



TAKING AMBITIOUS CLIMATE ACTION

Decarbonising
inland transport
by 2050

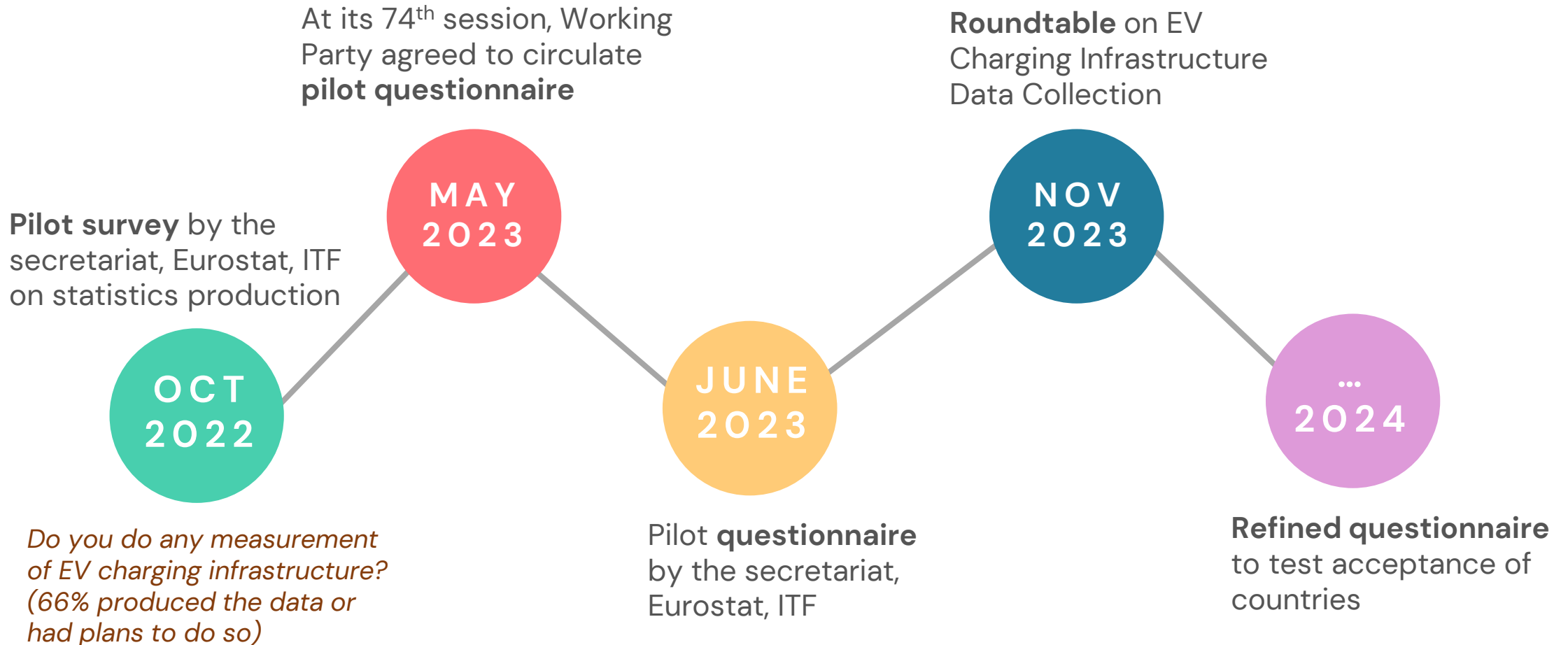


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Electric Vehicle Charging Infrastructure Data Collection

Fadhah Achmadi, UNECE

Timeline



June 2023 Pilot Questionnaire

| | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|------|------|------|------|------|
| Number of public recharging pools/locations | | | | | |
| of which: restricted access/semi-public | | | | | |
| Number of public recharging stations/devices | | | | | |
| of which: restricted access/semi-public | | | | | |
| Number of recharging points/Supply Equipment (EVSE) | | | | | |
| TOTAL AC (Category 1) | | | | | |
| <i>Slow AC : P < 7.4 kW</i> | | | | | |
| <i>Medium-speed AC : 7.4 kW ≤ P ≤ 22 kW</i> | | | | | |
| <i>Fast AC : P > 22 kW</i> | | | | | |
| TOTAL DC (Category 2) | | | | | |
| <i>Slow DC : P < 50 kW</i> | | | | | |
| <i>Fast DC : 50 kW ≤ P < 150 kW</i> | | | | | |
| <i>Level 1- Ultra fast DC : 150 kW ≤ P < 350 kW</i> | | | | | |
| <i>Level 2- Ultra fast DC : P ≥ 350 kW</i> | | | | | |

32

Countries
responded

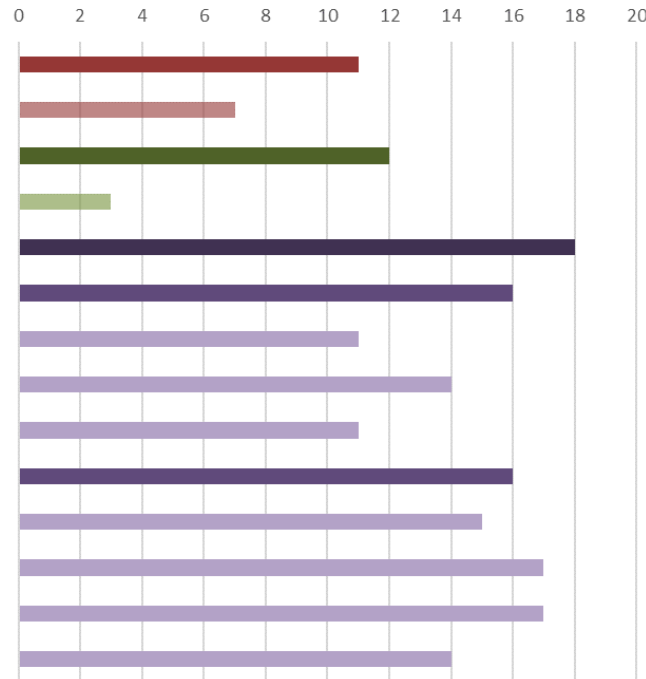
23

Provided data

Number of countries reporting 2022 data

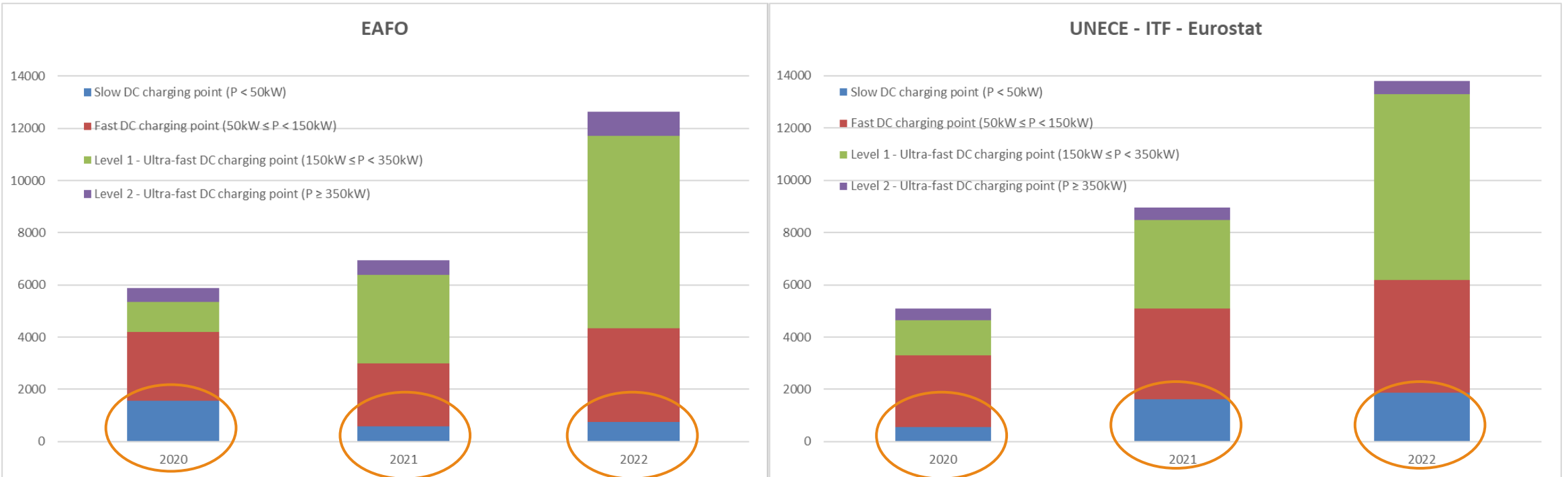


Number of public recharging pools/locations
 of which: restricted access/semi-public
Number of public recharging stations/devices
 of which: restricted access/semi-public
Number of recharging points/Supply Equipment (EVSE)
TOTAL AC (Category 1)
 Slow AC: $P < 7.4 \text{ kW}$
 Medium-speed AC: $7.4 \text{ kW} \leq P \leq 22 \text{ kW}$
 Fast AC: $P > 22 \text{ kW}$
TOTAL DC (Category 2)
 Slow DC: $P < 50 \text{ kW}$
 Fast DC: $50 \text{ kW} \leq P < 150 \text{ kW}$
 Level 1- Ultra fast DC: $150 \text{ kW} \leq P < 350 \text{ kW}$
 Level 2- Ultra fast DC: $P \geq 350 \text{ kW}$



- Not all countries track/report “**Restricted access/semi-public**” category
- Disaggregated **AC** and **DC** charging infrastructure data are not always available
- Countries provided data as of **Dec 31, Jan 1, June 30**
- Some countries have different power categorizations, e.g.:
 - Level 1 – Ultra fast DC: 150 kW – 250 kW
 - Level 2 – Ultra fast DC: > 250 kW

Our data vs EAFO (German case)



Findings and next steps

Diverse approaches by countries

- Refining international definitions
- Identifying suitable indicators for consistent measurements

Strategic approach for data collection

- Starting in 2025 for CQ reference year 2024
- AFIR's mandates for **power output**
- UNECE Consolidated Resolution on the **Construction of Vehicles (R.E.3)**

Revised questionnaire

- Integrate new definitions discussed at the roundtable
- Follow-up questionnaire in 2024 to test the updated definitions and refinements

Refined Questionnaire

| |
|--|
| Number of public recharging pools/locations of which: restricted access/semi-public |
| Number of public recharging stations/devices of which: restricted access/semi-public |
| Number of recharging points/Supply Equipment (EVSE) |
| TOTAL AC (Category 1) |
| <i>Slow AC : $P < 7.4$ kW</i> |
| <i>Medium-speed AC : $7.4 \text{ kW} \leq P \leq 22$ kW</i> |
| <i>Fast AC : $P > 22$ kW</i> |
| TOTAL DC (Category 2) |
| <i>Slow DC : $P < 50$ kW</i> |
| <i>Fast DC : $50 \text{ kW} \leq P < 150$ kW</i> |
| <i>Level 1- Ultra fast DC : $150 \text{ kW} \leq P < 350$ kW</i> |
| <i>Level 2- Ultra fast DC : $P \geq 350$ kW</i> |

| |
|--|
| Number of public recharging pools/locations at 31.12 of which dedicated to heavy-duty vehicles |
| Number of public recharging stations/devices at 31.12 |
| Number of public recharging points/Supply Equipment (EVSE) at 31.12 |
| Alternative Current |
| <i>Slow AC: $P < 7.4$ kW</i> |
| <i>Medium-speed AC: $7.4 \text{ kW} \leq P \leq 22$ kW</i> |
| <i>Fast AC: $P > 22$ kW</i> |
| Direct Current |
| <i>Slow DC: $P < 50$ kW</i> |
| <i>Fast DC: $50 \text{ kW} \leq P < 150$ kW</i> |
| <i>Ultra fast – level 1: $150 \text{ kW} \leq P < 350$ kW</i> |
| <i>Ultra fast – level 2: $P \geq 350$ kW</i> |
| Power output installed in public recharging points (kW) at 31.12 of which dedicated to heavy-duty vehicles |



Working Party on Transport Statistics
75th Session

**Navigating Sustainable Development Goals Progress
With Reliable Transport Data**



Palais des Nations, Geneva
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Thank you!

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Secretary, WP.6

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Date 12 | 04 | 2024, Paris