

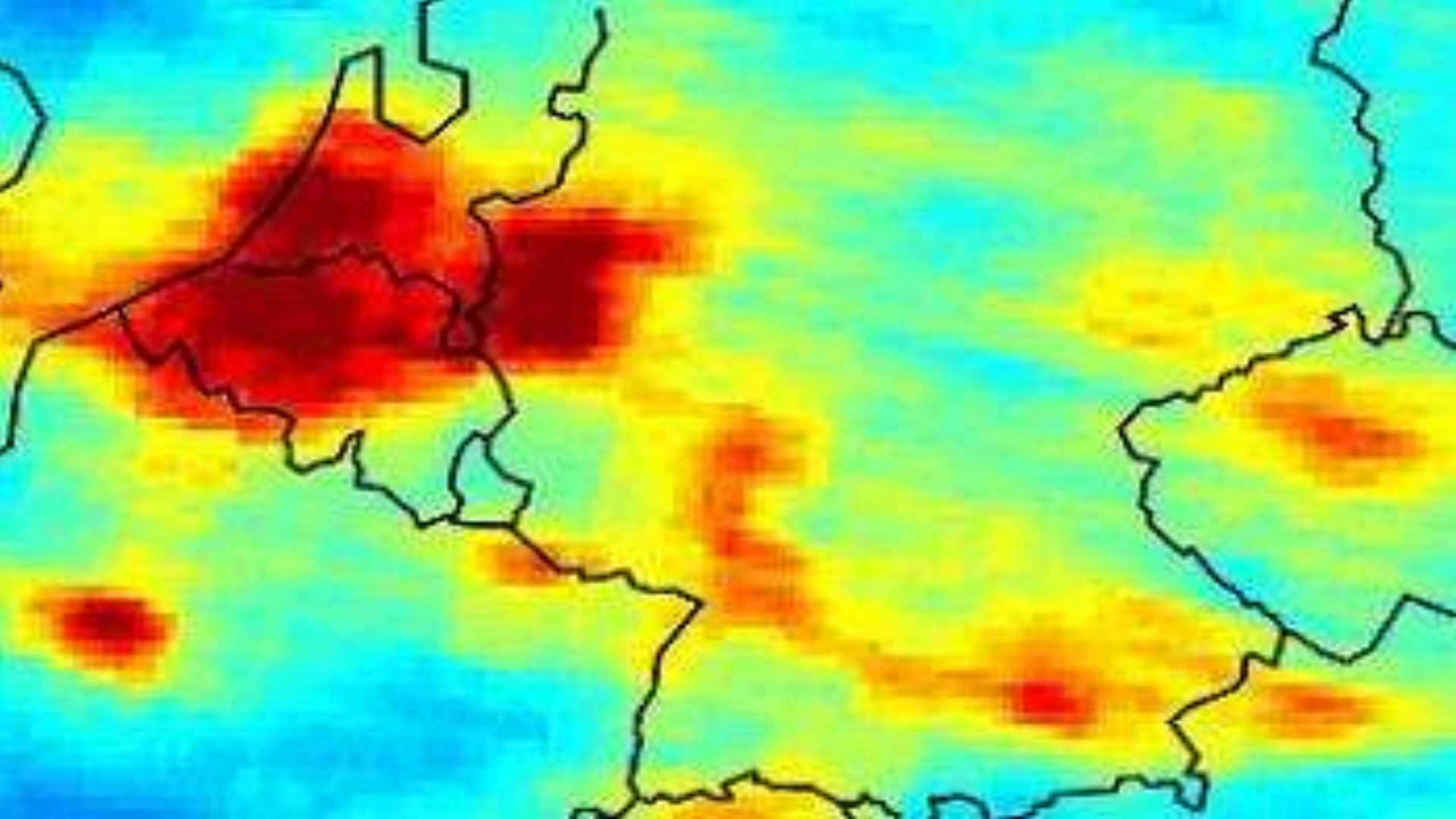


Facilitating public charging infrastructure in the metropolitan region

29 May 2018
Pieter Looijestijn



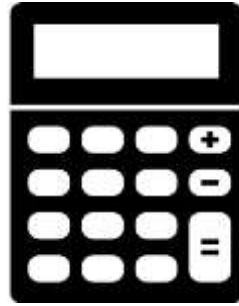
1. A very short history
2. Where we are
3. Where we are going?





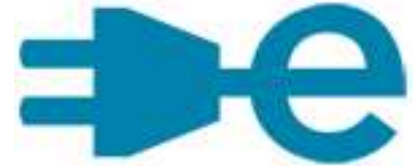
2011

Amsterdam
launches larger
scale investments
in
public charge
points



2012

National
governments
starts **fiscal benefits**
for electric company
cars



2013

First regional
**charging
infrastructure**
investment



WHY ?

**Contribute to the energy transition
and improve air quality**

WHY regionally ?

Because cars drive accross city limits

- Share knowledge & experiences
- More effective
- Tune policies

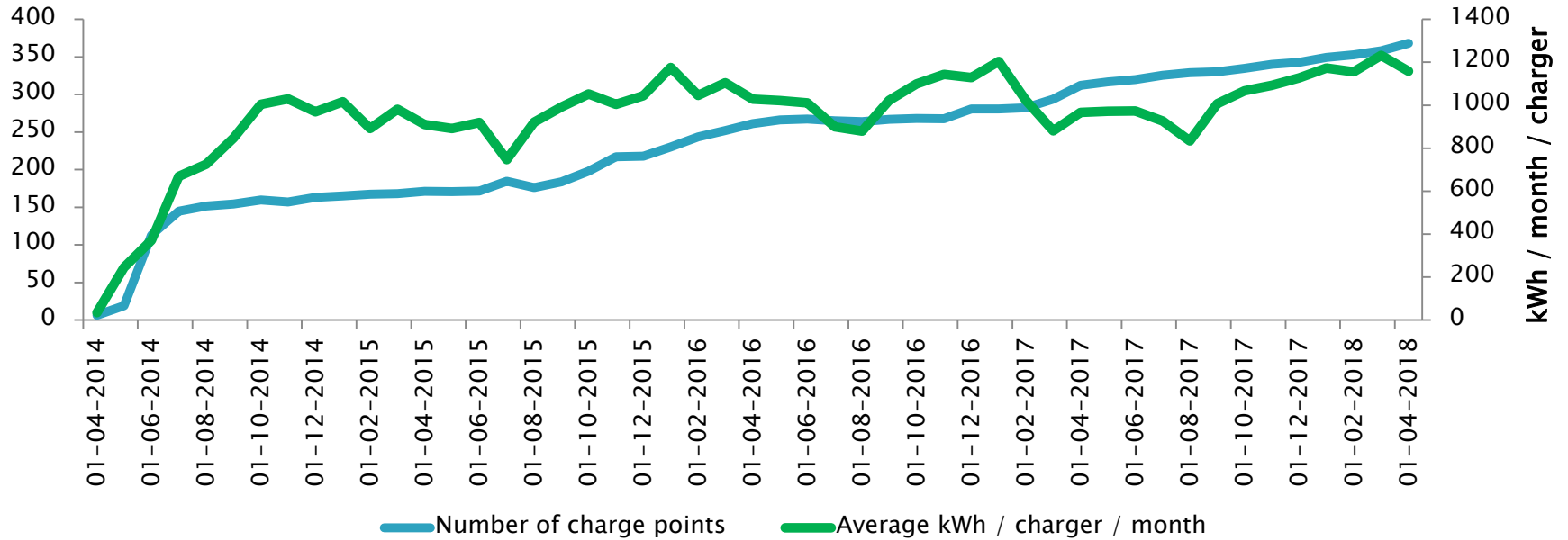
WHY government ?

Public goals and boundary conditions

- Transparant, interoperable,
open protocols, fits in public domain..

No mature market (yet)

Public charging in Noord-Holland, Flevoland en Utrecht



Charging infrastructure

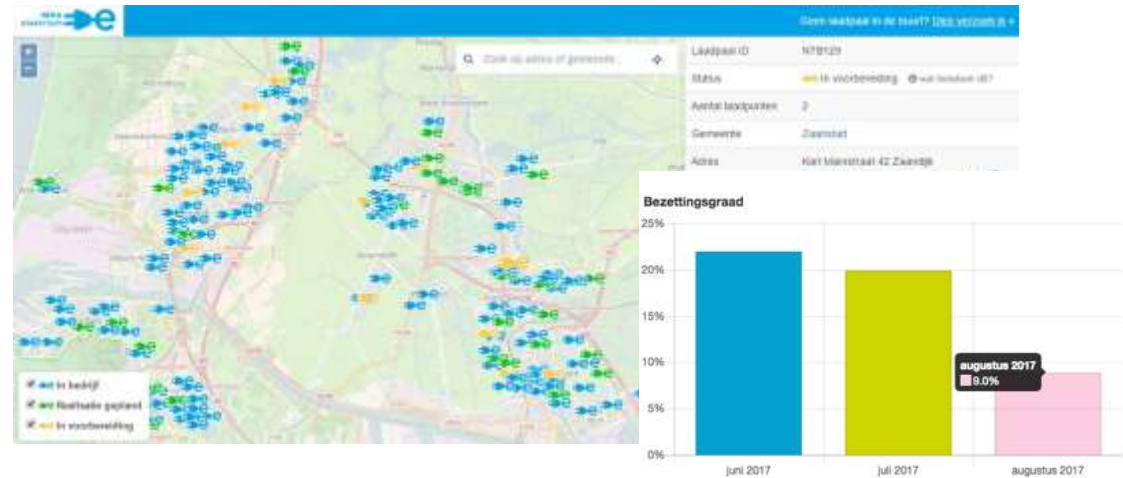
- Procurement
- Contract management
- Guide realisation
- Problem solving

- Project & policy

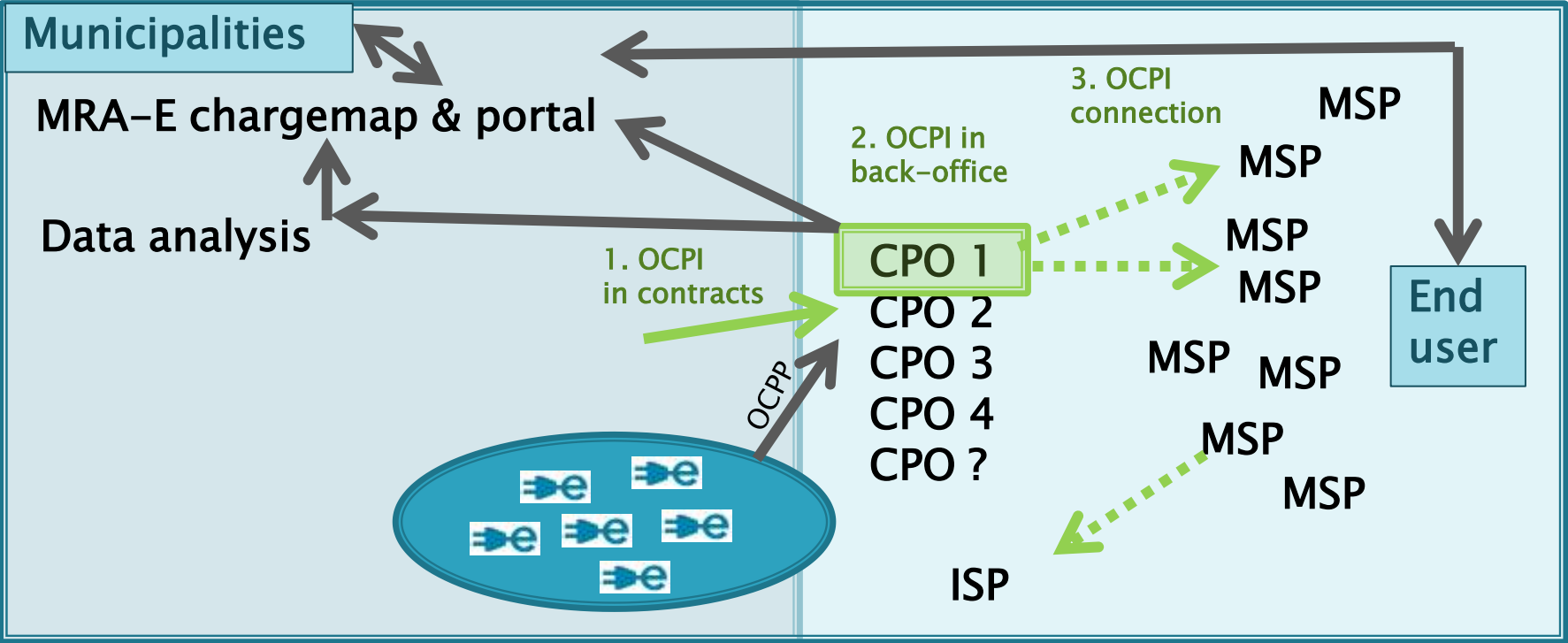


Toolkit EV

Ondersteunend materiaal voor gemeenten over elektrisch vervoer



Regional information system





- Large network
- Effective demand-driven system
- Nationally interoperable : hardware & software
- Decreasing public investments required

- Cross-border roaming
- (price) transparency
- Capacity for scaling up:
urban planning, grid & staff
- Attractiveness of EV for general public
& public opinion





evRoaming4EU

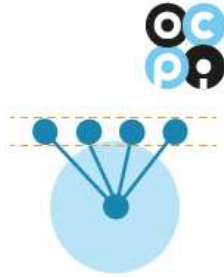
Realising cross-border charging in Europe

HOW?



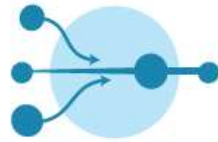
● Simplify

What information is needed
Simplify the value chain



● Standardize

Standard (open) communication protocols
Standard user experience



● Harmonize

Single protocol, datamodel
Align legal and fiscal frameworks



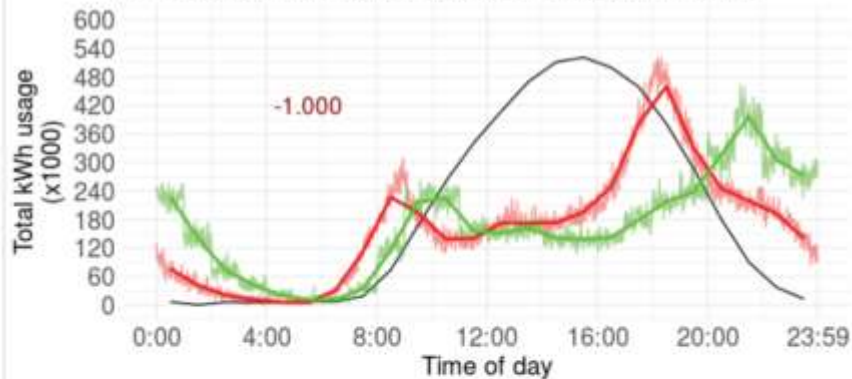
● Regional pilot (NL, DK, GER, AUS)

◆ Roaming hub

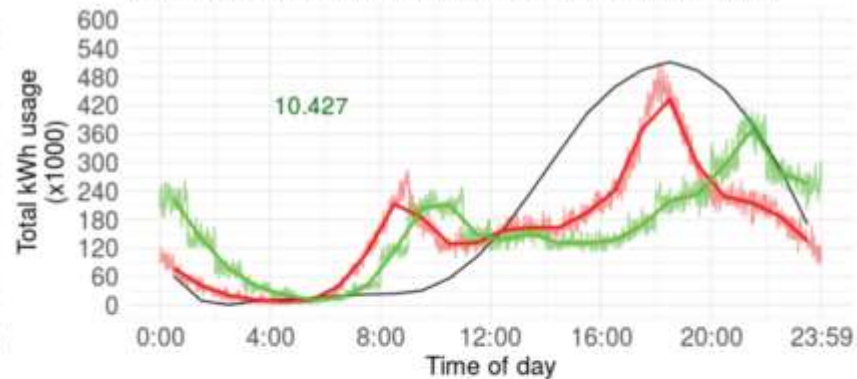
— decentral connection (OCPI) (peer-to-peer)

— central connection (OCPI) (via roaming hub)

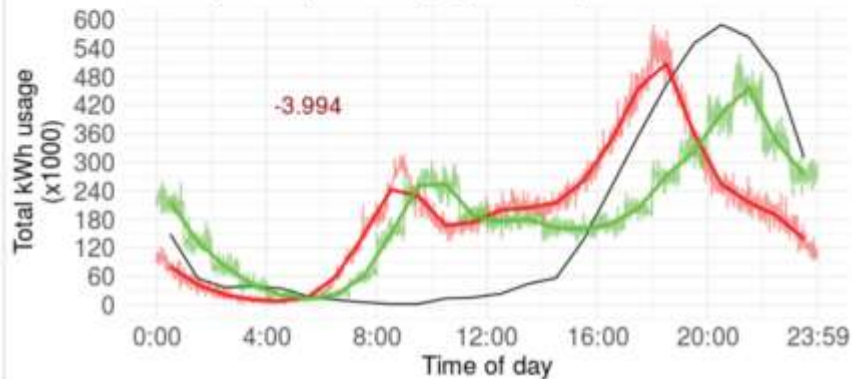
kWh usage shift by Smartcharging at 25% of potential in Spring



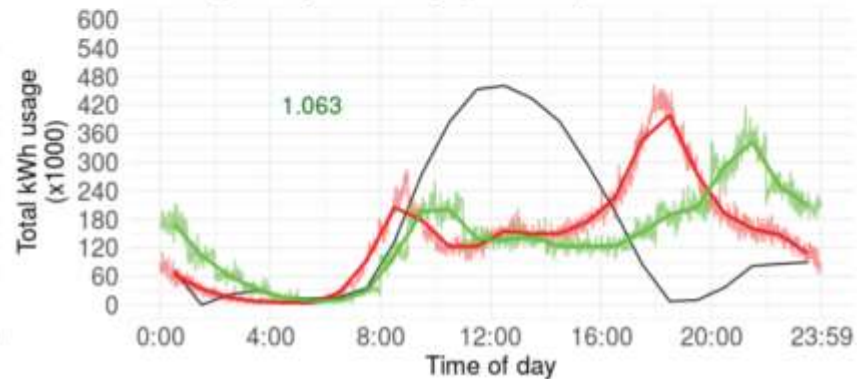
kWh usage shift by Smartcharging at 25% of potential in Summer



kWh usage shift by Smartcharging at 25% of potential in Autumn



kWh usage shift by Smartcharging at 25% of potential in Winter



LADEN VAN ELEKTRISCHE AUTO'S BINNEN DE VVE



Versie maart 2018

