



District Cooling Network: a sustainable cooling solution



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TEAMING UP FOR
RENEWABLE
HEATING
AND COOLING
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- **50% of the population is living in cities**
 - Growing demand for cooling
 - Electricity Peak demand in summer
- **Obligation to achieve the EU 2020 and 2050 energy goals**

➔ **The response is District Cooling**



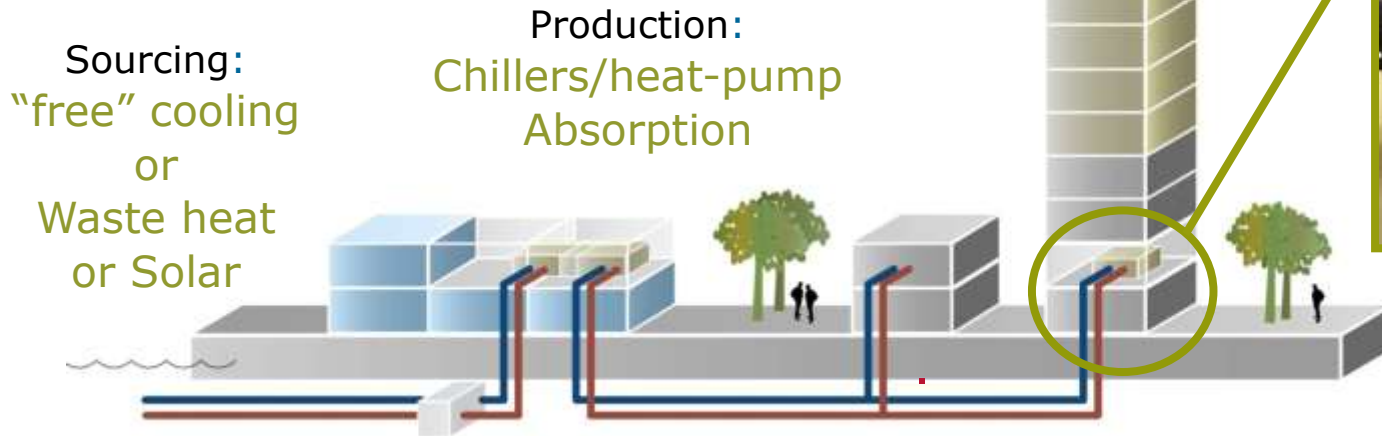
What is a DC Network?

The main idea of district Cooling is to use local sources for energy that would otherwise be wasted or not used, in order to offer the local market a competitive and high-efficient alternative to the traditional cooling solutions



What is a DC Network?

The centrally produced district cooling can reach **5-10 times higher** efficiency than local electricity-driven equipments



Sustainable Cooling

Exploitation of local renewable or free energies.

... from municipal urban solid waste incinerators, free cooling coming from sea or river, solar cooling, CHP Plant, it is often the ONLY solution to it.



Possibility to store the electricity as cooling energy

...it is a huge advantage with more and more renewable national electrical productions.



Global monitoring of the production plant

..... with the best energy available at each time.

Less dependence on foreign energy

... energy efficiency linked to local energy consumption is the smartest way, unavoidable for countries that are dependent on energy sources...

Reduction of CO₂ emissions



...as a consequence of the lower consumption of fossil primary energies and in order to avoid the loss of refrigerant gases from the conventional solutions that this method replaces.

Decrease of the overall electricity consumption and the Peak Demand

... centralized energy production allows, in economies of scale and due to its greater efficiency, a production capacity lower than the whole of the avoided, taking advantage at the same time of the non-simultaneity of all the demand...

