GUATEMALA

CLIMATE CHANGE FACT SHEET

Guatemala continues to struggle with elevated exposure to natural hazards and the effects of climate change, including higher temperatures and more variable rainfall that increase the risk of food and water insecurity among the country’s most vulnerable. Changing weather patterns increase disaster risk in urban areas, typically characterized by highly unstable physical infrastructure. Climate change is also likely to further impoverish a natural resource base already degraded by overexploitation, deforestation, and slash and burn agricultural practices. Land use change and the use of fossil fuels for transportation and agriculture contribute around half of overall greenhouse gas emissions, followed by cattle ranching and the use of fossil fuels to generate energy.

GOVERNMENT OF GUATEMALA CLIMATE PRIORITIES

Since 1992, Guatemala has taken significant actions to fulfill its commitments under the Convention on Climate Change (UNFCCC), including drafting a National Climate Change Policy, pledging to reduce greenhouse gas emissions in its Intended Nationally Determined Contributions (INDC), and signing and ratifying the Paris Agreement. Guatemala has a National Climate Change Policy and one of the first climate change laws in the world: The Framework Law on Climate Change. Under this law, Guatemala created the National Climate Change Council, which serves as a regulatory body for the country’s key sectors. Key goals relating to mitigation and adaptation under Guatemala’s Nationally Determined Contributions include:

The Government of Guatemala endorsed the National Low Emission Development Strategy (LEDS), developed with the support of USAID, as the official strategy for climate change mitigation in the country. The strategy was presented by the Ministry of Foreign Affairs and the Ministry of Environment and Natural Resources to the Executive Secretary of the United Nations Framework Convention on Climate Change (UNFCCC) in November 2020.

The reduction of 11.2 percent of its total GHG emissions from the 2005 base year projected to 2030; this reduction means that emissions in a baseline scenario (BAU) of 53.85 million tons of CO2 equivalent for the year 2030, will be reduced to a value of 47.81 million tons of CO2 equivalent in that year.

The reduction of 22.6 percent of its total GHG emissions from the 2005 base year by 2030 contingent upon technical and financial support from new and additional international public and private resources.

The development of Early Warning Systems and unification of climate information to reduce disaster risks linked to extreme weather events and a changing climate.
USAID’S CLIMATE CHANGE PROGRAM: OBJECTIVES AND RESULTS

USAID supports the Government of Guatemala’s development and climate priorities through a series of complementary programs and partnerships across the climate adaptation, renewable energy, and sustainable landscapes sectors.

ADAPTATION

USAID enhances the resilience of communities and livelihoods within Guatemala’s Western Highlands and Verapaces, the country’s most vulnerable regions to climate change. These are the highest priority regions for capacity building in climate change adaptation due to their strong dependence on agriculture, high levels of poverty, proximity to Mexico, and high rates of outward migration.

Feed the Future (FTF): USAID/Guatemala’s FTF value chain activities apply an integrated approach to watershed, land-use and water resources management. FTF activities also promote the use of agroforestry and climate smart agriculture technologies to increase the resilience of crops and soil to extreme weather events and climate pressures, while increasing overall productivity. These technologies include drip irrigation, water catchments, improved seed/tree varieties, soil fertility management and conservation, biopesticides and locally produced organic fertilizers, and locally appropriate agrostructures such as greenhouses, micro and macro tunnels, and screen houses that provide physical protection from heavy rain and hail.

RESULTS 2017-2021

Climate Smart Practices: 36,823 smallholder producers who are using climate smart agricultural practices on 22,801 hectares of land; including:

Watershed Restoration: 10,309 farmers and local governments reforested 24,630 hectares with local tree species and completed long-term watershed management plans.

Reforestation: 5,599 hectares has been enrolled under the Guatemalan Forestry Incentives Program which has provided an additional income of $2.4 million to 2,093 people.

Coffee Improvements: Agroforestry approaches improved 3,633 hectares of coffee with improved rust resistant varieties of coffee, soil conservation, and reforestation with shade trees. Production of local agro-ecological fertilizers are helping 569 small coffee producers improve soil health and coffee yields.

Solar Energy: More than 93 coffee solar dryers have been constructed which support 500 smallholder coffee farmers from 36 Cooperatives. Solar tunnels decrease the humidity rate of coffee beans from 65% to 11% in a shorter period, compared to drying coffee in open field tables, leading to improved quality coffee suitable for export markets.

SUSTAINABLE LANDSCAPES

USAID and its partners are mitigating climate change by reducing Guatemala’s primary sources of land based Greenhouse Gas (GHG) emissions: deforestation and forest degradation in the Petén, Alta Verapaz, and Baja Verapaz departments, and the Western Highlands region.
To mitigate increased emissions in the Agriculture, Forestry and Land Use (AFOLU) sectors, the Government of Guatemala maintains contracts with eleven community groups in northern Guatemala, in the Maya Biosphere Reserve (MBR), that derive significant income by sustainably managing over 500,000 hectares of Forest Stewardship Council (FSC) certified forests. Both former President Morales and current President Giammattei approved the renewal of 25-year contracts for the community forest concessions. To date, eight of the active nine concessions have been approved. In 2022, President Giammattei established two additional community managed concessions bringing the total to eleven. To safeguard gains in sustainable forest management, USAID supports periodic evaluations to facilitate the extension of community forest concessions in the Mayan Biosphere Reserve beyond current agreement periods and supports policy initiatives to reinitiate expired or canceled concessions. This is an outstanding demonstration of political will and sustainability of results achieved through USAID's 30 year support for reducing greenhouse gas emissions from deforestation and forest degradation in Guatemala. This activity has also led to noteworthy success in the conservation of biodiversity and cultural sites, such as Tikal, resulting in the generation of millions of dollars in tourist revenue over the last three decades.

Promoting forest management remains key, particularly under the 2015 PROBOSQUE law, which includes objectives such as increasing forest-cover and forest productivity, rural economic development, establishing agroforestry systems, and incentivizing reforestation and forest restoration. Additional work in reforestation or natural regeneration of deforested or degraded areas, particularly in protected area buffer zones, can reduce pressure on forest resources in multiple use and core zones of the MBR and other protected areas. USAID also works to strengthen partner systems for forest fire monitoring on both public and private lands, in order to reduce CO2 emissions. As a result, Guatemala's community fire brigades, park guards, and other government entities are provided with continual capacity-building support and training to prevent and control forest fires.

RESULTS FROM 2013 TO JUNE 2022:

Forest Product Development: US$199.1 million in total sales from 25 sustainable and inclusive value chains for forest timber products such as furniture and moldings, non-timber forest products such as xate palm, allspice, and ramon nut, and services such as community tourism.

Forest Sector Job Creation: 61,813 full-time equivalent jobs were created or strengthened (~18% women) for work in agroforestry and sustainable forest value chains.

Certified Forest Management: 555,650 hectares of forest certified through Forest Stewardship Council (FSC) certifications which means that forest dependent communities undertake economically viable, socially and environmentally conscious forest management.

Carbon Sequestration: 2,709,597 tons of greenhouse emissions sequestered and reduced as part of the sustainable management of the Community Forest Concessions in the framework of the Guatecarbon project in the MBR, as well as forest areas in Verapaces and Western Highlands regions.

RENEWABLE ENERGY

USAID promotes the generation and use of renewable energy and energy efficient and low emissions infrastructure, technologies and production processes. This includes conducting multiple studies that are
designed to help create the conditions for investment in and eventual adoption of energy-saving and energy-efficient technologies in the design of government buildings, municipal electricity power grids, municipal lighting systems, and housing projects. USAID support for efficiency upgrades and public investments to municipal generation plants, electricity grids and street lighting under its Creating Economic Opportunities program has resulted in a savings of $61.8 million and 103,000 megawatts of power annually, as well as an annual reduction in CO2e emissions of 40,000 tons.

USAID is also promoting the use of clean energy in the Western Highlands, through the installation of solar panels and solar dryers in coffee cooperatives and agriculture schools, thereby reducing labor requirements and operating costs, and creating a better quality coffee independent of traditional fuel-based dryers. In the same region, USAID provided solar panels to schools damaged by Hurricanes Eta and Iota, as part of a project preparing schools to reopen following COVID-19 closures. In addition, through its Guatemala Entrepreneurship Development Initiative, USAID is developing new financing mechanisms to help increase investment in renewable energy and energy efficiency in the Western Highlands.