



DISTRICT ENERGY IN COLOMBIA

PHASE II



SCAN ME

PROJECT COMPONENTS



Institutional Support

Integration of Energy Districts into national & subnational policies and regulations; promoting sustainable urban planning with city-level stakeholders



Knowledge Sustainability

Strengthen the capabilities for a sustainable growth of energy districts. This initiative engages developers, investors, engineers, academia and more, fostering collaboration among them



Market Development

Technical assistance in Colombian cities for the successful implementation of energy districts.



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)



Component 1

INSTITUTIONAL SUPPORT

Technical Regulation for Thermal Systems and Installations - RETSIT:

This technical regulation will set specific requirements for thermal installations, covering areas such as air conditioning, refrigeration, the production and distribution of cooling and heating energy. The fundamental pillars of this regulation will be safety, energy performance, and environmental protection, ensuring that the installations meet the highest standards of quality and efficiency.

Roadmap for a Just Energy Transition:

The ED2 project supported the government's development of a plan to transition from the standard fossil-fuel and hydro based energy matrix to a more diversified renewable based one.

Public Procurement:

The Project contributed in enhancing sustainable public procurement processes for air conditioning, prioritizing energy efficiency, eco-friendly refrigerants, and lifecycle analysis, in partnership with Colombia Compra Eficiente and the Ministry of Environment and Sustainable Development.

Component 1

INSTITUTIONAL SUPPORT

Promotion of District Energy at national and local levels:

Local mayoral decrees have established steering committees for Energy Districts, advocating for their promotion in national and local regulations to enhance territorial implementation.

City Support

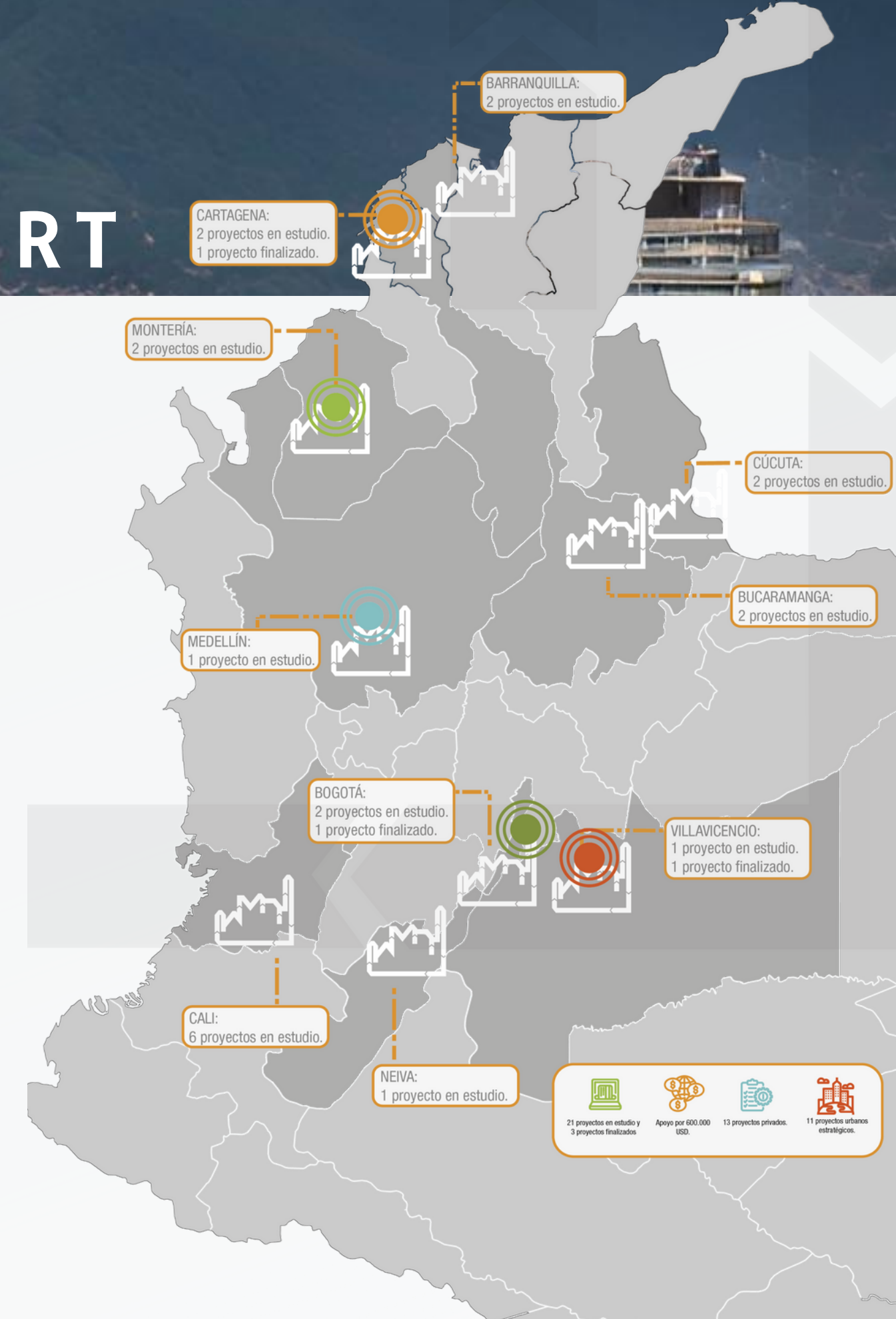
Inclusion of Energy Districts in local documents such as:

- City Planning
- Climate Change Plan
- Urban Planning Instrument (POT)
- Sustainable Construction Manual
- Energy Efficiency City Manual

Development of an Energy Planning Tool - Energy Maps

10 maps developed utilizing Georeferenced Information Systems.

The tool is being developed to aid decision-making in urban planning with a focus on mitigating climate change effects implementing district energy.





Component 2

KNOWLEDGE SUSTAINABILITY

Competence and Knowhow Center - CIDARE:

Created to lead energy districts and energy efficiency of refrigeration and air conditioning R&D and services in Colombia.



ED QUESTIONS?



SCAN ME

District Energy queries:

The growing interest in cooling Energy Districts in Colombia have led to technical, financial, R&D, among other questions within the general public. CIDARE currently leads efforts in responding these to different publics.

Strong ties with Academia:

Identifying and addressing R&D needs and capacities related to energy districts in collaboration with universities.

Promoting knowledge on district energy, centralized cooling systems, and Energy Districts through diplomas, conferences, trainings, etc.

Through 2020-2023, four University Contests have been held, closing the gap between academic research and real-world applications.



KNOWLEDGE SUSTAINABILITY

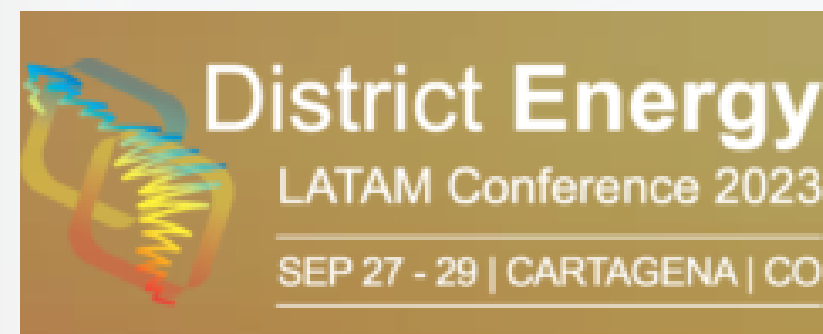
Development and delivery of portfolio of training and education events for internal and external capacity building

CIDARE hosts a diverse array of sessions, ranging from Webinars to Diplomas and trainings.



ED Promotional Events

With the support of the ED2 project and the International District Energy Association (IDEA), CIDARE organized the first 'Latin American District Energy Congress 2023', aiming to champion energy districts as a sustainable and profitable cooling alternative.





Component 3

MARKET DEVELOPMENT

Support of high-potential Energy District projects in Colombia

City Support

12 Energy District projects technically supported at different levels, selected by the City Steering Committees

Call for Project Proposals

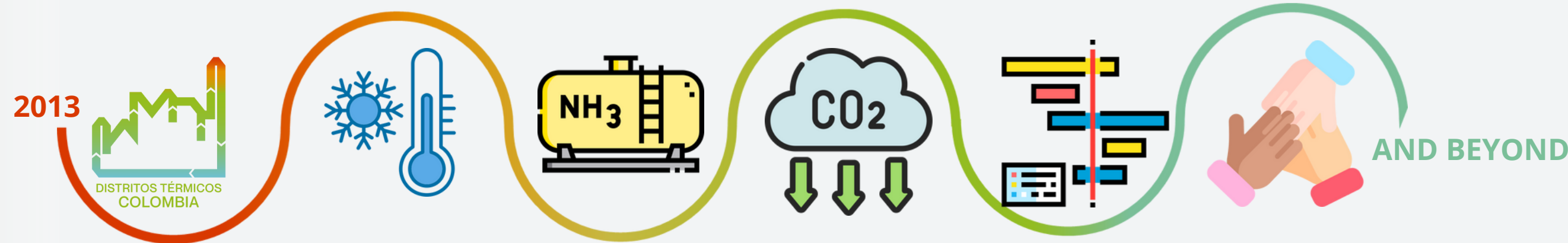
13 Energy District project technically supported at different levels as a result of the project selection from the yearly call for projects from 2021-2023.

25 ED PROJECTS SUPPORTED THROUGHOUT THE PROJECTS LIFETIME



MARKET DEVELOPMENT

La Alpujarra - Medellín, Colombia



2013

DISTRITOS TÉRMICOS COLOMBIA

MILESTONE 2016

1st ED in LAC serving public buildings

MILESTONE

Providing cooling services for 15,000 people

MILESTONE

Ammonia, with 0 GWP, replaces the use of ODS by 100%

MILESTONE

1200 tCO2eq/year saved

MILESTONE 2020

ED2 begins

MILESTONE 2020-2024

Supporting 25 ED projects in 10 cities

AND BEYOND



Component 3

MARKET DEVELOPMENT

Exemplary Project: Energy District Gran Manzana - Alameda del Jardin Cartagena, Colombia

Fourth Call for Project Proposals Winner

Energy District to be set up in Gran Manzana shopping mall, to provide cooling services for commercial and common spaces of the building.



Due to its proximity to a Social Housing complex, the winning company will perform a business model and engineering pilot to define the connection and consequent supply of cooling services.

UNIDO's Support



THANK YOU!

QUESTIONS?

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Gobierno de
Colombia



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