



# **U.S. ENERGY ASSOCIATION** PARTNERSHIP (USEA)

Integrating renewable energy sources into the Colombian power grid.

## **OVERVIEW**

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The U.S. Energy Association Partnership (USEA) with USAID helps the Government of Colombia (GOC) and Colombian utility companies integrate renewable energy sources into the national power grid. USEA, together with organizations like the U.S. National Renewable Energy Laboratory (NREL), assists GOC entities and utility companies to improve the Colombian electricity system's reliability and facilitate system growth. USEA also strengthens energy utility executives and employees' capacities to manage power systems, develop energy resources, and design off-grid power sources. USEA's Colombian work runs from January 2018-July 2023.

#### **COMPONENTS**

#### **DESIGNING GREEN ENERGY POLICIES AND REGULATIONS**

USEA assists the Colombian Ministry of Mines and Energy (MME) to design policies and regulations for geothermal, green hydrogen, and offshore wind energy production. It does this by inviting international experts to review and comment on proposed policies and regulations, like Colombia's Geothermal Decree and its Green Hydrogen Roadmap.

#### STRENGTHENING ENERGY LEADERS' CAPACITY

USEA organizes and disseminates a capacity building course for young professionals, mainly women, in the Colombian energy sector. The purpose of this course is to educate young professionals about renewable energy so that they can better incorporate renewable energy into Colombia's electricity grid.

### **RESULTS**

- Updated Colombia's power grid connection code to better integrate solar and wind projects;
- Helped Colombia's Mining and Energy Planning Unit (UPME) publish a solicitation for large scale battery storage;
- Supported the GOC in awarding 15-year power purchase agreements to nine solar and wind projects through a renewable energy auction;
- Strengthened MME proposals for a Geothermal Decree through a public consultation process and through reviews and recommendations from international subject matter experts;
- Worked with Colombia's Energy and Gas Regulation Commission (CREG) to develop regulations for battery storage use to relieve energy grid transmission and congestion problems;
- Helped 73 Colombian participants become Institute of Electrical and Electronics Engineers (IEEE)
  certified through courses on renewable energy, battery storage, and distributed energy
  resources; and
- Supported the GOC with the first successful renewable energy auction resulting in historically low energy prices of \$28 per megawatt hour (MWh) and awarded contracts that will mobilize an estimated USD \$1.3 billion in private capital.