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#2 Workshop on Alternative fuels data

25-09-2026



*This session will be
recorded*

Agenda

- **Opening – NAPCORE**

- *Update from the NAPCORE AFIR Team*

- European Commission – The aim of AFIR

- FIER – Status of CEAP / Pilots

- Open discussion

- Standards perspective / alignment

- EV Roaming foundation & Spilett

- Short break

- AF Infrastructure views and challenges

- POLIS & Schneider Electric

- Understanding data (re)use from NAP

- Google, Metergram & ACE Autoclub

- Open discussion

- Wrap up & closing

Rules of the Workshop:

- Participants cannot turn their camera/mic on, unless permitted.
- **during/after the presentations please use the **CHAT** function to ask your questions**, all will be answered when the handout is sent out
- There will be two open discussions sessions, where the discussion will be moderated. Please raise your hand in TEAMS if you want to start a dialogue.

NAPCORE in general

- **The world's largest cooperation of mobility data platforms**, with the objective to coordinate and harmonize all European NAPs on a technical and organizational level creating interoperability.
- Task 3.3 Data on Alternative Fuels: support the NAPs and member states with the implementation of 2023/1804 and its amendments, facilitate exchange between the stakeholders, provide feedback to legislators, support the onboarding of MS to CEAP

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EAFO — Common European Access Point

Design Principles, Mockup & Data Collection

2nd Workshop on AFIR | NAPCORE

September 25, 2026 | 9:00 – 12:00

Edwin Bestebreurtje, Laszlo Kerenyi, Stelios Kourakis
FIER | European Alternative Fuels Observatory



European Alternative Fuels Observatory

Agenda

- 01** CEAP within EAFO and design principles
- 02** Development status and pilots
- 03** Data collection from NAPs and next steps

CEAP on EAFO

The **Common European Access Point (CEAP)** is the European gateway for discovering data on publicly accessible recharging and refuelling infrastructure covered by **AFIR**.



Legal basis

AFIR Article 20 requires the Commission to establish a CEAP by 31 December 2026



Gateway, not a database

CEAP does not store data — it connects users to information available in the NAPs



Hosted on EAFO

The CEAP pages will be part of the European Alternative Fuels Observatory portal

CEAP Design Principles



Gateway & discovery layer

Not a central database — connects users to NAPs and their published data



Transparent

Honestly reflects the current mixed landscape of standards, formats and access conditions



Harmonised presentation

One consistent entry per dataset, regardless of the underlying publication model



Transition-aware

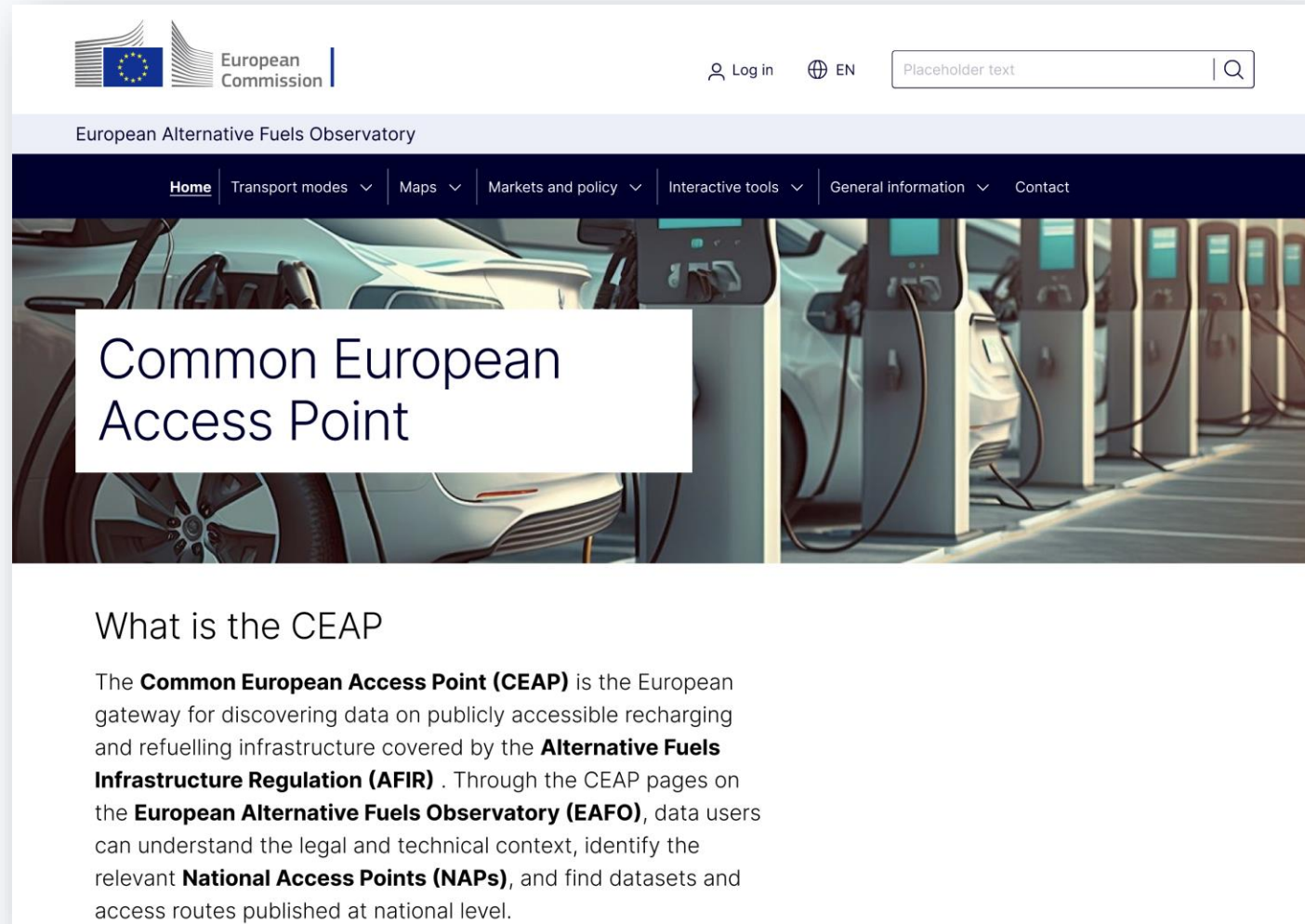
Reflects where NAPs are today while supporting progressive convergence



Built on official sources

All data routes point to authoritative national endpoints — CEAP does not intermediate

Development status: presenting dev page (Stelios)



Pilots with 3 NAPs in 2026 (Laszlo)

The Netherlands map with static and dynamic data, OCPI based

Austria API key received since a couple of days, OCPI based

Spain (started with first workshop last Friday, Sept 18), info and data not received yet

Data Collection from NAPs

To populate the CEAP NAPs Directory and Data Explorer, we are conducting a structured data collection and validation exercise with all National Access Points.



CEAP Intake Form (received from 20 NAPs)

Two tabs to fill in:

NAP_Profile

Complete once for your NAP — fill column D, using column E for guidance

Dataset_Metadata

One row per charging-infrastructure dataset or service

Drop-down menus with standard values are provided.

Instructions tab explains everything.

Next Steps



NAPs complete NAP_Profile and Dataset_Metadata tabs



EAFO validates and integrates responses into CEAP pages



CEAP to be operational by 31 December 2026 (AFIR deadline)

Contact & questions

ec-alternative-fuels-observatory@ec.europa.eu

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Open discussion / Q+A (~20min)

Please RAISE YOUR HAND IN TEAMS if you want to start a discussion / ask a question

You can only turn on your microphone if permitted!

Participants may share:

- Their opinion / take on the regulation and the governance
- Improvement suggestions, pain points NAPCORE should focus on in the future
- Important topics to address for our next Workshop with the stakeholders and Commission
- AoB



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- **Standards perspective / alignment**
 - EV Roaming foundation – OCPI / CEN upgrade
 - Spilett – CEAP for H₂ Data
- Short break
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EVRoaming Foundation NAPCORE update

Contact:
Michel Bayings
operations@evroaming.org



OCPI

Status standardization & NAP extension

Michel Bayings | September 2026



Michel Bayings

Executive Director EVRoaming Foundation

- In the EV market since 2008
- Champions globally accessible charging infrastructure
- Works through his own firm, Emobility Consulting



OCPI is becoming a standard

OCPI v2.3.0

- **Technical Specification** via CENELEC
- Goal: Nov/Dec **2026**
- To be mandated via **AFIR** delegated/implementing acts and usable for data sharing with NAPs
- **CENELEC TC69/WG7 =**
Roaming services for electric vehicle (EV) charging

OCPI v3.0 and beyond

- Official CENELEC standard
- Goal: H2 2027



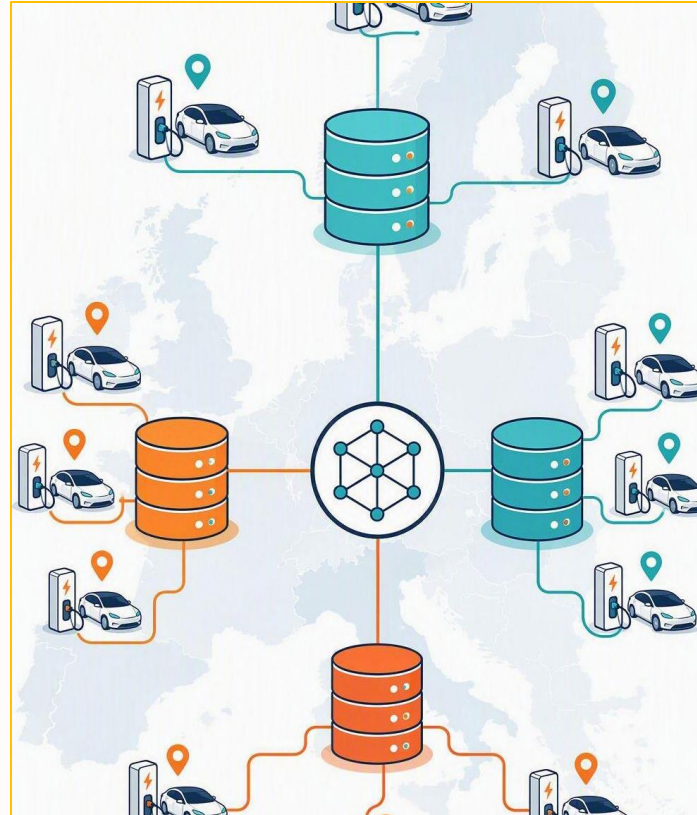


Status standardization

- **Experts are needed** (at least 5) from National Standardization Bodies (NSBs) for the creation of the Work Item Proposal
- EVRoaming Foundation and others are working on this – ready coming days.
- **8 parties already voted for the WIP and agreed** – ten are needed.
- EC and EVRF and others are pushing and pulling to get it all **done in coming weeks.**

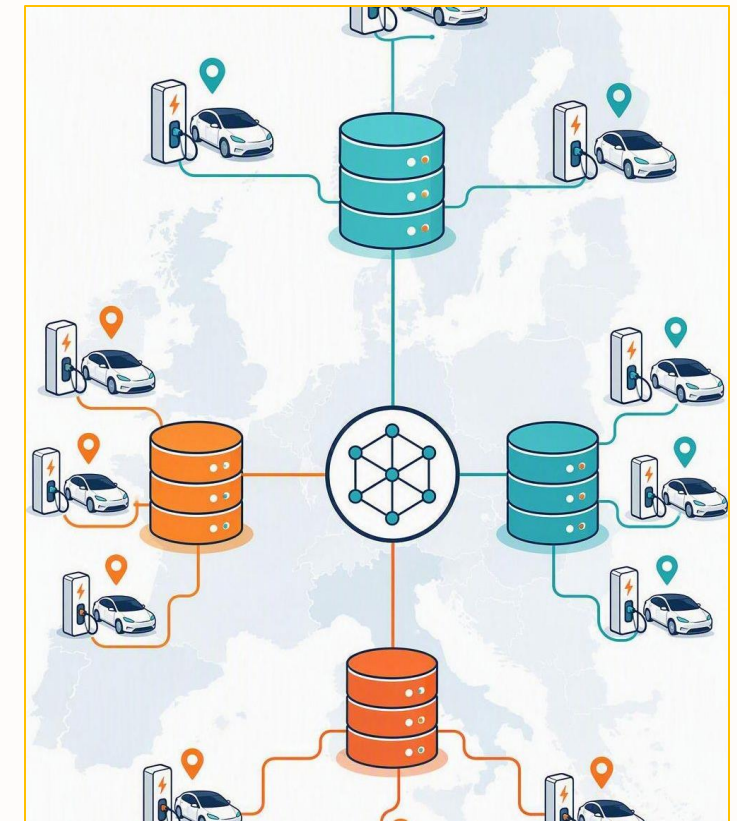


OCPI NAP Extension



OCPI NAP Extension – Why?

- **OCPI = Global usable standard** / AFIR and NAP are only for Europe
- **Setup** of Implementing acts with NAP requirements **done without direct alignment with OCPI**
- **DATEX-II and OCPI do not compete!**
- The market **communicates OCPI**
- Shortest route to compliance: **map the AFIR data requirements onto OCPI**
- This extension **does not replace DATEX II**;
- **CPOs can still communicate using OCPI, NAPs convert this to DATEX II**



The data set at a glance

Category	Data
General Information	Legal and commercial name, number of points, service support, helpdesk telephone, facilities
Geographic location	GNSS coordinates, additional location information, country, region (NUTS-1), city, postal code, address
Accessibility	Opening hours, time zone, compatible vehicle types, permitted vehicle specifications, parking spaces, accessible parking spaces
Payment options	Bank card reader, contactless, other ad-hoc means, accepted providers, contract-based payment
Charging-specific	Point ID including the IDRO operator code, connectors, connector type, current type, station and point maximum power, contract MSPs, plug & charge, smart charging, renewable electricity
Dynamic	Operational status, availability, ad-hoc price

The models do not line up

AFIR	OCPI 2.3.0	OCPI 3.0.0
Recharging pool	Location	Location
Recharging station	<none>	Charging Station
Recharging point	EVSE	EVSE
Connector	Connector	Connector

Most of the AFIR recharging information is mapped onto the Location (Both in OCPI 2.3.0 and 3.0)



The Mapping

Existing

A native OCPI property carries the required information

Conversion

A native OCPI property exists, but the value must be converted to the the required format

New

No property exists, the extension defines one

OCPI NAP Extension – Process

Stage	Steps	Date
Proposal	Task Group - AFIR Regulations	10-2024
Draft	- NAP Mapping mappings - NAP Extension DRAFT	03-2025 06-2026
Under Review	- Reviewed by the NDW (NAP NL) - Review by the EVRF Development Workgroup	06-2026 09-2026
Accepted	Release the EVRF NAP Extension	24-09-2026



OCPI NAP extension + TEST TOOL + CERT.

OCPI NAP Extension spec

- Free available see next slides

NAP Test tool incl conformance certification

- Test spec implementation + CONTENT (are the right fields correct filled)
- Fee will be required for test license, test operation and conformance test

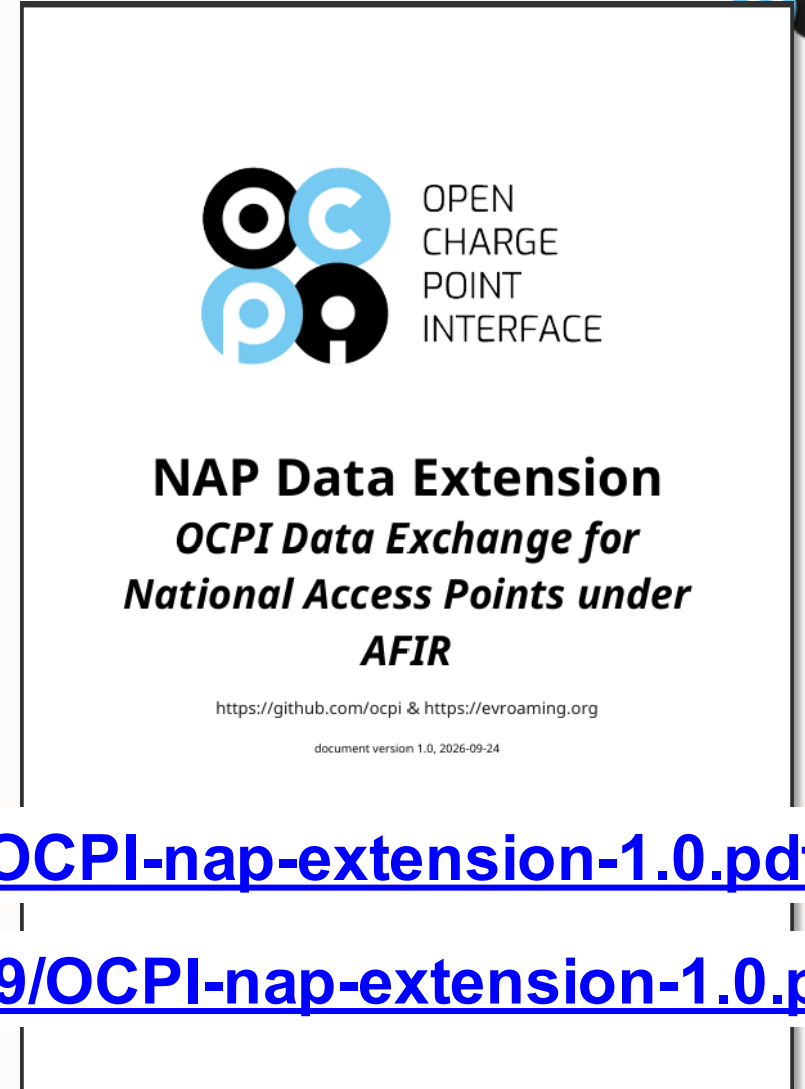
Additional support (non competitive)

- Based on individual agreements

OCPI NAP Extension – RELEASE!



OCPI NAP Extension – RELEASE!



<https://evroaming.org/wp-content/uploads/2026/09/OCPI-nap-extension-1.0.pdf>

<https://ocpi-protocol.com/wp-content/uploads/2026/09/OCPI-nap-extension-1.0.pdf>

Q & A



Thank you !

Michel Bayings – Executive Director

More information:

- www.evroaming.org
- <https://www.linkedin.com/company/evroaming-foundation>
- operations@evroaming.org



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Open discussion

- Standards perspective / alignment
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Spilett – CEAP for H₂ Data

Short break

AF Infrastructure views and challenges

Understanding data (re)use from NAP

Open discussion

Wrap up & closing



H2-Stations Initiative

Europe's central access point for reliable, free and up-to-date hydrogen refuelling station data

2nd NAPCORE Workshop on AFIR data , 25/09/2026

An initiative delivered by

SPILETT
new technologies

with the support of

 **ERM**
Sustainability is our business

 **EMCEL**
Consulting and Engineering
for the Energy Transition



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the European Union



Europe's Hydrogen Refuelling Stations
(HRS) community is evolving - and so
are data requirements

Europe's hydrogen HRS community is rapidly evolving

Since the Clean Hydrogen Partnership launched the platform in 2019, H2-Stations has been developed to Europe's **central source of hydrogen refuelling station data**. As hydrogen community grows, so does the need for reliable, up-to-date and standardised information.

To overcome current **challenges in data quality** available from different sources (including incomplete, outdated and inconsistent information), H2-Stations closely collaborate **with data owners to rely on first-hand information only**:

- 1) HRS operators and owners (static data)
- 2) HRS suppliers and other signal originators (dynamic data)
- 3) 3rd party assessors for validation of fueling protocols

<https://h2-stations.eu/>



	From 2019	To 2026
	16 countries	25 countries
	232 HRS (of which 143 in public operation)	630 HRS (of which 181 in public operation)
	14 HRS suppliers	28 HRS suppliers
	48 registered users (HRS operators)	136 registered users (HRS operators)
	27 static data fields, 1 dynamic data field	46 static data fields, 4 dynamic data fields, infos on site architecture
	3 dynamic signal originators	6 dynamic signal originators
	0 registered data users	125 registered data users

AFIR turns ambition into obligation and puts new reporting demands on many station operators



Source: Hydrogen Refueling Solutions (2025)

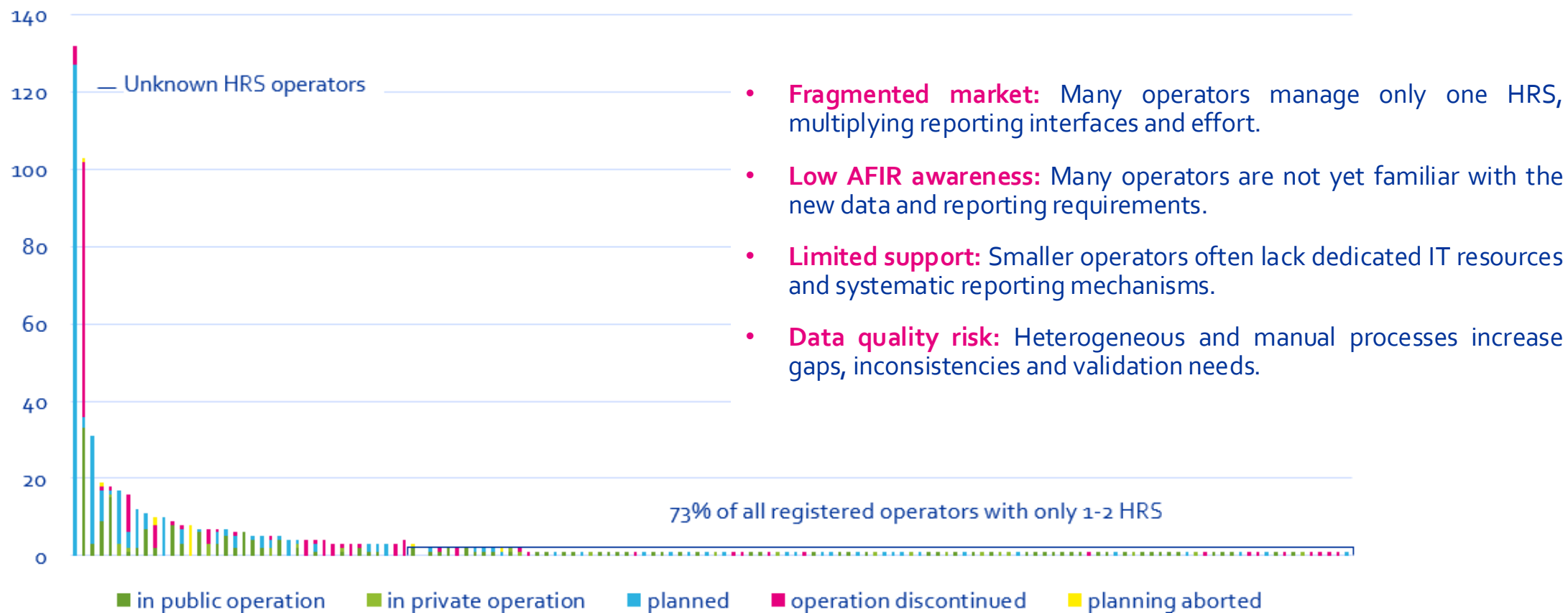
The **Alternative Fuels Infrastructure Regulation (AFIR)** requires transparent, reliable and up-to-date information on hydrogen refuelling infrastructure across Europe.

What AFIR means for hydrogen stations:

- Increased reporting requirements for hydrogen refuelling stations
- More frequent and accurate data updates
- Greater transparency for authorities, market participants and users
- Consistent data across countries and providers

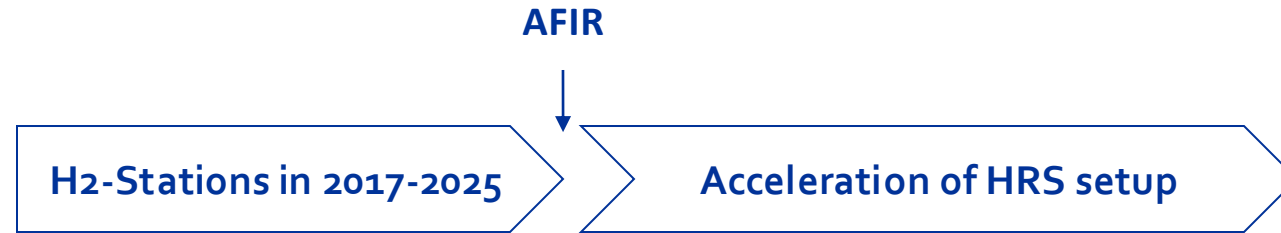
Data quality is no longer a nice-to-have. It is a regulatory requirement for many HRS operators and a prerequisite for the successful rollout of hydrogen mobility. Therefore H2-Stations not only includes AFIR compliant locations, but **all public operational HRS** throughout Europe.

Resulting challenges for HRS data reporting from the diversified HRS operators community



H2-Stations takes a collaborative approach to respond to this challenge for the organisations that create, manage and use hydrogen refuelling data

H2-Stations is transitioning to a more diverse environment under AFIR



1. more HRS stations
2. more HRS operators
3. diversified technology setups
4. new reporting regulation



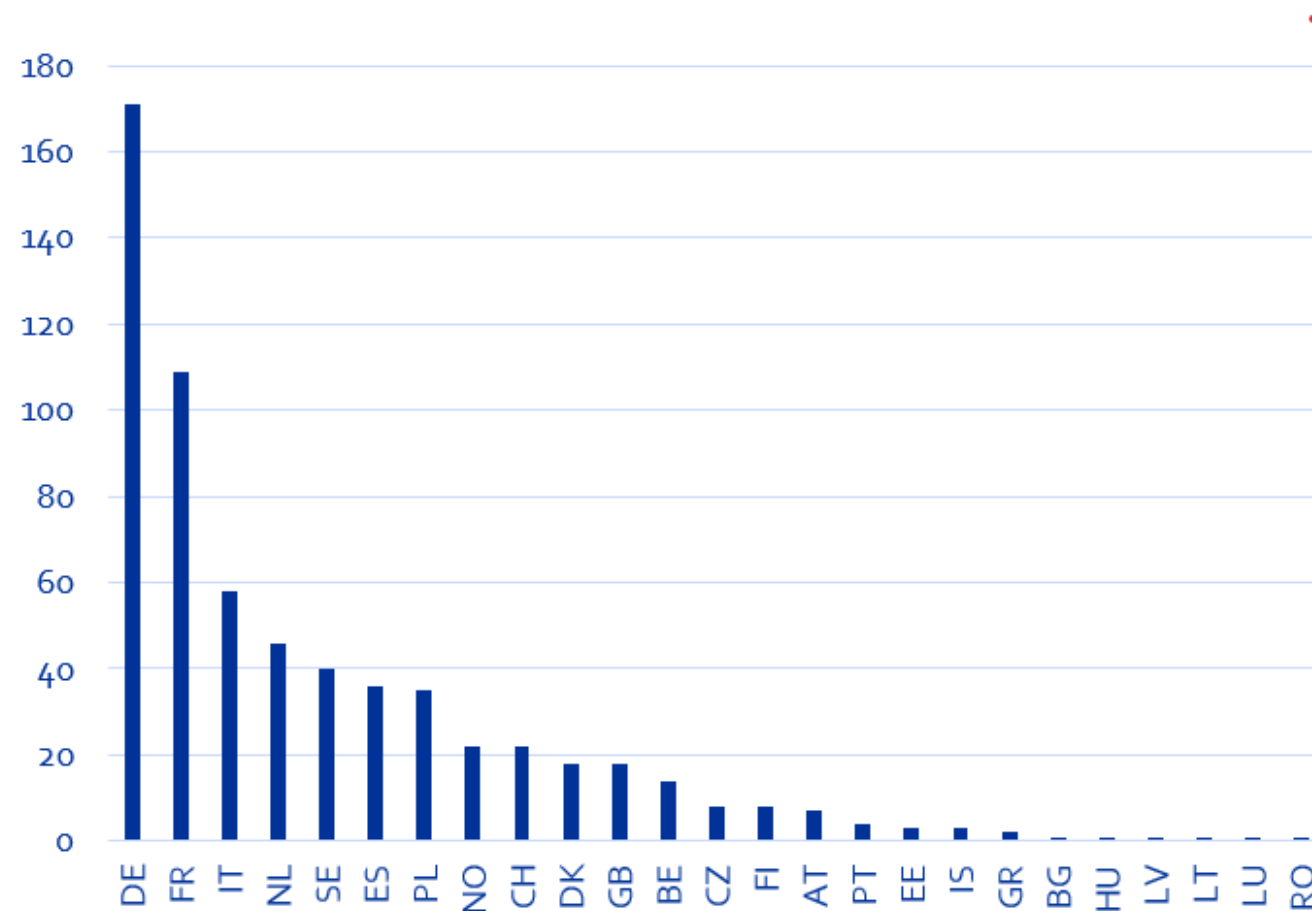
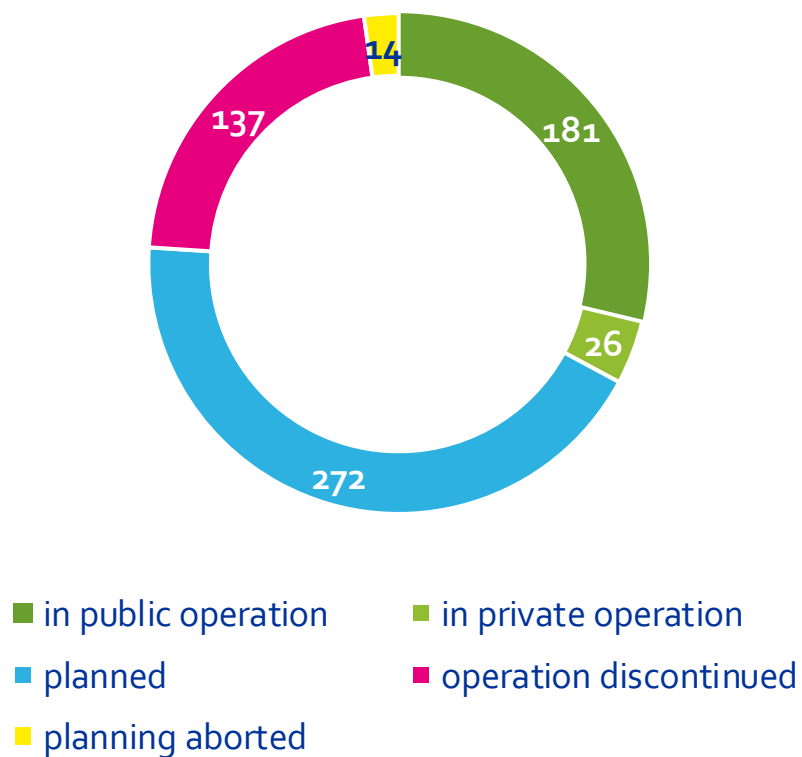
12/2025 – 12/2029



- Target: 100% of HRS operators registered
- Target: 100% of HRS registered
- Target: Complete static datasets¹
- Target: Complete dynamic datasets¹
- Target: Country specific DATEX II export APIs

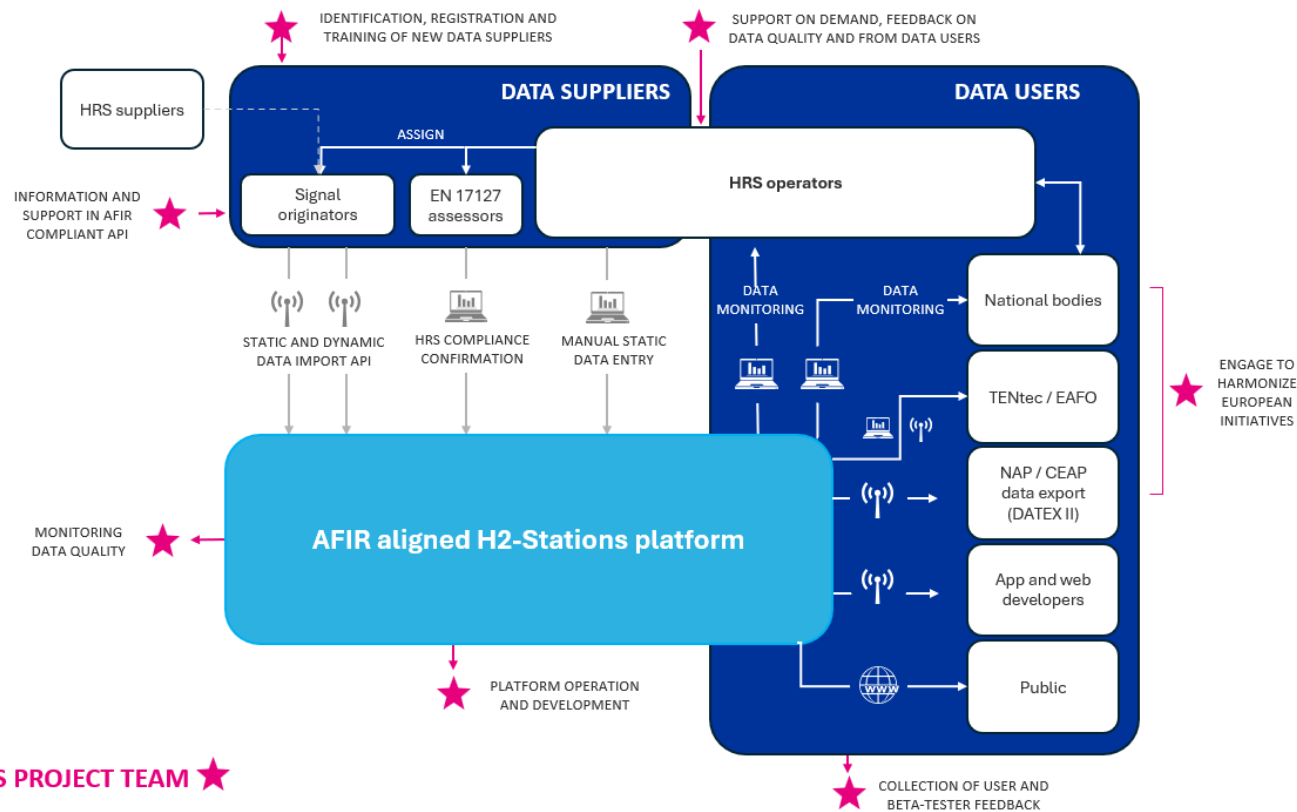
The use of the services and data of H2-Stations Initiative will remain free of charge

A total of 630 HRS are registered in the database



H2-Stations: A self-sustaining platform

Building on lessons learned from earlier project phases, the approach is designed to **shift data maintenance responsibilities gradually from the project team to data suppliers** - primarily HRS operators, signal originators, HRS suppliers and qualified assessors for EN 17127 approvals - while ensuring that platform administrators retain oversight, coordination, and validation roles.



Offer: Dedicated dashboards for

- *HRS operators*
- *Signal originators*
- *Third Party assessors*
- *National bodies*
- *EAFO / TENtec (on demand)*
- *Clean H2 JU*

to monitor and maintain data, assign users and exchange information.

H2-STATIONS PROJECT TEAM ★

Static and dynamic data update aligns with AFIR reporting rules

v2.0.0 (v2) OpenAPI 3.0.3

H2-Stations: HRS Availability Data Export API

[Download OpenAPI Document](#)

Summary

H2-Stations collects real-time availability data reported by HRS all over Europe. This API provides open data access to both the real-time availability status as well as various static HRS information.

Changes since v1.1

- Station responses now include the station layout sections `dispensers` (each dispenser with its nozzles) and `storages`. These sections are part of the schema from dav one. They

STATIC DATA (**UPDATE** < 24H AFTER CHANGE)

- General information
- Geographic location
- Accessibility
- Payment options
- Hydrogen delivery
- Renewable hydrogen
- General information

Manual update by registered user(s) in <https://portal.h2-stations.eu>
Reminders and alerts in case of missing or incorrect data

DYNAMIC DATA (**UPDATE** < 60 SEC AFTER CHANGE)

- Functionality: Operational status
- Functionality: availability of nozzle
- Price: Ad hoc price
- Hydrogen delivery: Storage alert

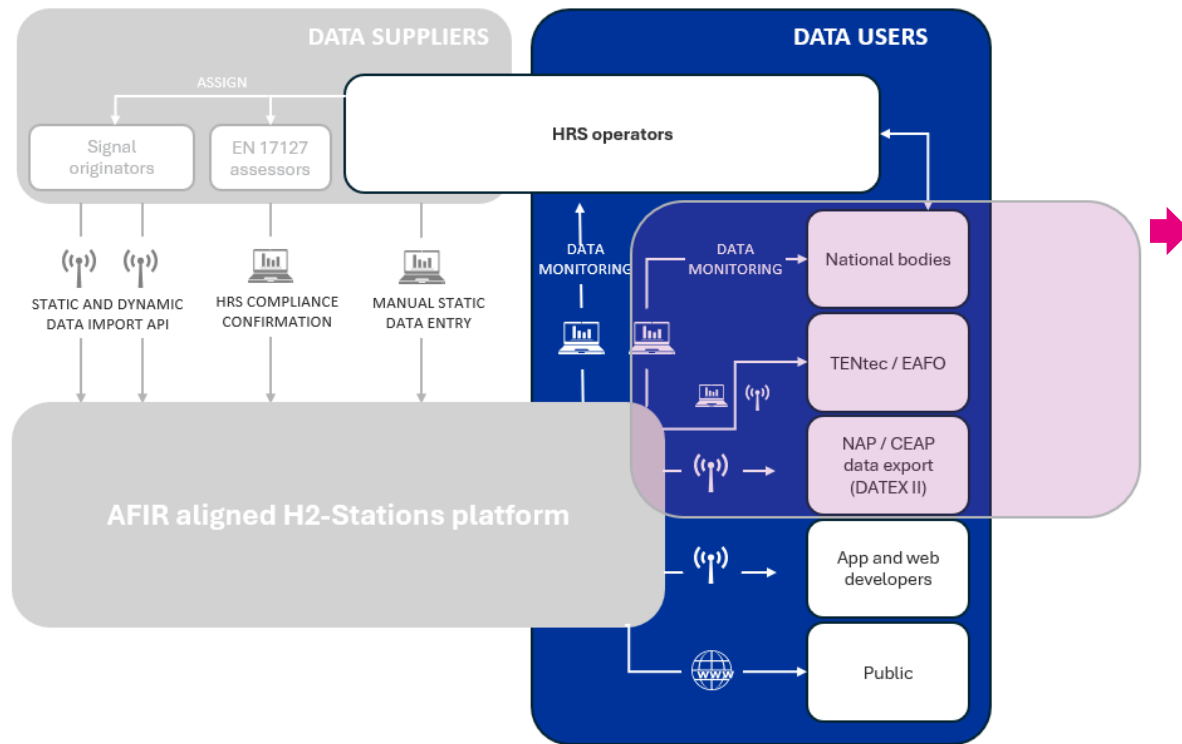
Automated update by station monitoring systems
Alerts in case of missing updates

Data quality aligns with the NAPCORE Quality Framework

The work is guided by the [NAPCORE Quality Framework Approach \(June 2025\)](#), which defines six quality dimensions: *Completeness, Correctness, Accessibility, Currency, Consistency, and Relevance*. The H2-Stations portal will support alignment with the NAPCORE Quality Framework “by design” and with dedicated alert functions for HRS operators.

Quality dimension	Quality criterion	Criterion description	
Completeness	AFIR data coverage	Assess the proportion of AF- related data types that are covered by the dataset, according to the AFIR.	ALERT function
Correctness	Alignment with the Implementation Regulation (IR)	Assesses how the elements in an AF dataset correctly reflect the description set out in the Annex of the IR.	by DESIGN
Accessibility	Level of accessibility	Assesses if the dataset is publicly accessible and under which conditions	by DESIGN
	API availability	Assesses if the operator of the recharging or refuelling point provides an API	by DESIGN
	NAP accessibility	Assesses if the dataset is published at the National Access Point	by DESIGN
Currency	Update frequency (static data)	Assesses the frequency on which static data on Alternative Fuels are updated after a change in the real-world	ALERT function
	Update frequency (dynamic data)	Assesses the frequency on which dynamic data on electric recharging points are updated after a change in the real-world	ALERT function
Consistency	Compliance with recommended data standards	Assesses whether the Alternative Fuels dataset is compliant with the recommended data standards	by DESIGN
Relevance	Data duplication	Assesses the occurrence of data duplication within the dataset	by DESIGN

For National Bodies: Monitoring dashboard for HRS rollout



- Visualization of HRS dataset
 - List view
 - Map view
- Traffic-light style monitoring of AFIR alignment, filtered by
 - Location (TEN-T corridor, urban node)
 - Technical setup (capacities, fuel pressure, dispensers...)
 - Operational set up (opening hours, accessibility, pricing...)
 - Operational compliance (EN17124, En17127, ISO 17268)
 - AFIR reporting compliance (data quality and completeness)
- Collaboration with HRS operators
 - Request for contact button
 - Validation of dataset confirmation (HRS operators)

For developers: free, open-access data, ready to integrate via the API

How to access the data

1. Request an API token from H2-Stations administration (email h2-stations@clean-hydrogen.europa.eu)
2. Explore available dataset and API documentation
3. Start with sandbox environment before integrating live data into your applications
4. Connect via the API: integrate information into your applications, create maps, dashboards, analytics and services

The HRS dataset is made available under the [Creative Commons Attribution 4.0 International \(CC BY 4.0\)](#) license, approved by the Clean Hydrogen Joint Undertaking (CH JU).

A screenshot of the H2-Stations Portal interface. The top navigation bar is dark blue with the portal logo and a search bar. The left sidebar contains links to Dashboard, ADMINISTRATION (Account, API tokens), OTHER APPS (Availability Map, Documentation), and RESOURCES (Privacy Statement, Support). The main content area is titled "New Export API token" and includes instructions, a warning about licensing, and input fields for "Token name*" and "Expiration*" (set to 90 days). It also shows the expiration date "Expires on 2026-12-17" and "Create token" and "Cancel" buttons.

What does the CC BY 4.0 license permit?

The license allows to freely share and adapt the data for *any* purpose, including commercially.
The only requirement is that you give **appropriate credit to the source** and **do not distort the original meaning or message of the data**.

DATEX II interface for the NAPs

H2-Stations offers one dedicated feed for each national subset of hydrogen station on H2-Stations.

Standard

- DATEX II v3.7, AFIR namespaces
- Aligned with national AFIR profiles where they exist (custom adjustments might be necessary)

Data

- **Static:** All requested AFIR fields
- **Dynamic:** operational status and availability per refuelling point, ad hoc price, limited-hydrogen warning
- Stable identifiers per station and refuelling point

Exchange

- **Snapshot Pull over HTTPS** (default supported method) : Two endpoints to poll, one for static data and one for dynamic data, in DATEX II XML and JSON.
- **REST push:** H2-Stations sends delta every 60s and full snapshots periodically. On request.

Quality

- Every payload validated against the official DATEX II XSDs
- Dynamic data from automated station signals only

H2-Stations will continuously be improved but we need your support to do this

Sneak Preview: What is Next

H2-Stations is designed to evolve into a **long-term, community-owned and -driven resource for Europe's hydrogen ecosystem**, with active community co-development.

H2-Stations Initiative Relaunch 2026



✓ **AFIR-Ready Platform**

New API v2 (import and export)

Real-time data dashboards: availability, pricing, usage, and low-hydrogen warnings

Expanded static data fields

✓ **Station Layout Update**

Infrastructure editor introduced

Physical equipment inventory

Receive filtered driver feedback and station-specific alerts

✓ **Extended protocol configuration**

Operators can record the precise fuelling capability of each nozzle

✓ **New HRS Operator's Monitoring Dashboard**

Invite team members, manage access permissions, and review a full history of changes across your organization

✓ **National Body Connectivity for HRS operators**

Verify and manage connections with National Bodies or NAP, and initiate dialogue directly from the platform

✓ **National Body Monitoring Dashboard**

Monitor HRS rollout in your country and understand state of AFIR alignment regarding location, technical capacity, performance, data reporting and else.

Request for support



To ensure NAPCORE Quality Framework aligned data delivered by the H2-Stations platform we need to

1. be kept updated on any changes in the framework approach
2. get in contact with all NAP to discuss on (individual) DATEX II data profiles and other likely existing national HRS datasets (for cross checking and improving our data quality)



To improve completeness and accuracy of our HRS registry we need to

3. get introduced to HRS operators who don't know us yet
4. be kept updated on any new HRS to come (from national funding programs, HRS supplier information etc.)

Where to find more information

<https://blog.h2-stations.eu/>

Information on activities and latest developments from the H2-Stations initiative, and relevant news for the HRS community (e.g. AFIR, funding, workshops...)

<https://docs.h2-stations.eu/>

H2-Stations documents, categorized per user group

<https://docs.h2-stations.eu/roadmap/>

Information on what is already available on the H2 Stations platform and what we plan to ship over the coming months, what each update contains, and when it is expected to reach you.

Requests can be addressed at h2-stations@clean-hydrogen.europa.eu



Thank you!

Nadine Hölzinger | Spilett new technologies | +49 172 8874 991 | nadine.hoelzinger@spilett.com

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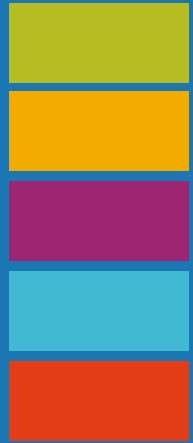
SHORT BREAK

The session continues at **10:45**



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- **AF Infrastructure views and challenges**
 - POLIS - Views and challenges from a municipality's perspective
 - Schneider Electric – AFIR by design: Crafting Compliance into infrastructure
- Understanding data (re)use from NAP
- Open discussion
- Wrap up & closing



Alternative Fuels Data

Views and challenges from public authorities

Pedro Gomes

Clean Vehicles & Air Quality Cluster Lead

Pgomes@polisnetwork.eu



About POLIS

Peer-to-peer exchange

Policy & Advocacy

Research

Innovation

130 Cities, regions and
related entities

SUSTAINABLE
URBAN
MOBILITY
INNOVATION



NETHERLANDS

Amsterdam
 Arnhem-Nijmegen
 Eindhoven
 Emmen
 Gelderland
 Groningen
 Helmond
 Land van Cuijk
 Limburg
 North Brabant
 North Holland
 Overijssel
 Rotterdam
 South-Holland
 Stedendriehoek
 Súdwest-Fryslân
 The Hague
 Tilburg
 Twente
 Utrecht (City)
 Utrecht (Region)
 Westland
 Zeeland (Province)
 -
 Breda University of Applied Sciences
 CROW Kennisplatform
 Lantis
 Rijkswaterstaat
 Vervoerregio Amsterdam

IRELAND

Cork
 NTA (Dublin)

UNITED KINGDOM

TfGM (Greater Manchester)
 Glasgow
 Greater London
 London – LEPT

LUXEMBOURG

LIST

BELGIUM

Antwerp
 Bruges
 Brussels-Capital
 Flanders
 Ghent
 Hasselt
 Leuven
 Mechelen
 Schaerbeek
 -
 Way To Go
 IMEC
 KU Leuven
 MPACT
 VUB

PORTUGAL

Lisbon
 CIM Douro
 NOVA Cidade

SPAIN

A Coruña
 Barcelona
 Bilbao
 Catalonia
 Gipuzkoa
 Hospitalet de Llobregat
 Madrid
 Vic
 Vitoria-Gasteiz

ITALY

Bologna
 Perugia
 Pisa
 Puglia (Region)
 Ravenna
 Reggio Emilia
 Rome
 -
 Iuav University
 DIIES - University of Reggio Calabria

FRANCE

La Rochelle
 Lille
 Paris
 Ile-de-France Mobilités
 Tisseo (Toulouse)
 -
 CEREMA
 IFP Energies Nouvelles
 Université Gustave Eiffel

SWITZERLAND

SBB

NORWAY

Akershus
 Norwegian Public Roads Administration
 Ruter
 -
 Molde University College
 SINTEF AS
 TOI

SWEDEN

Gothenburg
 Örebro
 Stockholm

RISE

VTI

FINLAND

Forum Virium (Helsinki)
 Helsinki-Uusimaa
 Turku

GERMANY

Baden-Württemberg
 Berlin
 Dresden
 FrankfurtRheinMain
 Hamburg
 Heidelberg
 Heilbronn
 Karlsruhe
 North Rhine-Westphalia
 Stuttgart
 -

DIFU

POLAND

Czestochowa

CZECH REPUBLIC

Prague

DENMARK

Aarhus
 Aalborg
 Central Denmark

HUNGARY

BKK Budapest

ROMANIA

Arad

BULGARIA

Sofia

CROATIA

Zagreb
 -
 University of Zagreb

SLOVENIA

Ljubljana
 -
 Urban Planning Institute of the Republic of Slovenia

AUSTRIA

Vienna

GREECE

Heraklion
 Thessaloniki
 Region of Crete
 -

CERTH

University of West Attica

CYPRUS

Strovolos

Ukraine

Lviv
 Mariupol
 Uman
 Zviahel

USA

MobilityData
 Open Mobility Foundation

Urban mobility challenges & policy goals



AIR QUALITY



MODAL SHIFT

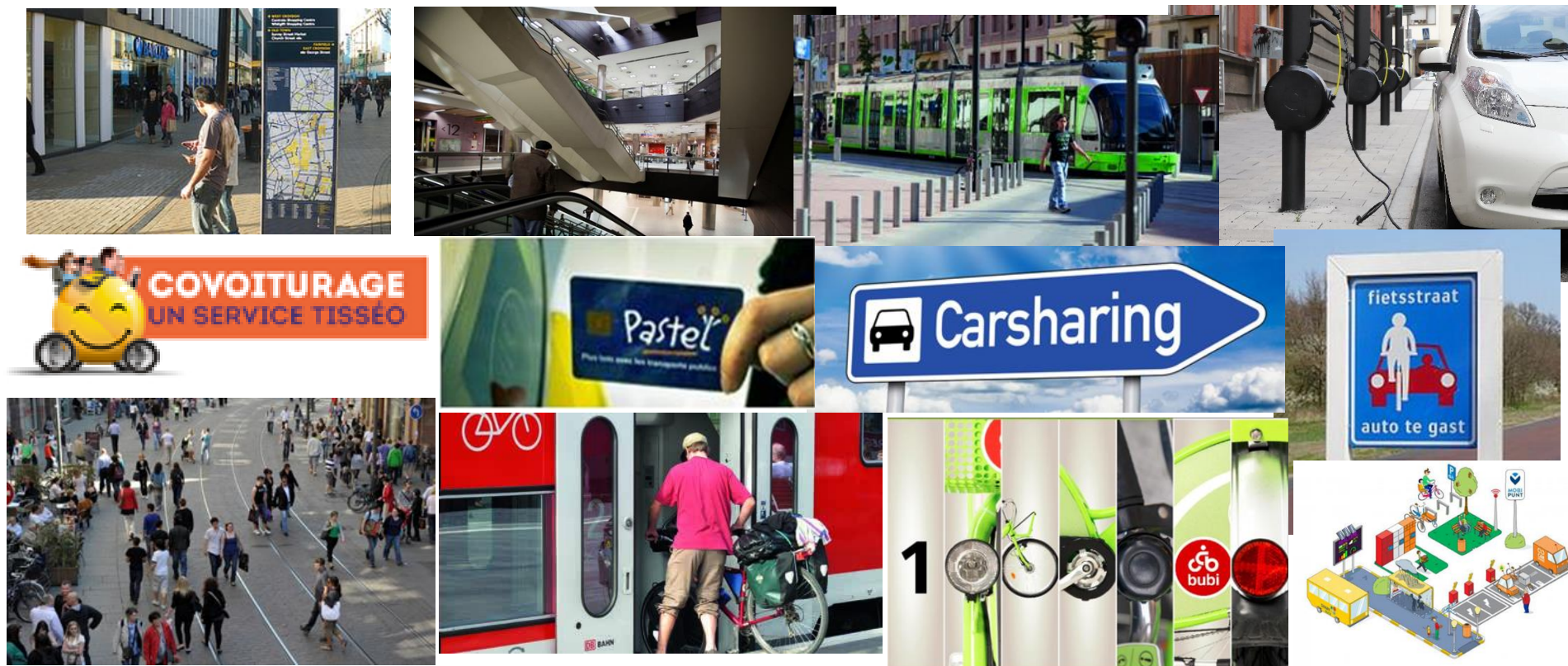


SAFER ROADS



DECARBONISATION

Sustainable Urban Mobility Ecosystem



User wants: Multimodal – Intermodal – Clean – Safe – Flexible – Affordable – Connected – User-centric – Inclusive – Shared – Healthy – Seamless ...

AFIR & data requirements

AFIR Article 20: *By 14 April 2025, operators of publicly accessible recharging points and refuelling points for alternative fuels (...) shall ensure the availability of static data and dynamic data concerning alternative fuels infrastructure operated by them (...) at no cost.*

Commission Implementing Regulation (EU) 2025/655 of 2 April 2025

Adherence to DATEX II Specifications

Commission Delegated Regulation (EU) 2025/645 of 1 April 2025

Common technical requirements for a common API

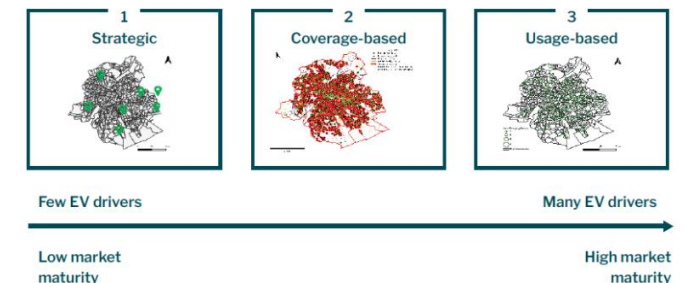
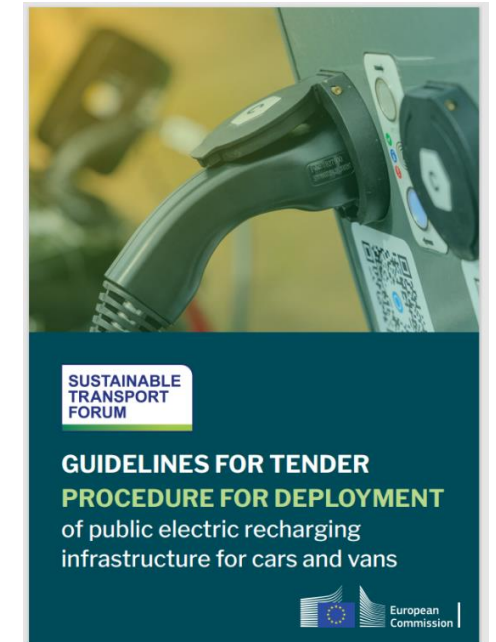
Commission Delegated Regulation (EU) 2025/671 of 2 April 2025

Additional data types

Opportunities from AF data

Data on AF infrastructure plays a crucial role:

- AFIR establishes that **data** (static and dynamic) should be **accessible** in a coherent manner in all MS
- AFIR data relevant to ensure that **end users** can make **fully informed decisions** on the recharging and refuelling of their vehicles
- But also, for **local and regional authorities** to properly **plan their investments** in recharging networks (from user-driven to data-driven approaches) and MS to produce **robust and realistic NPF**
- Improved **levels of service** for EV drivers and **integration** between electromobility, parking and urban planning policies (including **SUMPs**)
- **Integrated** with other types of data (RTTI, MMTIS...) it contributes to a sustainable urban mobility ecosystem



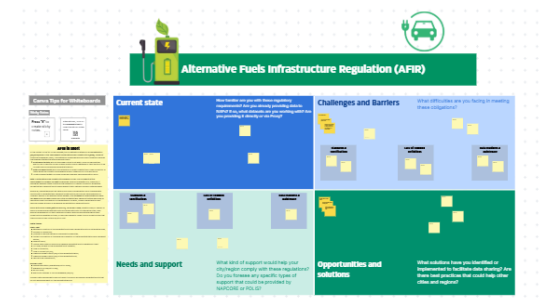
Local and regional authorities views on AFIR & data

Challenges

- Lack of awareness from LRAs on AFIR data requirements, and how cities can benefit (some are CPOs...)
- No clear “ownership” of competencies (EV recharging people ≠ data people)
- Lack of common legal governance (lack of clarity about the role of PAs vs NAPs vs CEAP/EAFO...)
- Roaming and payment services not governed throughout Europe, not even on a national level

Opportunities

- Positive impacts on the CPOs (interestingly, PAs not mentioned...)
- Increase in recharging point usage rate by sharing data (viability of business models, adoption of EVs...)
- Raise awareness and knowledge about the CPOs (and network coverage?)



Local and regional authorities' needs on AFIR & data

- **Increased know-how** and support to implement the EU legislation including best practice sharing
- Avoid a **two-speed** Europe when it comes to data collection, usage and sharing
- **Breaking of silos** between the electromobility people and the data sharing people
- **Financial support** to enable data collection and usage (and compliance with EU regulations)
- More dialogue structures between the different levels – can NAPCORE play a role in facilitating this?
- Comon **data standards** and **good, easy to use** data
- **Clarity** on **CEAP** and how it can support local data sharing (and the NAPs)
- **Fair** and proportionate **data exchange** between PAs and private stakeholders



Cooperation NAPCORE - POLIS



**Balancing parking,
EV charging, and
energy management**

29-30 SEPTEMBER 2026
LILLE, FRANCE

POLIS
CITIES AND REGIONS FOR TRANSPORT INNOVATION

POLIS-NAPCORE Workshop: Increasing mobility data sharing in European cities

20 October 2026
2:00 PM - 4:30 PM
Online

POLIS
CITIES AND REGIONS FOR TRANSPORT INNOVATION

 napcore



About POLIS

POLIS is the network of European cities and regions working together to deploy innovative solutions for a more sustainable mobility.

Contact

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Clean Vehicles & Air Quality Cluster Lead

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POLIS

Rue du Trône 98

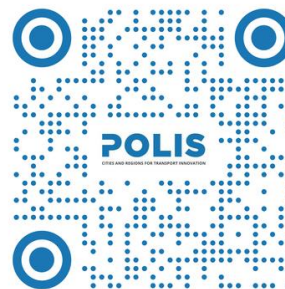
B-1050

Brussels, Belgium

Tel +32 (0)2 500 56 70

polis@polisnetwork.eu

www.polisnetwork.eu



Agenda

- Opening – NAPCORE
- European Commission – the aim of AFIR
- FIER – Status of CEAP / Pilots
- Open discussion
- Standards perspective / alignment
- Short break
- **AF Infrastructure views and challenges**
 - POLIS - Views and challenges from a municipality's perspective
 - Schneider Electric – AFIR by design: Crafting Compliance into infrastructure
- Understanding data (re)use from NAP
- Open discussion
- Wrap up & closing

AFIR by Design: Crafting Compliance Into Infrastructure

Tamás Lukács | Schneider Electric | CEE Prosumer Strategy Manager



Schneider Electric is one of the world's **leading energy technology companies**.
Our solutions make **safer, more efficient** and **more sustainable** energy use possible
from homes to critical infrastructure.

With **more than 160 000 employees** worldwide
present in **100 countries**, with **400+ sites** our goal is to be your reliable partner with
our **innovative solutions** to shape the **future**.

„AFIR’s big 3”: TEN-T, Payments, Transparency

**Providing Solutions Worldwide
Focusing on: Quality, Support & Ease-of-Use!**

- **TEN-T '25 → TEN-T '30 = 1 million chargers to be installed**

Our Supply Chain is ready to supply:
Factory capacity + EU Stock up to 1.44MW power

- **Ad-hoc Local Payment need**

POS terminal available for all DC chargers: 60kW - MCS

- **Transparency and Interoperability**

HMIs on all chargers + Interoperability testing with all CSMS

Key: Solutions ready ahead of legislations!

Contact us if you wish to collaborate!



We are always „Walking the talk”

Fleet transformation

100% EV fleet until 2030 worldwide → Experiencing first hand
Installing our own solutions to test and train

Duna Smart Power Systems factory

MV, LV, Switchboard, Protection, Metering, Busbars, Automation,
AC and DC Charging, BESS + 3rd party PV

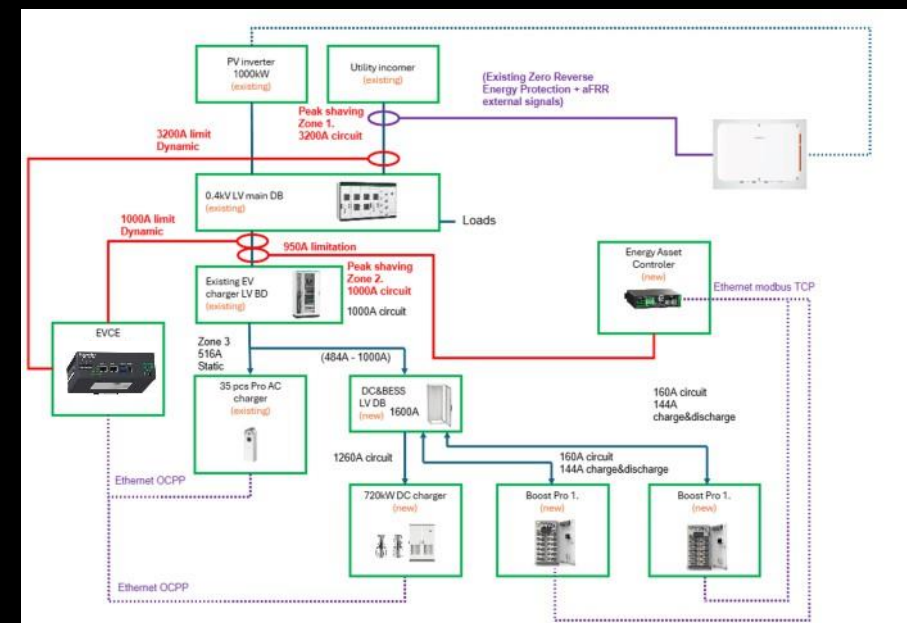
EMS, BMS + starting Predictive Mikrogrid, Semipublic charging

Projects: BESS + DC, Bus Hub, MFH, C&I, Factory

Starting testing of V2X, MCS, Container BESS

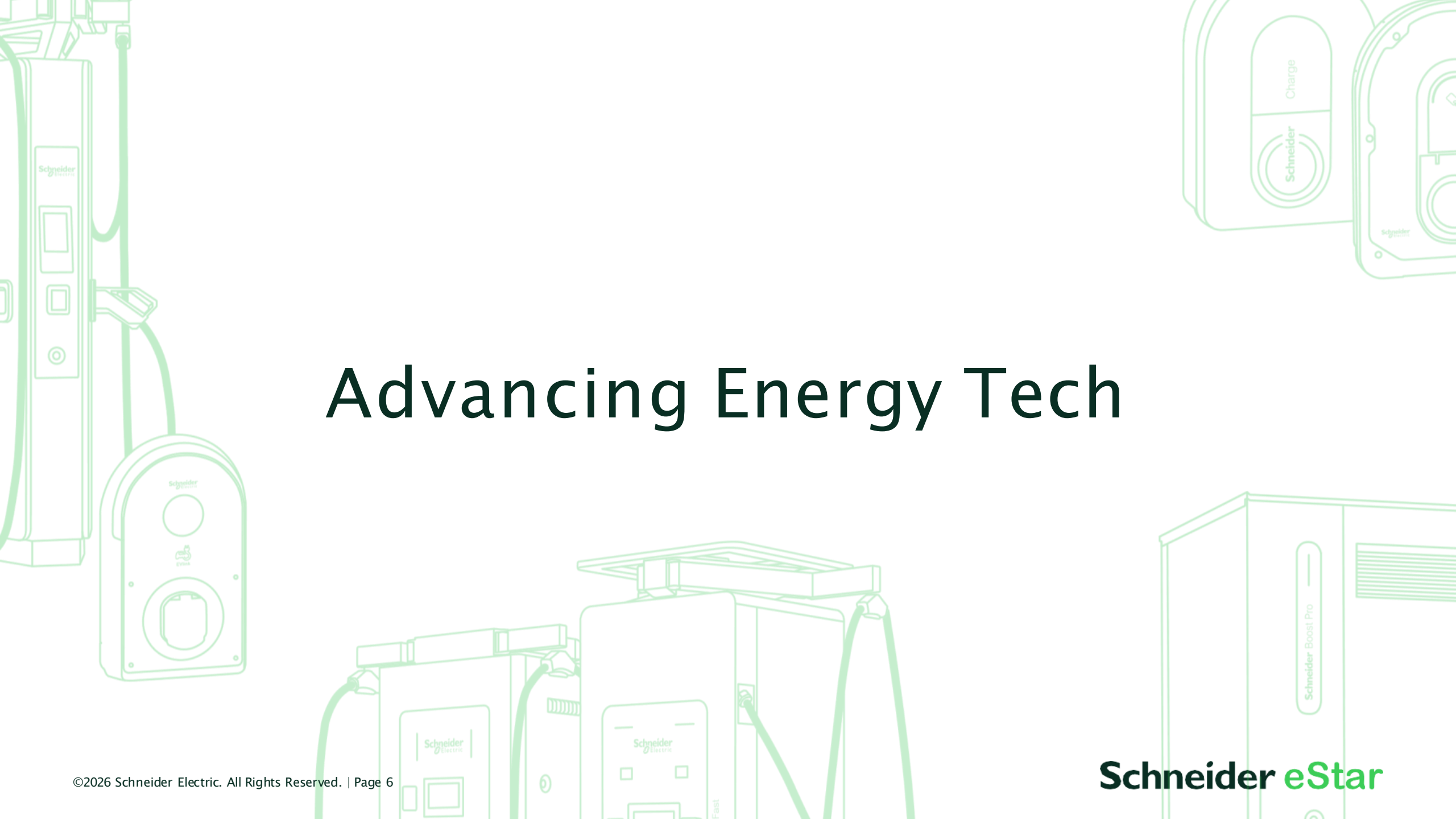
Thought leadership to support transformation

May you have any questions, feel free to reach out!



Life Is On

Schneider
Electric

A light green line-art illustration of various Schneider Electric energy products, including a vertical switchgear unit on the left, a circular device in the middle left, and several large industrial cabinets at the bottom and right. The text "Advancing Energy Tech" is centered in the middle of the image.

Advancing Energy Tech

Schneider eStar

se.com

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- **Understanding data (re)use from NAP**
 - Google – Assist EV drivers worldwide
 - Metergram – Regulation to reality
 - ACE Europa – Charging price transparency
- Open discussion
- Wrap up & closing

Google

EV Charging AFIR



Lisa Arendt

Mission



Assist EV drivers everywhere in navigating the world

Sourcing Data



Partners (CPOs)

Feeds are provided from partners directly

Aggregators

Data is been consolidated by data aggregators and provided to Google .

Upload Tool

Partners can upload data via the upload tool. The upload requires static and RTA data upload.

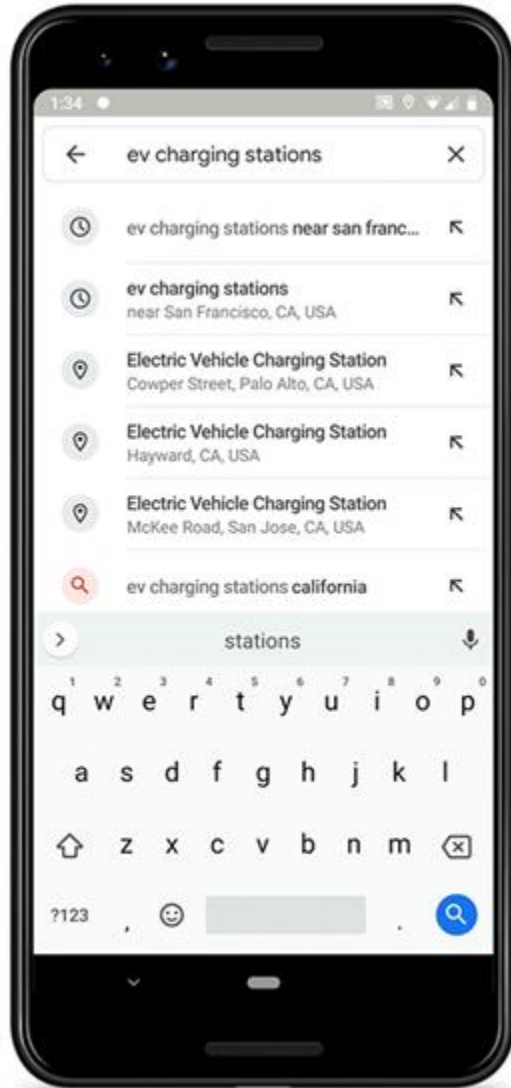
UGC

User Generated Content

Open Data

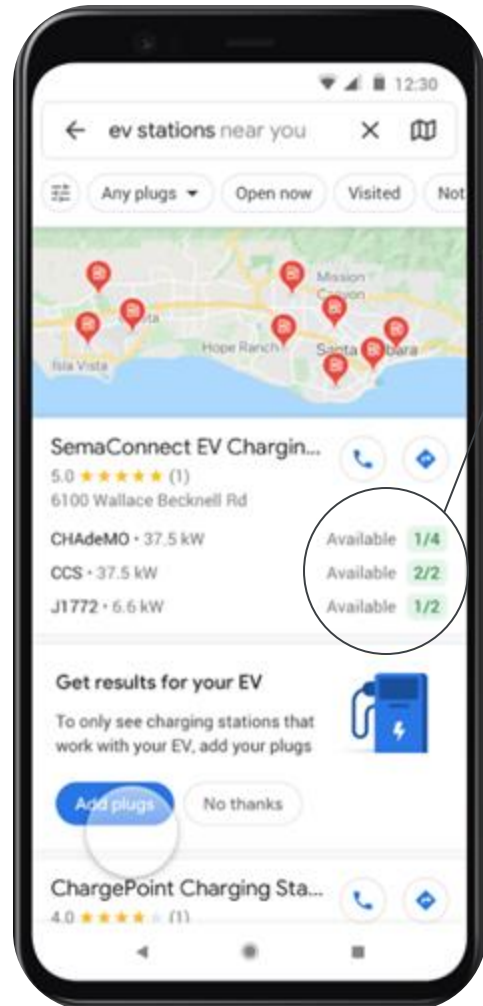
Google sources data through open data where available.

Mobile Search



- Google Maps users can search “**EV charging stations**” or search by **brand name** to locate nearby EV charging stations.
- Station details include:
 - EV Station Name
 - Address
 - Hours
 - Port type (e.g. CHAdEMO, J17772)
 - Power level
 - Current availability

Real Time Availability and Payment Methods



SemaConnect EV Charging...  

5.0 ★★★★★ (1)
6100 Wallace Becknell Rd

CHAdEMO • 37.5 kW	Available	1/4
CCS • 37.5 kW	Available	2/2
J1772 • 6.6 kW	Available	1/2

8:10   

Green Motion Charging S...  

OVERVIEW UPDATES PHOTOS ABOUT

 DIRECTIONS  CALL  SAVE  SHARE PLACE

 J1772 • 22kW Available 4/4

 Type 2 • 22kW Available 4/4

 **Payment** 

Plugsurfing EnBW mobility+

Shell Recharge EinfachStromLaden

evpass

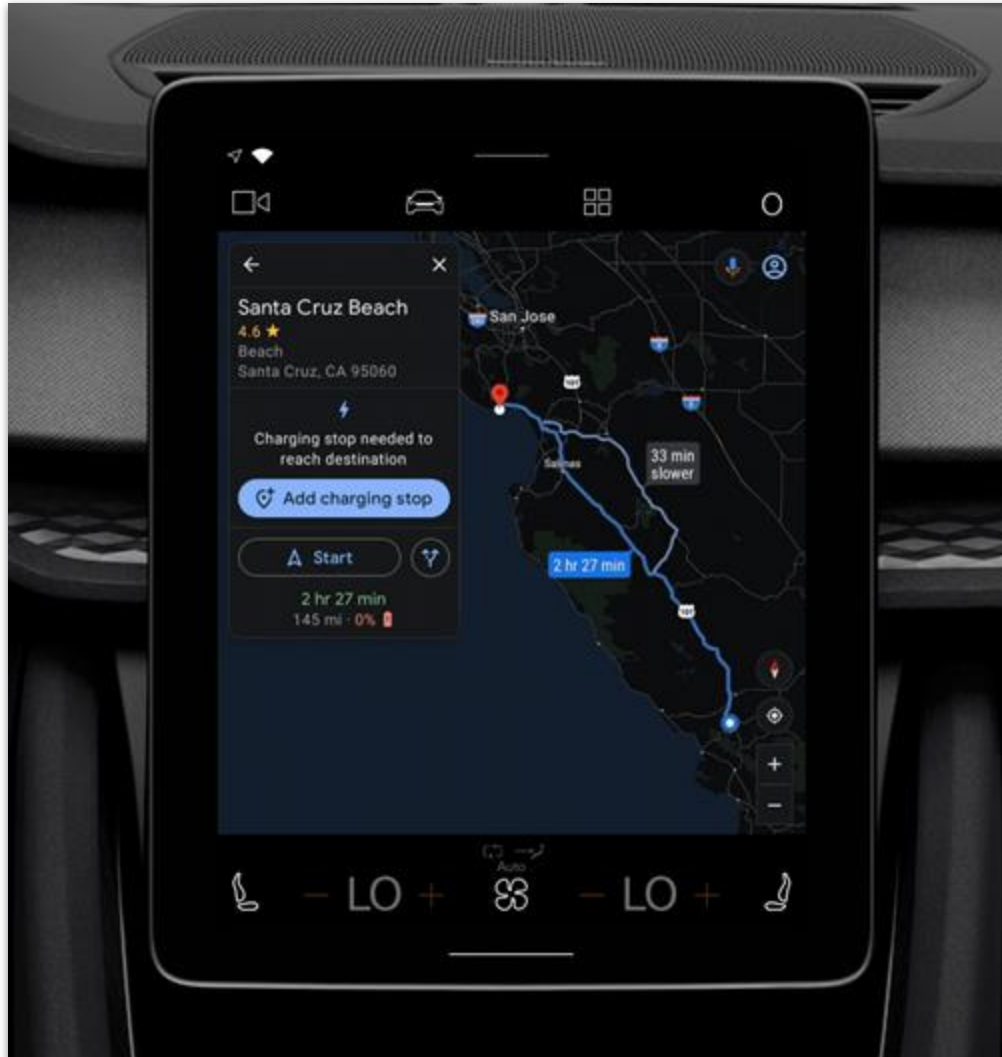
 Beethovenstrasse 21, 8002 Zürich, Switzerland

 Open 24 hours 

 Suggest an edit

[See all](#)

In-Car EV Routing



- **Short Distance Routing:**
Users can see which charging stations are the fastest and select specific stations. They can also see if a charging spot is close to a grocery store or coffee shop

In-Car EV Routing



- **Long Distance Routing:**
In vehicles equipped with Android Automotive (e.g. Polestar 2 and Volvo XC40 Recharge), when users enter a destination that requires two or more recharge stops, algorithms in Maps will search and filter through tens to thousands of public charging stations to find the most efficient route. Users can see how long each charge will take and their updated total trip time.



Process Flow of adding open data sources

01

Data Availability

Is static AND RTA data available on NAPs?



02

Data Format

Is the data in OCPI?



03

License Terms

Does the license allow us to access and use the data



04

Data Quality

How good is the data quality, completeness and freshness compared to other sources?

Assessment March 2026



44

Countries Researched

11

Countries with RTA Data Found

Austria • Finland • France • Italy • Latvia • Lithuania • Netherlands • Norway • Poland • Switzerland • UK

2

Countries Using OCPI

Lithuania • Netherlands



NAPCORE ALTERNATIVE FUELS WORKSHOP

From regulation to reality

Implementing standards in production systems

Klas Eliasson · Metergram · 25 September 2026



CHARGING PRICE TRANSPARENCY

Collecting and analyzing AFIR data in the EU



CHARGING PRICES AS A KEY TO THE SUCCESS OF ELECTRIC MOBILITY

Challenges in Germany

- I) High electricity prices
- II) Many different providers
- III) Lack of price transparency

Charging Providers

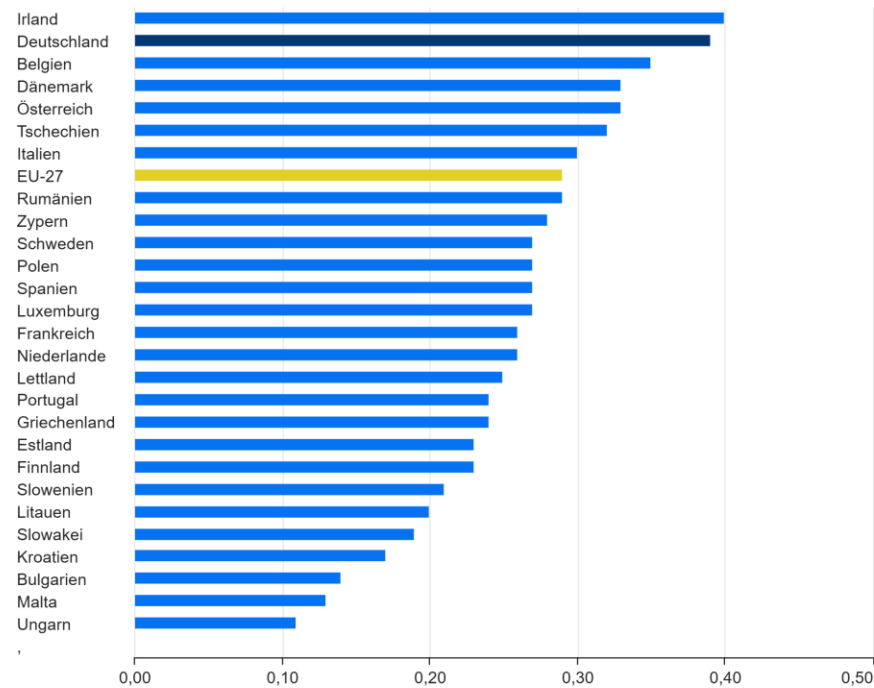
>375 CPOs
>400 EMPs

Source I): Stiftung Klimaneutralität, 2026
Source II) Eurostat, 2026
Source III) ACE App, 2026

Household electricity prices in Europe

Strompreise in Privathaushalten 2. Halbjahr 2025

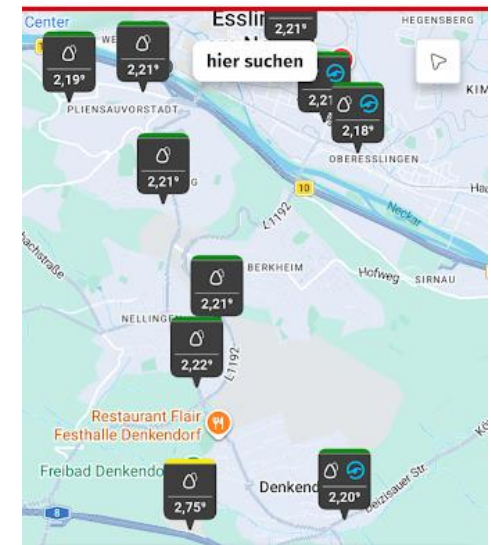
in Euro je Kilowattstunde (kWh)



Inklusive Steuern und Abgaben. Quelle: Eurostat

© Statistisches Bundesamt (Destatis), 2026

Fuel prices, Screenshot ACE App



FUEL PRICES ARE TRANSPARENT. CHARGING PRICES ARE NOT. YET.

FUEL

~ 15,000 filling stations

SINCE 2013

Mandatory reporting in GER

SUPER E5 | E10 | DIESEL

Static and dynamic data

CENTRAL DATA PLATFORM (MTS-K)

~ 100% MARKET OVERVIEW

~ **100% MARKET COVERAGE**

EV CHARGING

~ 220,000 charging points

SINCE 2025

Mandatory reporting adhoc prices
in the EU

AC | DC

Static and dynamic data

One NAP (Mobilithek)

25 + DATA SOURCES (in GER)

~ **70% MARKET OVERVIEW**

~ 5% PUBLIC CHARGING COVERAGE

ONE REQUIREMENT – DIFFERENT NAP APPROACHES

Distributed (e.g. Germany)

Many sources -> NAP

25+ individual sources

- Many interfaces
- Different data quality
- Duplicates & missing data
- High processing effort

Aggregated (e.g. Austria)

**CPOs -> central
database -> NAP**

Central aggregation

- Central infrastructure required
- Single point of dependency

Catalogue (e.g. Belgium)

**NAP – links to data
sources**

**Data remains with
providers**

- Data must be retrieved from many sources
- Less control over data quality

ONE REQUIREMENT – DIFFERENT NAP APPROACHES

Distributed
(e.g. Germany)

69%

**ad-hoc prices publicly
available**

Aggregated
(e.g. Austria)

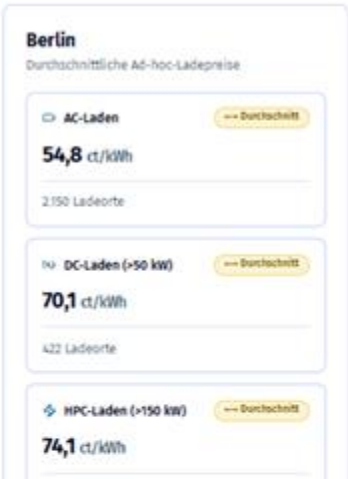
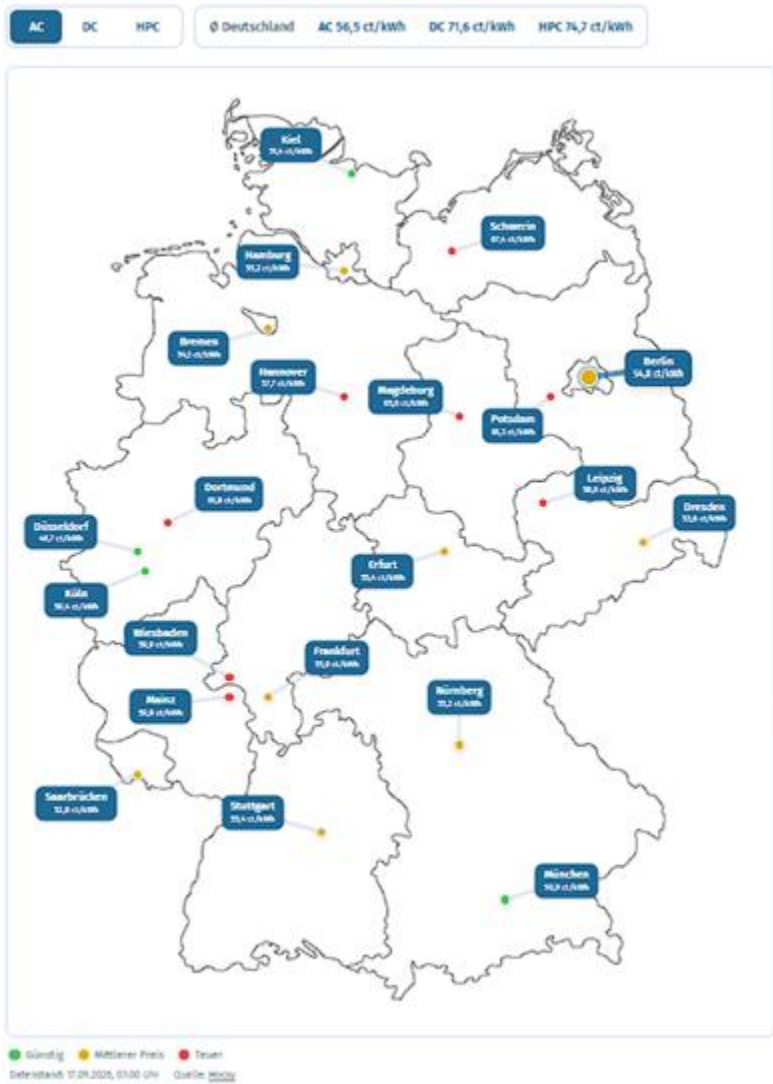
>95%

Catalogue
(e.g. Belgium)

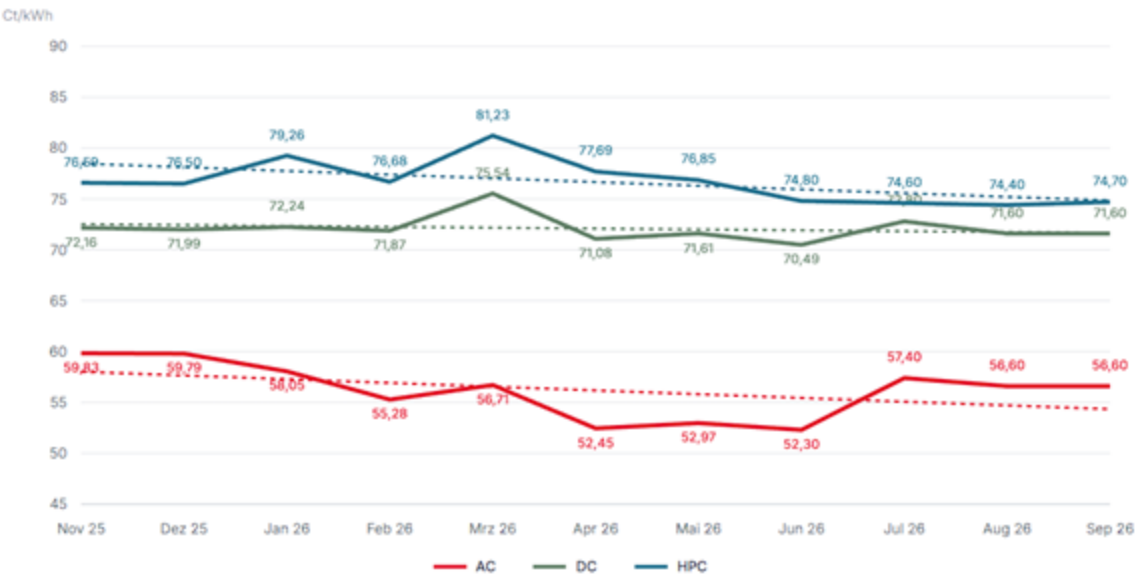
71%

FROM DATA TO HELPFUL INSIGHTS

1) ADHOC PRICE OVERVIEW



2) ADHOC PRICE DEVELOPMENT



3) ADHOC PRICES ABROAD

So viel kostet Laden im Ausland

1. Finnland 23,6 ct/kWh	2. Litauen 28,7 ct/kWh	3. Slowenien 29,1 ct/kWh	4. Griechenland 43,0 ct/kWh
5. Niederlande 43,0 ct/kWh	6. Dänemark 43,9 ct/kWh	7. Portugal 50,3 ct/kWh	8. Belgien 51,2 ct/kWh
9. Deutschland 56,5 ct/kWh	10. Österreich 57,8 ct/kWh		

ADVOCATING E-MOBILISTS ACROSS EUROPE, WE HAVE A VISION!

★

Basics

Now

- ✓ **EU-wide transparency**
All countries provide their data
- ✓ **One central access point**
 - One place for all 27 EU members
 - No different platforms, access rights or authentications

★★

What else we need

By 2028

- ✓ **No additional costs**
 - No starting fees
 - No time-based fees
 - No other hidden charges
- ✓ **Including associated countries**
 - Switzerland
 - Norway
 - UK...

★★★

Deluxe

By 2030

- ✓ **Including subscription models**
Next level transparency
- ✓ **End roaming fees**
Like in mobile connections

CONTACT

Thank you very much for your time and interest. If you would like to discuss new ideas, innovative approaches or potential collaborations with us, we are always happy to hear from you. Let's work together to shape the next steps regarding transparency and fair pricing.

CONSTANTIN HACK

Kompetenzteam Elektromobilität

SPECIAL THANKS

Thomas Fischl
<https://hocsy.eu>



Phone: 0049 711 5303 299



E-Mail: constantin.hack@ace.de



Link: <https://www.ace.de/elektromobilitaet/laden-wallbox/ladepreise/>

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- Wrap up & closing

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Open discussion / Q+A (~20min)

Please RAISE YOUR HAND IN TEAMS if you want to start a discussion / ask a question

You can only turn on your microphone if permitted!

Participants may share:

- Their opinion / take on the regulation and the governance
- Improvement suggestions, pain points NAPCORE should focus on in the future
- Important topics to address for our next Workshop with the stakeholders and Commission
- AoB



Wrap up & closing



Co-funded by
the European Union

Invitation to the Mobility Data Days 2026!



Why Attend?

At the NAPCORE Mobility Data Days 2026, you will:

- **Contribute to shaping** the discussion on improving mobility data accessibility and availability in Europe.
- **Learn and discuss about** the latest achievements in defining and implementing common procedures and strategies for mobility data exchange
- **Network with stakeholders** of the data ecosystem for road and traffic as well as multi-modal mobility
- **Meet experts** from EU Member States, regions, municipalities and cities to exchange experiences, solutions and best practices

Who is it for?

The NAPCORE Mobility Data Days 2026 welcomes:

- Multimodal and road traffic **data users and service providers**
- **Data experts and owners** within the road and multi-modal mobility sector
- **Representatives** of Road and Public Transport Authorities and Public and Private Road and Transport Operators
- **European policy makers** in the field of mobility and transport data
- Representatives of **governments, municipalities, regions or cities**

[About / Registration 2026 | NAPCORE](#)



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Thank you for your attention!



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