



City examples on policies for smart and sustainable cities


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**City of
Gothenburg**



Facts about Gothenburg
Smart district heating system
Why district heating and cooling
Celsius project
Challenges

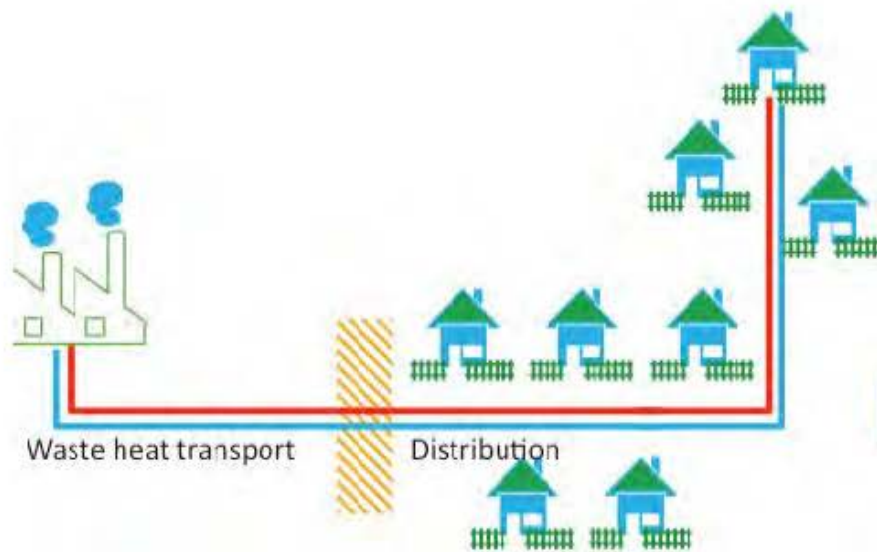
About Gothenburg:

- Gothenburg was founded in 1621
- 500 000 inhabitants
- 65 000 students
- 1000 km long district heating network
- It provides heat to more than 90 % of all buildings
- 85 % of the heat is reused heat
- By 2050 the city will have a sustainable and fair level of carbon dioxide emissions
- Our policy is a holistic view and to make the best of resources already available



Current system

*one or few big suppliers, one direction,
high temperature*

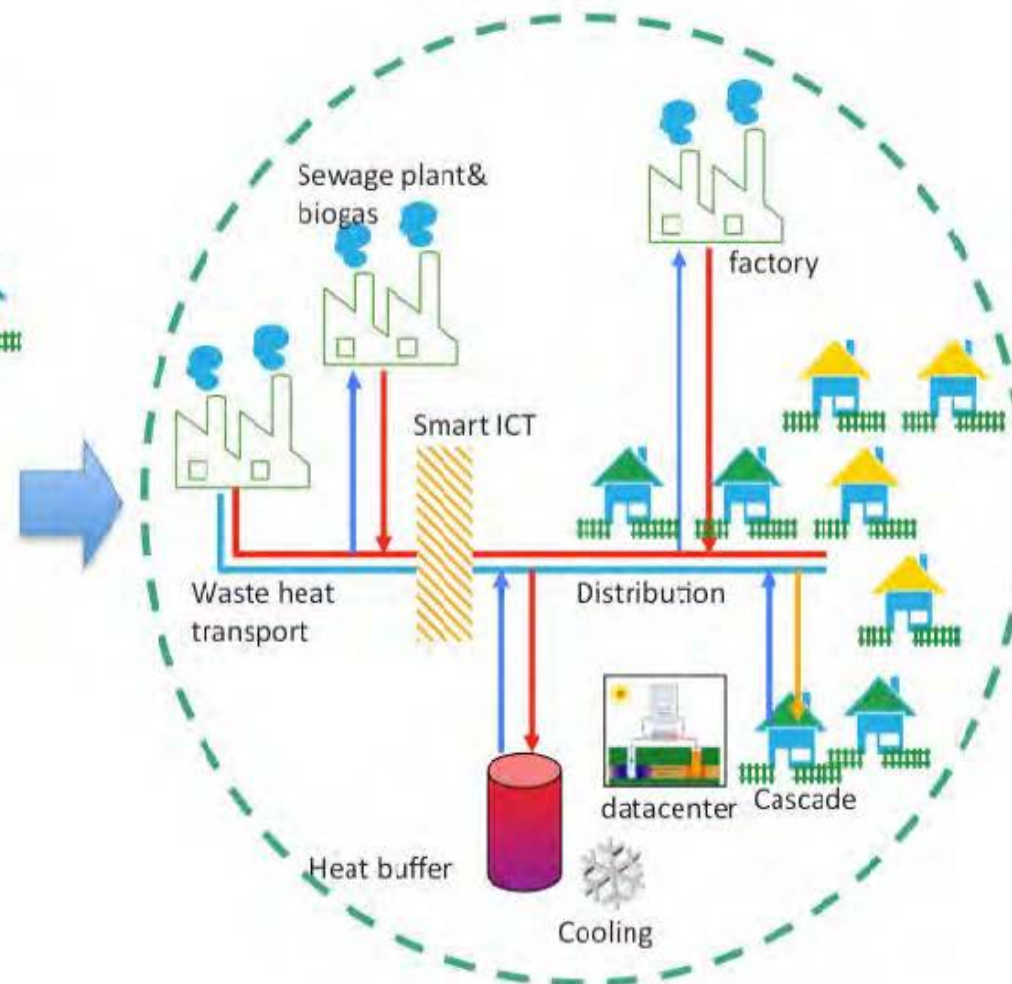


Existing buildings, end users

New building, end users

Goal

*Multiple suppliers, smart grid high,
medium and low temperature*



Advantages



Ecological:
Decreased CO₂-emissions by reduction of energy use



Social:
Improved air-quality
Comfortable source of heat



Economic:
Green business opportunities
Secure energy supply



Smart Cities Celsius project about district heating and cooling

Main Objective:

to use more of the wasted heat in Europe

How:

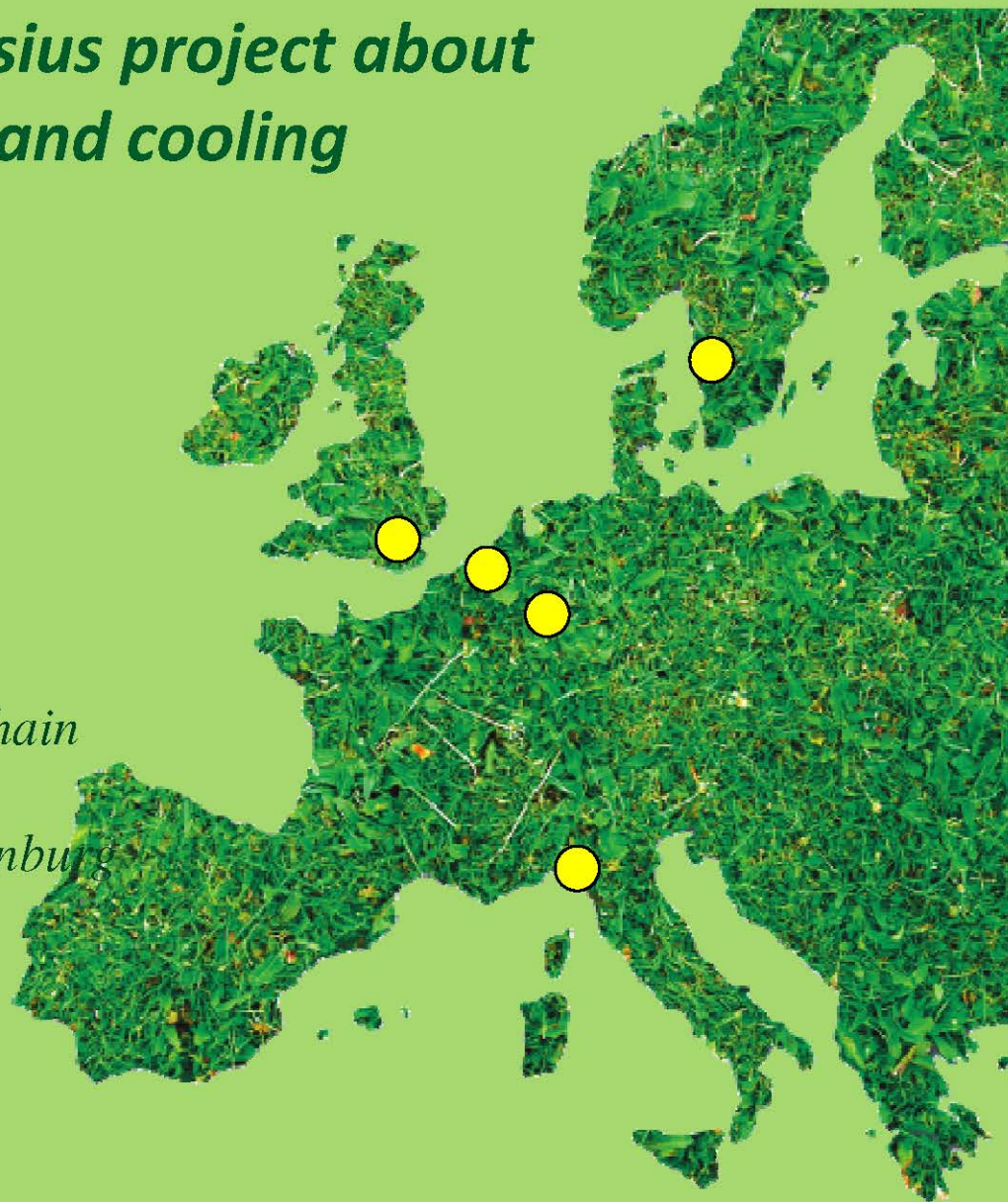
demonstration of Celsius City elements

Through:

collaboration with key actors across the value chain

Partner cities:

London, Rotterdam, Genoa, Cologne and Gothenburg



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Rya CHP Gothenburg

Challenges:

Investments for thermal grids

Capturing of waste heat

Political readiness for holistic planning and system integration