



Center for  
Climate Solutions

# Holistic solutions for a more sustainable and equitable future for all



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# OUR EXPERTISE



The impacts of climate change affect every industry, sector, and all life on our planet.

To drive real change, decisions must be grounded in science, informed by data, and supported by the know-how to implement attainable solutions.

Our climate-smart programs aim to reduce greenhouse gas (GHG) emissions and prioritize renewable energy, while protecting vital natural resources, promoting economic growth, and helping people adapt to the impacts of climate change.



## Adaptation and Resilience

- Climate smart agriculture
- Urban resilience
- Health system strengthening
- Green buildings
- Water security and quality
- Climate resilient water and sanitation infrastructure
- Market system resilience
- Nature-based solutions



## Mitigation

- Renewable energy
- Energy efficiency
- Implementation of nationally determined contributions (NDC)
- Energy utility performance improvement
- Air pollution control and measurement
- Non-carbon dioxide emissions (i.e., methane) mitigation
- Carbon capture, utilization, and storage
- Ocean plastic pollution reduction
- Solid-waste management and beneficial reuse



## Cross-sectoral

- Climate and environmental policy and regulations
- Climate, economic, and health impact assessments
- Nexus (i.e., food-energy-water or public health-climate)
- Climate finance
- Climate data and information services
- Private sector engagement



## Our Values

Equity

Justice

Gender inclusion

Locally led

Sustainability



# OUR APPROACH

Through applied research, technology development, and project implementation we work with local partners to develop and scale evidence-based solutions that help communities around the globe to mitigate and adapt to the effects of climate change and to accelerate the transition to net zero emissions.

## CLIMATE TOOLBOX



### Research & Analytics

- Modeling and forecasting
  - Emissions
  - Adaptation scenarios
  - Decision support
  - Economic & environmental
- Economic input-output analyses
- Hydrologic models to assess water resources in data-scarce locations
- Decarbonization science
- Cost-benefit analysis
- Survey data collection
- Data management
- Geospatial analyses
- Laboratory services



### Technology

- Innovations for zero- or low-carbon power sources for transportation, buildings, and food production
- Clean energy innovations for carbon-free and carbon-reducing energy solutions
- Methane abatement impact assessments
- GHG & air pollutant emissions reduction
- Removal of environmental exposures to contaminants
- Conversion of GHG (carbon dioxide, methane) to sustainable products



### Implementation

- Integrated climate solutions across energy, food and agriculture, governance, nutrition, natural resources and water management, and public health
- Analyzing the relationship among urban services, human development, economic sustainability, and environmental resilience for resource and policy planning
- Facilitating creation of enabling environments for climate-resilient economies
- Deploying data-driven tools to optimize projects and solutions addressing the impacts of climate change on natural resources (water, energy, land) and on the local communities

### **Guatemala Low Emission Development Strategy (LEDS), U.S. Agency for International Development (USAID) (2014–2019)**

- Worked with the government of Guatemala to develop its first Low Emission Development Strategy which serves as the country's climate action plan
- Developed Guatemala's Nationally Determined Contribution (NDC) in 2015

### **Sustainable Interventions for Biodiversity, Oceans, and Landscapes (SIBOL), USAID (2020-2025)**

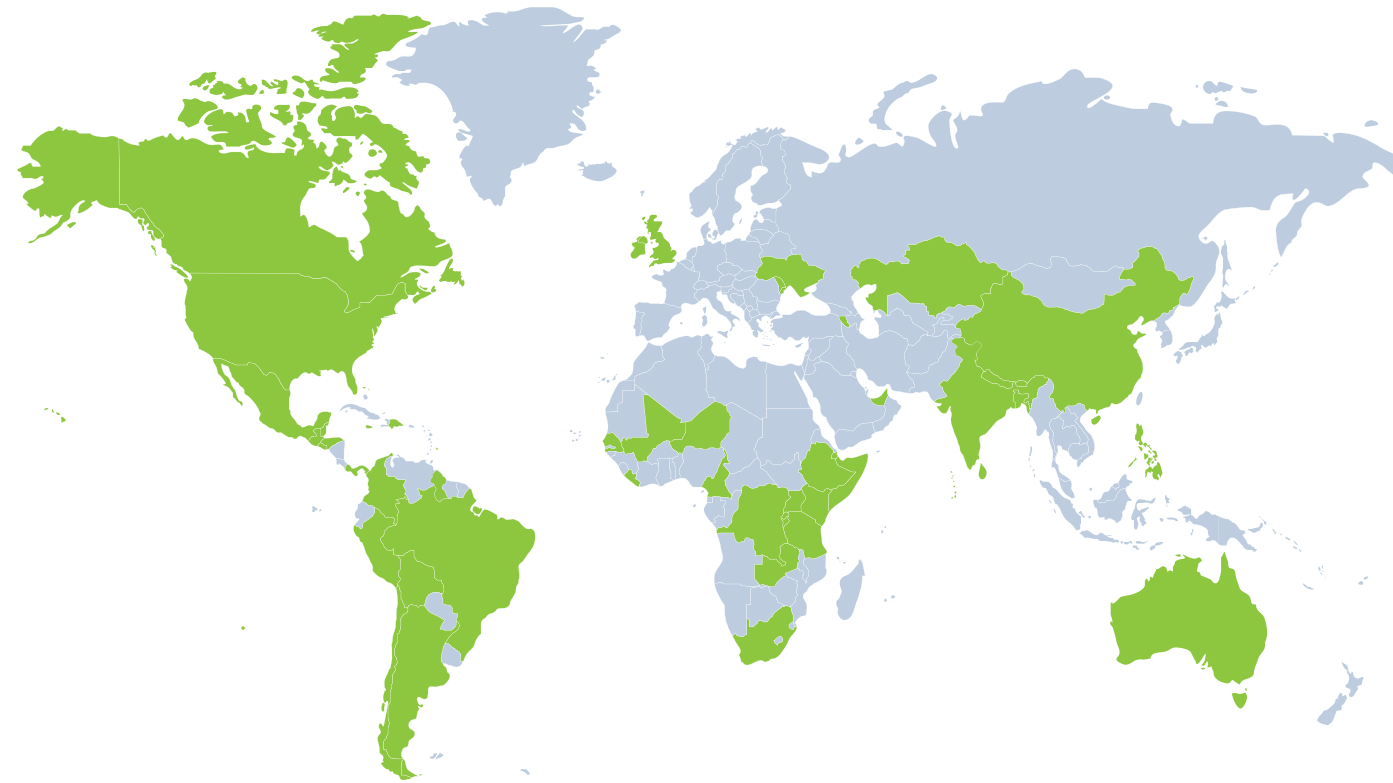
- Promotes biodiversity conservation in the Philippines by working with local partners to develop protocols to measure forest carbon and promote green supply chains to reduce carbon emissions
- Strengthens environmental law enforcement to protect against illegal wildlife trade and marine and terrestrial law violations

### **Energy Secure Philippines (ESP), USAID (2021–2026)**

- Facilitated a green energy auction that resulted in 1,866 megawatts of clean-energy investment in the Philippine economy valued at \$2 billion
- 9.94 million metric tons of carbon dioxide equivalent are projected to be reduced, sequestered, or avoided from 2021–2026

### **Development and Implementation of the Greenhouse Gas Reporting Program, U.S. Environmental Protection Agency (EPA) (2009-Ongoing)**

- Assisted the EPA with the development and implementation of the U.S. Government's Greenhouse Gas Reporting Program
- Helped the EPA collect GHG data from thousands of industrial facilities to help the U.S. policymakers use data to understand the sources of GHGs and how to reduce emissions



Through innovative, science-based solutions,  
we have successfully completed more than  
**2,500 projects** in more than **80 countries.**

### **Global Methane Initiative (GMI) and Climate and Clean Air Coalition (CCAC) International Programs Technical and Outreach Support Services, U.S. Environmental Protection Agency (EPA) (2016–2022)**

- Supports the EPA with technical, analytic, policy and outreach support services to advance and enhance its international activities under the Global Methane Initiative (GMI)

### **Integrated Water Resources Management in Latin America, Inter-American Development Bank (2011–Ongoing)**

- Developed a Hydro-BID modeling system to evaluate the impacts of climate change on water availability and water-related infrastructure
- Hydro-BID has been used in Argentina, Peru, Brazil, Ecuador, Guatemala, Colombia, Suriname, Chile, Panama, Paraguay, Honduras, El Salvador, Costa Rica, and Mexico to manage water resources

### **Renewable Energy to Fuels Through Utilization of Energy-Dense Liquids (REFUEL), U.S. Department of Energy (DOE), Advanced Research Projects Agency – Energy (ARPA-E) (2022-2025)**

- Demonstrating breakthrough technologies to produce ammonia from intermittent renewable energy to produce sustainable, zero-carbon sources for energy storage, fuels and fertilizers
- Producing a fully integrated, modular demonstration facility capable of producing 1 metric ton per day of renewable ammonia from wind and solar energy sources



# DOING OUR PART

## A commitment to reducing our carbon footprint

As an international development organization and scientific research institute of over 6,000 employees, we have been conducting research related to climate change for more than 60 years and understand that the time to act is now.



**27%**  
Reduction

in our GHG emissions  
since 2008



**55%**  
Reduction

in our energy use intensity  
from 2008 to 2019  
(energy consumption per square foot)



**400+**  
Staff

committed to climate-related  
research and projects

All new buildings are constructed and certified to



**LEED Silver or LEED Gold**  
Standards

RTI is dedicated to reducing GHG emissions. We're exploring the use of electric vehicles and solar energy on campus and finding ways to decrease the carbon footprint of our employee travel.

For more information, visit [rti.org/climate](http://rti.org/climate)



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