous projects.<br>• IFC should carefully assess the internal capacity of potential clients to proactively participate in the project. Analyzing the market in general is not sufficient, and the specificities of targeted market players should be analyzed. Indeed, their management practices or financial situation may prevent them from actually implementing what would be developed in partnership with IFC (cf. UEFA Program).<br>• Funding should be secured as much as possible at the pre-implementation stage to protect the project against unexpected events. A fundraising strategy should also be designed as long as the funding is not secured (cf. Clean-PAS SSA). |

***Completed***

| **AREAS South Africa** | | | |
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| **Project timeline** | January 2013 – September 2014<br>*The project was compelled to close one year early based on a decision from the client* | **Total project cost** | $1,275,456 |
| **Geographic Focus** | South Africa | **IFC EF (GEF) Funds approved** | $196,390 |
| | | **Leverage of EF (GEF) Funds** | 1:5.5 |
| **Type of project** | Advisory Services | **IFC Funds approved** | - |
| **Overview** | The Africa Renewable Energy Advisory Services (AREAS) South Africa project focused on supporting the South African Government in meeting its goal of universal electrification by 2020, by defining a clearer role for off-grid renewable energy (RE) solutions to serve a portion of the 3.4 million South African households currently without electricity, and identifying specific areas which could lend themselves to private sector participation to reduce the burden on limited public finances and increasing efficiency of delivery. | | |
| **Objectives** | The program's objectives were separated into two phases:<br>Phase 1:<br>• To support the design and approval of the South African Government's new National Electrification Roadmap that will result in a clear path forward for the electrification of 3.4 million households across the country by 2020<br>Phase 2:<br>• To support the establishment of a Non-Grid Implementation Mechanism by the Department of Energy to implement the non-grid connected component of the new National Electrification Roadmap<br>• To provide advisory services in the design of at least 3 viable private sector electrification business models for the non-grid sub-sector<br><br>Other objectives included:<br>• Increasing non-grid renewable energy household connections to about 10,000, reaching approximately 50,000 people<br>• Mobilizing at least $10 million in financing for companies along the electrification value-chain<br>• Creating at least 200 jobs<br>• Avoiding approximately 1,000 tons of $CO_2e$ per year by June 2015 | | |
| **Market Barrier Addressed** | • Lack of clarity as to the role for off-grid electrification in the country's broader electrification planning process restricts private sector involvement.<br>• Government's current approach supports only one business model for non-grid electricity access, when many more business models are needed.<br>• The off-grid electrification market is very limited, with little diversification with regards to targeted customer base and products offered.<br>• Limited application of available funding options for off-grid electricity initiatives, and little exploration of alternative financing options | | |

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| **Project partners and roles** | **Department of Energy and other entities from Government of South Africa, including municipal distribution companies**: Definition and adoption of the National Electrification Roadmap<br>**National utility, Eskom**: Provision of detailed information on electrification planning at the central level; roll-out at the local level in Eskom service areas; and opportunities to support struggling municipal distribution companies in improving performance<br>**Representatives of private sector operators**: Participation in a steering committee and working groups to contribute to the design of the Roadmap |
| **Current project status and expected developments** | • Completed |
| **Main results and project achievements to date** | Phase 1 was a success, as a Roadmap was developed and endorsed by Cabinet in June 2013. The Roadmap set clear guidelines for achieving the off-grid aspirations of the Government and led to the development of planning tools required for the Non-Grid Implementation Mechanism (NGIM) and the facilitation of a National Electrification Master Plan (NEMP), laying the structure of Phase 2. The acceptance of the Roadmap is therefore regarded as the cornerstone for the country's path to universal electrification.<br>The Government allocated additional budget of $10 million for the off-grid component in the 2014 budget. 20,000 new grid connections were created, reaching an estimated 100,000 people against a program target of 10,000 connections (approximately 50,000 people). |
| **Achieved environmental benefits** | **$CO_2$ reductions:** 2,000 tons of $CO_2$e avoided |
| **Project success factors and challenges encountered** | Key success factors for the Phase 1 include:<br>• Close work with staff from both the Department of Energy and Government of South Africa in addition to representatives of the private sector operators and key stakeholders by establishing a Steering Committee and four Working Groups. This approach ensured that once the program was completed, stakeholders acknowledge and support the Roadmap.<br>• The Director of Electrification for the Department of Energy became the champion of the project and now continues to champion the implementation of the Roadmap. This ensures the sustainability of the programs benefits.<br>Several dissemination activities such as workshops have been conducted internally to share information and experience with countries where similar initiatives could be developed, which seems to facilitate broader market impact.<br>Challenges appeared during Phase 2, which led to delays in the project before it was closed. The main challenge was the lack of political commitment to this second phase. Indeed, possibly fearful of a return to an "us-and-them" situation in which only some portions of the population are connected to grid power and others are left with what might be perceived as "sub-standard" off-grid solutions, it appeared that key stakeholders were hesitant to define exactly where the grid would "end" and off-grid would "begin". Particular challenges were faced in integrating the relatively high priority afforded to off- |

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| | grid electricity of the Department of Energy with the more conventional grid roll-out planning processes of the national utility, Eskom |
| **Lessons learned** | Major lessons learned include:<br>• Projects where the implementation is dependent on political decisions risk being blocked and resulting in few alternative solutions left<br>• The involvement of a broad spectrum of actors (both public and private) early on in the project decreases the risk of actors turning down the project during the implementation phase. |

| Green Power for Mobile Global 2 | | | |
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| **Project timeline** | Implementation: May 2012-June 2014<br>Post-implementation:<br>July 2014-December 2015 | **Total project cost** | $3,418,680 |
| **Geographic Focus** | Global | **EF (GEF) Funds approved** | $350,000 |
| | | **Leverage of EF (GEF) Funds** | 1:8.8 |
| **Type of project** | Advisory Services | **IFC Funds approved** | - |
| **Overview** | The project aims at scaling up the deployment of renewable energy (RE) and energy efficiency (EE) technologies in mobile network operator (MNO) tower base stations. This is an issue as there are a rapidly increasing number of cellular devices around the world, especially in rural areas, which require tower base stations, most of which are powered by diesel generators. Following up on a successful pilot, the project engages a broad spectrum of supply chain participants in 12 countries. Actions under the project include technical trainings, market analysis and feasibility studies. | | |
| **Objectives** | The overall goal of this project, when completed at the end of 2015, was to have helped deploy green power to 11,800 tower sites, most of which were previously powered by diesel generators.<br>Specific objectives included:<br>• The mobilization of $354 million to finance green tower sites<br>• The avoidance of 475,095 tons of $CO_2e$ per year<br>• The generation of 114,342 MWh of renewable energy per year | | |
| **Market Barrier Addressed** | • Overcoming information gaps, including operator skepticism regarding green power and vendor skepticism of market potential<br>• High upfront capital and first-mover costs<br>• Lack of proven business models creates risk aversion for companies such as ESCO's that are considering entrance into the market | | |
| **Project partners and roles** | **GSMA** (Groupe Speciale Mobile Association): Made an in-kind contribution of $981,166, and represented a single entry point for the project to engage with multiple actors of the sector | | |
| **Current project status and expected developments** | • Post-implementation concluded in December 2015 | | |
| **Main results and project achievements to date** | Overall project results were deemed very successful. Positive results were obtained substantially ahead of schedule, eventually surpassing the project's targets. Almost 16,000 mobile network sites adopted green power solutions. The successful implementation of the project has reduced the need for a continued sector-wide, global initiative to create awareness and technical capacity, as many entities have been trained and many resources are now available online. These resources will be maintained online at least until December 2015 on the Green Power for Mobile (GPM) website (hosted by GSMA).<br>In total $309 million was mobilized for investments in green power for mobile technologies. | | |

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| **Achieved environmental benefits** | **$CO_2$ reductions:** 1,294,246 tons of $CO_2e$ per year<br>**Renewable energy production:** 99,759 MWh per year |
| **Project success factors and challenges encountered** | The key project success factors identified were:<br>• The strong partnership with GSMA allowed disseminating knowledge through the private sector.<br>• As a complement to this partnership, the broadening of industry stakeholders involved increased the scope and efficiency of the project. Along with GMSA, energy services providers and equipment manufacturers joined the project. These actors are in a better position to generate financing needs for GPM because of their greater focus on green power solutions compared to MNOs.<br>• The IFC EF advisory work was extremely important in catalyzing investments from the private sector.<br>The main challenge faced during the project was that MNOs were not as keen on adopting green power for mobile solutions as expected. MNOs have a lot of competing investment needs and GPM investment is positioned as lower priority because of the longer pay-back time; the project succeeded in spite of this challenge. |
| **Lessons learned** | Main lessons learned include:<br>• Finding a high-level champion within the Operator's organization (preferably the CEO) to champion Green Power can help boost the project's impact.<br>• Identify and anticipate both expected project benefits, as well as potential negative impacts on certain portions of the population (e.g. local diesel fuel suppliers). For identified potential negative impacts, consider specific mechanisms for inclusion or education initiatives.<br>• Industry associations are important partners to rationalize the project's effort. But it is important to include additional actors (equipment providers, energy services companies, etc.), by moderating a platform for interaction between actors, so that not only the specific interests of the industry association are represented in the project. |

| **Brazil Environmental Permits** | | | |
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| **Project timeline** | November 2011 – April 2013 | **Total project cost** | $659,826 |
| **Geographic Focus** | Brazil | **EF (GEF) Funds approved** | $182,959 |
| | | **Leverage of EF (GEF) funds** | 1:2.6 |
| **Type of project** | Advisory Services | **IFC Funds approved** | - |
| **Overview** | The project aim was to avoid incremental illegal deforestation in the Amazon by improving environmental permitting procedures for forest management and construction activities by the Brazilian State of Acre. The project is based on a diagnostic study conducted by IFC in 2010 on the State of Acre's environmental permitting procedures. While this project focused on forestry, it is built upon similar environmental regulatory reform work that has been conducted for urban areas. | | |
| **Objectives** | The overall goal of the project was to reduce the average number of days needed for local firms to comply with sustainability regulations by 39%, from 112 days to 68 days. This was expected to incentivize companies to apply for this new permit, thereby leading to a 100% rate of compliance with the new regulation after project completion.<br>Specific environmental objectives included:<br>• A minimum of 35,000 hectares of land would come under sustainable management<br>• Avoiding at least 12,640 tons of $CO_2e$ annually by the end of the project | | |
| **Market Barrier Addressed** | • Slow and cumbersome administrative processes, resulting in the loss of efficiency in issuing permits<br>• Low levels of security and managerial reporting in the environmental permitting software | | |
| **Project partners and roles** | **Finnish Trust Fund:** Provided complementary funding for the project<br>**IMAC** (State Environmental Agency): The project helps IMAC improve and modernize its procedures to deliver environmental permits to firms | | |
| **Current project status and expected developments** | • Completed, post-completion monitoring is still active | | |
| **Main results and project achievements to date** | Despite the important environmental issue and the potential impacts that could have been very beneficial for local stakeholders, the project's outcome has not been in accordance with the objectives. Most dimensions of the project were classified as partly unsatisfactory.<br>The client did not demonstrate the willingness or capacity to deliver project recommendations. Since recommendations were not put into practice, the cost and time for companies to comply with construction permits requirements remained unchanged. Consequently, the impact on sustainably managed lands and GHG emissions will be limited.<br>Although the project did not succeed in changing the legal framework, a website was launched to spread knowledge on the permit application process, which encouraged companies to follow the application process. | | |

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| **Achieved environmental benefits** | No $CO_2$ reduction |
| **Project success factors and challenges encountered** | The project proved to be flexible when alternative solutions were used to make up for the lack of progress against the original objectives. As regulatory changes were costly and largely dependent on external factors, it was decided to set up a website that would reach a large number of stakeholders.<br>The main challenges faced during the project were:<br>• The State of Acre's government did not demonstrate a proactive and organized approach to implementing some changes at the project end. This is due to the client's focus on State elections (the champion that was pushing the project forward within the government left when elections took place) and on responding to emergency state status for massive floods.<br>• The topic (environmental permits) required an extensive knowledge of local specificities. The project team needed more time than expected to become knowledgeable.<br>• Some baseline data was missing (e.g. cost to issue an environmental license), and had to be researched during the implementation phase of the project. |
| **Lessons learned** | Main lessons learned include:<br>• Making the implementation of recommendations a participative process by involving a broad spectrum of stakeholders in the beneficiary institution (government agency).<br>• The political context should be considered when developing projects and setting project timelines, to ensure the project can be effective and have the expected impacts.<br>• Consider turning to agile alternatives when the project's main action plan does not seem to succeed (e.g. a website to inform stakeholders when policy reforms could not be achieved).<br>• Make sure that the preliminary work includes all the necessary data collection and diagnosis efforts, so that the implementation phase can build on existing knowledge.<br>• Make sure that the project team is sufficiently knowledgeable on the topic, and organize trainings early on, if necessary. |

| **Techcombank Energy Efficiency (EE) Senior Loan** | | | |
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| **Project timeline** | Cut-off date for first disbursement: June 2010<br>For last disbursement: December 2010<br>Grace period: until March 2012<br>Repayment period: July 2012 – January 2015 | **Total project cost** | $37,000,000 |
| **Geographic Focus** | Vietnam | **EF (GEF) Funds approved** | $1,000,000 |
| | | **Leverage of EF (GEF) Funds** | 1:36 |
| **Type of project** | Investment Services | **IFC Funds approved** | $24,000,000 |
| **Overview** | The project aims at increasing the financing available for cleaner production (CP) and energy efficiency (EE) projects in Vietnam. It consists of a $25 million loan from IFC and the Earth Fund to Techcombank, a leading financial institution (FI) in Vietnam: $1 million has been lent by the Earth Fund and $24 million was lent by IFC. The Earth Fund loan is convertible into a grant if Techcombank on-lends $50 million to CP and EE companies, with at least half of the borrowers being SMEs, by the loan's termination date. | | |
| **Objectives** | The project was set with the following quantitative objectives:<br>• Reach a minimum portfolio of $25 million (which is the threshold for Techcombank to earn a bonus of 2% of the portfolio)<br>• Lend at least 50% of the funds to SMEs<br>• Prevent an estimated 90,000 tons of $CO_2$ emissions per year over a 10-year period<br>• Attain for EE projects a 15% reduction in energy used per unit of production, or energy/fuel used for facility or non-process technology related measures<br>• Attain for CP projects at least a 15% reduction in resources used or waste generated per unit of production, or other non-process related resources used or other waste generated | | |
| **Market Barrier Addressed** | • Many commercial Vietnamese banks lack access to sufficient long-term liquidity, limiting their ability to provide CP and EE loans that require longer terms.<br>• Local FIs often do not have in-house technical capacity to evaluate CP and EE projects, which increases the perceived risks for the investments and inhibits CP and EE project lending. | | |
| **Project partners and roles** | **IFC:** Co-funded the project with a $24 million loan<br>**Techcombank:** Lent $37 million to clean production (CP) and energy efficiency (EE) companies | | |
| **Current project status and expected developments** | • Completed<br>• A $37 million portfolio was built by Techcombank<br>• Techcombank earned and received a performance bonus of $745,000 from the Earth Fund<br>• Techcombank repaid to the Earth Fund the remaining $255,000 loan and associated interest; Techcombank repaid to IFC its loan and associated interest. The project was closed in January 2015. | | |

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| **Main results and project achievements to date** | Key results achieved against objectives include:<br>• Techcombank developed a $37 million portfolio, exceeding the $25M target, with half of the loans being granted to SMEs, and was consequently rewarded a performance bonus.<br>• Regarding climate change benefits, it is estimated that emission savings of 90,000 tons of $CO_2$ per year over a period of 10 years has been reached. However, it is challenging to measure the impact of the portfolio over the long term as the equipment financed through the loans will continue to operate for a time that is not foreseeable.<br>Overall, the project represented a significant innovation for the market and has the potential to be replicated. Following the project's implementation, IFC has been approached by 4 other local banks expressing interest in developing a similar loan program.<br>Due to deteriorating market conditions in the local banking sector, IFC decided to withdraw from the project and negotiated a loan prepayment with Techcombank. |
| **Achieved environmental benefits** | **$CO_2$ reductions:** 92,300 tons of $CO_2e$ per year |
| **Project success factors and challenges encountered** | It was key to have identified an FI that was very interested in creating a portfolio at a fast pace. Although the convertible loans can provide an additional incentive for the FI, the willingness of the bank to tackle the CP and EE SME segment was the main driver for success.<br>The main challenge faced during the project was that the banking sector in Vietnam experienced difficulties during project implementation, because of a period of economic turmoil for local companies. These difficulties encouraged both banks and companies to scale down their balance sheets. |
| **Lessons learned** | Main lessons learned include:<br>• Providing FIs with bonuses (e.g. with convertible loans) can incentivize them to make the best use of the resources provided by the project. This point deserves further investigation to assess the extent to which bonuses influence the behavior of partner FIs. |

| Research and Engagement on Climate Change Investment in Private Equity (RECCIPE) | | | |
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| **Project timeline** | November 2009 – December 2012 | **Total project cost** | $1,245,000 |
| **Geographic Focus** | Global | **EF (GEF) Funds approved** | $200,000 |
| | | **Leverage of EF (GEF) Funds** | 1:5.2 |
| **Type of project** | Advisory Services | **IFC Funds approved** | - |
| **Overview** | The RECCIPE project sought to develop a commercially sustainable information tool to enable institutional investors to increase their capital allocations to emerging markets (EMs) in private equity (PE) and venture capital (VC) funds, particularly in climate change related sectors (such as clean-tech, renewable energy and energy efficiency).<br>The tool helped establish two investment products which raised private sector capital, totaling nearly $600 million, from a variety of investors. The information tool helped create a common framework for climate change investments by publishing industry standards and benchmarks. | | |
| **Objectives** | The overall goal of this product was to stimulate, within two to three years post project completion, $750 million of new institutional investments, including IFC investment, in climate friendly investment products in EMs, specifically through PE and VC funds. Specific objectives included:<br>• Provide IFC and other partners with research and analysis to inform climate friendly investment decisions<br>• Disseminate research results to the pension fund community and the investment community more broadly<br>• Research, develop and test financial market structures combining private and public funds to stimulate climate friendly investments via PE | | |
| **Market Barrier Addressed** | • Asset allocation into climate change sectors by major investors is limited by incomplete and inconsistent information flows, which prevents the development of industry standards and benchmarks.<br>• The lack of standards and benchmarks, including the risk-return characteristics of clean energy sectors, reduces investor appetite for the sector. | | |
| **Project partners and roles** | **IFC:** Provided experience in working with PE funds, climate-related investments and sustainability issues<br>**Castalia:** Provided expertise in developing public-private partnerships, developed research on the role of PE in addressing climate finance changes<br>**Department for International Development (DFID)**: Provided funding and expertise for the development of PE for climate change mitigation; benefited from RECCIPE's work, which facilitated investments into PE funds | | |
| **Current project status and expected developments** | • Completed<br>• The IFC Catalyst Fund, which is now operational and managed by IFC's Asset Management Company, launched with support from the project.<br>• A second fund (CP3 Asia Fund) launched with support from the project and has attracted over $180 million in commitments. | | |
| **Main results and project** | Overall project results were deemed very successful. The project proved the viability of a private equity investment vehicle for climate change, by supporting the launch of 2 funds in | | |

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| **achievements to date** | emerging markets, successfully raising about $600 million. It also finalized two key pieces of market research and presented its findings to a number of key stakeholders (5 workshops).<br><br>The first fund which was developed during the RECCIPE project and which is now under management by the IFC Asset Management Company (AMC) is called the IFC Catalyst Fund. It has raised nearly $420 million. The fund has been active for 3 years and is set to continue another 9+ years. The investors involved are partially commercial and, to date, are satisfied with the fund team's performance. The other fund (the CP3 Asia Fund), managed by Credit Suisse, will focus primarily on Asia and has attracted over $180 million in commitments.<br><br>The focus of the project shifted over its lifetime, moving from a focus on knowledge management and dissemination, with the development of a commercial market on PE market information, towards the development of a demonstration project. This shift took place as the demonstration of commercially viable investment models was considered more important to engage investors than addressing information gaps, and seems to have a led to a stronger project impact.<br><br>While the project did launch two new investment products, the project was not, as yet, fully successful in changing the investment industry's perception of sustainability-inclusive strategies; this is related to the fact that it is still too early to assess industry perception and estimate outcomes based on the duration of the funds. Another issue was that the market has changed since the project's inception: as renewables have become more cost competitive, companies are developing renewable energy platforms (not necessarily with a fund format) and there no longer needs to be specific climate change financing. In this context, this type of investing now falls under more traditional energy-related infrastructure investment vehicles. |
| **Achieved environmental benefits** | **$CO_2$ reductions:** Not applicable. Knowledge product, no direct environmental benefits can be ascribed to the project. |
| **Project success factors and challenges encountered** | The key project success factors identified were:<br>• Designing and "right-sizing" a specific investment vehicle for certain types of investors seems to facilitate market impact.<br>• IFC financing to launch the fund resulting from the project sent a strong signal to the market and gave the fund credibility, encouraging other investors to participate.<br>• Collaboration across donor organizations seemed to lead to significant scale and faster progress than expected, allowing for early engagement in market opportunities.<br>The main challenges faced during the project were:<br>• Difficulty in launching novel climate-focused investment products and gaining potential investor interest and trust, e.g. investors tend not to invest with first time fund managers.<br>• Delays were experienced in both Castalia and IFC's work; Castalia was very stretched in terms of staffing.<br>• Difficulty in managing expectations and visions across three distinct institutions (IFC, Asian Development Bank, UK Department for International Development).<br>• The project was initially designed by one staff member and later on directly overseen by the global product specialist (GPS), which created a significant administrative |

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| | challenge. The GPS was in a conflicted position for signing off on project documents and another GPS had to be involved, which placed strain on overall team resources.<br>• Knowledge dissemination activities took place but were not considered particularly successful, as their scope was too broad. |
| **Lessons learned** | Main lessons learned include:<br>• Project focus on one investment type and one theme seems important for achieving efficiency and market impact (e.g. private equity, climate change).<br>• Combining future advisory work on new financial products with an IFC investment component can help to accelerate achievement of desired impacts.<br>• Consider allowing an approval exemption for managers (Global Product Specialist) when also acting as team leader, rather than allowing direct oversight to be provided by a higher level position such as unit manager.<br>• It is important to clarify project partner roles before project launch to avoid any misunderstandings and loss of time during project implementation.<br>• Market test financial products before launching them and have anchor investors. |

| Emerging Markets Carbon Efficiency Index | | | |
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| **Project timeline** | April 2009 – December 2010 | **Total project cost** | $1,837,257 |
| **Geographic Focus** | Global | **EF (GEF) Funds approved** | $272,257 |
| | | **Leverage of EF (GEF) Funds** | 1:5.8 |
| **Type of project** | Advisory Services | **IFC Funds approved** | - |
| **Overview** | The project developed the first global emerging markets Carbon Efficiency Index that aimed to incentivize listed companies in emerging markets to disclose and improve their carbon efficiency. The Index allowed investors to benchmark their performance against a portfolio of stocks selected and weighted according to the relevant carbon efficiency. The project was launched by IFC and Standard & Poor's in December 2009 at the UN Climate Change Conference in Copenhagen.<br>Although the project was considered innovative and successful, it was ahead of its time. While the project increased overall market awareness and met most objectives set, it did not identify investors for a fund tracking the index, limiting its impact. | | |
| **Objectives** | The project objective was to develop an emerging markets carbon efficiency index to encourage listed companies to disclose and improve their carbon efficiency.<br>This involved two aspects:<br>• Providing financial and technical assistance to conduct research and develop a carbon-optimized index<br>• Providing financial and technical assistance to existing investor initiatives to encourage disclosure of carbon emissions from emerging market companies | | |
| **Market Barrier Addressed** | • Lack of incentives for companies to disclose and improve their carbon emissions<br>• Lack of financial and technical assistance to conduct both environmental research and index testing, in order to construct and launch a carbon-optimized index for emerging markets | | |
| **Project partners and roles** | **IFC:** Provided financing for advisory services and expertise in sustainability-related indices for emerging markets (Bovespa Corporate Sustainability Index in Brazil, and the S&P ESG India Index)<br>**Carbon Disclosure Project (CDP):** Provided expertise in carbon reporting and disclosure, engaged with companies on carbon disclosure<br>**Standard & Poor's (S&P):** Provided expertise in index development and management<br>**TruCost:** Provided data, information and research on environmental impacts | | |
| **Current project status and expected developments** | Completed, no further developments are expected | | |
| **Main results and project** | Key results achieved against objectives:<br>• Launched first global emerging markets carbon index | | |

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| **achievements to date** | • Raised awareness regarding climate-friendly investments and led to a number of replications (Japan, Brazil, FTSE, PRI, MSCI)<br>• Potentially helped modify corporate behavior<br>• Obtained GHG disclosure from 30% of new companies reached by CDP (32% achieved)<br>• Investors interested in developing a fund tracking the index were not found, limiting its impact<br>However, evolving market conditions mean that indices and the development of methodologies for decarbonizing portfolios (identifying and prioritizing the most efficient companies by sector, not just excluding companies) are increasingly of interest to a number of actors and becoming mainstream.<br>Project partners (CDP, S&P, TruCost) have continued to work on similar projects and push forward carbon disclosure initiatives in emerging markets. |
| **Achieved environmental benefits** | Not applicable. Knowledge product, no direct environmental benefits can be ascribed to the project. |
| **Project success factors and challenges encountered** | The key project success factors identified were:<br>• Strong team commitment to innovative and forward-looking project and potential for market impact.<br>The main challenges faced during the project were:<br>• Lack of investment financing provided by IFC or other actors for a fund tracking the index; for IFC, this appears partly related to the separation at the time between the financing and advisory teams.<br>• Combating investor's impressions that climate change-related investments would involve a higher level of risk (and lower level of returns)<br>• S&P's limited reputation for indices in emerging markets (compared to MSCI) |
| **Lessons learned** | Main lessons learned include:<br>• The project would have been more effective if it would have been supported by IFC investment to signal confidence to the market players. More broadly, more market impact can be achieved by supporting Advisory Services projects with IFC investment funds, when relevant; this lesson was applied to the RECCIPE project. |

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