

# SMART KALASATAMA

# CO-CREATING A SMARTER CITY

Picture: Riku Pihlanto

Kerkko Vanhanen, Programme Director  
1 June 2021 – Local Energy Transition Conference



FORUM  
VIRIUM  
HELSINKI

# Forum Virium Helsinki

an Innovation Company

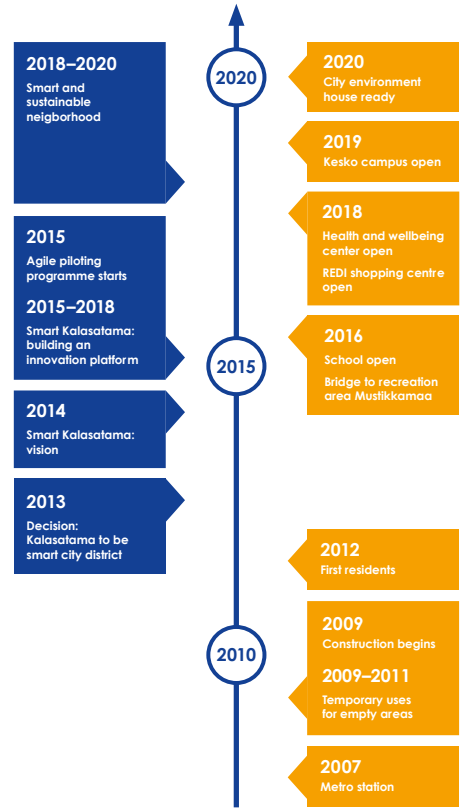
owned by the City of Helsinki

- Co-creating,
  - Piloting and
  - Experimenting
- urban futures with companies, the scientific community and the residents.

FORUM  
VIRIUM  
HELSINKI

Helsinki





# Helsinki's smart city innovation district



Smart energy

Smart mobility

Smart everyday services

Robotics

Digital twin

SMART  
KALASATAMA

**Vision:**

**One more hour a day**



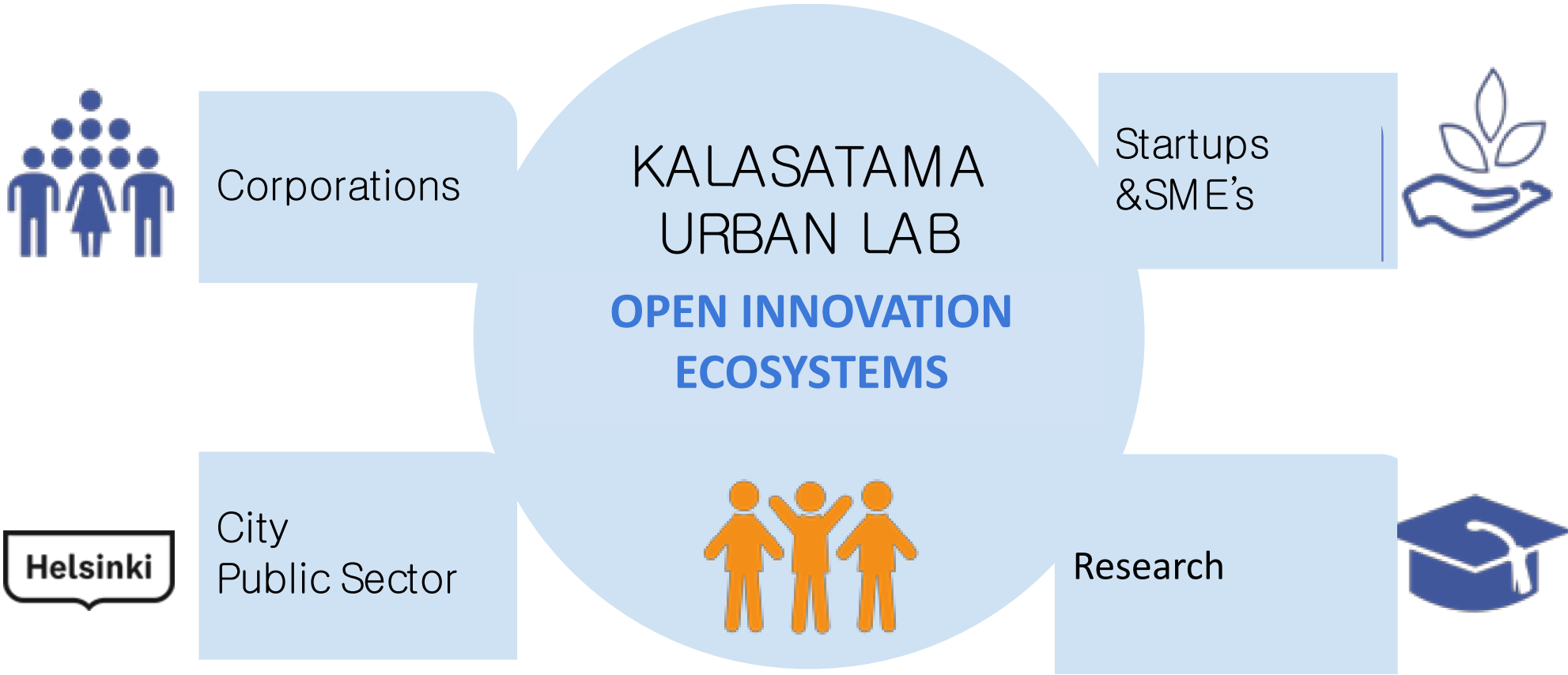
**GOAL:**

**CARBON  
NEUTRAL**

**HELSINKI 2035**



# INNOVATION ECOSYSTEMS **CO-CREATING VALUE**



Deep dive to evaluate or gather baseline information

Thematic co-creation workshops to develop solutions

Innovator's Club to network and share

**Co-creation with the residents**

Piloting to get involved

Soft GIS and 3D to create place-based understanding





# Agile piloting programme

Co-creation and experimentation of early prototypes in real-life environment

Procuring 3-5 thematic pilots from startups & SME's max. 6 months (5-10k EUR)

Co-creating Value For All Stakeholders

Market References

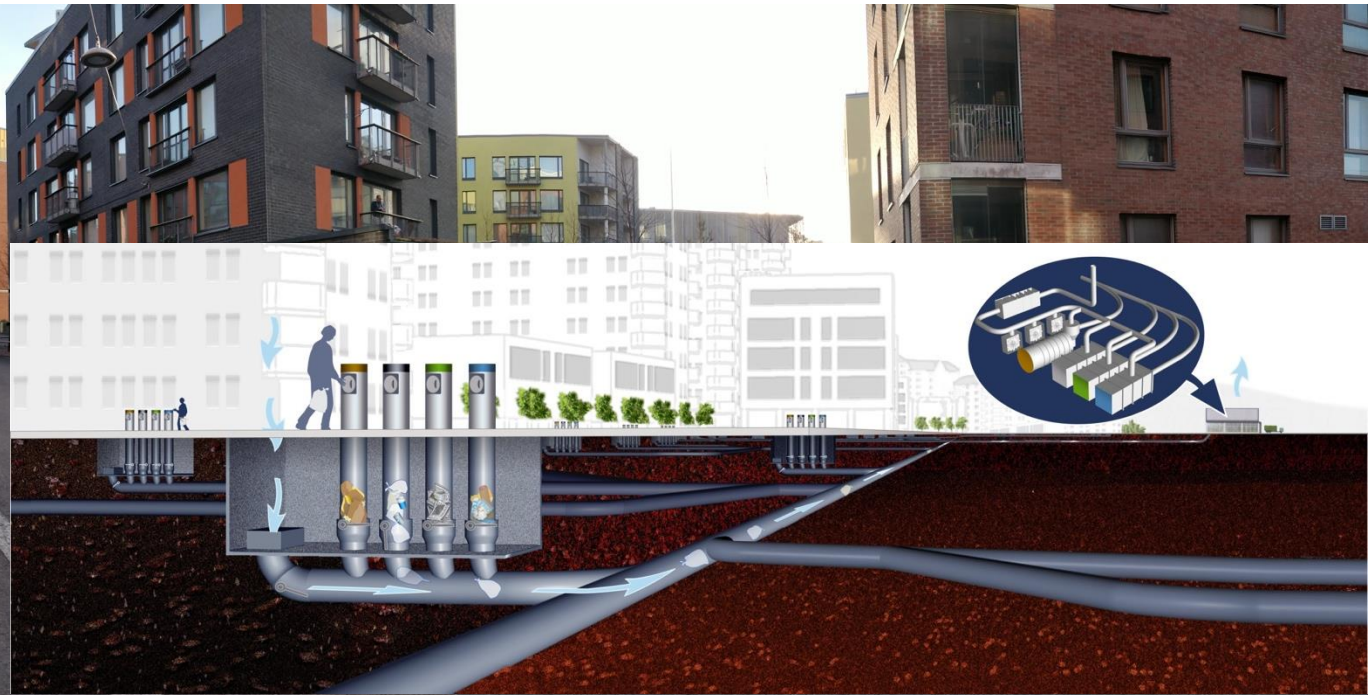
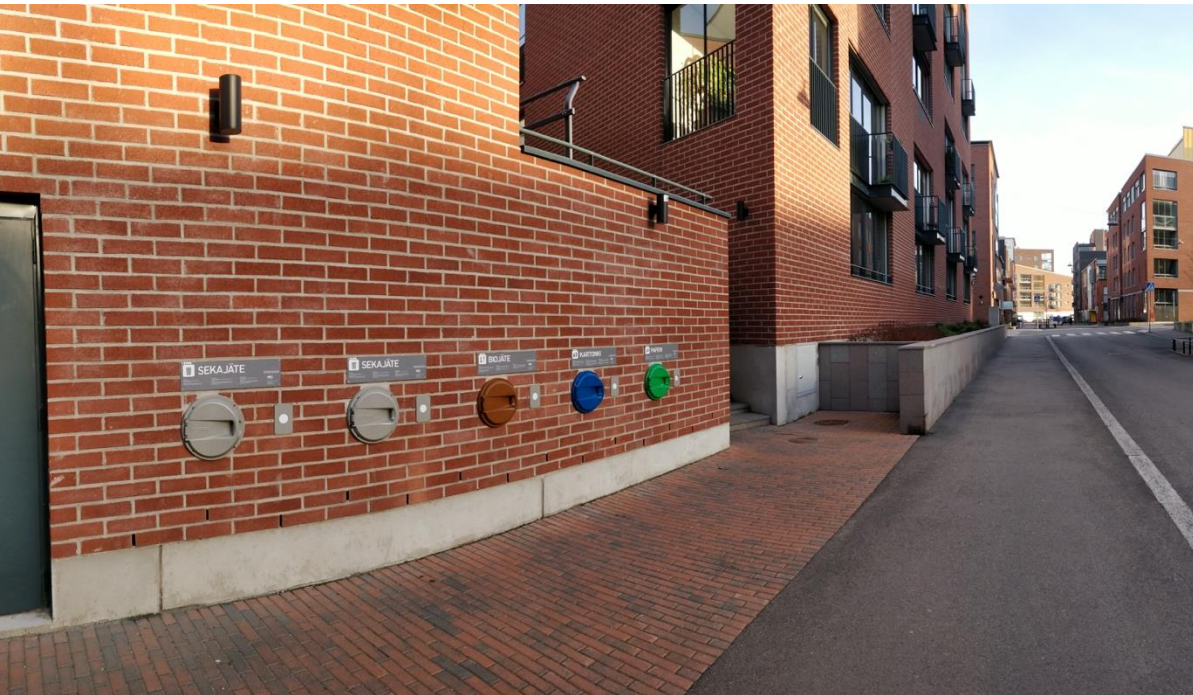
Engaging Citizens

Future Use Cases

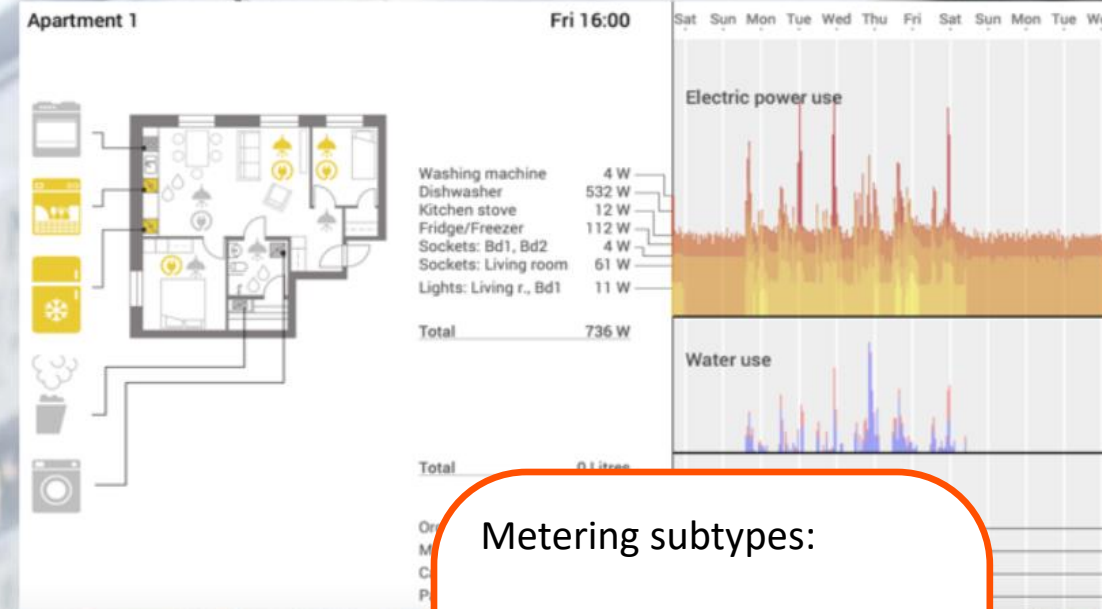


Top Down **Bottom Up!**

# AUTOMATED WASTE COLLECTION SYSTEM IN KALASATAMA



# SMART ENERGY IN KALASATAMA

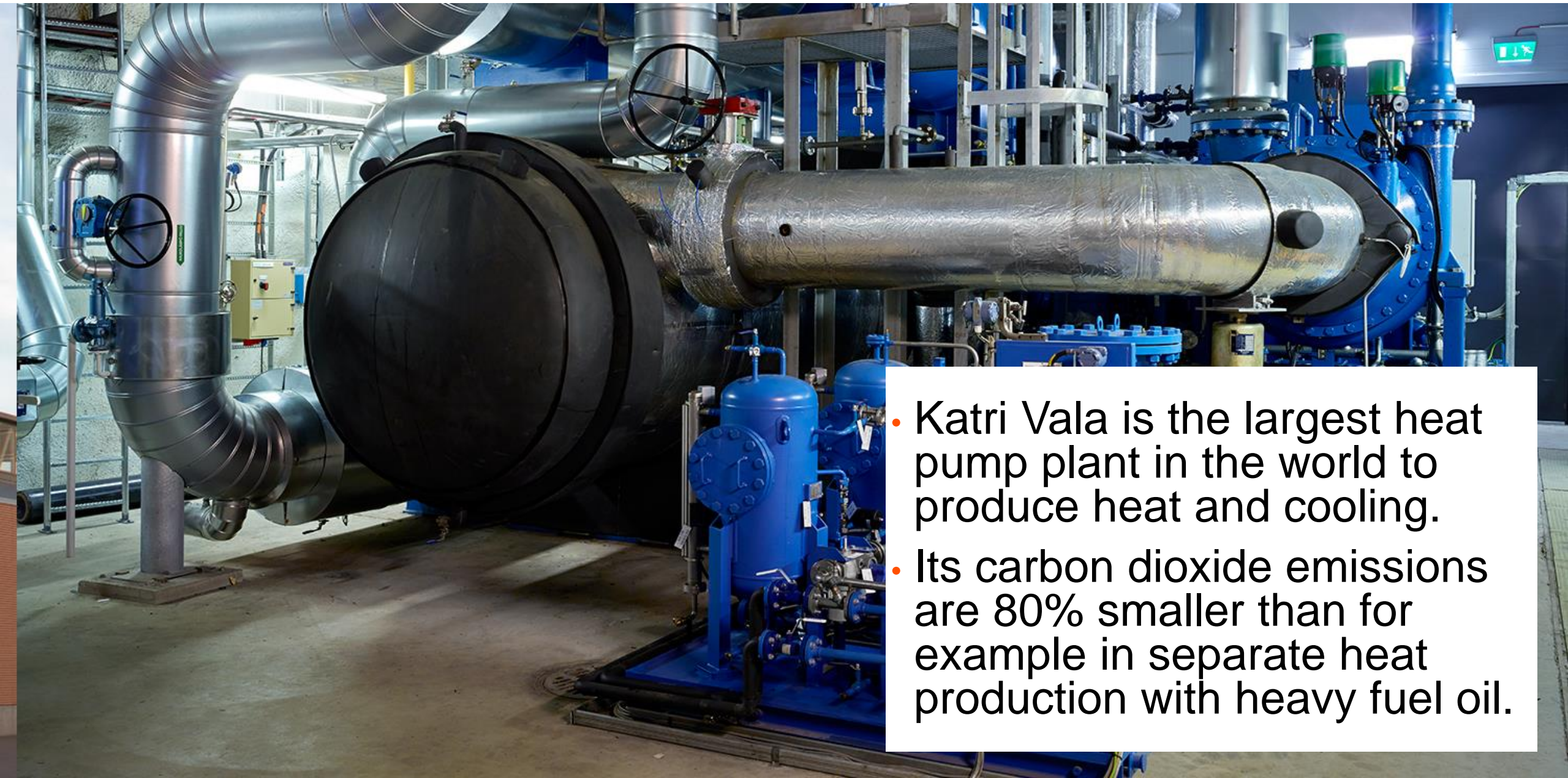


## Metering subtypes:

- 1) Lighting
- 2) Wall and floor outlets
- 3) Kitchen countertop
- 4) Washer/dryer
- 5) Refrigeration
- 6) Sauna heater
- 7) Direct heating devices
- 8) Storage heating
- 9) Boilers
- 10) Air ventilation
- 11) Cooling devices
- 12) Vehicle chargers

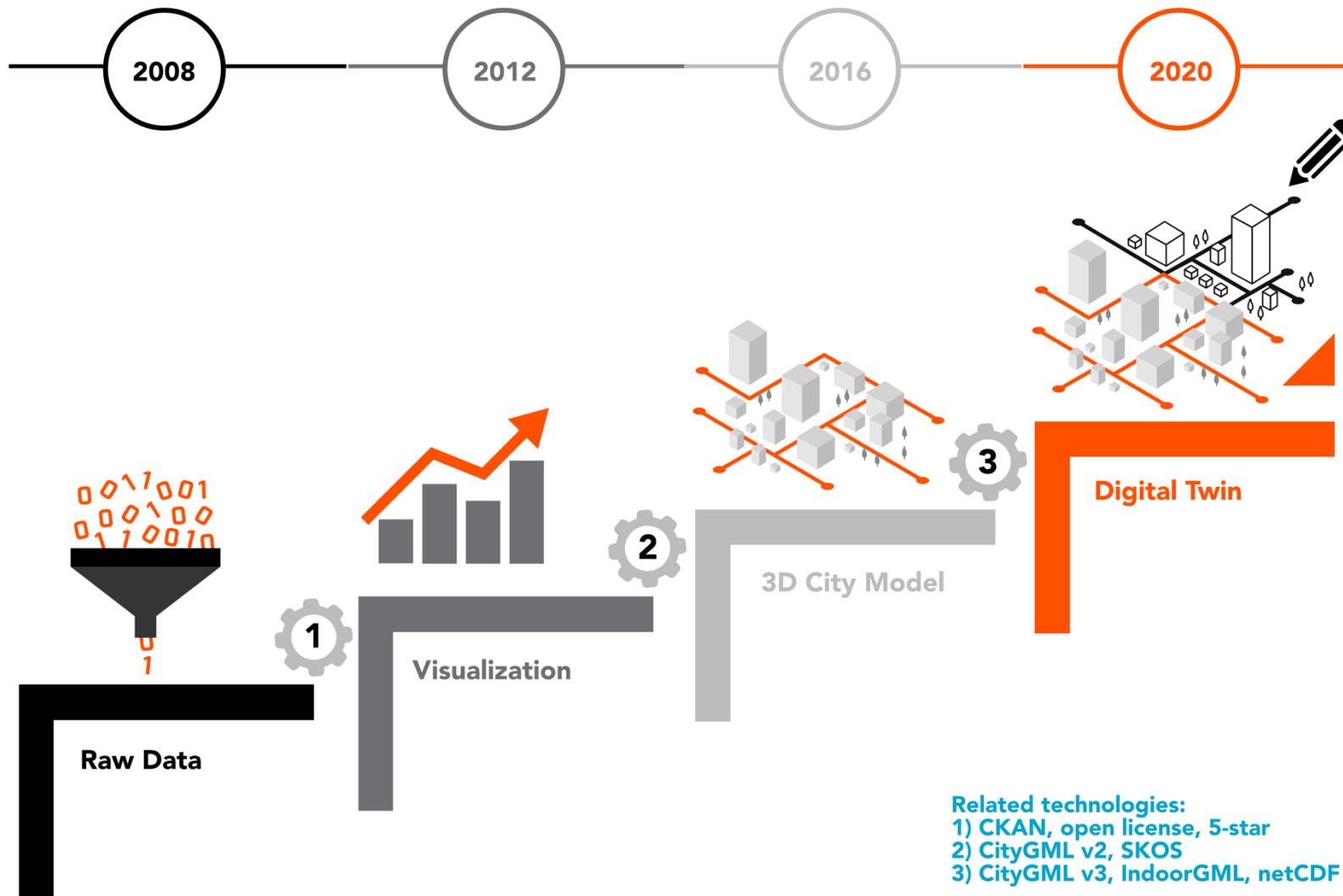


# KATRI VALA HEATING AND COOLING PLANT

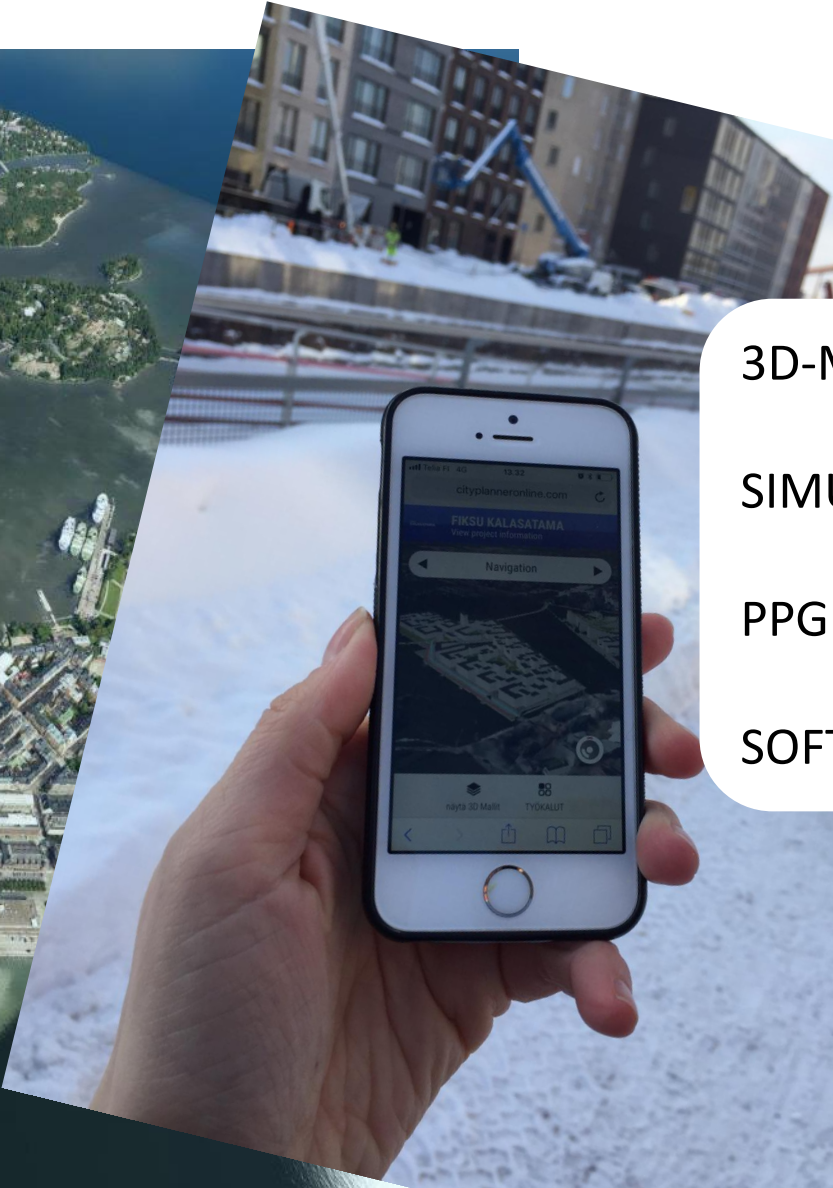


- Katri Vala is the largest heat pump plant in the world to produce heat and cooling.
- Its carbon dioxide emissions are 80% smaller than for example in separate heat production with heavy fuel oil.

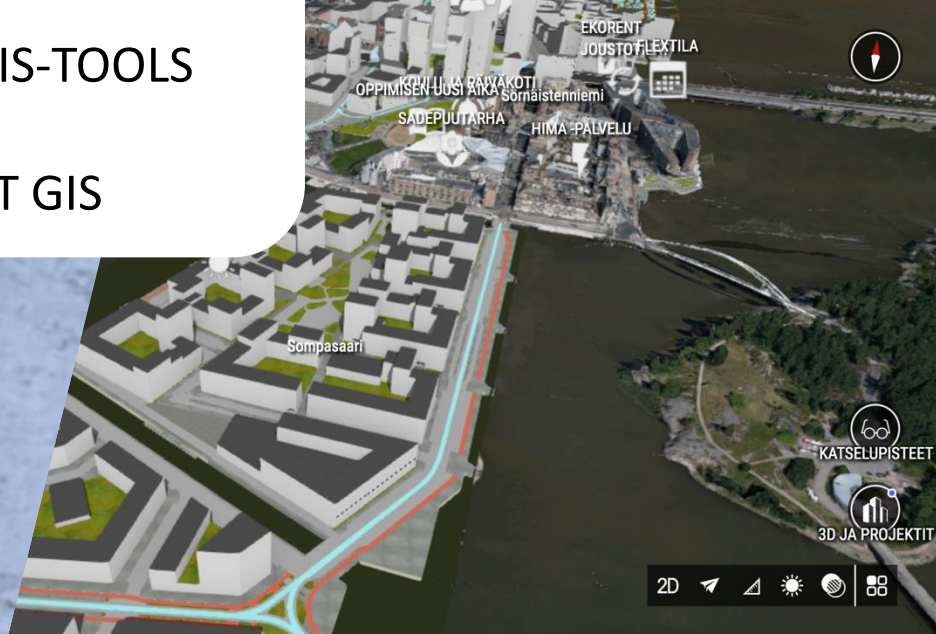
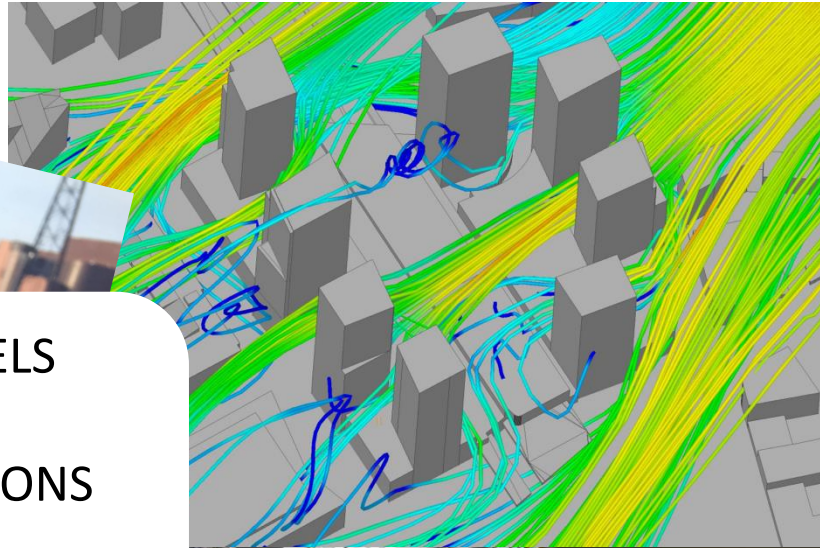
# OPEN DATA SERVICES



# SMART KALASATAMA **DIGITAL TWIN**



3D-MODELS  
SIMULATIONS  
PPGIS-TOOLS  
SOFT GIS



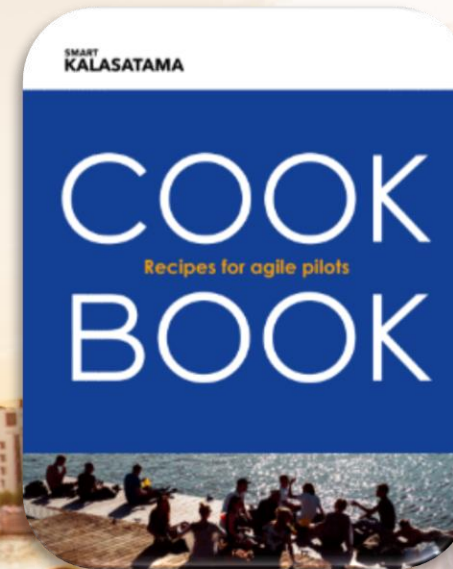
Data is KNOWLEDGE

Smart City,

SMART DECISIONS



# SMART KALASATAMA PUBLICATIONS



[www.fiksukalasadatama.fi](http://www.fiksukalasadatama.fi)

@fiksukalasadatama

[www.forumvirium.fi](http://www.forumvirium.fi)

[www.myhelsinki.fi](http://www.myhelsinki.fi)

THANK YOU!

Helsinki

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