



Advancing U.S. Solutions for Climate Adaptation and Resilience

Fact Sheet November 10, 2022

Under the Biden-Harris Administration, the U.S. Trade and Development Agency (USTDA) has increased its support for infrastructure project preparation and partnership-building activities that advance climate adaptation and resilience in emerging economies. Since early 2021, USTDA has funded more than 15 adaptation and resilience activities that are designed to help mobilize nearly \$700 million in climate finance and \$500 million in potential U.S. exports.

USTDA partners with emerging economies that seek high-quality infrastructure solutions to adapt to and mitigate the impacts of climate change. The Agency also leverages the expertise of U.S. industry to help deploy the latest technological innovations to support their adaptation needs.

USTDA's activities advance the [President's Emergency Plan for Adaptation and Resilience](#) (PREPARE), a U.S. whole-of-government effort that President Biden launched in November 2021 to help more than half a billion people in developing countries adapt to and manage the impacts of climate change by 2030. These activities also advance the goals of the [Partnership for Global Infrastructure and Investment](#), which President Biden and the G-7 leaders launched in June 2022 to close the infrastructure gap in emerging economies.

USTDA's portfolio of adaptation- and resilience-related activities now includes:

Climate Information Services

- [The Caribbean](#): A USTDA-funded virtual workshop series focusing on information and communications technology will support climate adaptation across the region by addressing emergency management and safety technologies that can help Caribbean nations strengthen their response and communications capacity for climate change-related disasters.
- [India](#): USTDA funded a pilot of a cloud-based emergency management and operations system at airports managed by the Airports Authority of India, to enable these sites to better prepare for the effects of climate change.

- Jamaica: USTDA provided a technical assistance grant to Jamaica's Ministry of Science, Energy and Technology, to advance the development of national emergency communications infrastructure and strengthen the country's ability to adapt to and manage the impacts of climate change.
- Vietnam: USTDA partnered with the Vietnam Air Traffic Management Corporation (VATM) by funding technical assistance to strengthen aviation safety using advanced weather forecasting technologies; this can help VATM adapt to the effects of climate change, such as an increase in severe weather events.

Energy Resilience

- Benin: USTDA is strengthening the climate resilience of Benin's energy systems through the funding of a pilot project on a U.S.-made digitalized system for solar minigrid management.
- Brazil: USTDA partnered with the Brazilian Association of Electricity Distributors by funding technical assistance to support and enable further smart grid deployments in Brazil. This will encourage the modernization of electricity distribution networks and strengthen the grid's resilience to climate change.
- The Caribbean: USTDA's [Global Procurement Initiative \(GPI\)](#) launched a Caribbean Energy Procurement Assistance Program to share best practices on integrating climate resilience considerations into public procurement of infrastructure, including training and educational visits for eight countries.
- Costa Rica: USTDA is helping to strengthen the reliability of Costa Rica's power sector through technical assistance to the national electricity provider (ICE), to develop a roadmap for monitoring its generation, transmission, and distribution assets and leveraging digital and intelligent technologies to minimize losses.
- Nigeria: USTDA is further developing Nigeria's minigrid sector through a grant to EM-ONE Energy Solutions that will facilitate the deployment of up to 150 solar hybrid minigrid systems for healthcare sites and their neighboring communities, improving the energy resilience for critical healthcare facilities.
- Nigeria: A USTDA-funded grant to Sosai Renewable Energies Company is advancing the development of approximately 100 solar minigrids and associated low voltage distribution networks in central and northern Nigeria, resulting in a more resilient energy system which will offset diesel-based generation.

- South Africa: USTDA is supporting the resilience of South Africa’s grid by funding workshops and technical exchanges with local stakeholders that will focus on investing in state-of-the-art transmission and distribution systems, as well as municipal energy procurement. These investments can support the grid’s ability to withstand the impacts of climate change, including droughts, extreme heat, heavy rainfall, and flooding.
- St. Lucia: USTDA funded technical assistance to help St. Lucia’s National Utilities Regulatory Commission deploy six resilient microgrids that will use solar power generation and battery storage and allow critical facilities on the island continue to operate during severe weather events.
- Tonga: USTDA funded a feasibility study for the state-owned utility Tonga Power Limited to support the use of low-emission energy and advance power transmission and distribution infrastructure to build resilience to climate change.

Water and Wastewater

- El Salvador: USTDA-funded technical assistance will enable the National Administration of Aqueducts and Sewers (ANDA), the national water utility, to increase water use efficiency through energy efficiency measures. This will help El Salvador manage the increased variability in water supply due to climate change and improve system reliability in the case of extreme weather conditions.
- Latin America: USTDA funded a four-part virtual workshop series focused on U.S. technologies and best practices to support priority water and wastewater infrastructure development projects in Brazil, Ecuador, Jamaica, and Mexico. The workshop series focused on climate solutions related to water delivery, water supply, and energy efficiency technologies.
- Mexico: In October 2022, a USTDA-funded reverse trade mission to the United States familiarized Mexican delegates with state-of-the-art U.S. technologies and services to support the development of water storage and water use efficiency projects in Mexico. These technologies can help Mexico address the challenge of water scarcity due to changing weather patterns caused by climate change.
- Uzbekistan: USTDA funded a feasibility study for UST, the national water company, to pilot digital twin technologies to model UST’s water infrastructure and identify leaks, enhancing the country’s water security.