

New generation of Intelligent Efficient District Cooling Systems

What is it?

INDIGO is a Horizon 2020 project aimed at developing a more efficient, intelligent, and cheaper generation of District Cooling (DC) systems by improving the existing system planning, control and management tools, taking into account all components and levels of a DC system.

Why INDIGO?

How does it work?



In Europe, different prognosis show an increase in cooling demand of almost 60% in 2030 with respect to nowadays. DC can play a part in satisfying this demand in a sustainable way (since it can offer 5 to 10 times higher efficiency solutions than on-site stand-alone distributed systems). Even if DC captures only minor portion of the prospective market, this will translate into a dramatic increase in the size of the global DC sector. IN-DIGO's objective is to position itself as a spearhead project in innovative DC systems.

Towards more efficient, intelligent and cheaper DC systems

Project Facts

Project Type: Research and Innovation Action Call: H2020-EE-2015-2-RIA Budget: €2.237.500 Start Date: March 2016 Duration: 42 months

Pilot 1: Basurto Hospital (Bilbao, Spain)

Basurto was erected in the first decade of the 20th century and currently comprises more than 15 buildings, most of them maintaining their original architectural special features. Heating and cooling demands are satisfied thanks to a DHC installation connected to a trigeneration plant (electricity, heat and cold). The DHC system was erected inside the hospital area in 2003 by GIROA, and extended in 2011. This company currently operates the system and also the HVAC in the buildings.





Pilot 2: Zona Franca-La Marina-L'Hospitalet area (Barcelona, Spain)

The District Heating and Cooling (DHC) installation is a big city project, with the aim of supplying heat and cold to a 15.000.000 m² area in the Barcelona Harbour surroundings. The construction and exploitation of the district belongs to Ecoenergies Barcelona. Currently two generation plants (heat and cold) are constructed and first consumers are connected to a grid of 5 km total length.





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