

UNECE EV Fast & Smart Charging Cluster KPI Recharged energy in 10min



Recharged energy <> Recharged Range (in 10min)

- OICA proposes to **include Recharged Energy in 10min as KPI** and allow to **choose either recharged energy or recharged range in 10min**
- According to **ISO12906** procedure **Recharged Energy** in 10min is the **input size for Recharged Range** in 10min
- **Recharged Range** in 10min is **calculated** using the **measured Recharged Energy** and the **energy consumption during WLTP**. **Heating or climatization is not considered**.
N1 vehicle use cases are not considered.
- *Why do we think that Recharged Energy in 10min is a valuable KPI to the customer?*



Recharged energy <=> Recharged Range (in 10min)

Recharged Energy in 10min

Pro	Con
KPI needs no disclaimer or explanation for the customer	No direct KPI
Customer can relate the recharged energy to the average energy consumption, can adjust driving/heating/cooling	Needs educated Customer (for HDV-driver, this is already possible)
For N1 vehicle: Energy may be spend on cooling goods, standing, higher load (Annex B for HDV of ISO 12906 already specifies recharged energy)	Not ideal KPI to compare before purchasing a vehicle

Recharged Range in 10min

Pro	Con
Direct KPI for customer	Value based on WLTP Customer behaviour driving/heating/cooling not considered* → can be misleading in warm and cold climate (customer wont see the value)
Known KPI (although many „definitons“ exist beside ISO12906)	N1 vehicle use cases not considered
Good KPI for Marketing and for comparing vehicles before purchasing	Disclaimer needed // customer might be displeased

*) ISO12906 procedure recommends test temperature of 23°C

→ Good reasons for both KPI's depending on the perspective