



CLIMATE CHANGE MITIGATION



MAIN ISSUE

Climate change is a growing major threat to human and natural systems on our planet. Greenhouse gases (GHG) emissions released to date from burning fossil fuels and cutting forests have already caused an average increase in global temperatures of 1.1 degrees Celsius. The latest science as reviewed by the Intergovernmental Panel on Climate Change (IPCC) [Sixth Assessment Report \(AR6\)](#) concludes that business as usual emissions will lead us to exceed the 1.5C threshold within the next two decades.

Humanity has a chance to embark on a less catastrophic path, but the window of opportunity is brief and rapidly closing. To put the world on the path to carbon neutrality by 2050, all relevant actors need to urgently pivot toward zero emissions, with the most dramatic transformations taking place this decade. The 2023 State of [Climate Action Report](#) highlights that in the energy sector, this means increasing the growth in solar and wind power dramatically by 2030, and phasing out coal in electricity generation seven times faster. Substantial decarbonization is also needed in

the built environment, including infrastructure and construction. Tree cover gains and carbon sequestration in agriculture will also need to increase considerably, while the annual rate of deforestation shall be reduced four times faster by 2030.

With adoption of the Paris Agreement in 2015, governments and non-state actors committed to stronger action on the climate. Building on that, the [2021 Glasgow Climate Pact](#) called all countries to further increase their level of ambition to tackle the climate emergency. However, the combined impact of planned emissions cuts as expressed in the [Nationally Determined Contributions \(NDCs\)](#) still falls short of the Paris Agreement goals. The world must focus on scaling up climate mitigation action that minimizes trade-offs and maximizes synergies with other government economic and development priorities, including protecting nature and promoting an equitable post-pandemic recovery. In this context, the GEF is very well positioned to help accelerate action standing on three decades of experience in the provision of climate financing.



WHAT WE DO

The GEF provides financial resources to developing countries and countries with economies in transition for climate action, investing strategically to support enabling environments and policy reforms, while piloting new technologies and business models.

The goal of the GEF-8 (2022-2026) climate change focal area strategy is to enable developing countries to shift toward net-zero GHG emissions and climate-resilient development. To achieve this, the strategy is structured around both single focal area investments and investments in integrated programs covering more than one focal area.

Under focal area investments, GEF projects promote innovation, technology development and transfer, and enabling policies directly aimed at reducing carbon emissions. Through the integrated programs, the GEF invests climate finance resources to tackle broad drivers of environmental degradation cutting across several focal areas (including biodiversity and land degradation), on themes related to sustainable cities, food systems, conservation of forest biomes, and ecosystem restoration, among other topics. A new GEF-8 program, the [Net-Zero Nature Positive Accelerator](#), looks to enable countries to raise their climate action ambition through long term planning, and accelerate the shift to nature-positive, net-zero pathways with investments in nature and new technologies.



RESULTS

Since 2014, the GEF has invested more than \$2.7 billion in climate mitigation finance, programmed jointly with \$27 billion from other partners. This financing was channeled through more than 160 countries, contributing to over 4.4 billion metric tons of CO₂ eq of expected GHG reductions.

A large share of the portfolio is dedicated to reducing the carbon footprint of the energy sectors including through renewable energy and energy efficiency projects. With respect to energy efficiency, GEF-funded projects have introduced

standards for consumer appliances and equipment, such as lighting, air conditioners and motors, as well as more stringent building codes. To support renewable energy, GEF-supported projects have commercialized and scaled technologies like solar, wind, small hydro, biopower, and geothermal energy. In addition, more than 50 cities received GEF support to adopt integrated approaches to reduce GHG emissions and become climate resilient through grants worth more than \$310 million and leveraging \$3.5 billion in co-finance.

Sustainable forestry and ecosystem restoration represent the second largest portion of the climate mitigation portfolio, with more than 265 projects since 2014 covering more than 62 million hectares where efforts towards improving sustainable forest management were financed, supporting more than 35 million smallholders.

Finally, as of October 2023 the climate change focal area has supported countries with more than \$607 million for enabling activities, including more than 207 Biennial Update Reports, 102 BTRs and 545 National Communications. As of the same date, the CBIT had provided funding in excess of 156 million to 94 countries, with several more projects under preparation.

GEF-8 Provides New Opportunities to Support Implementation of the Paris Agreement

Climate Change Focal Area Strategy

The GEF-8 strategy is based around six objectives organized under two pillars. **Pillar I** (objectives 1-4) aims to promote innovation, technology development and transfer, and enabling policies for mitigation options with systemic impacts. As such, it invests in opportunities to trigger the transformation of key economic systems, including energy, transport, and land use. **Pillar II** (objectives 5-6) is aimed at providing resources for developing countries to meet their reporting obligations under the UNFCCC and Paris Agreement, and to foster enabling conditions to mainstream mitigation concerns into sustainable development strategies.

Under **Pillar I, Objective One** of the strategy (accelerate the efficient use of energy and materials) invests in the adoption of a new generation of energy efficiency policies. For example, it will support integrated approaches to pilot net-zero buildings; better performance standards for cooling technologies; circular economy approaches for sourcing and use of materials; and greater efficiency in manufacturing through wider adoption of digital technologies, among other areas.

Objective Two of the strategy (enable the transition to decarbonized power systems) will increase the pace of renewable energy growth and integration

into the grid through long-term plans and models. Investments include smart grids and demand-side management approaches like energy storage; building the climate and economic resilience of communities through better access to clean, reliable, and affordable energy; and support for decentralized energy solutions, including through development of local supply chains.

Objective Three of the strategy (scale up zero-emission mobility of people and goods) supports integrated approaches enabling the transition toward zero-emission mobility. This could include investments in avoid/reduce, shift, and improve approaches, investments to build local capacity and conducive policies for the adoption of electric vehicles (EVs), and towards the repurposing recycling and end-of-life management of EVs batteries and other components.

Objective Four of the strategy (promote nature-based solutions with high mitigation potential) supports action to protect and restore ecosystems with high potential to sequester emissions, including intact forests, wetlands, peatland, and coastal habitats such as mangroves, seagrass, and marshes.

Under **Pillar II, Objective Five** of the strategy (support capacity-building needs for transparency under the Paris Agreement through the CBIT) aims to straighten national institutions for transparency-related activities to support national priorities, including for the establishment of monitoring, reporting and verification (MRV) national systems, collection and management of GHG emission data, training, and south-south exchange, amongst other activities.

Objective Six of the strategy (support relevant Convention obligations and enabling activities) continues to make financial support available to prepare and submit to the UNFCCC National Communications every four years and Biennial Transparency Reports every two years.

Please see [GEF-8 Climate Change Focal Area Strategy](#) for a detailed description of programing and investment opportunities.

GEF-8 Integrated Programs

Eleven integrated programs (IPs) form part of the [GEF-8 Programming Directions](#) and strongly complement the GEF-8 climate change focal strategy. The IPs cover a wide array of thematic areas of direct relevance to the Paris Agreement, providing additional opportunities to contribute to climate change outcomes. Key IPs include the Net-Zero Nature-Positive Accelerator, Ecosystem Restoration; Circular Solutions to Plastic Pollution; Sustainable Cities; Amazon, Congo, and Critical Forest Biomes; and Food Systems (see table below).

GEF-8 projects and programs aim to work more closely with the private sector on climate change mitigation, including small and medium-sized enterprises, entrepreneurs, energy suppliers and distributors, vehicle manufacturers, industrial producers and manufacturers, farmers and producers, and financial institutions, among others. The focus of the GEF's integrated programming is on translating the ambition of net-zero commitments into real-economy emissions reductions. In addition, it will work with businesses ready to align with deep decarbonization targets in areas that can transform energy, transport, and land-use systems.

GEF-8 Integrated Program	Program Objective
Amazon, Congo, and Critical Forest Biomes	Maintain the integrity of globally important intact tropical forests through conservation and effective governance.
Wildlife Conservation for Development	Conserve wildlife and landscapes by transforming the drivers of species loss and ensure that countries and communities benefit from conservation.
Blue and Green Islands	Incorporate the value of nature into national decision making and support Nature-based Solutions (NbS) to address development challenges of Small Island Developing States related to food security, adaptation, tourism, and urban development.
Ecosystem Restoration	Restore degraded ecosystems and generate multiple environmental and socioeconomic benefits through an integrated approach.
Food Systems	Catalyze the transformation to sustainable food systems that are nature-positive, resilient, and pollution-reduced.
Net-Zero Nature-Positive Accelerator	Accelerate implementation of nature-positive, net-zero pathways by investing in nature and new technologies.
Clean and Healthy Ocean	Contribute to a sustainable blue economy by curbing coastal pollution from agricultural, industrial, and municipal sources through infrastructure investments combined with NbS.
Greening Transportation Infrastructure	Enable countries to develop portfolios of transportation infrastructure projects at national or land/seascape levels that build in environmental sustainability from inception to provide biodiversity, avoided land degradation, and climate change mitigation benefits and outcomes.
Sustainable Cities	Advance integrated and systems-based approaches toward building net-zero carbon, nature-positive, inclusive and climate-resilient cities.
Eliminating Hazardous Chemicals from Supply Chains	Significantly reduce or eliminate the environmental degradation caused by globally significant supply chains, with a focus on fashion and construction.
Circular Solutions to Plastic Pollution	Catalyze circular economy approaches to reduce plastic production, consumption, and disposal focusing on packaging, particularly single-use related to the food and beverage sector.

The Global Environment Facility (GEF) is a family of funds dedicated to confronting biodiversity loss, climate change, pollution, and strains on land and ocean health. Its grants, blended financing, and policy support help developing countries address their biggest environmental priorities and adhere to international environmental conventions. Over the past three decades, the GEF has provided more than \$23 billion and mobilized \$129 billion in co-financing for more than 5,000 national and regional projects.

