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)

(2300km)

**Scenario Depot-Public-Destination (A to Cx to B)**
- charging at depot overnight (50-150kW)
- extend trip by (multiple) public charging OC (450kW)
- charge (overnight) at destination (50-160kW)

A: Depot  C: Public  B: Destination
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?
• ....
Recommendations for take-up

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

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