



Sanitation Safety Planning in Helsinki Metropolitan Area

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Helsinki Region Environmental Services Authority HSY

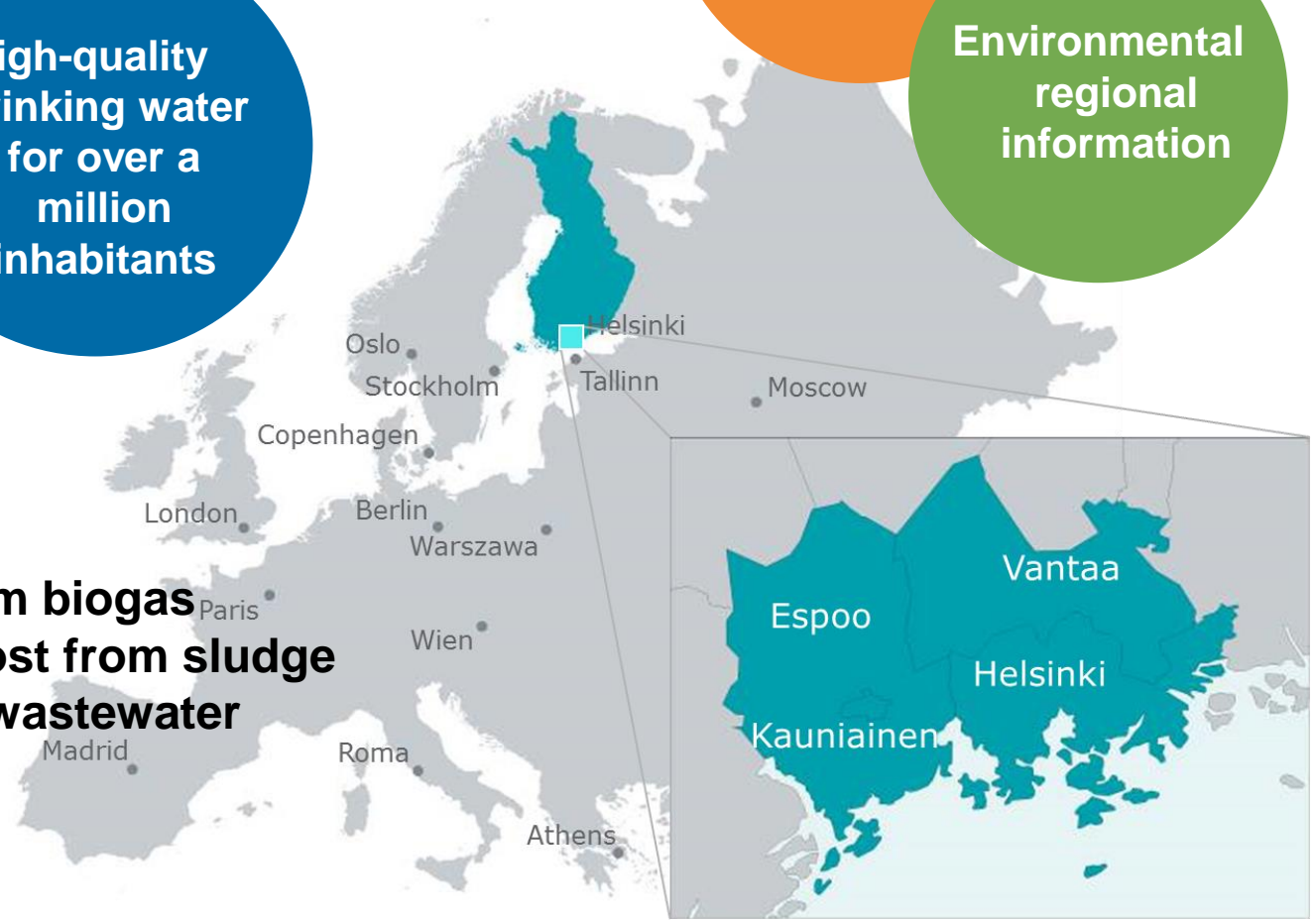
Waste management services

Environmental regional information

High-quality drinking water for over a million inhabitants

Effective wastewater treatment

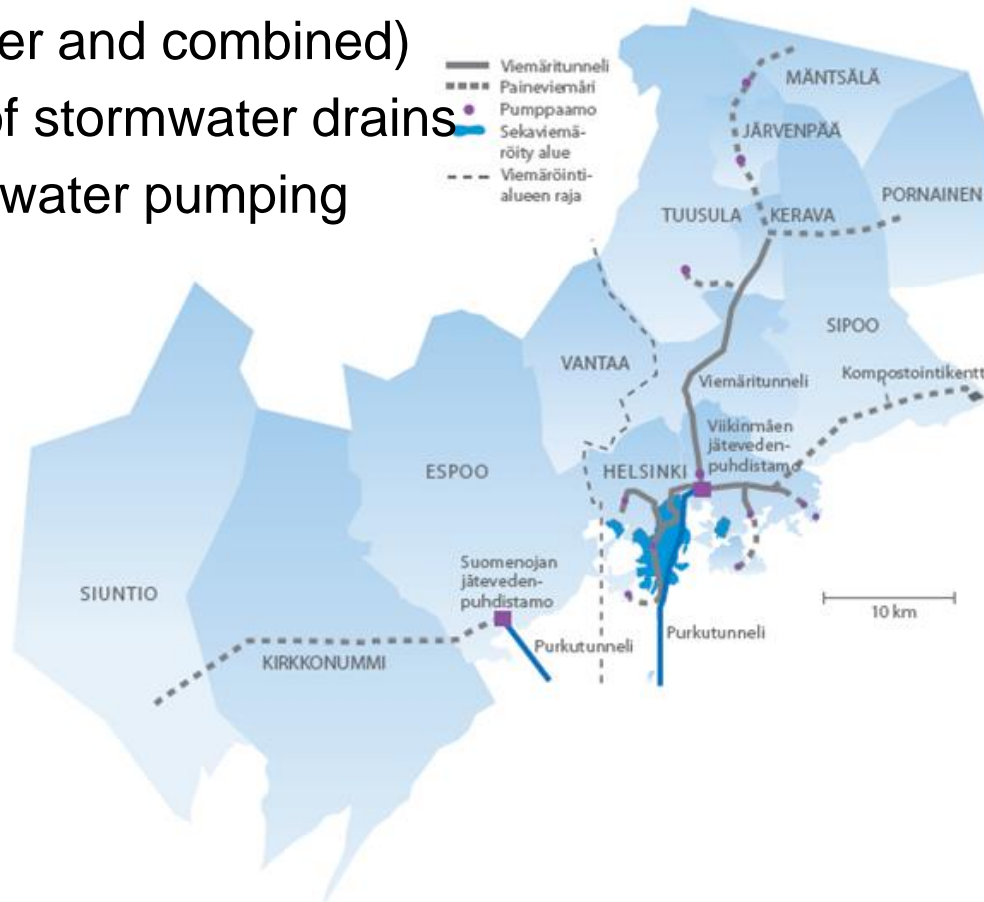
Energy from biogas
Eco-compost from sludge
Heat from wastewater



Purely better, every day

Wastewater services in HSY

- 2 WWTPs: 136 Mm³ of treated wastewater in 2016
- 2831 km of sewers (wastewater and combined)
- 2571 km of stormwater drains
- 530 wastewater pumping stations



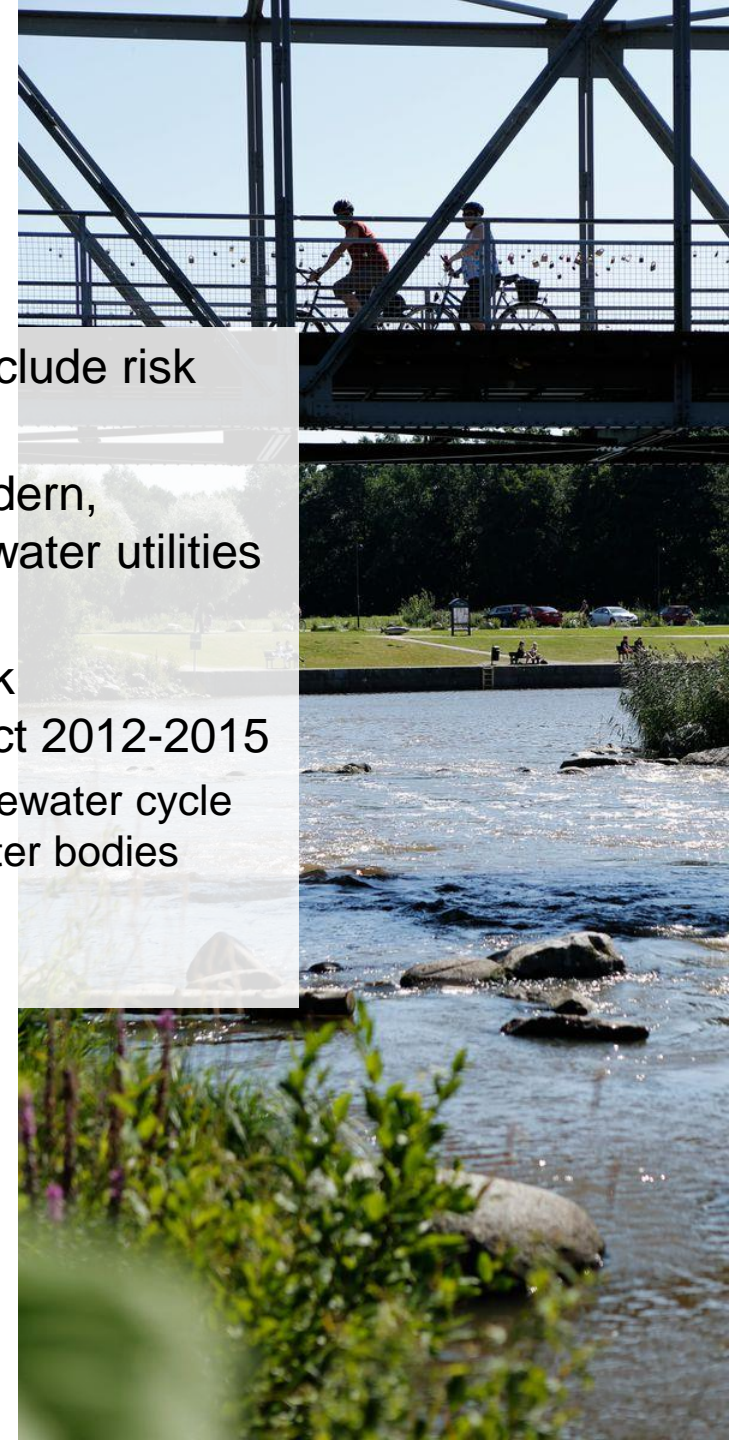
Viikinmäki
wastewater treatment
plant



Suomenoja
wastewater treatment
plant

The Finnish SSP model

- Environmental permit requirements for WWTPs include risk assessment and preparedness planning
 - International SSP models not intended for modern, technical wastewater systems in municipality water utilities
→ need for a uniform risk management tool
- A web-based tool for health and environmental risk management was created in a national SSP project 2012-2015
 - The SSP concept aims at managing the whole wastewater cycle risks from wastewater collection to the receiving water bodies
- Parallel piloting of the SSP model at HSY



Experiences from SSP implementation

- Creating and updating risk assessments and defining risk control measures are time-consuming tasks
 - sufficient planning and resourcing
- Essential contents of the risk management plan comes from our employees
 - motivation and involvement of the staff at different stages of the SSP process
- Critical risks are typically indentified in the network
- Control measures are numerous, some specific and some universal
- Action plan and its follow-up is crucial to implement control measures
- Implementation of the SSP has been a lesson to systematic quality thinking

