



PROJECT AT-A-GLANCE

The District Energy in Cities Initiative is a multi-stakeholder partnership coordinated by the United Nations Environment Programme (UNEP), and is one of six accelerators of the Sustainable Energy of All (SEforAll) Energy Efficiency Accelerator Platform. The Initiative is supporting market transformation efforts to shift the heating and cooling sector to energy efficient and renewable energy solutions.

GEOGRAPHICAL SCOPE

GLOBAL

Argentina, Bosnia and Herzegovina, Chile, China, Colombia, Egypt, India, Malaysia, Mongolia, Morocco, Russia, Serbia, the Seychelles and Tunisia



STATUS **ACTIVE**

STARTING DATE **2014**
CLOSING DATE **2021**
(CURRENT FUNDING)

IMPLEMENTING PARTNERS

**Energy & Climate Branch,
Economy Division, UNEP**

TEAM LEADER

Lily Riahi

TOTAL PROJECT COST



\$ 3.9 million
(current funding)

DONORS

Danish International Development Agency (DANIDA), Global Environment Facility (GEF), Italian Ministry of the Environment and Protection of Land and Sea, Kigali Cooling Efficiency Program

PARTNERS **45 Partners in total:**

19 private sector companies: Broad Energy, Carbon Trust, China Energy Conservation and Environmental Protection (CECEP) Group, Dalkia, Danfoss, Efficacity, Empower, Energy Efficiency Services Limited, ENGIE, GGLO, Johnson Controls, King & Spalding, Pöyry, PWC, Solar Turbines, Sustainability Solutions Group (SSG), Thermaflex, Thermax, Veolia.

5 Industry Associations: International District Energy Association (IDEA), Euroheat and Power (EHP), Danish Board of District Heating (DBDH), Chinese District Energy Association, International Copper Association (ICA).

15 National and International organisations: **UNEP**, UN-Habitat, International Energy Agency (IEA), Copenhagen Centre on Energy Efficiency (C2E2), International Finance Corporation (IFC), Climate Technology Centre and Network (CTCN), Global Environment Facility (GEF), Sustainable Energy for All (SEforALL), European Bank for Reconstruction and Development (EBRD), International Partnership for Energy Efficiency Cooperation (IPEEC), Union for the Mediterranean (UfM), World Resources Institute (WRI), Danish Energy Agency, the Energy Resources Institute (TERI), Building Performance Institute Europe (BPIE).

3 city networks: ICLEI - Local Governments for Sustainability, C40 Cities Climate Leadership Group, CELSIUS cities.

3 Academic Institutions: Danish Technical University, Aalborg University, Politecnico di Milano.

KEY ACHIEVEMENTS TO DATE



36

cities across 14 countries



45

partners



\$ 215 million

investment committed



\$ 22 million

investment achieved



290 000 tCO₂/yr

CO₂ projected reductions



THE CHALLENGE

Space heating, cooling and hot water account for half of global energy consumption in buildings and this demand and its impacts is concentrated in cities. District energy systems, including district heating, district cooling and cogeneration have been recognized internationally as the most sustainable and cost-effective means of supplying this energy in dense areas and yet their full potential remains largely untapped. Diverse barriers at the local, regional and national levels are impeding the scale-up of district energy particularly a lack of supportive local and national policy frameworks, awareness, and a lack of early-stage financial support to bring well-planned projects to market.

WHAT WE DO

The Initiative supports local and national governments build local know-how and implement enabling policies that will accelerate investment in modern – low-carbon and climate resilient – district energy systems. In parallel, the Initiative is working with cities and industry to identify, assess and tender bankable district energy projects based on international best practice accumulated from 45 champion cities for district energy and 45 partners with decades of expertise in the sector.

The Initiative will continue to scale-up its model in the countries it is working and replicate this to new interested countries. The Initiative aims to strengthen strategic partnerships and financing mechanisms with regional and global development banks to accelerate this growth by ensuring that projects and policies are developed hand-in-hand with dedicated grants and neutral technical assistance. Such partnerships would deliver the much-needed market transformation to shift district energy away from the demonstration phase to replication and mass scale-up and could be linked to investment targets such delivering district energy in over 500 cities.



UNEP'S ROLE



In 2013, UNEP initiated research on and surveyed low-carbon cities worldwide to identify the key factors underlying their success in scaling up energy efficiency and renewable energy. This led to the publication of the 'District Energy in Cities: Unlocking the Potential of Energy Efficiency and Renewable Energy' for which was defining for the first time a model and methodology for cities and countries to scale-up district energy. Based on this model, UNEP launched the District Energy in Cities Initiative a multi-stakeholder partnership at the SG Climate Change Summit in 2014.

Central to UNEP's approach is to partner with development banks, engaging the banks from concept to tender to ensure projects are bankable with attached investor interest and integrated within local governments' strategies and plans and promoted through new policies. In Banja Luka, Bosnia & Herzegovina, UNEP's partnership with EBRD and the municipality helped break a decade-long impasse over the district heating system's future. This partnership has unlocked \$22 million of investment in district heating through a combination of private sector funding and an EBRD loan with attached technical assistance.

