



WEDISTRICT - Smart and local reneWable
Energy DISTRICT heating and cooling solutions
for sustainable living



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N°857801

WEDISTRICT

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Project:
H2020-SC3-2019-03-857801
Project Start/End date:

Oct 2019/Sept 2024
<https://www.linkedin.com/company/wedistrict/>
<https://cordis.europa.eu/project/rcn/224589/factsheet/de>



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Summary

The overall objective of WEDISTRICT is to demonstrate DHC (District Heating and Cooling) as an integrated solution that exploits the combination of renewable energy sources, RES, thermal storage and waste heat recycling technologies to satisfy 100% of the heating and cooling energy demand in new DHC.

The University of Córdoba will be responsible for designing, manufacturing and testing an innovative renewable air cooling unit, RACU, suitable for installation in a DHC. The idea is to take advantage of the thermal energy generated in a district heating to power an air cooling system, which has proved to work with low temperature coming from renewable energy sources.

RACU is a Desiccant Indirect Evaporative Renewable Cooling Unit, composed of an indirect evaporative cooler and a desiccant wheel that can independently control the air temperature and humidity in buildings, thereby optimizing indoor air conditions providing 100% outdoor air.

Finally, a new pilot demo installation of 100% renewable DHC will be constructed and operated in the Campus of Rabanales at the University of Cordoba.

Researchgroup TEP974