



GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET



Behind the Numbers

A CLOSER LOOK AT GEF ACHIEVEMENTS







The numbers tell a story:

20 years, \$9.2 billion invested directly, **\$40 billion** in cofinancing, and **2,700** projects in more than **165 countries**.

Together, these numbers make us the world's leading public financial fund dedicated to smart environmentally sound choices that boost local economies and protect **the planet**.

Yet behind those numbers is a bigger story

that comes from the **positive impact GEF investments have** on the two billion still waiting for access to electricity, clean water, and other services others easily enjoy. It is the story of a unique networked organization that brings together the **public sector, businesses, and civil society** to make a **global impact**.

A large group of African school children, mostly girls, are smiling and looking towards the camera. They are wearing school uniforms consisting of white collared shirts and light blue dresses or skirts. The background shows a schoolyard with other children and buildings in the distance.

Investing in our Planet



What is the GEF?

A FINANCIAL MECHANISM for key international environmental conventions.

A PARTNERSHIP of 182 governments, international institutions, nongovernmental organizations, and the private sector.

A CATALYST that has generated unprecedented levels of cofinancing, averaging levels of 1:4.

AN EFFICIENT ORGANIZATION with a Secretariat budget at 1.8 percent of the total core fund.

A NETWORK of agencies with a broad set of competencies — UN agencies and multilateral development banks.

A LEARNING ORGANIZATION with an independent Evaluation Office that receives 16 percent of the total corporate budget.

A SCIENTIFIC PANEL providing both strategic and project-level input.

A HIGHLY TRANSPARENT system among international organizations.

A BALANCED GOVERNANCE structure, reflecting both the United Nations and Bretton Woods systems.

A MECHANISM FOR ADAPTATION to climate change, managing two United Nations Framework Convention on Climate Change (UNFCCC) adaptation funds — the Least Developed Countries Fund and the Special Climate Change Fund.

A KEY INNOVATOR for meeting the world's goals for development, climate protection, and the conservation of natural resources, including the Earth's rich biodiversity by acting locally for global impact.



Climate Change

More than **\$3.1 billion** to support mitigation and adaptation projects and enabling activities in more than **154 developing countries** and economies in transition.

Leveraged an additional **\$19.9 billion** in cofinancing from GEF partner agencies, governments, commercial banks, businesses, and non-governmental organizations.

Supported more than **30 climate-friendly technologies** for energy efficiency, renewable energy, sustainable urban transport, and methane reduction. Played catalytic roles for mobilizing investments, enabling recipients, pioneering innovative financial instruments, and promoting market-based mechanisms leading to widespread adoption and dissemination of climate-friendly technologies.

GEF investments over time are expected to directly reduce **1.7 billion tonnes of greenhouse** gas emissions and to catalyze an additional emission reduction of **4.5 billion tonnes** through transformation of markets.



Transferring Technology and Knowledge

Technical breakthroughs supported by the GEF are expected to more than halve the cost of clean, geothermal power in Kenya and other countries of the Rift Valley, reducing greenhouse gas emissions and increasing local development opportunities.

The GEF China Refrigerator Project will save **66 billion kWh** of electricity and reduce **100 million tonnes** of CO₂ emissions during the lifetime of the products. Production and sale of top-rated energy-efficient refrigerators has increased significantly, from 36,000 units in 1999 to **4.8 million units**. Today, 256 types of refrigerators manufactured in China comply with international standards and exceed advanced **energy-efficiency** requirements of the European Union.



Pioneering Carbon Emission Reduction Payments

The award-winning Metrobus sustainable transit project in Mexico City was the first to receive actual payments for emission reductions through carbon funds, providing very practical lessons for a low carbon future of the transport sector at a global level. With GEF funding, Mexico City developed a **50-kilometer** bus rapid transit system, reducing CO₂ emissions from Mexico City traffic by an estimated 60,000 to **80,000 tonnes** a year. In addition, the project **removed 800 polluting minibuses** from the road and encouraged greater use of sidewalks and bicycles throughout the city.



Developing the Market for Concentrating Solar Power

The GEF Solar Thermal Hybrid Project in Egypt increased the country's generation capacity derived from renewable resources while reducing local and regional pollution. Over time other physical benefits of this project as compared to a conventional combined-cycle gas turbine are expected to be increased renewable electricity production of about **33.4 GWh/year** and reduced CO₂ emissions of **500,000 tonnes** over the life of the project.

Beyond the physical benefits of reducing greenhouse gas emissions from power generation, the project has already demonstrated the operational viability of concentrating solar power in Egypt and contributed to accelerated market development of local suppliers of various components of this technology, positioning Egypt as a source of expertise and equipment in future solar thermal power projects internationally.

Through this and other projects, the GEF has been the first to finance the implementation of concentrating solar power technology in developing countries. By demonstrating the feasibility of this technology, the GEF has created a receptive market environment for **follow-up investments** that are currently being undertaken by the public and private sector in Asia, Middle East and North Africa region.



Adapting to Climate Change

More than **\$300 million**, financing concrete adaptation action in more than **90 projects** covering over **90 developing countries** and economies in transition. These projects are some of the first in the world tackling the actual impacts of climate change across development sectors such as agriculture and food security, water management, disaster risk management, coastal zone management, health, and the sustainable management of ecosystems.

Thanks to these early investments by the GEF, particularly through the **Least Developed Countries Fund (LDCF)** and the **Special Climate Change Fund (SCCF)**, developing countries are now gaining their first experiences on how to address the impacts of climate change, and are already actively working to increase the resilience of some of the world's poorest and most vulnerable communities.



Preventing Climate Induced Disasters

With resources from the LDCF, the Bhutan government has been integrating climate risk projections into existing disaster risk management to expand their early warning system to cover the growing risk of bursting dams that hold glacial lakes. LDCF funds are also used to physically lower by **5 meters** the level of Thorthormi Lake (one of the most critical glacial lakes threatening to release a glacial lake outburst flood into a densely populated valley).



Making Food Security and Rural Livelihoods Resilient to Climate Change

A Niger LDCF project is helping vulnerable communities at the edge of the Sahara desert address projected reductions in erratic rainfall. This includes the testing and dissemination of innovative water harvesting techniques, construction of at least **172 new drinking water wells**, construction of more than **160 new irrigation wells**, and the fencing of **155 hectares of irrigated land** to facilitate the more efficient use of irrigation potential in the Niger River. This project also introduced more drought resilient varieties of traditional crops — thus **increasing yield levels by 20 percent** over traditional varieties, and creation of at least **27 community based food banks** for episodes of drought and temporary food shortages.



Assisting Small Island Developing States to Deal with the Impacts of Climate Change

In the Pacific region, local governments in **14 countries** are using SCCF funds to implement pilot adaptation projects in key development sectors, such as food production and food security, water, and coastal management. The projects are, for example, demonstrating how to consider climate change risks when redesigning and relocating **7 km of local roads** on Epi Island in Vanuatu, exploring the climate resilience of subsistence **food production systems** on small isolated islands in Solomon Islands, and identifying means to provide alternative water resources and **water storage facilities** for a raised atoll island in Niue. The collective effect of these national pilots will be a comprehensive set of regionally-relevant adaptation experiences that provides a knowledge foundation for effective and efficient future investments on climate change adaptation.



Biodiversity

Over \$3.1 billion, leveraging **\$8.3 billion** in cofinancing, to support implementation of more than **1,000 projects** in more than **155 countries** to conserve and sustainably use biodiversity.

\$1.89 billion invested in the creation or management of over **2,302 protected areas** covering more than **634 million hectares**.

Biodiversity protection and planning for more than **265 million hectares** of productive lands.

Support for the development of National Biosafety Frameworks in **123 countries** and for their subsequent implementation under the Cartagena Protocol.



Protecting the “Thermostat of the Planet” in the Amazon

The Amazon Basin can be considered one of the few key thermostats of the planet, helping to regulate temperature, rainfall and other weather patterns thousands of miles away. The Tumucumaque National Park is the first of many new protected areas that are part of the GEF-funded Amazon Region Protected Area (ARPA) program. ARPA has helped turn an area of the Amazon the size of Poland into legally protected forestland. Protected areas established under the ARPA project between 2003 and 2007 could **prevent 272,000 km² of deforestation** through 2050, representing more than **1/3 of the world’s annual CO₂ emissions**. During the first phase of the program, ARPA placed more than **31 million hectares** into new protected areas, exceeding the original goal of 18 million hectares. An additional 25 areas are being studied for future protected area creation. The second phase of ARPA, which is intended to build upon these achievements, has recently been approved and is under implementation.



Conservation Areas that Generate Local Benefits

The Cambodian Northern Plains, one of the largest, relatively intact landscapes in Southeast Asia hosts

more than **40 species** that are listed in the IUCN “Red List” of globally threatened species. Working with the government the GEF helped establish the **189,987 hectare** Preah Vihear Protected Forest. Today, **80 percent** of the **530,000 hectares** Northern Plains area is now legally protected.

GEF funding also spurred community incentives for conservation. Farmers now receive a premium price for “wildlife-friendly” rice if they agree to meet conservation agreements that are designed to protect rare water birds and other species. For example, over the course of one year, **40 village families** sold **30 tons** of fragrant rice at almost double the price for tourist markets.



Protecting Critical Ecosystems

With the help of the GEF-supported Critical Ecosystem Partnership Fund (CEPF), a civil society group in Madagascar has simultaneously addressed poverty alleviation, health, and conservation needs. The group supported the communities around the Zahamena National Park, home to some of the nation’s most spectacular rain forests, to engage in micro-enterprises, improved sanitation, and reproductive and child health, while helping the communities to adopt best practices in farming techniques and develop plans to manage their natural resources and biodiversity. The project also helps to maintain healthy forests and people, particularly women and youth. Founded in 2000, the CEPF is a global partnership that empowers civil society and works to conserve some of the world’s most critical ecosystems. The CEPF has enabled more than **1,500 civil society** organizations to help conserve hotspots in Africa, Asia, and Latin America.



International Waters

GEF is the largest investor in multi-country collaborations on shared water systems. Projects across multiple country boundaries have included **30** river and lake basins, **5** groundwater basins, and **19** of the planet's **64** large marine ecosystems.

More than **\$1.2 billion** leveraged **\$6.4 billion** in cofinancing for water, environment and community security projects across more than **170 countries**.

Largest ecosystem-based and coordinated program of action to reverse the depletion of marine fisheries. Working with more than **150 nations**, GEF projects cover **19 of the Earth's 64 large marine ecosystems**, including half of those shared by developing countries.



Improving Conditions for Peace

The GEF has been the largest contributor to collaborative efforts in the Nile Basin, with **\$79 million** in grants to improve **conditions for peace**, security, and stability through the Nile Basin Initiative and subsidiary cross-border projects. The Nile River Basin Treaty is now open for signature by the **9 countries**.



Sustaining Small Island Developing States

The GEF is providing support for **33 Small Island Developing States** to protect their valuable surface and groundwater drinking supplies, as well as to reduce pollution from sewage and other sources that degrade coastal water quality and pose health risks to communities.



Implementing Strategic Partnerships

GEF projects in the Danube/Black Sea basin are reducing nitrogen pollution from agriculture, city

sewage, industrial sources, and restoring floodplains to reduce pollution that has created the **"Dead Zone" of the Black Sea**.

The "Dead Zone" of oxygen deficient water observed over broad sections of the Black Sea has become virtually non-existent in recent years, and the **diversity of indicator species has roughly doubled** from the 1980s as countries have reduced nutrient pollution. Other International Waters partnerships are now underway for the Mediterranean Sea, Large Marine Ecosystems of East Asia, and Sub-Saharan Africa.



Well-established Leader in the Fight Against Toxic Mercury

GEF work has reduced exposure to mercury from artisanal gold mining — a poverty-driven activity that contaminates air, soil, water, fish, and people when mercury is used to extract gold from ore. Although artisanal gold mining provides an important source of livelihood for **15 million people**, it also accounts for **20 percent** of global mercury pollution.

This GEF partnership demonstrated practical methodologies and technologies to minimize mercury releases in mining operations. The project illustrated that a mix of policy and governance reforms, training, and technology transfer can successfully reduce the toxic environmental and human health effect of artisanal gold mining.

Best practices and affordable technologies were introduced to over **12,000** mining community members by **100** local trainers in **6 countries**. In Brazil alone, the project contributed to a reduction of over **1,700 kg of mercury releases** to the environment. In Indonesia, mercury emissions were reduced by **900 kg** in 2008 after the Indonesian government introduced a new law creating a licensing system and policy framework for small-scale miners. The approach is being replicated in Cambodia, Ecuador, Guinea, Mozambique, Senegal, and Venezuela, with more than 35 additional countries seeking help.



Land Degradation

\$438 million in GEF resources to **94 projects** and programs supporting sustainable land management to combat desertification and deforestation and creating multiple benefits for the global environment in production landscapes.

\$2.8 billion leveraged in cofinancing that has made an impact on the global trend in land degradation while simultaneously improving the livelihood base of millions of rural people who rely on agriculture to survive.



People's Republic of China–GEF Partnership in Dryland Ecosystems

Dryland areas of the western People's Republic of China (PRC) cover roughly **40 percent** of the country's total land area, and are highly vulnerable to drought and desertification. A 10-year (2003-2013) **\$400 million** partnership, to which the GEF has contributed \$20 million in these areas, has successfully developed and applied innovative, locally adapted production practices by communities. The overall program is implemented by the central government with operations in **6 provinces**. As a result of this effort, communities in the provinces are benefitting from **sustained flow of ecosystem services**, such as availability of water, healthy soils, and improved vegetative cover, in agricultural and rangeland systems, and at the same time contributing to effective management and conservation of biodiversity in the drylands.

The immediate goal of the partnership is to **combat land degradation, alleviate poverty, and conserve biodiversity**. It also aims to restore, sustain, and enhance the protective and productive functions and services of dryland ecosystem resources. In effect, the project will also demonstrate viable integrated ecosystem management models for widespread dissemination and replication.



Rangeland Management in Argentina

Argentina's Patagonia region is a rich mosaic of arid and semi-arid areas interspersed with riparian wetlands. The ecosystems collectively support a rich diversity of species, but land degradation now affects an estimated **85 percent** of Patagonia. This is caused mainly by overgrazing in the rural areas, where rearing livestock, principally sheep, has been the main productive activity for more than a century. This GEF-funded project is helping to control land degradation in Patagonia through the promotion of **sustainable rangeland management** practices to restore ecosystems to their full integrity, stability, and functions. The project helps sheep breeders and herders adopt sustainable rangeland management practices, and it complements a sustainable sheep husbandry program.



Persistent Organic Pollutants (POPs)

GEF's intervention in the POPs focal area is characterized by a large number of activities covering all POPs issues identified under the Stockholm Convention. These include investment projects addressing PCBs and PCB containing wastes, pesticides containing waste, development of alternatives to DDT for vector control, management of medical wastes, minimization of dioxins and furans in selected industrial sectors, as well as capacity building projects for ensuring a sustained implementation of the Stockholm Convention.

\$409 million spent for measures to reduce human and environmental exposure to POPs; another **\$663 million** leveraged through private sector and other sources. This will lead to environmentally sound disposal of at least **35,000 tons** of PCB-related waste, and **15,000 tons** of obsolete pesticides.



Replicable Demonstration Project in China

Through an investment of \$18 million, raising \$13 million in cofinancing, a GEF project on PCB management and disposal in the province of Zhejiang will:

- Clean up about **58 PCB storage sites** in Zhejiang;
- Dispose of about **2,000 tons** of PCB oil, PCB equipment, and high-PCB contaminated soils and water in Zhejiang;
- Clean up about **20,000 tons** of PCB-contaminated soils and water in Zhejiang.

Beyond these local benefits, this project will develop and implement a national replication program for PCB management and disposal in the rest of the country. The aim is for China to meet its obligations under the Stockholm Convention to eliminate equipment and oils containing PCBs from use by 2025 and bring these under environmentally waste sound management by 2028.



Demonstrating Best Practices

The objective of this project is to protect public health and the global environment from the impacts of dioxin and mercury releases. Seven recipient countries — Argentina, India, Latvia, Lebanon, Philippines, Senegal, and Vietnam — will receive \$10.3 million in GEF assistance and cofinancing from national partners, NGOs, and the private sector of \$13 million to develop and sustain best healthcare-waste-management practices in a way that is both locally appropriate and globally replicable. If replicated nationally and sustained, these best practices and techniques are expected to reduce the release of an estimated **187g TEQ** (toxic equivalency) of dioxins and **2,910 kg of mercury** to the environment each year from participating countries' healthcare sectors.

An additional project component in Tanzania will develop, test, and disseminate affordable and effective alternative healthcare-waste-treatment technologies that are appropriate to conditions in much of Sub-Saharan Africa.



Protecting the Ozone Layer

The GEF has invested in countries with economies in transition in Central and Eastern Europe and the former Soviet Union with **\$187 million** in projects to phase out substances that deplete the ozone layer, and an additional **\$200 million** in cofinancing.

These countries have achieved over **99 percent** reduction in their consumption of ozone-depleting substances (ODS) and phased out **296,000 tons**, including **20,000 tons** directly targeted by GEF projects.



HCFC Phase-out with Climate Benefits

An HCFC project in the Russian Federation will phase-out, in time to meet a 2015 Montreal Protocol target, **600 tons** of HCFCs through the transfer of technology for more energy efficient designs in the foam and refrigeration manufacturing sectors. The greenhouse gas emission reductions resulting from the phase-out will be approximately **15.6 million tonnes** of CO₂. Additional non-HCFC greenhouse gas emission reductions, to be achieved through the reduced electricity consumption in the commercial and industrial refrigeration sectors, will be approximately **10 million tonnes** of CO₂ over 5 years.

The GEF Council also approved **\$9 million** for a project to accelerate an HCFC phase-out in four countries with economies in transition (Belarus, Tajikistan, Uzbekistan and Ukraine) through the implementation of regulatory measures, such as stepping down quotas, bans, container size restrictions, fiscal instruments and through supporting the development and implementation of regional plans for **ODS destruction**.





Securing multiple benefits

\$784 million of GEF resources have funded multi-focal area projects: in other words supporting programs that have multiple benefits, such as mitigating greenhouse gases while tackling ozone depletion, protecting habitat while securing carbon stocks and improving freshwater flows.

350 GEF projects and programs, providing the multiple environmental and social benefits of sustainable forest management (SFM) and reducing emissions from deforestation and degradation and production forest-related landscapes (REDD+). **\$1.6 billion** leveraging **\$4.8 billion** in cofinancing for forest conservation and management.

New **\$250 million** SFM account to incentivize **\$1 billion** in support of forests for the period 2010 – 2014. Resilient forests increase carbon sequestration capacity, biodiversity, improve habitat, and protect against soil erosion and desertification. Livelihoods are further enabled by provision of food and shelter for forest-dependent peoples, water supply, flood control, and income opportunities.

Over 45 percent of the GEF international waters projects have benefits for climate change, many of these relating to adaptive management measures, and **over 70 percent** of GEF's projects in international waters benefit biodiversity, specifically with respect to coastal and marine ecosystems, freshwater ecosystems, and pollution reduction.



Congo Basin Forest Program

By combining GEF funds of more than **\$50 million** from different focal areas for **13 coordinated projects**, the GEF has been helping **6 Central African countries** conserve unique forest biodiversity while at the same time creating income for local populations and reducing greenhouse gas emissions from deforestation and forest degradation. This program is part of the GEF's Tropical Forest Account, which fostered investments in high tropical forest cover regions like Amazonia, the Congo Basin and Papua New Guinea/Borneo.



Albania Natural Resource Development Project

This GEF project has promoted sustainable, community-based natural resource management in about **240 upland and mountainous erosion-prone communities** across the country. Since the project's start-up, rural families have better managed forests and pastures to increase productivity and incomes while reducing erosion by **400,000 tons** and more effectively sequestering carbon.

Benefits to the local population included a **25 percent increase** in income earned from forest activities in communal forest and pasture lands, a **50 percent** increase in income earned from forest and agriculture activities in micro-catchments, and employment to **6,000 workers**, including **1,900 women** and **1,900 beneficiary families**.



Improved Management of "Blue Forests"

55 percent of atmospheric carbon captured by living organisms is attributable to marine systems with much of that captured by coastal vegetated habitats, such as mangroves, sea grass beds, salt marshes and kelp. In addition to being hotspots for carbon capture, "blue forests" also support livelihoods and provide food security for communities, yet they are being lost at up to **4 times** the rate of terrestrial forests.

GEF international waters projects protecting "blue forests" provide multiple benefits in terms of coastal storm protection, adaptation to fluctuating climate and sea-level rise, biodiversity conservation, food security, livelihoods, building products, transboundary fisheries, and carbon sinks to mitigate climate change.

For example, the sea grass beds in East Bintan, Indonesia were found, in a GEF project involving **724 households**, to have an estimated annual value of **\$2,287 per hectare** from capture fisheries and associated tourism activities. In East Africa, GEF-funded activities led to the development of a community-based spatial marine zoning process that created limited use areas used as "fish refugia." The limited use areas, along with a participating local economic development plan, resolved long-standing conflicts in the use of seagrass beds and mangroves.



SMALL GRANTS, BIG EFFECT

The GEF's successful Small Grants Programme has invested **\$495 million** in **12,000 projects** by indigenous and community-based organizations based in more than **124 countries**. Even though these grants are small, they help local communities achieve and sustain global environmental benefits, mainly in the areas of biodiversity and climate change, according to an independent evaluation.

PARTNERS

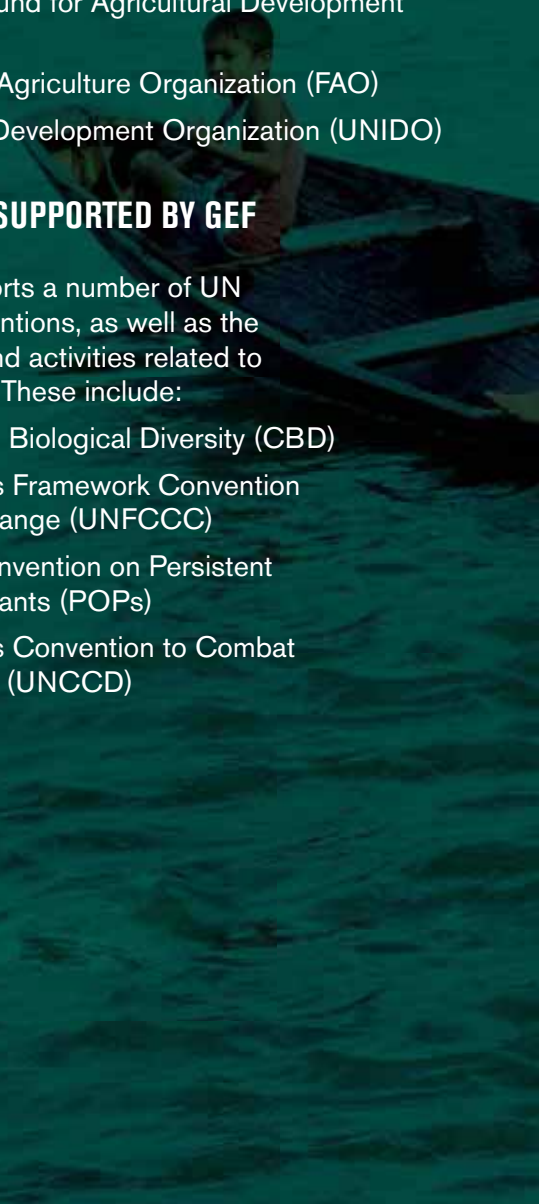
One of the GEF's key strengths is its partnership structure. Partners include:

- United Nations Development Programme (UNDP)
- United Nations Environment Programme (UNEP)
- World Bank
- African Development Bank (AFDB)
- Asian Development Bank (ADB)
- European Bank for Reconstruction and Development (EBRD)
- Inter-American Development Bank (IDB)
- International Fund for Agricultural Development (IFAD)
- UN Food and Agriculture Organization (FAO)
- UN Industrial Development Organization (UNIDO)

UN CONVENTIONS SUPPORTED BY GEF

The GEF also supports a number of UN environmental conventions, as well as the Montreal Protocol and activities related to international waters. These include:

- Convention on Biological Diversity (CBD)
- United Nations Framework Convention on Climate Change (UNFCCC)
- Stockholm Convention on Persistent Organic Pollutants (POPs)
- United Nations Convention to Combat Desertification (UNCCD)





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