United States General Accounting Office

GAO

Report to the Honorable
Larry E. Craig, U.S. Senate

June 1999

INTERNATIONAL ENVIRONMENT

Information on Global Environment Facility's Funding and Projects

GAO
Accountability * Integrity * Reliability

GAO/RCED-99-149

GAO

United States
General Accounting Office
Washington, D.C. 20548

Resources, Community, and
Economic Development Division

B-282452

June 15, 1999

The Honorable Larry E. Craig
United States Senate

Dear Senator Craig:

In recent years, an increasing recognition of the global nature of environmental problems has led to a greater emphasis on international efforts to address them. In 1991, the Global Environment Facility was established to help address climate change; threats to biodiversity, such as the impact of development on fragile ecosystems; and other environmental problems. The Facility is funded by the United States and other countries and provides funds for projects in developing nations to help protect the global environment. Because of your interest in the Facility, you asked that we provide information on its funding and activities. Specifically, you asked that we determine (1) the amount and the sources of its funding commitments for fiscal years 1995 through 1998; (2) how it selected projects for funding; (3) how it allocated funds among major priorities and how funds for climate-change projects were allocated by purpose and country for fiscal years 1995 through 1998; and (4) what oversight and evaluation mechanisms it has established, and what, if any, findings have resulted from its evaluations and reviews.

Results in Brief

From fiscal years 1995 through 1998, 35 nations committed to contribute, or pledged, a total of about $2 billion to the Global Environment Facility trust fund. The United States and two other nations accounted for the majority of these pledges. Specifically, the Unites States pledged $430 million (21 percent); followed by Japan, which pledged $415 million (20 percent); and Germany, which pledged $240 million (12 percent). In 1998, the United States pledged to contribute an additional $430 million for fiscal years 1999 through 2002.

Projects are selected through a multistage review and approval process, which includes technical, environmental, and other considerations. Nations and other applicants submit project concepts, which are developed into detailed project proposals if they meet the Facility’s eligibility criteria. These criteria require, among other things, that a project be from a developing country and that funds from the Facility be used only for new activities. The project proposals are then reviewed for technical appropriateness, financial feasibility, environmental benefits, and other considerations that reflect the Facility's policy goals. During these reviews, representatives of contributing nations and Facility-appointed scientific and technical specialists review and comment on the proposals. According to U.S. Treasury officials, the Facility ultimately selects projects through negotiations and consensus.

The Facility allocated a total of $1.2 billion to projects for fiscal years 1995 through 1998. These funds went to projects in its four priority areas:

- $488 million (41 percent) to climate-change projects,
- $435 million (36 percent) to biodiversity projects,
- $116 million (10 percent) to international waters projects, and
- $109 million (9 percent) to ozone depletion projects.

The remaining $44 million (4 percent) went to projects addressing two or more of these priority areas. The majority of the funds for climate-change projects were aimed at removing barriers to energy conservation and efficiency or to removing barriers to adopting renewable energy. Four countries—China, Brazil, India, and Indonesia—received 69 percent of the funds for climate-change projects.

In coordination with the three international agencies that help implement its projects, the Facility has established an approach for project oversight and evaluation. This approach includes both strategic-level reviews, which examine such issues as the Facility's effectiveness in providing resources to address global environmental problems and the Facility's relationship with recipient nations, and project-level reviews, which examine the implementation and the results of individual projects in greater detail. These reviews have found both strengths and weaknesses. In some cases, the Facility's projects have encouraged the broader adoption of environmentally sound technologies by recipient countries. However, some projects appear dependent on funds from the Facility and might not meet the expectation that they be self-sustaining after that funding ends.

Background

Established in 1991, the Global Environment Facility (GEF) is an international funding organization that provides grants to developing nations for projects that help protect the global environment. GEF provides funds for projects in four priority areas: (1) biodiversity, which includes preserving species by protecting ecosystems; (2) climate change, which promotes ways to reduce emissions of greenhouse gases; (3) international waters, which focuses on the effects of land-based pollution or the overuse of marine resources; and (4) the depletion of the ozone layer. The United Nations Framework Convention on Climate Change and the Convention on Biological Diversity,[1] to both of which the United States is a signatory, have designated GEF as their primary funding mechanism. The pilot phase of GEF lasted from 1991 through 1994, when the facility was restructured with the goal of providing universal membership and greater openness in managing its affairs.

GEF's governing structure consists of an Assembly, a Council, and a Secretariat. The Assembly has representatives from over 160 member nations and meets once every 3 years to review GEF's general policies. The Council—the main governing body—has representatives of both donor and recipient countries. Officials of the U.S. Department of the Treasury told us that Treasury officials serve as representatives to the Council. The Department's Office of Multilateral Development Banks is the primary contact point between the U.S. government and GEF. The Council meets every 6 months to develop and evaluate GEF's operational policies and programs and to review project proposals. Finally, the GEF Secretariat helps ensure implementation of the decisions of the Assembly and the Council. GEF-funded projects are implemented and overseen by the United Nations Development Program, the United Nations Environment Program, and the World Bank. Known as the implementing agencies, they serve as the primary conduits between GEF and the recipient nations.

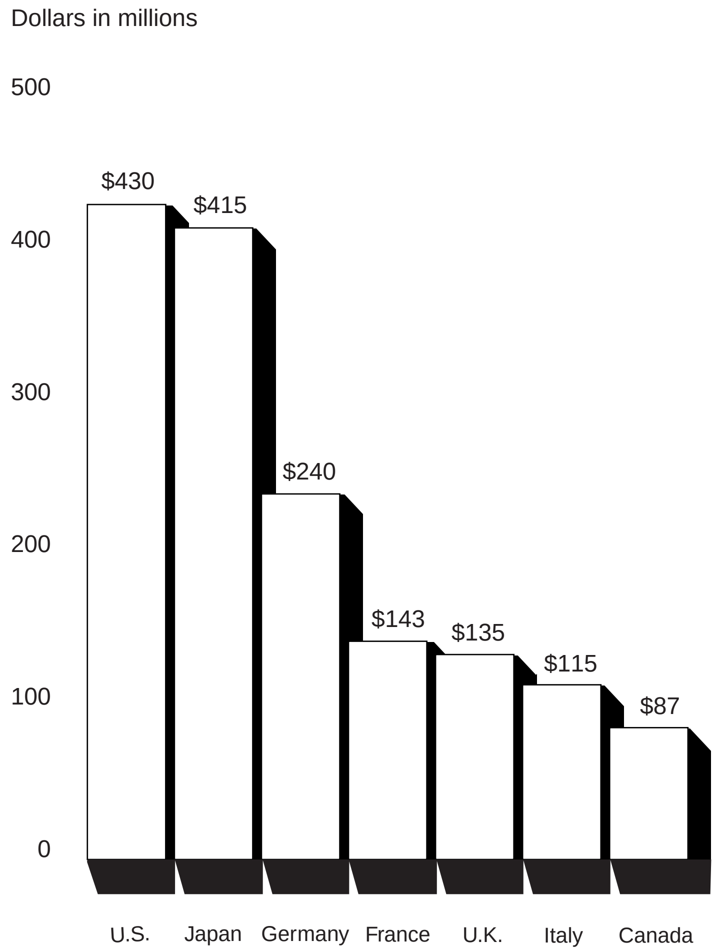
Three Nations Pledged Most of GEF's Funds

From fiscal years 1995 through 1998, 35 countries pledged to contribute a total of about $2 billion to GEF's trust fund. As figure 1 shows, three countries accounted for $1.1 billion, or 54 percent of the total amount pledged: the United States ($430 million), Japan ($415 million), and Germany ($240 million). Another four countries pledged $480 million, or 24 percent of the total: France, the United Kingdom, Italy, and Canada. Finally, 28 other countries pledged a total of about $460 million, or 23 percent of the total.[2] The average contribution of these 28 countries was $16.5 million. The United States also has pledged a total of $430 million for fiscal years 1999 through 2002. The U.S. share of funding to GEF is comparable to its contributions to other international agencies.

[1]Under the Framework Convention, which was signed by the United States in 1992, the signatory nations agreed to adopt policies and measures aimed at reducing their greenhouse gas emissions to 1990 levels by the year 2000. The Convention on Biological Diversity, which entered into force in December 1993, is designed to help ensure biological diversity by preserving species and ecosystems.

[2]Numbers do not add to 100 percent due to rounding.

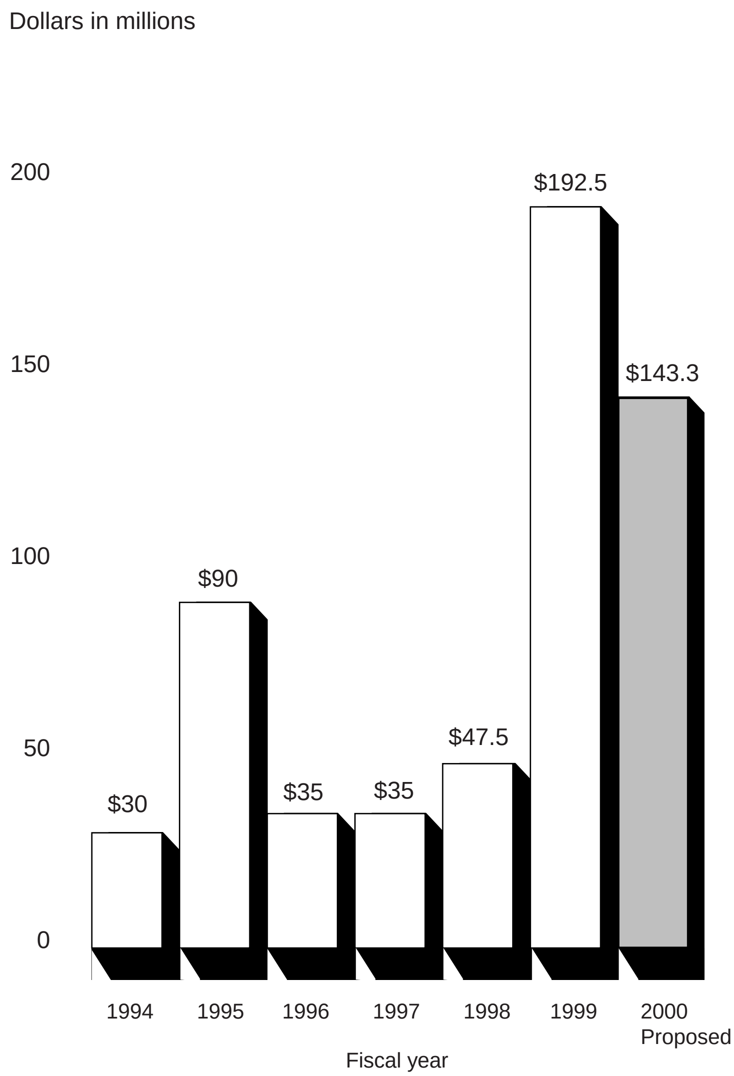
Figure 1: Countries Making the Largest Pledges to GEF, Fiscal Years 1995 Through 1998



Source: GAO's analysis of GEF's data.

To meet the U.S. pledge of $430 million, the Congress appropriated between $30 million and $90 million each year from fiscal years 1994 through 1998 (see fig. 2). The total appropriation over these 5 years was $237.5 million, $192.5 million short of the amount pledged. To cover this shortfall, the Congress appropriated $192.5 million to GEF for 1999.

Figure 2: U.S. Appropriations to GEF, Fiscal Years 1994 Through 1999



Source: GAO.

In 1998, member nations renewed their financial commitment to GEF for fiscal years 1999 through 2002. They agreed to contribute the same proportional share that they had contributed during the previous 4-year period. As a result, the United States pledged another $430 million for this period. Because no funds were appropriated in 1999 toward this pledge, the United States would need to appropriate an average of $143.3 million per year from fiscal years 2000 through 2002 to meet its obligation to GEF in a timely manner. Accordingly, the administration requested $143.3 million for GEF for fiscal year 2000.

According to Treasury officials, the U.S. share of funding for GEF is consistent with its contributions to other international agencies. They said that a nation's contributions to international agencies are generally intended to reflect its relative ability to pay. Among the factors that may be considered are a nation's national income, debt, and per capita income. The U.S. share for GEF (about 21 percent for both 4-year periods) is the same as its share for the International Monetary Fund, while its share for the United Nations is 25 percent.

GEF's Project Review and Approval Process Includes Many Participants That Apply Various Criteria and Considerations

GEF has established a project review and approval process during which its staff, implementing agencies, member nations, scientific and technical specialists, and others can review and comment on proposed projects. Participants in the review process consider GEF's policy objectives and its technical and environmental criteria. Treasury officials said that the final selection of projects emphasizes negotiations and consensus.

The review and approval process includes four broad phases. First, an applicant, such as a country's government, submits an initial project concept to one of the three implementing agencies—the United Nations Environment Program, the United Nations Development Program, or the World Bank. If the project is deemed eligible and worthwhile, the applicant and the implementing agency then develop a project proposal, outlines for engineering and design work, and environmental impact projections. Second, GEF's Scientific and Technical Advisory Panel, which includes experts in GEF's four priority areas, assesses the project for technical appropriateness. The GEF Secretariat and Operations Committee assess how well the project proposal meets GEF's eligibility criteria and more detailed policy objectives. Third, successful project proposals are placed in a work program—a compilation of project proposals that is developed and reviewed four times annually—for review and comment by the GEF Council, which includes representatives of GEF's member countries. During this phase, representatives of the United States and other member countries have the opportunity to review and suggest modifications to proposed projects. Fourth, the final project documents are prepared and reviewed. If approved, the project is then implemented.

To be eligible, a project must, among other things, (1) be from an eligible country, one that is eligible to borrow from the World Bank and is a signatory to the relevant international convention; (2) use funds from GEF only for new activities; and (3) use funds from GEF only for the incremental costs pertaining to global environmental benefits. Incremental costs are the additional costs incurred when a development project also has global environmental benefits. For example, if a country or firm proposes to build an electrical generating plant fueled by advanced solar-energy technology instead of a less expensive coal-fired plant, funds from GEF may be used only to fund those costs of the solar-energy technology that would exceed those of the coal plant.

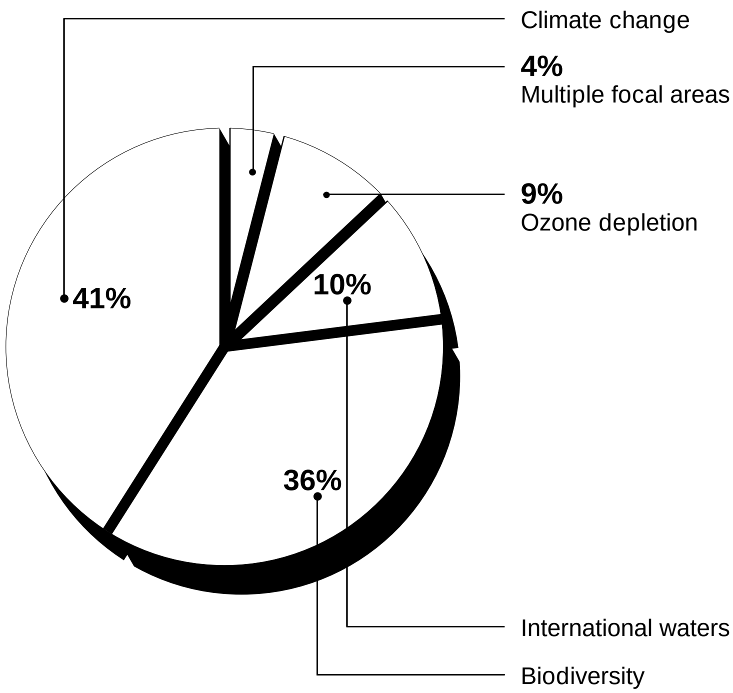
Throughout the review and approval process, the various GEF representatives also assess project proposals in light of considerations that reflect GEF's policy objectives, in addition to its eligibility criteria. For example, GEF's policy objectives stress that communities potentially affected by a project should be included in that project's development and that their needs should be reflected in its design. According to GEF, effective public involvement can facilitate the local population's acceptance of biodiversity projects, which can limit hunting and grazing in sensitive areas, and can help develop alternatives to replace the activities that would be limited. Also, a project is supposed to be sustainable after funding from GEF ends. For example, a climate-change project that funds energy-efficient lighting technology is likely to continue after funding from GEF ends and could encourage the adoption of similar designs elsewhere. According to Treasury officials, this technical and policy review process rejects the majority of project proposals before they would reach the Council.

A member country's influence on project selection is generally exerted in negotiations in the GEF Council. GEF does not have a formal process of scoring and ranking projects that are competing for limited resources, and neither individual projects nor work programs typically come to a vote before the GEF Council. Instead, the GEF Council and other participants in the review and approval process have an opportunity to comment on and improve proposals. Projects that do not meet GEF's eligibility criteria and other considerations are usually removed from consideration by the implementing agency or the GEF Secretariat. If Council members agree that a proposal has significant weaknesses, it is either rejected or its approval is conditioned on specific improvements. When projects are rejected, the implementing agencies may choose to revise and resubmit them to the Council.

Climate Change and Biodiversity Projects Received About Three-Fourths of GEF's Funds

From fiscal years 1995 through 1998, GEF allocated a total of $1.1 billion to projects in four priority areas. Over three–fourths of GEF's allocations went to climate change ($488 million or 41 percent) and biodiversity ($435 million or 36 percent) (see fig. 3). According to U.S. officials, these two priority areas received the majority of funds in part because GEF is the primary source of funds to support the Framework Convention on Climate Change and the Convention on Biological Diversity. Smaller amounts went to international waters ($116 million or 10 percent) and ozone depletion ($109 million or 9 percent).[3] GEF allocated an additional $44 million to projects that addressed multiple priority areas.

Figure 3: GEF Allocations by Priority Areas, Fiscal Years 1995 Through 1998



Source: GAO's analysis of GEF's data.

[3]For more information on funding to address ozone depletion, see International Environment: Operations of the Montreal Protocol Multilateral Fund (GAO/T-RCED-97-218, July 30, 1997).

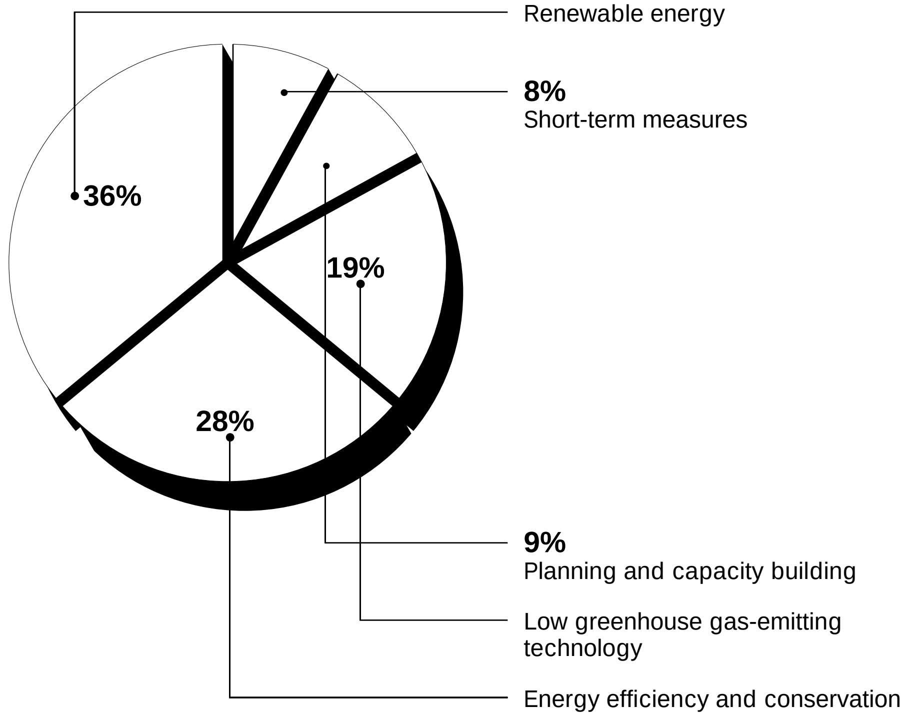
The $488 million allocated to climate-change projects was apportioned among five categories and 138 projects. Over half of the funds for climate-change projects went to two of these categories—renewable energy ($174 million or 36 percent) and energy efficiency and conservation ($137 million or 28 percent) (see fig. 4). The countries receiving the largest amounts of funds for climate-change projects were China, Brazil, India, and Indonesia, and these allocations were largely for projects intended to advance renewable energy and energy efficiency and conservation.

The 19 projects in the renewable energy category are intended to remove barriers to and lower the costs of technologies, such as windmills to pump agricultural water and solar technology to convert solar energy into electricity. For example, a project in Peru—to which GEF allocated $4 million—focuses on improving data, technical standards, and training to promote the use of photovoltaic systems to generate electricity for rural areas. According to an estimate provided in the project's proposal, carbon dioxide emissions could be reduced by 77,000 tons over the 20-year life of the project.

The 15 energy efficiency and conservation projects are intended to support selected market applications, such as more energy-efficient industrial processes and more efficient heating and cooling of buildings. For example, a project in China—to which GEF allocated $33 million—will promote the adoption of efficiency improvements to coal-fired industrial boilers, which are the largest single source of greenhouse gas emissions associated with energy use in China. Over the 20-year life of the project, GEF estimates that the efficiency improvements will reduce carbon dioxide emissions by 175 million tons.

The remaining 104 projects tend to be much smaller in dollar terms. Of these, 94 address the need for planning and capacity-building in developing nations; 7 provide short-term measures to reduce greenhouse emissions, such as switching from coal to other carbon-based fuels to generate power; and 3 are designed to reduce the long-term costs of low greenhouse gas-emitting technologies.

Figure 4: GEF Allocations to Climate-Change Projects by Type, Fiscal Years 1995 Through 1998

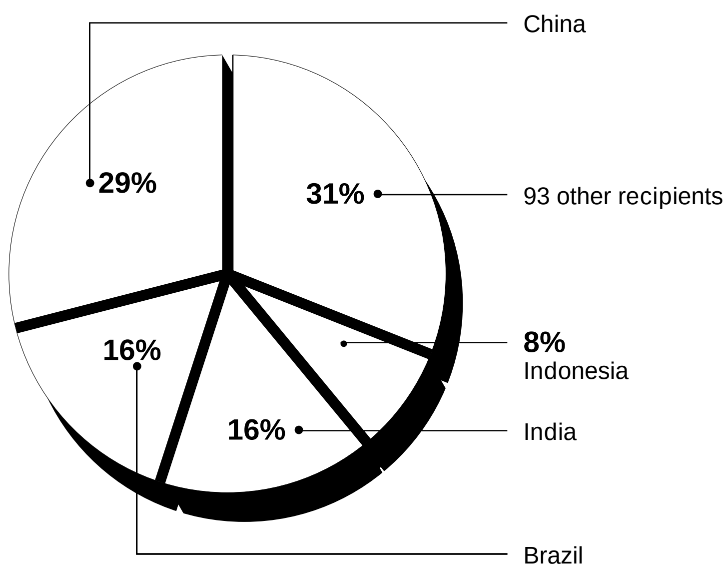


Source: GAO's analysis of GEF's data.

Of the 138 climate-change projects, 127 are located in 97 developing nations. The remaining 11 projects have a regional or global focus and generally are located in two or more countries. Of the 127 projects, the largest number, 7, are located in China. Brazil and Indonesia each received funding for four projects. Three countries received funding for three climate-change projects each and twelve others received funding for two projects each. The remaining 79 nations received funding for one project each.

GEF allocated $400 million to the 97 nations for climate-change projects, with another $88 million allocated to 11 global and regional ones. Of the $400 million, four nations received $276 million (69 percent of the total funding): China (29 percent), Brazil (16 percent), India (16 percent), and Indonesia (8 percent). The remaining 93 nations received $124 million (31 percent) of the funds GEF dedicated to climate-change projects, an average of about $1.3 million per country (see fig. 5).

Figure 5: GEF's Allocations to Climate-Change Projects by Country, Fiscal Years 1995 Through 1998



Source: GAO's analysis of GEF's data.

Projects receiving funds from GEF often receive funds from other sources as well. Funds from GEF are intended to fund only the incremental cost—the difference between the cost of a project with global environmental benefits and the cost of that project if it were pursued without those benefits. For example, for a project that would promote the use of solar energy technology over the use of a less costly coal-fired power generator, GEF would pay the incremental difference in cost between the two projects. Consequently, the other costs of the project must be met by other sources, such as the implementing agencies, private companies, or host governments. For example, a renewable energy project in China, which will install wind and solar systems to produce electricity and lower the long-term costs of commercializing those systems, has a total cost of $408 million. Funding sources include the private companies ($293 million), the implementing agencies ($65 million), GEF ($35 million), and the government of China ($15 million).

GEF's Oversight and Evaluation Efforts Noted Mixed Results

GEF's framework for oversight and evaluation includes reviews at both the strategic level and the project level. The strategic level includes reviews of GEF's overall performance, which cover such topics as GEF's effectiveness in providing resources to address global environmental problems and its relationship with recipient nations. Project-level reviews focus on the prospects for meeting environmental objectives and other issues at the project level. GEF's 1997 review of its overall performance found that some projects did not comply fully with project-selection criteria and considerations. According to a Treasury official, these findings led to reform proposals by the United States.

GEF and the implementing agencies engage in several types of strategic oversight. For example, GEF conducts broad assessments of overall performance to examine such issues as how effectively GEF provides resources for global environmental projects and how well the various organizations work together to select, implement, and oversee GEF's projects. Two of these reviews have been done to date, one in 1994 and another in 1997, both in preparation for negotiations on replenishing funding for GEF. These reviews are performed by an external team nominated by the GEF Council, including individuals with experience in environmental science and managing global projects. GEF also performs about three to six crosscutting reviews per year. These reviews are theme-oriented, focusing on such issues as the role of agriculture in preserving biological diversity or the importance of building technical capacity in countries needing to address climate-change issues. These reviews are documented in periodic "lessons learned" documents to share best practices and experiences with other GEF project managers. At the request of individual countries, GEF also conducts country reviews, which can examine the potential or the actual environmental impact of GEF's operations in a country.

GEF has also established an approach to evaluate the effectiveness of individual projects. For example, each GEF project that exceeds 3 years in length—as the majority does—undergoes a midterm review by the implementing agency or outside consultants. These reviews focus on a project's progress toward its objectives and may result in suggestions to modify its design. In addition, when a project has been completed, the implementing agency is responsible for preparing a report that assesses the achievement of the project's objectives, the factors that facilitated or hindered achieving them, and the lessons learned.

GEF's oversight and evaluation efforts have found both strengths and weaknesses. For example, the 1997 study of overall performance found that some projects significantly affected a country's policies beyond the their immediate objectives. For example, a project in India that used biomethane as a fuel source led to a $60 million investment by the Indian government to generate energy from waste. However, the study also found that project implementation did not always meet GEF's expectations. For example, projects that receive funds from GEF are supposed to be financially sustainable when that funding ends, but a review of 17 project submissions in 10 countries found that financial sustainability was specifically addressed in just 7 cases. Moreover, the study found that serious financial planning for sustainability of projects was not common and that few project proposals discussed how recurring costs would be met. Finally, some countries had difficulty establishing that funds from GEF would be used only to cover the incremental costs of a project—that is, the additional costs incurred when a development project also targets global environmental benefits. According to a Treasury official, the problems regarding financial sustainability and incremental costs are more common among the biodiversity and international waters projects than the climate-change projects.

GEF has not yet done a specific review focusing on climate-change projects. However, the results of broader studies provide some information on how well GEF is addressing the climate-change issue. At a broader level, the 1997 study of GEF's overall performance found that the current emphasis of removing barriers, such as barriers to commercially viable energy conservation and efficiency technologies, is appropriate for the climate-change priority area. Furthermore, the study found that GEF had appropriately allocated funds for climate-change projects to recipient countries, given the need to provide sufficient resources to the countries with the highest emissions and to implement those projects in a variety of settings. At the project level, the 1997 project implementation review found that about three-fourths of GEF's projects ranked satisfactory or better in either implementation progress or prospects for achieving environmental objectives and that about one-quarter ranked below satisfactory, generally for implementation problems due to a lack of stakeholders' involvement.

Agency Comments

We provided a draft of this report to the Department of the Treasury for review and comment. In response, Treasury said that the report provides a balanced, informative presentation of the Global Environment Facility's funding, project selection, and oversight processes. (Treasury's letter appears in app. I.)

Scope and Methodolgy

To respond to this request, we examined GEF documents and met with officials of Treasury's Office of Multilateral Development Banks. We limited our work on the amounts and the sources of funds and how they were allocated for fiscal years 1995 through 1998 because activities during the pilot phase might not be comparable to later activities. We did not adjust dollar amounts for inflation, and we did not independently verify the information provided by GEF and by Treasury officials. We conducted our work from February through May 1999 in accordance with generally accepted government auditing standards.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 10 days from its date. At that time, we will send copies of this report to congressional committees with jurisdiction over international environmental affairs; interested Members of Congress; Mohamed T. El-Ashry, Chief Executive Officer, Secretariat of the Global Environment Facility; the Honorable Robert E. Rubin, Secretary of the Treasury; the Honorable Carol M. Browner, Administrator, Environmental Protection Agency; and other interested parties. We will also make copies available to others upon request.

Please call me at (202) 512-6111 if you or your staff have any questions. Major contributors to this report were Michael Hartnett, Michael Daulton, and David Marwick.

Sincerely yours,

David G. Wood

David G. Wood
Associate Director, Environmental
Protection Issues

Comments From the Department of the Treasury

MAY 12 1999

Mr. David G. Wood
Associate Director
Environmental Protection Issues
General Accounting Office
441 G Street, NW
Washington, D.C. 20548

Dear Mr. Wood:

I welcome the opportunity to comment, on behalf of the Treasury Department, on the General Accounting Office's (GAO) Report on the Global Environment Facility. The Report provides a balanced, informative presentation of the GEF's funding, project selection and oversight processes. Three key observations stand out:

- The scope of the GEF's work is very rich and diverse, reflecting a range of pressing environmental concerns that transcend national borders and can only be addressed successfully through coordinated multilateral efforts. With respect to the climate change, the issue of particular interest to the requester, the report correctly notes that the bulk of the GEF's operations are allocated to removing barriers to clean energy technologies – an area in which U.S. companies are well-positioned to compete.

- The GEF project selection process is primarily driven by review of technical merit. The U.S. has worked hard to set up objective procedures and policies that improve the rigor of project selection. We agree with GAO that the resulting allocation of the GEF's very limited resources is broadly appropriate.

- The GEF has both strengths and weaknesses, natural for a young institution that is experimental in both its structure and its project work. In order to address the weaknesses, Treasury has successfully put in place a solid agenda of further GEF reforms that were identified by an independent evaluation of GEF that concluded in early 1998. We welcome the GAO's recognition of U.S. efforts to promote effective reforms under this agenda, such as improved GEF monitoring and evaluation, over the new replenishment period.

Finally, I would like to express our appreciation for the spirit of cooperation and intellectual rigor with which the GAO team approached the process and its openness to our comments.

Sincerely,

William E. Schuerch

William E. Schuerch
Deputy Assistant Secretary
International Development, Debt
and Environment Policy

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are $2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. VISA and MasterCard credit cards are accepted, also. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

U.S. General Accounting Office
P.O. Box 37050
Washington, DC 20013

or visit:

Room 1100
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC

Orders may also be placed by calling (202) 512-6000
or by using fax number (202) 512-6061, or TDD (202) 512-2537.

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

For information on how to access GAO reports on the INTERNET, send an e-mail message with "info" in the body to:

info@www.gao.gov

or visit GAO's World Wide Web Home Page at:

http://www.gao.gov

United States
General Accounting Office
Washington, D.C. 20548-0001

Bulk Rate
Postage & Fees Paid
GAO
Permit No. G100

Official Business
Penalty for Private Use $300

Address Correction Requested