



DISTRITOS TÉRMICOS COLOMBIA

ENERGY DISTRICTS PROJECT COLOMBIA

Singapore, 8th – 12th May, 2023



GOBIERNO DE COLOMBIA



ORGANIZACIÓN DE LAS NACIONES UNIDAS
PARA EL DESARROLLO INDUSTRIAL

Industrielle Entwicklungs-
Cooperation Agency
Colombian Energy
Efficiency Unit
República de Colombia
Ministerio de Energía y Minas (MEM)
Secretaría de Estado para el Medio Ambiente (SEM)

COLOMBIA - LOCATION

Officially the **Republic of Colombia** is a country in South America with insular regions in the Caribbean (San Andrés and Providencia) and in the Pacific (Gorgona island and Malpelo Island).

BORDERS

The Colombian mainland is bordered by the **Caribbean Sea** to the **north**, **Venezuela** to the **east** and **northeast**, **Brazil** to the **southeast**, **Ecuador** and **Peru** to the **south** and **southwest**, the **Pacific Ocean** to the **west** and **Panama** to the **northwest**.



COLOMBIA - CLIMATE

The climate of Colombia is characterized for being tropical, presenting variations within six natural regions and depending on the altitude, temperature, humidity, winds, and rainfall.

Colombia has a diverse range of climate zones, including:

- Tropical rainforest
- Savannas
- Steppes
- Deserts
- Mountain



Savanna



Tropical Rainforest



Desert



Steppe

Project Partners



**MINISTERIO DE AMBIENTE Y
DESARROLLO SOSTENIBLE**



**MINISTERIO DE MINAS Y
ENERGÍA**



UNIDAD TÉCNICA OZONO
Colombia



Unidad de Planeación Minero Energética



ORGANIZACIÓN DE LAS NACIONES UNIDAS
PARA EL DESARROLLO INDUSTRIAL



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Embajada de Suiza en Colombia
Cooperación Económica y Desarrollo (SECO)

Objective



To promote the implementation of energy districts as an alternative of sustainable urban development, reducing climate impact and increasing energy efficiency.



ED IN COLOMBIA – PHASE 2

Institutional

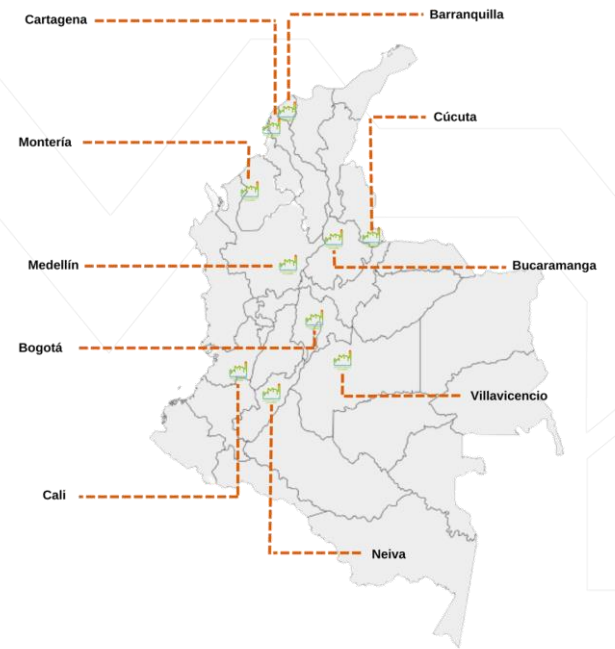
Improve and implement national and local/decentralized policy and regulatory frameworks to promote further development of energy districts.

Knowledge sustainability

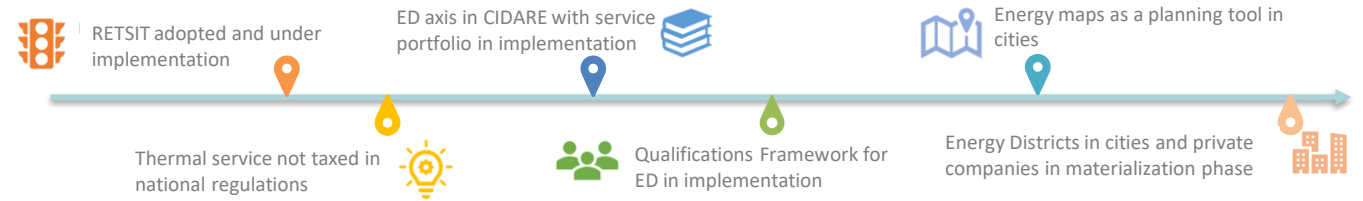
Strengthen capacities in the different market players and enable partnership between them to promote energy district projects

Market development

Provide technical assistance to cities and private companies to promote the materialization of energy district projects on different scales and market niches.



Goals



DISTRICT ENERGY DEVELOPMENT IN COLOMBIA

Six(6) energy districts in operation:



2 Urban energy
districts



3 Intramural
cooling districts



1 Industrial
energy district

La Alpujarra

Location: Medellín, Antioquia

Operator: Veolia

Developer: EPM

This Energy District, the first urban system implemented in Colombia, produces and distributes chilled water to the administrative center of La Alpujarra, mostly made up of administrative buildings.

Installed capacity: 3.600 TR- hour

Serena del Mar

Location: Cartagena, Bolívar

Developer: Celsia

This Energy District has the goal to supply chilled water to the urban development Serena del Mar. It is a mixed use development that incorporates hospital, hotels, educational, residential and commercial services.

Installed capacity: 1.700 TR- hour

Nuestro Montería

Location: Montería, Córdoba

Operator: Celsia

Developer: Celsia

This Energy District produces and transports chilled water to 156 commercial spaces located in the Mall "Nuestro Montería".

Installed capacity: 1.410 TR- hour

Air Liquide Tocancipá

Location: Tocancipá, Cundinamarca

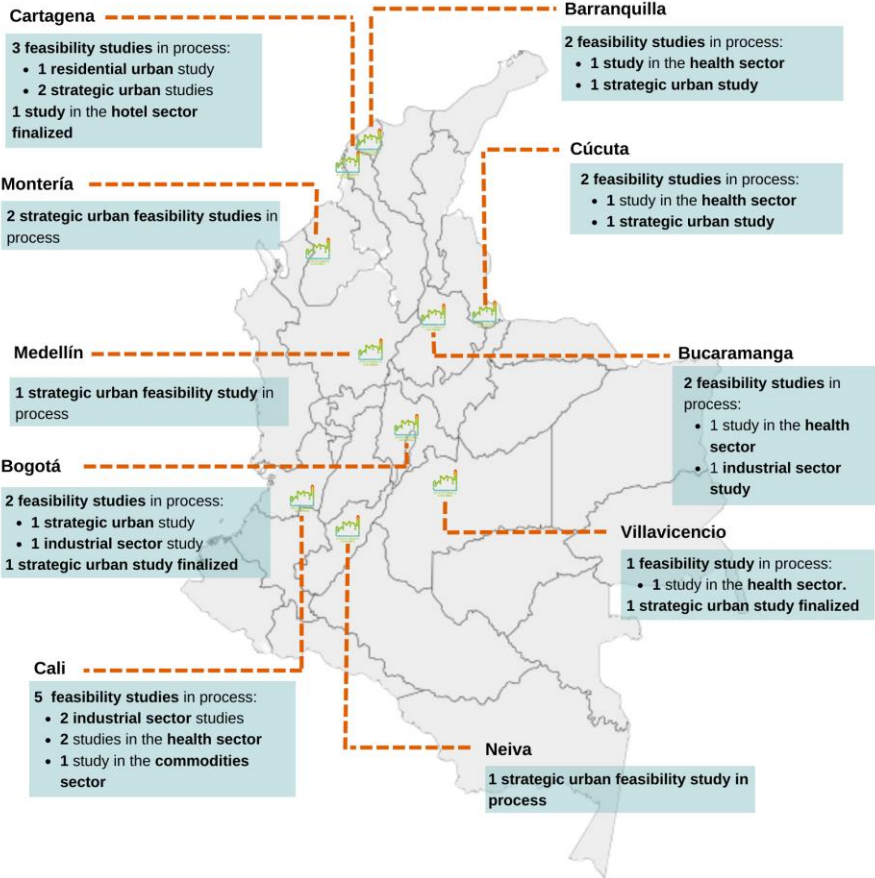
Operator: Air Liquide

Developer: Air Liquide

This Energy District, located in CocaCola- FEMSA's industrial park, generates and supplies chilled water, vapor, electric energy, compressed air, nitrogen and carbon gas. This system exemplifies the variety of energetics and supplies that an ED can deliver to final users.



DISTRICT ENERGY DEVELOPMENT IN COLOMBIA



Open calls for projects between 2020-2022



21 feasibility studies in process and 3 studies finalized



Support by 600.000 USD



13 private projects



11 strategic urban projects.



DISTRITOS TÉRMICOS
COLOMBIA

Thanks

www.distritoenergetico.com