



Rijksdienst voor Ondernemend  
Nederland

Policy workshop

# LTES in the Netherlands

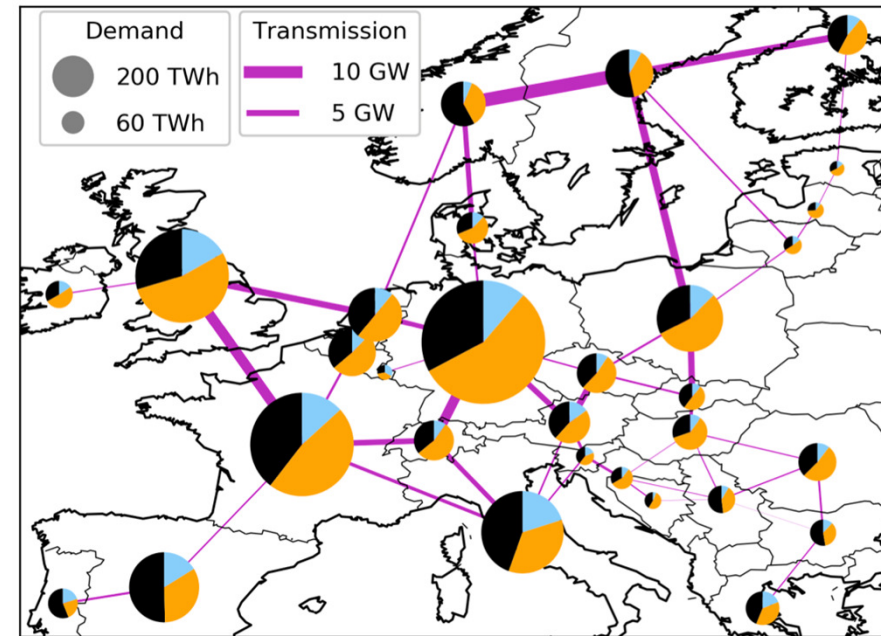
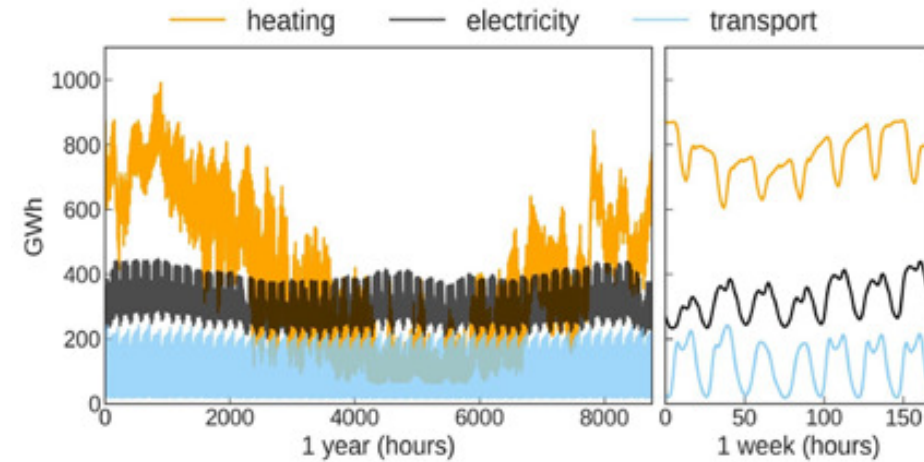
Netherlands Enterprise Agency  
(RVO)

Paul Ramsak & Robin Horsmans



# Storage is key

- > More solar and wind energy
- > Fluctuating supply and consumption
  - Day – week – season
- > ~50% heat in final energy demand



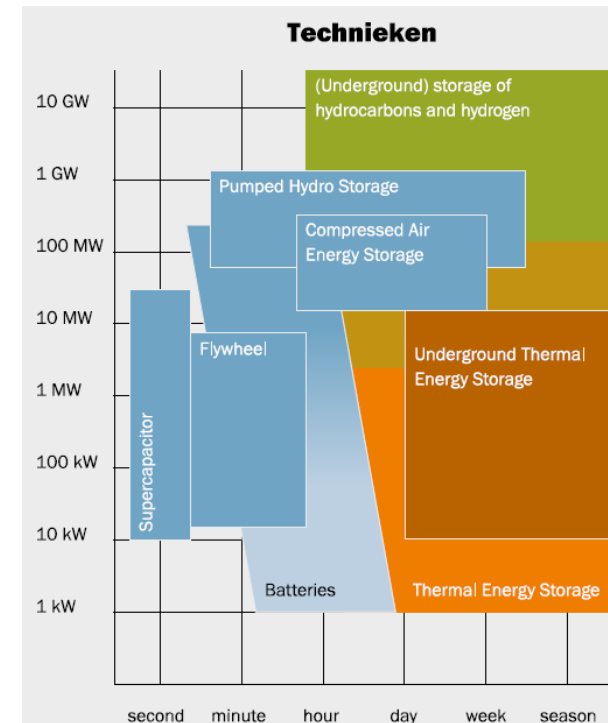
KEV, 2021 & Victoria, M., Zhu, K., Brown, T., Andresen, G. B., & Greiner, M. (2019). *Energy Conversion and Management*, 201, 111977.





# Roadmap Energy Storage Netherlands

- > Sent do Dutch Parliament in June 2023
- > Energy storage necessary in future energy system
  - Heat
  - Electricity
  - Molecules (H2)
- > What type depend on situation; choose what is logical
- > All district heating networks should contain LTES

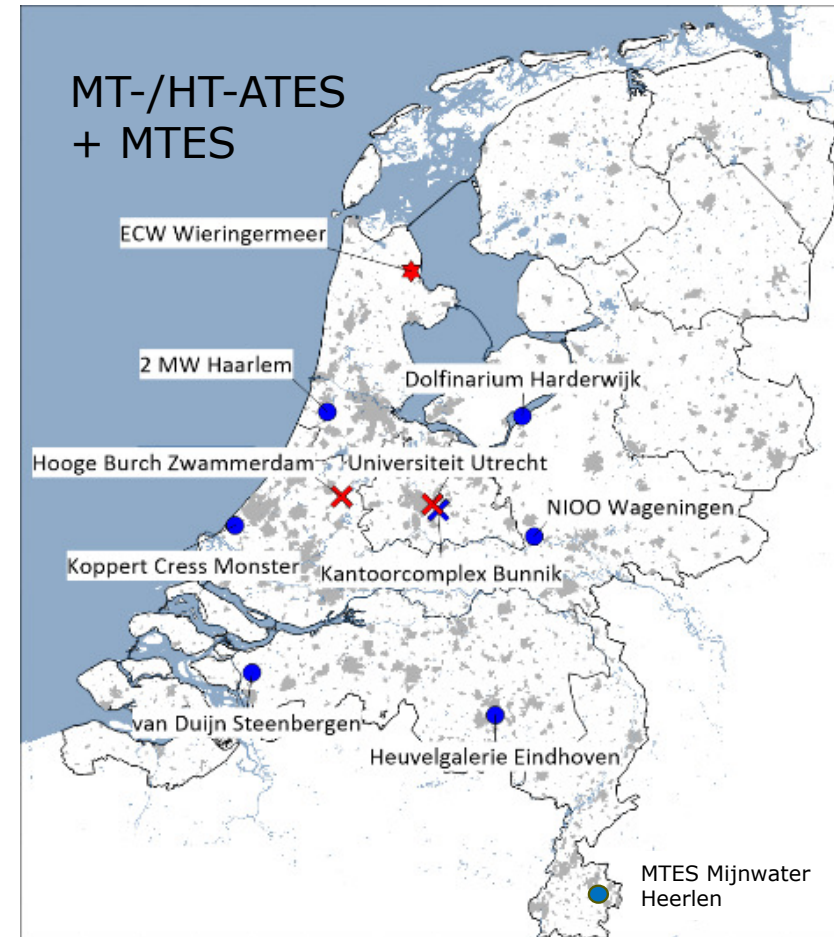
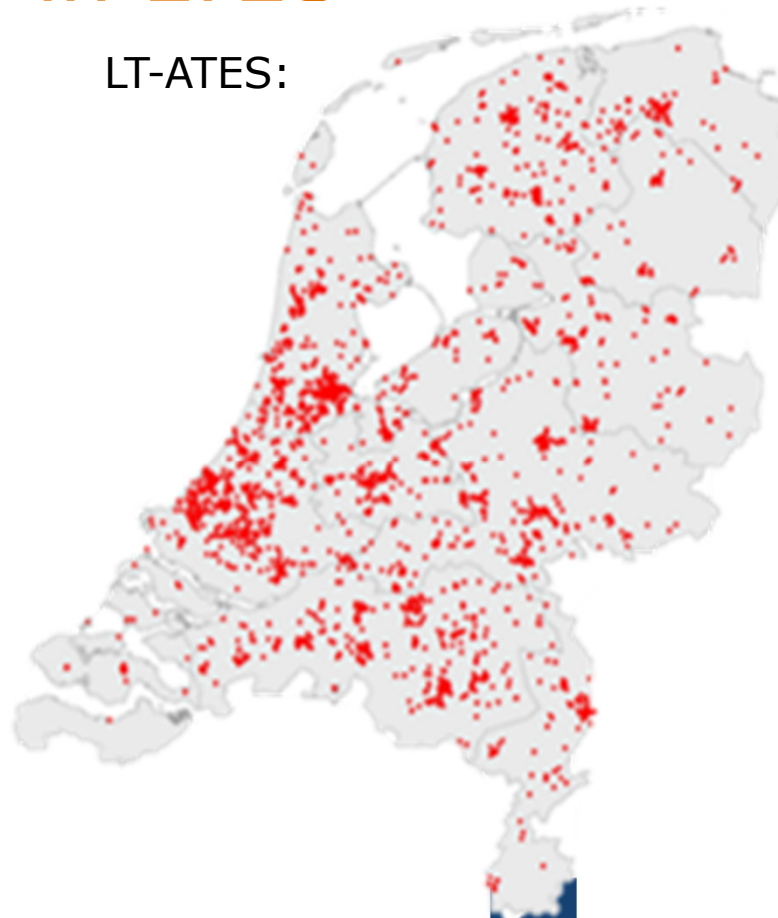




# Experience in LTES

LT-ATES:

- > LT-ATES
- > MT-/HT-ATES
- > MTES





IEA Geothermal



Underground Thermal Energy Storage (UTES) Symposium  
Free 1 day event / 9:00-17:30 / with networking after the event

Project and expert presentations on  
**ATES / BTES / PTES / MTES in Europe**

Aquifer / Borehole / Pit / Mine – Thermal Energy Storage

**28.02.2024**

Messe Offenburg, Germany

GeoTHERM side event

<http://www.geothermica.eu/events/utes-symposium-2024/>