

# Innovative public procurement for circular economy

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# Audit approach to cleantech procurement

- One of the objectives of the Finnish government is to make Finland a pioneer in the bioeconomy, a circular economy and cleantech by creating markets for sustainable cleantech solutions through public procurements.
- Our audit approach in our cleantech procurement project was development oriented and forward-looking.
- How things could be done more successfully in the future?  
How to improve the effectiveness of public procurement?

# Audit approach to cleantech procurement

- We also looked at topic from a broader perspective...

## Report Implementation of cleantech procurements in public administration

- The strategies of cleantech procurement
- The level of administrative structures



## Report Implementation of cleantech procurements

- Procurement practices and risk management
- The level of procurement organisations and single procurement cases

# Public procurement as part of the circular economy

## industrial symbiosis

- Using old roof bitumen as recycled raw material for new asphalt.
- Parties of industrial symbiosis: bitumen collectors, transferring companies, bitumen granulate manufacturer, asphalt plants, research and development partners and public buyers.
- A good example of how regulatory reform can open up opportunities for innovative procurement: in 2016 Finland banned the supply of organic and combustible waste to landfills.

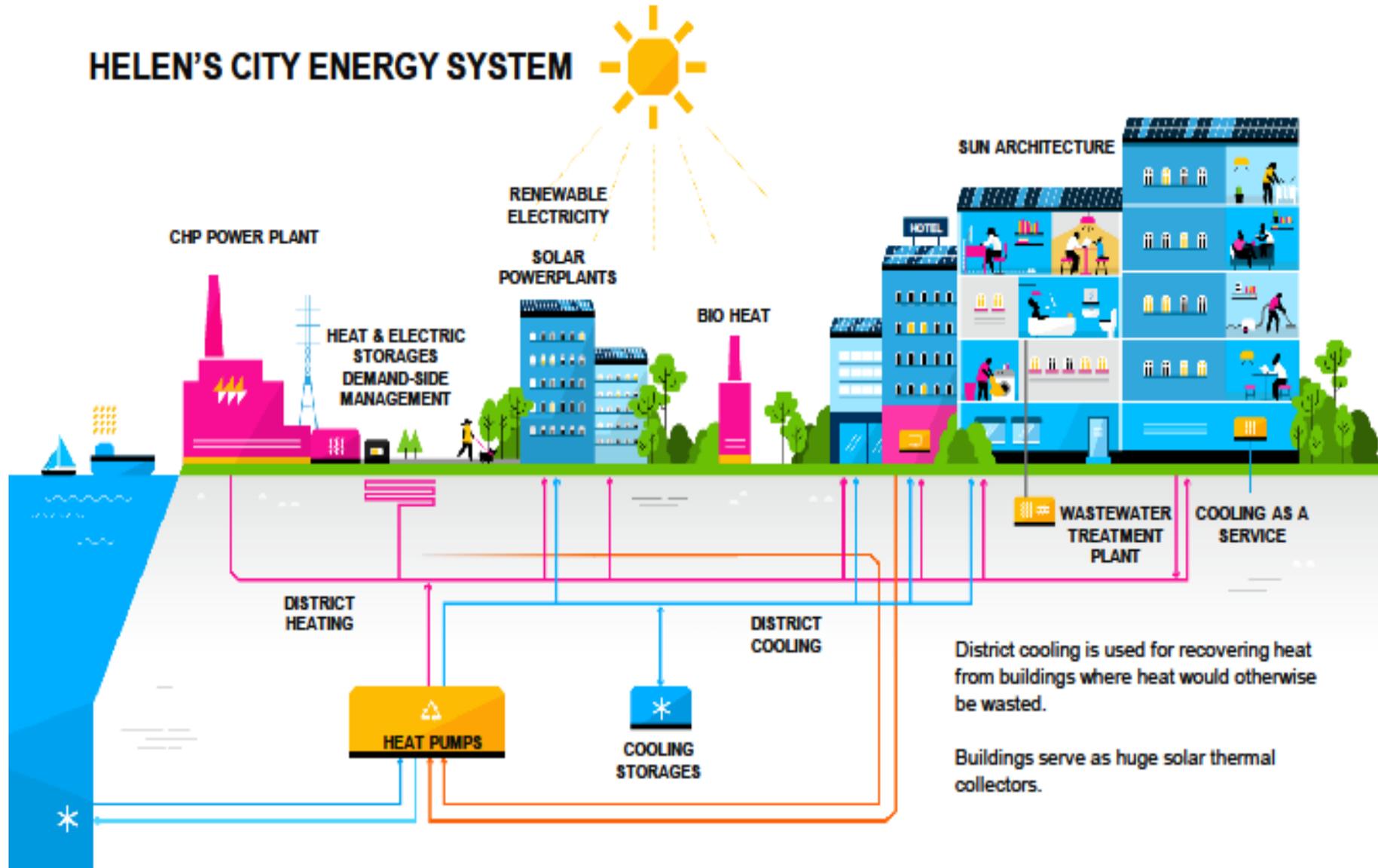
# Public procurement as part of the circular economy industrial symbiosis

- ...But the market is still growing quite slowly.
- Public buyers are conservative and cautious.
- To accelerate market access bitumen granulate manufacturer went through the end of waste (EOW) procedure.
- After EOW procedure the bitumen ceased to be waste and obtained a status of a chemical product.

# Public procurement and energy recycling

- The district heating network can also enable energy recycling: Helsinki Energy's (Helen) Esplanade cooling center
  - In this system cold water is used to cool customers' properties.
  - And then the system collects waste heat generated by the sun, machinery and equipment and people.
  - And this waste heat, in turn, is routed back into the heat pump plant, where it acts as a "fuel" for the heat pumps, producing heating and cooling in the same process.

# Public procurement and energy recycling



# Public procurement and sharing economy

- More efficient use of facilities by sharing resources: School as a Service (SaaS)
- The acquisition of school premises has traditionally been a construction work (product model). Such acquisition involves planning risk and investment risk.
- Instead of building new facilities the city of Espoo decided to co-operate with the Aalto University and share facility resources with university. In this kind of service model facilities are more like a tool.

# Public procurement and sharing economy

- In SaaS school activities can be flexibly changed to meet different needs. The school can also be placed in a more central location.
- Flexible and cost-effective operating models that can later be extended and scaled to other educational institutions.
- In the SaaS model, the cost per a student have been reduced by about a third compared to traditional school operating model.
- Challenge: Develop an appropriate cost accounting for SaaS model.

Thank



you!