

**Interreg**

North Sea Region

SEEV4-City

European Regional Development Fund

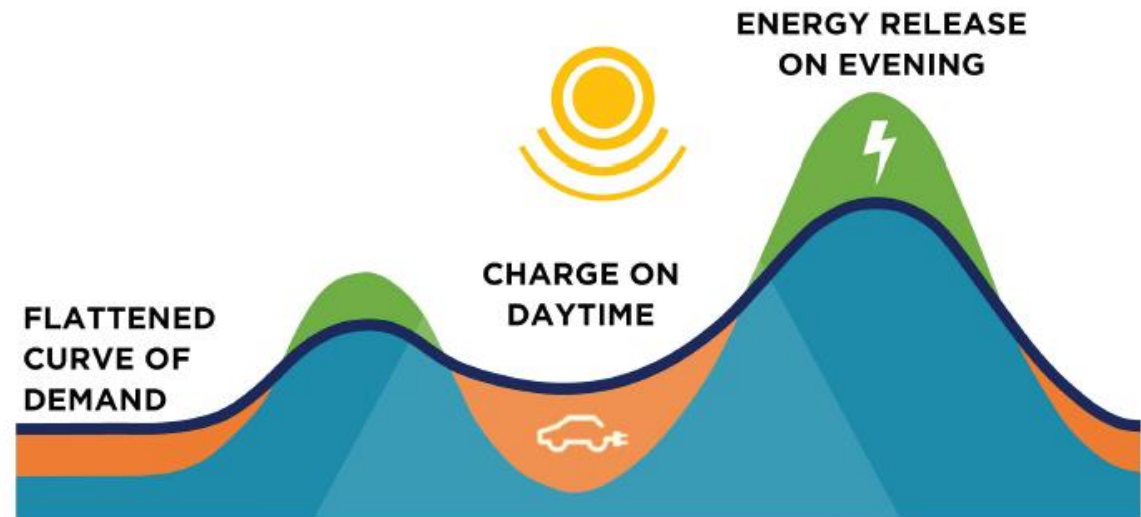
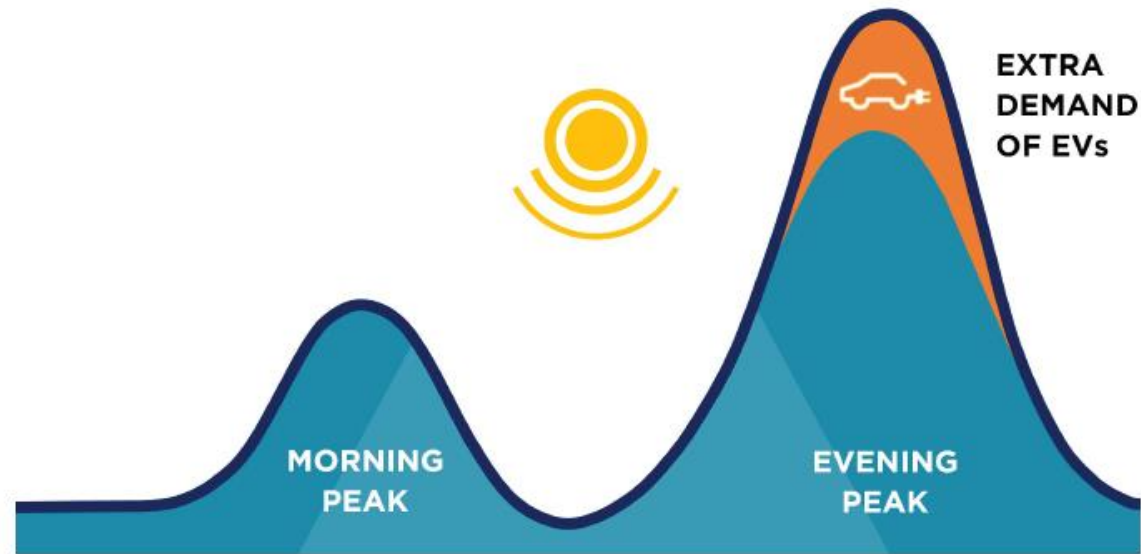


**Hogeschool van Amsterdam**

# Marketplace for electric mobility and renewable energy services, new initiatives

Hugo Niesing, Amsterdam University of Applied Sciences

Brussels, 22 November 2016





Hogeschool van Amsterdam

Interreg



North Sea Region

SEEV4-City

European Regional Development Fund

# URBAN TECHNOLOGY: Research, design, implementation

**Applied** research

**Demand driven** with companies and  
knowledge institutes

**Design** oriented research

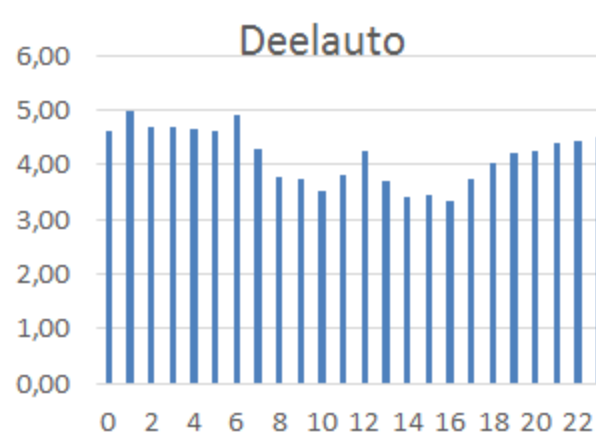
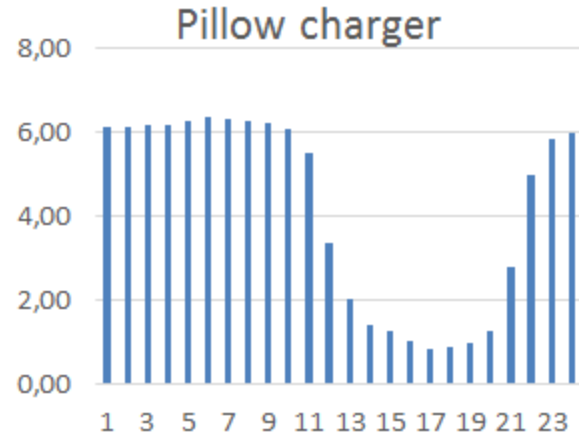
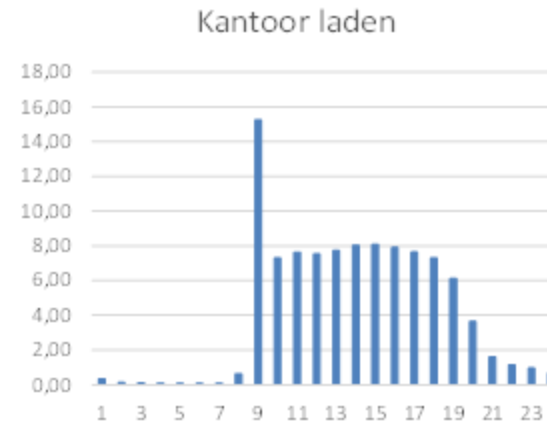
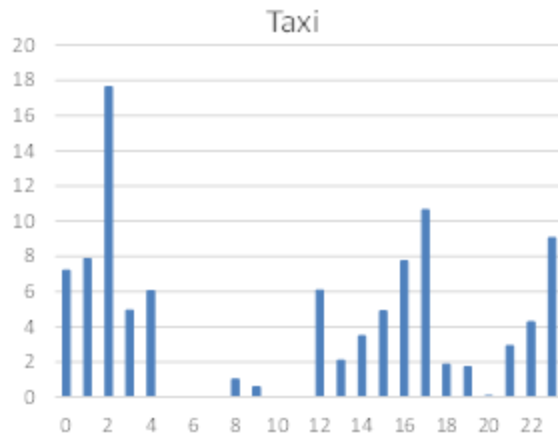
**Typical products:** As: scenarios, roadmaps, models, pilots,  
prototypes, databases

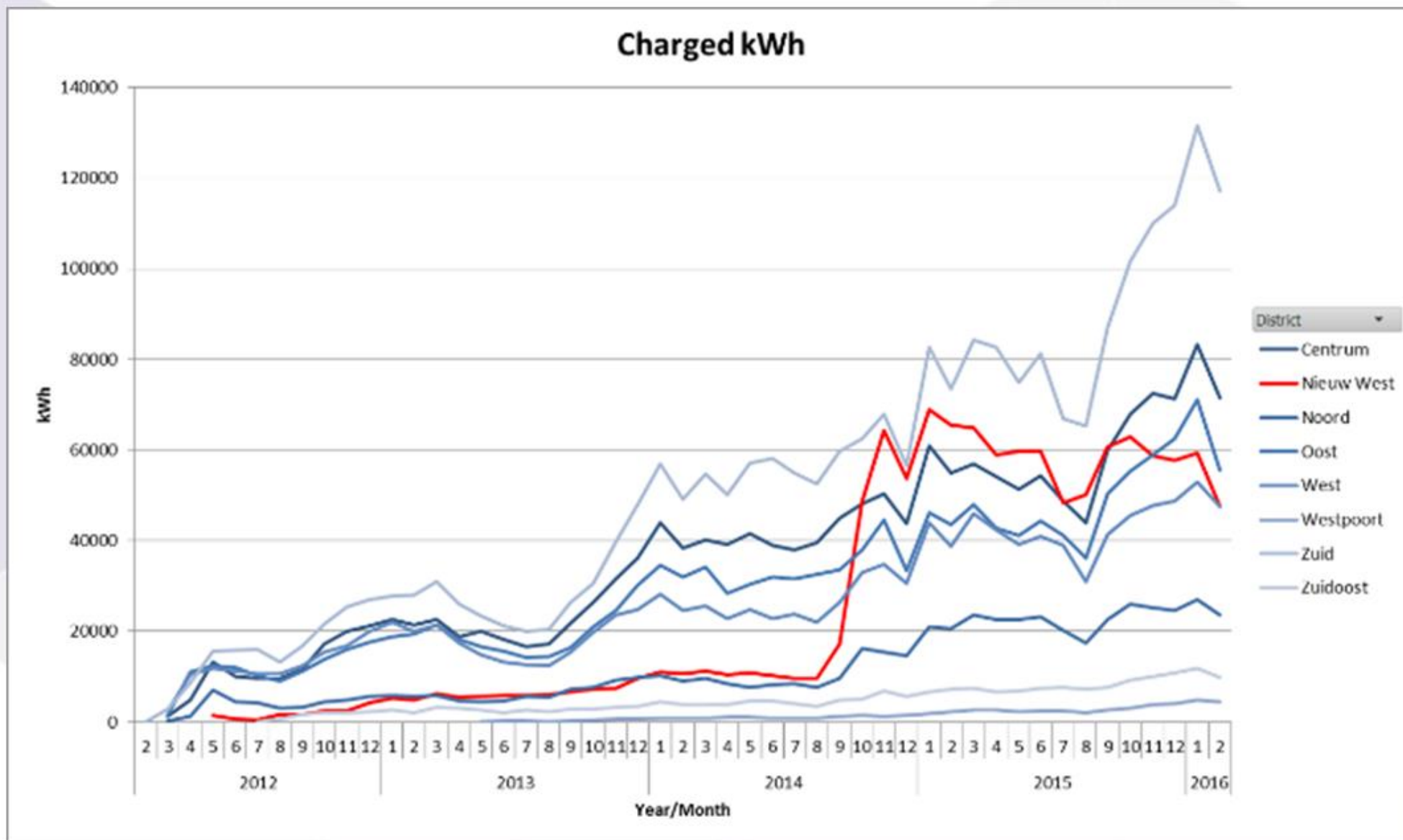
**Living lab** Amsterdam





# Example charging profiles, see the differences !





80 commissioned electric taxi's responsible for 4-fold increase in kWh charged in an Amsterdam district (new west)



# SEEV4-City

- **SEEV4-City: Smart clean Energy and Electric Vehicles 4 the City**
- Funding: EU- Interreg NSR
- Priority 4 Promoting green transport and mobility
- Duration: Sep 2016 – Oct 2019
- Budget: € 5 Million
- Consortium: 11 partners
- Project Coordinator:  
Amsterdam University of Applied Sciences



# Project Objective

To develop Operational Pilots that combine Electric Vehicles and Renewable Energies in order to:

1. Promote and prepare wider roll out of clean and zero-emission electricity for EV with the help of V2G;
2. Demonstrate the business potential of EV where EV and RES are integrated in operational V2G systems.

# Strong, Varied-Experienced Consortium

Oslo Largest EV Fleet

Amsterdam Largest Charging Infra

Hamburg V2G technology Centre

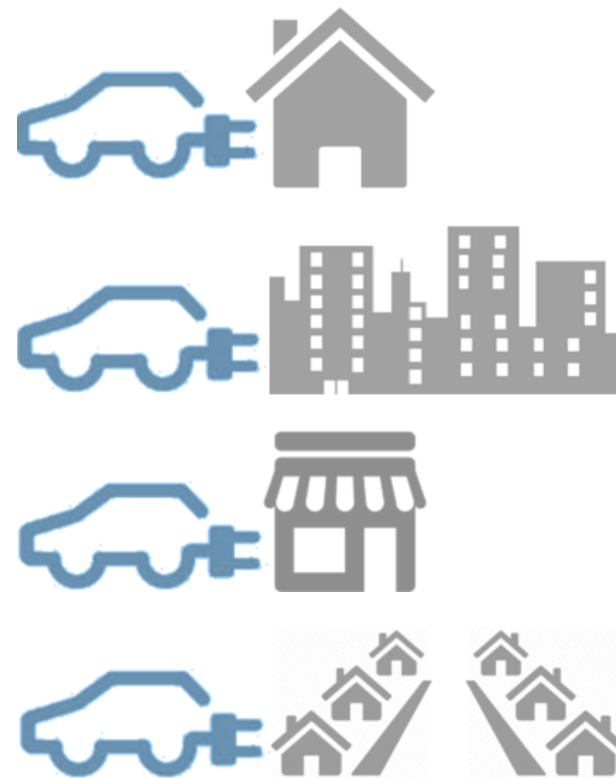
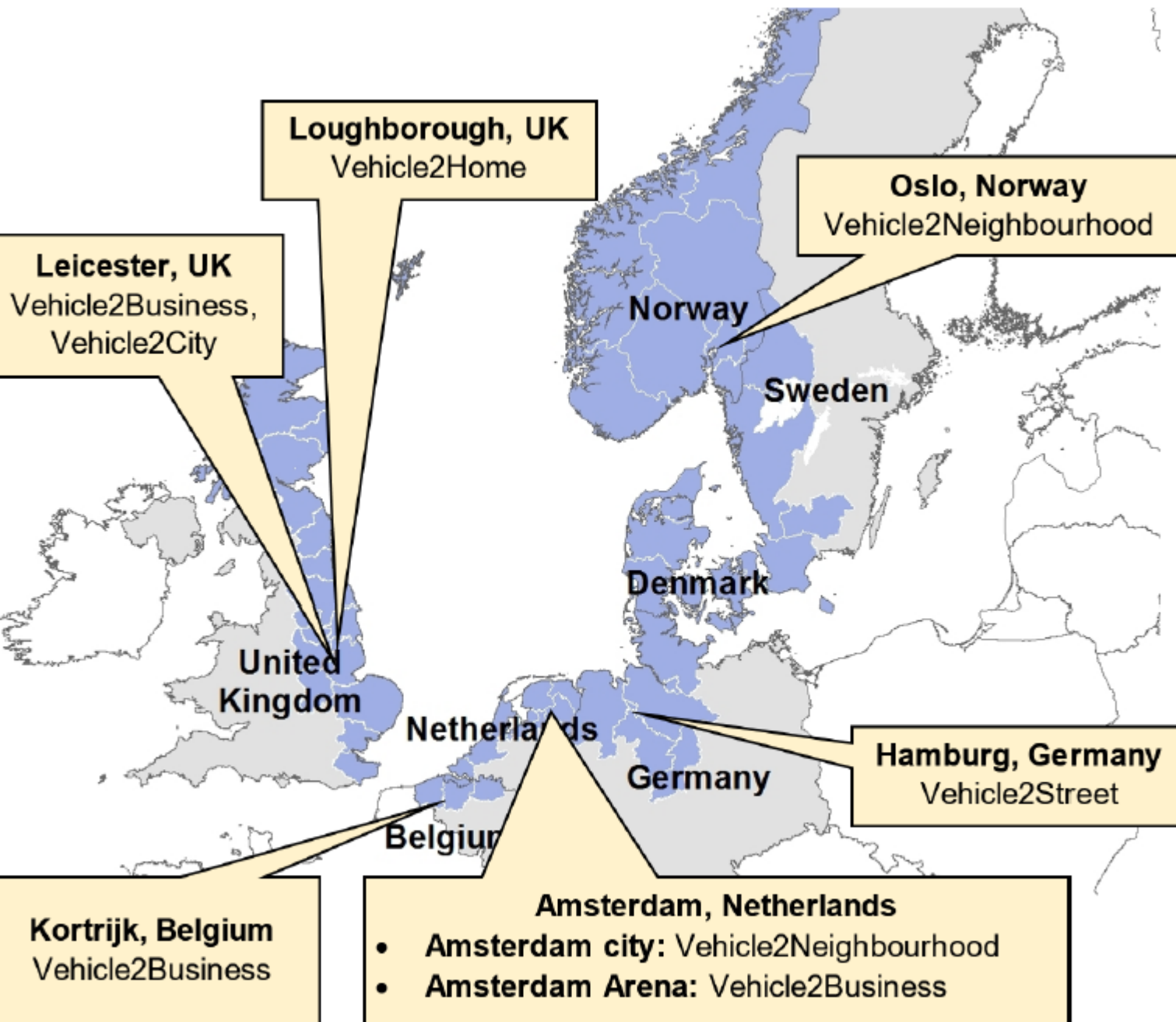
Leicester & CENEX V2G Experience

KU Leuven R&D

POLIS Municipal Policy Network

AVERE Network EV-Mob





# SEEV4-City

- State of art V2X 2016
- Policy & related Business cases
  - Market place, where & when?
  - Clean mobility? Pollution taxes?
  - Energy costs ? CO<sub>2</sub> intensity taxes?
  - Infrastructure costs?
    - Too much EV?
    - Too much PV?
  - Varying energy prices (over the day) for charging EV?
  - Transport4energy Services
- Urgent to Demonstrate added value in Operational setting, measure impact for the City (air quality, CO<sub>2</sub> emissions, energy independence);

# Conclusions

- V2X offers ambitious, challenges for future
  - Technology -
  - Organisation wise -
  - Viable Business cases -
  - New transport4energy services -
- Great potential for upscaling and change city integration of energy and mobility
- Important environmental advantages
- Large economic interest for local authorities, DSOs, e-mobility & RES sector

Thank you!

Questions?

[h.niesing@resourcefully.nl](mailto:h.niesing@resourcefully.nl)

