





# U.S. NATIONAL RENEWABLE ENERGY LABORATORY PARTNERSHIP (NREL)

Helping deliver clean, reliable, and affordable power to Colombia.

# **OVERVIEW**

The U.S. National Renewable Energy Laboratory Partnership (NREL), implemented through a partnership between USAID and the U.S. National Renewable Energy Laboratory, advances renewable energy systems in Colombia. NREL provides policy, planning, modelling, and deployment support to energy entities within the Government of Colombia (GOC) to address renewable energy challenges in the country. NREL's current support to Colombia runs from January 2018 to June 2022.

# COMPONENTS

### INTEGRATING RENEWABLE ENERGY

NREL works with the GOC to plan, operate, and integrate solar, wind, hydrogen, and geothermal power into Colombia's electricity system and market. NREL supports the GOC, utility companies and stakeholders in developing standards, programs, and best practices for non-traditional renewable energy.

### STRENGTHENING LOCAL CAPACITY

NREL improves the GOC, utility companies, and stakeholders' knowledge of renewable energy. It does this through seminars, workshops, technical events, and access to advanced renewable energy sector research. NREL also promotes gender equality and women's inclusion in the energy sector.

### SUPPORTING A CLEAN ENERGY ECONOMY

NREL supports Providencia Island in transitioning toward a clean energy economy. The activity hopes that Providencia will serve as an example for how governments can couple rapid natural disaster response with capacity building for a more sustainable, less carbon-intensive future.

## **DISTRIBUTING ENERGY RESOURCES**

NREL provides tailored technical assistance to the GOC to develop energy distribution plans. This assistance includes support in areas like electric mobility, regulatory considerations, distributed generation modeling, and residential and commercial energy applications.

# **RESULTS**

- Trained 116 stakeholders on how to make Colombia's geothermal sector more open and competitive;
- Contributed to Colombia's Hydrogen Roadmap and geothermal regulation by providing detailed feedback from subject matter experts;
- Trained over 60 early-career energy sector professionals on the construction and operation of clean energy projects, 70 percent of whom were women;
- Supported the development of Providencia's renewable energy roadmap through research, virtual workshops, and an energy resource optimization analysis; and
- Helped develop four action plans with the GOC and private sector actors to transform Colombia's energy distribution, electric mobility, and distributed energy resources growth.