



Break-out session:

development of a business model for ultra-fast charging infrastructure used by various sectors and different heavy-duty vehicles

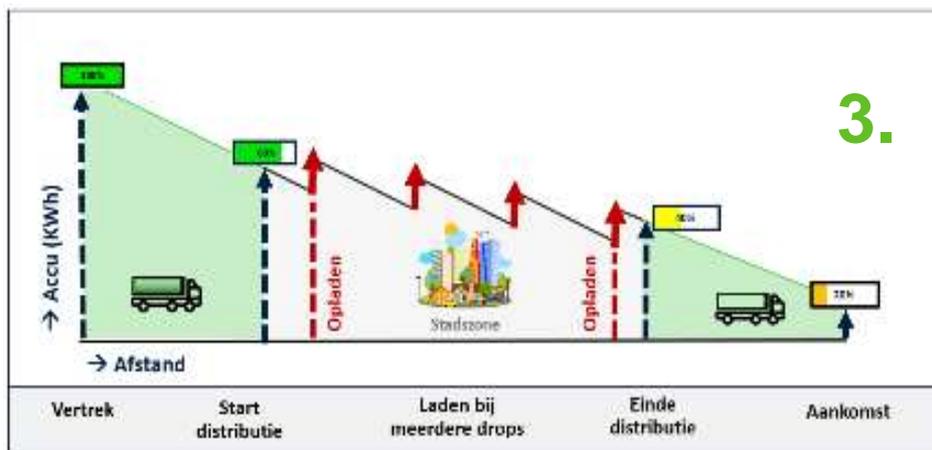
ASSURED workshop
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...where on-route charging is involved



Scenario Depot-Public-Depot (A to C to A)

- charging at depot (overnight) (50-150kW)
- extend trip by public charging OC (-450kW)



Scenario Depot-Public-Destination (A to C^x to B)

- charging at depot overnight (50-150kW)
- extend trip by (multiple) public charging OC (450kW)
- charge (overnight) at destination (50-150kW)





Guiding questions

- **When** can this become an interesting business model (2020, 2025, 2030)?
- **What level of e-vehicle take-up** is needed?
- What are differences in terms of **locations and charging approaches**?
 - Public opportunity charging vs. shared charging at depots/ in private areas?
- What **sectors** actually have a need for using shared charging infrastructure?
 - Dependent on driving ranges

User charging needs/ requirements

Users

- PTOs/ PTAs
- Logistic companies (e.g. delivery, retail)
- Commercial fleets (e.g. craftsmen/ craftswomen)
- Municipal fleets (e.g. garbage trucks)

Industry/ providers

- Charging solution suppliers
- OEMs

Weaknesses and opportunities

Challenges: barriers for implementation

- Technical hurdles
- Market barriers
- Reservation and payment issues
- Industry standards, interoperability
- Regulatory issues
- Institutional barriers

Added value and benefits

- Total cost of ownership (TCO)
- Reducing range anxiety?
- Less space constraints?
- Increased usage?
- Branding/ image?
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Recommendations for take-up

- Good practice examples in Europe
- Supporting policies and measures
- Cooperation and partnership models
- Necessary legal and regulatory frameworks
- ...