



Earth's rapidly changing climate has emerged as one of humanity's most pressing threats. This report assesses the GEF's efforts at mitigating that threat.

The global landscape for climate change finance has evolved since the GEF became the first operating entity of the financial mechanism of the United Nations Framework Convention on Climate Change (UNFCCC) in 1996. New institutions such as the Climate Investment Funds (CIF) and the Green Climate Fund (GCF) have since pledged amounts that far exceed those of the GEF.

The GEF has added particular value in reforming policies and regulations to support public and private climate investment; piloting technologies and business models to promote broader scale-up; strengthening public and private institutional capacity; and providing grants and concessional financing to help implement and lower the risks of project-financing schemes. Other evaluations have highlighted the complementarity of GEF support with other funds. For example, in Ukraine, GEF grants to develop the regulatory framework for renewable energy and feed-in tariffs complemented financing from

the Clean Technology Fund and the European Bank for Reconstruction and Development to support a direct-lending facility.

Also, the GEF has been unique among climate funds in its ability to finance multifocal area and multi-fund projects. For example, the Poznan Strategic Programme on Technology Transfer was financed with \$35 million from the GEF Trust Fund and \$15 million from the Special Climate Change Fund. To date, 20 multitrust fund projects have been approved.

KEY FINDINGS

1. High level of relevance to convention guidance. The GEF-6 Climate Change Focal Area Strategy is highly responsive to UNFCCC guidance. The GEF has also been responsive to guidance issued after finalization of its GEF-6 strategy. In particular, a new Capacity-Building Initiative for Transparency Trust Fund was established in September 2016, in response to the

PURPOSE AND METHODS: This study aimed to provide insights and lessons for GEF-7 based on an analysis of the climate change portfolio, terminal evaluations of completed projects, mapping of convention guidance to the GEF-6 strategy and programming, interviews with stakeholders, and case studies. Its main objectives were to assess the relevance and comparative advantage, performance, results, and lessons learned through Global Environment Facility (GEF) support for climate change mitigation (CCM) and climate change adaptation.

WEB PAGE: <http://www.gefio.org/evaluations/climate-change-focal-area-study>

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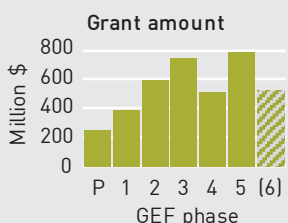
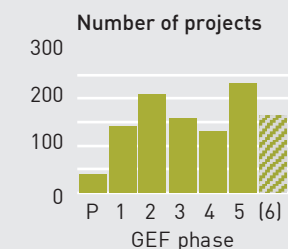
ABOUT US: The Independent Evaluation Office (IEO) of the GEF has a central role in ensuring the independent evaluation function within the GEF. www.gefio.org

PORTFOLIO HIGHLIGHTS

1,037
projects

\$3.6 billion
in grant funding

\$33.5 billion
in cofinancing

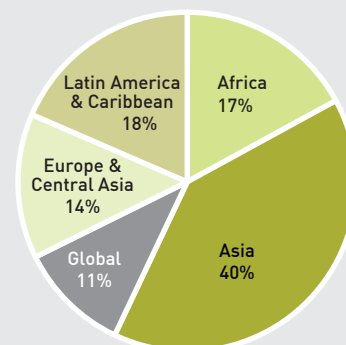


Project modality
87% full-size projects
7% medium-size projects
6% enabling activities

Top 4 Agencies by number of projects
57% UN Development Programme
16% World Bank Group
11% UN Environment Programme
8% UN Industrial Development Organization

Top 4 Agencies by amount of funding
39% World Bank Group
32% UN Development Programme
7% UN Industrial Development Organization
6% UN Environment Programme

Total approved GEF resources by region*



*Does not include multifocal projects.

request from the Conference of the Parties in December 2015. To date, four projects totaling \$4.1 million in GEF grants have been approved.

2. Satisfactory progress toward impact, with significant differences by project focus, region, and size.

The terminal evaluation review found that about three-quarters of GEF climate change projects show evidence of environmental impact, although in some projects the extent of greenhouse gas (GHG) reduction was marginal.

Some evidence of broader adoption of technologies, approaches, and strategies tested by GEF projects was observed in more than 80 percent of the terminal evaluations reviewed. The most frequently achieved mechanism for broader adoption was mainstreaming (in 70 percent of projects), which incorporates information, lessons, or specific results of GEF interventions into broader stakeholder mandates and initiatives such as laws, policies, regulations, or programs. Scale-up and replication were noted in approximately 40 percent and 30 percent of projects, respectively. A recent impact evaluation of the GEF's mitigation portfolio in China, India, Mexico, and Russia found that projects demonstrating a high level of progress are those that have adopted comprehensive approaches to

address market barriers and specifically targeted supportive policies.

The greatest progress has been made within the energy efficiency portfolio, where projects more frequently achieved direct GHG reductions and market change compared to projects focused on renewable energy and sustainable transportation. Projects in Africa and Latin America and the Caribbean showed less evidence of broader adoption through all four pathways. Lower achievement of environmental impact and fewer instances of broader adoption were also observed for medium-size projects as compared to full-size.

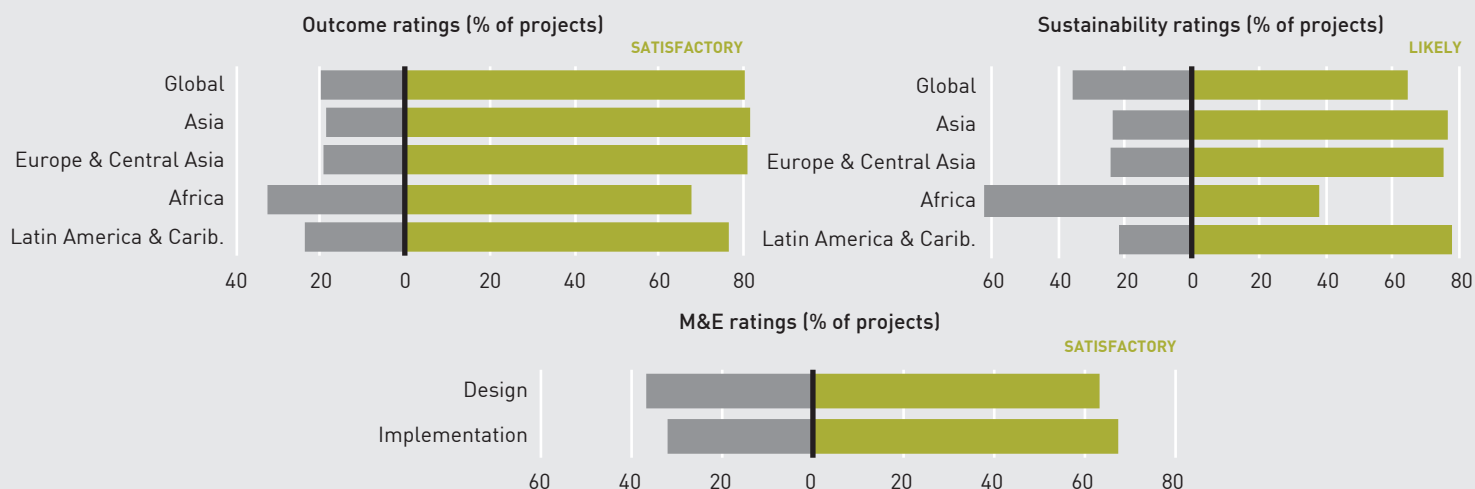
3. An important role in strengthening the enabling environment for scaling-up climate investments.

GEF climate change projects have frequently focused on developing and proposing legal and regulatory measures to address CCM (84 percent of projects reviewed), public and private sector capacity building (76 and 80 percent, respectively), and reducing information barriers and supporting market change by raising awareness of stakeholder groups (98 percent). The GEF is sometimes the first to tackle policy barriers as a cornerstone of a more enabling environment, as in the sustainable transport sector in Dushanbe, Tajikistan.

4. Substantial results have been achieved in countries where laws have been drafted or amended with GEF support. For example, in Vietnam, where the GEF assisted with the national strategy for urban lighting, 25 provinces developed regulations on public lighting, and electricity consumption for public lighting decreased by about 2 percent between 2010 and 2016. In Kazakhstan, where the GEF supported the Law on Energy Saving and Energy Efficiency Improvements, the government allocated \$62 million to improve energy efficiency in residential buildings from 2011 to 2014, resulting in the renovation of heating systems in 1,000 residential buildings.

5. Substantial private sector engagement compared to other focal areas. Climate change has been the most engaged with the private sector of all GEF focal areas. Two-thirds of the projects in the private sector portfolio are in the climate change focal area, amounting to 63 percent of the GEF's total investment in the private sector. The climate change focal area has also been more successful in mainstreaming private sector engagement in GEF projects. The terminal evaluation review found that 80 percent of closed projects included activities focused on building private sector

PERFORMANCE HIGHLIGHTS



capacity; a third of projects also provided direct assistance to private sector entities (e.g., in piloting technologies). Private sector entities have provided 42 percent of total cofinancing for climate change projects. More than half of all CCM full- and medium-size projects have had private sector cofinancing. Strategies for engaging the private sector have included the use of non-grant instruments to help build public-private partnerships, working with multilateral development banks to promote financing, and supporting small and medium enterprise innovation and entrepreneurship through the United Nations Industrial Development Organization (UNIDO) Global CleanTech Programme for SMEs, among others.

6. Shifting to multifocal area approaches. Climate change priorities have increasingly been addressed through multifocal area projects, including those that did not receive funding from the climate change focal area. Approved resources for multifocal area projects as a percentage of total approved CCM resources grew from 2 percent in GEF-3 to 47 percent in GEF-5.

The climate change focal area has consistently had the lowest percentage of multifocal area projects (18 percent in GEF-5), despite receiving the

greatest increase in funding allocation. At the same time, 87 percent of multifocal area projects that did not receive climate change funding tracked climate change-related indicators. Consequently, the GEF's contribution to climate change-related global environmental benefits may be greater than that achieved by activities financed by the climate change focal area.

BACKGROUND

The GEF's strategy for its CCM programming has evolved considerably from its early emphasis on removing barriers to broader adoption of energy efficiency and renewable energy technologies. GEF-3 strategic priorities began to shift the focus upstream toward creating policy and market environments conducive to technology diffusion.

The GEF-4 focal area strategy included new programs for promoting sustainable energy production from biomass and the management of land use, land-use change, and forestry (LULUCF), and moved away from GEF support for off-grid renewable energy and low-GHG-emitting energy technologies—noting that past projects in these areas had achieved less-than-desired results. Additionally, the GEF launched the Poznan Strategic Program on Technology Transfer that involved support

for assessing technology needs and financing pilot projects on the transfer of environmentally sound technologies.

The GEF-5 strategy retained the focus on market transformation, but expanded to promote investment, particularly for renewable energy. It also renewed support for off-grid renewable energy projects, expanded urban-transport support to include integrated approaches promoting low-carbon cities, and expanded the LULUCF program. The strategy specifically identified support for small island developing states and least developed countries, and for the GEF's strategic role in the emerging carbon market. Support for innovation and technology transfer continued under GEF-5.

The GEF-6 climate change focal area strategy addresses many of the same core areas as GEF-5, focusing on three objectives: promoting innovation, technology transfer, and supportive policies and strategies; demonstrating systemic impacts of mitigation options; and fostering conditions to mainstream mitigation concerns into sustainable development strategies. The strategy features a stronger emphasis on integrated approaches, innovative measures (such as performance-based incentives), and links and complementarity with other initiatives and climate funds.

CONCLUSIONS

Performance. These findings are based on an analysis of 278 completed CCM projects for which terminal evaluation reports have been completed and submitted to the GEF IEO.

Approximately 77 percent of completed projects in the CCM portfolio have satisfactory outcome ratings. This performance is comparable to the rating of 75 percent averaged across all focal areas in the 2015 GEF annual performance report. Outcome ratings for CCM projects have steadily improved over time, with the highest ratings (82 percent in the satisfactory range) reported in Asia, followed by Eastern Europe and Central Asia with 81 percent. Success rates were lowest in Africa (68 percent) and Latin America and the Caribbean (76 percent). Projects with adaptation, biomass, and energy efficiency components performed better on average than projects with renewable energy, transport, or other components.

Approximately 68 percent of CCM projects for which ratings are available ($n = 265$) have sustainability ratings—based on the likelihood of benefits continuing past project closure—of moderately likely or higher, comparable to sustainability ratings of 67 percent across all completed GEF projects. Sustainability ratings showed general improvement over time. They were highest in Latin America and the Caribbean (78 percent), Asia (76 percent),

and Eastern Europe and Central Asia (75 percent), and significantly lower in Africa (38 percent). Projects addressing biomass, energy efficiency, and adaptation had higher sustainability ratings on average; projects addressing transport and renewable energy had lower sustainability ratings.

Highlights of impact achievement and transformational change.

GEF CCM activities have significantly affected countries with some of the largest GEF climate change portfolios, as well as shown evidence of transformational projects in the climate change focal area. Sixteen of the 18 projects assessed in China, India, Mexico, and the Russian Federation resulted in significant GHG emissions reductions. Four of these projects—three in China—made significant contributions to GHG avoidance.

The first phase of the China Renewable Energy Scale-up Program, approved in 2005, was particularly transformational. The intervention combined a \$40.2 million GEF grant to stimulate demand for renewable energy and to build a strong renewable energy equipment manufacturing industry, with World Bank loans totaling \$173.3 million to support pilot projects in four participating provinces. Five years after the program's close in 2011, the project performance assessment concluded that it had made a substantial contribution to transforming China's renewable energy sector from a pilot demonstration into a global leader in wind

energy generation and the manufacture of wind-power equipment. A recent impact evaluation of GEF CCM support also found causal links to scaling-up project impacts rooted in the project's capacity-building efforts and establishment of government policies. A driver of success was the multiple-component approach combining institutional development and capacity building, technology improvement (addressing quality and quantity), and investment activities in a single intervention. The project worked with a wide range of stakeholders to achieve consensus about policy reforms and comprehensive market change.

RECOMMENDATIONS

- Sustain the focus on the enabling environment, including capacity building, and legal, policy, and regulatory measures to support market transformation, as areas where the GEF has shown strong results and a comparative advantage.
- Continue strategic engagement of the private sector, in particular as a mechanism for replicating and scaling-up project results.
- Ensure broader adoption of technologies and strategies tested by GEF projects in Africa and low-income countries, as well as in projects focused on renewable energy and sustainable transport.
- Further identify and pursue synergies with other funds and focal areas. ■

