DISTRICT ENERGY IN
COLOMBIA
PHASE II
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.
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.
**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 Georreferenced 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.
Competence and Knowhow Center - CIDARE:
Created to lead energy districts and energy efficiency of refrigeration and air conditioning R&D and services in Colombia.

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.

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.
Component 2

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
Component 3

MARKET DEVELOPMENT

La Alpujarra - Medellín, 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 2020
1200 tCO2eq/year saved

MILESTONE 2020-2024
Supporting 25 ED projects in 10 cities

AND BEYOND

2013
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

- Thermal Energy Consumption Analysys
- Basic Engineering Development
- Promotion & Contracting
- Al-Driven Feasibility Analysis Platform
- Impact & Savings Assessment
QUESTIONS?
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THANK YOU!

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