AVERE

The European Association for Electromobility

AVERE EAFO Webinar
9 April 2020

Webinar Info

- This webinar is recorded.
- Participants receive the link inclusive the presentations.
- Q&A : please post your questions.
- Questions can be up voted.
- We limit the Q&A to 15 minutes or 15 questions.
- Participation in the polls is anonymous.

History

AVERE – **Passion to electrify since 1978**

Vision

AVERE's electromobility vision for Europe is:

- A strong electromobility industry;
- Clean, quiet and healthy cities;
- Energy efficient transport;
- Independence of fossil fuels.

Agenda of the webinar

- Introduction to EAFO
- User experience – EV charging across Europe
- Research on recharging prices and the difficulties identified for drivers
- Questions and answers

Speakers

- Philippe Vangeel
- Julia Cora
- Edwin Bestebreurtje
- Floris Jousma

Introduction to the EAFO Consortium

Lead partner:

Business development, consulting and research company (Helmond, The Netherlands)

Partners:

European Association for Electromobility (Brussels, Belgium)

Liquid Gas Europe (Brussels, Belgium)

International Council on Clean Transportation Europe GmbH (Berlin, Germany)

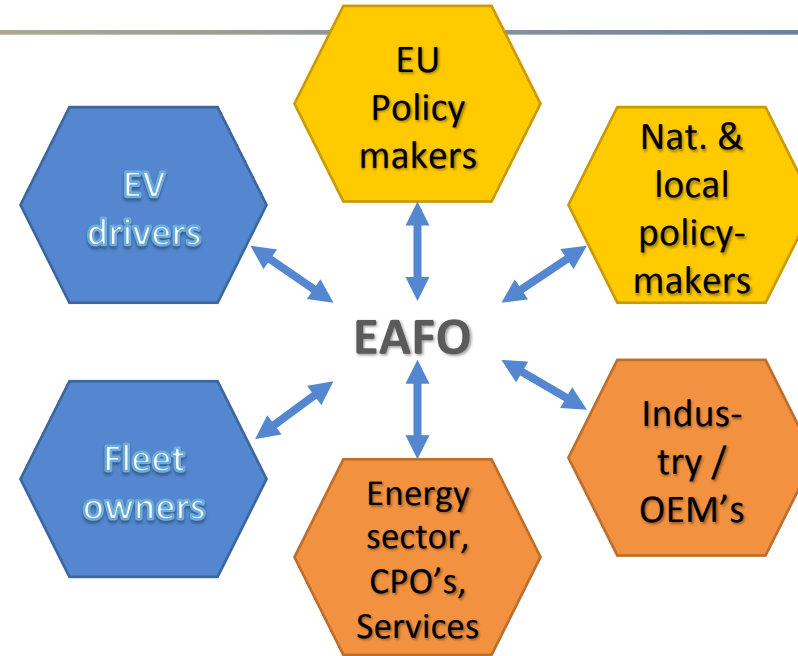Promotion of Operational Links with Integrated Services (Brussels, Belgium)

Netherlands Organization of Applied Scientific Research (Delft, The Netherlands)

"The EU reference point for Alternative Fuels Infrastructure and Vehicles"

Info and data for mobility & transport:

- Recharging infrastructure
- Refuelling infrastructure
- AF Vehicle Sales & Fleet
- AF Consumption & Production
- Incentives
- Procurement
- Reliable Data
- Latest News
- Analyses & Reports

EU Policy makers

EV drivers

Nat. & local policy-makers

EAFO

Fleet owners

Energy sector, CPO's, Services

Indus-try / OEM's

Electricity   Hydrogen

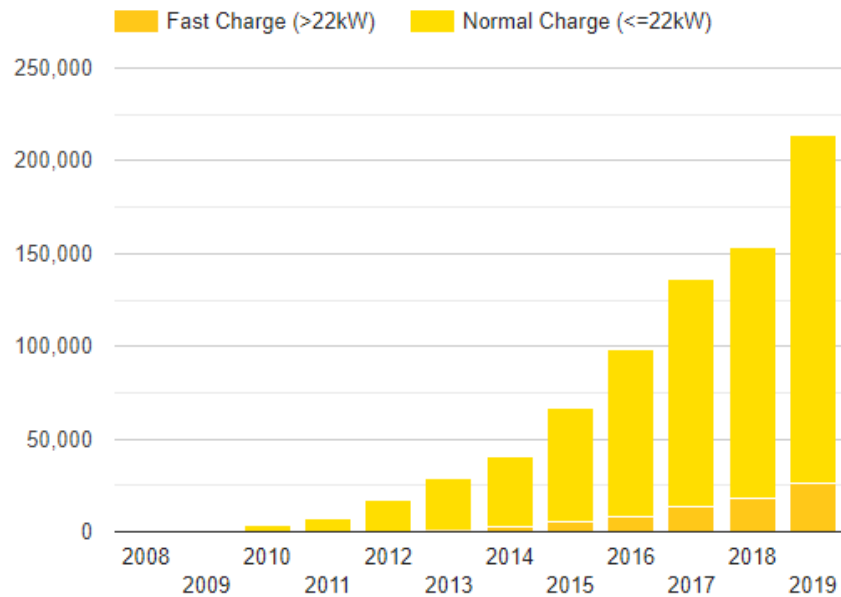Natural Gas   Biofuels   Syn fuels

Example: Charging infrastructure Europe
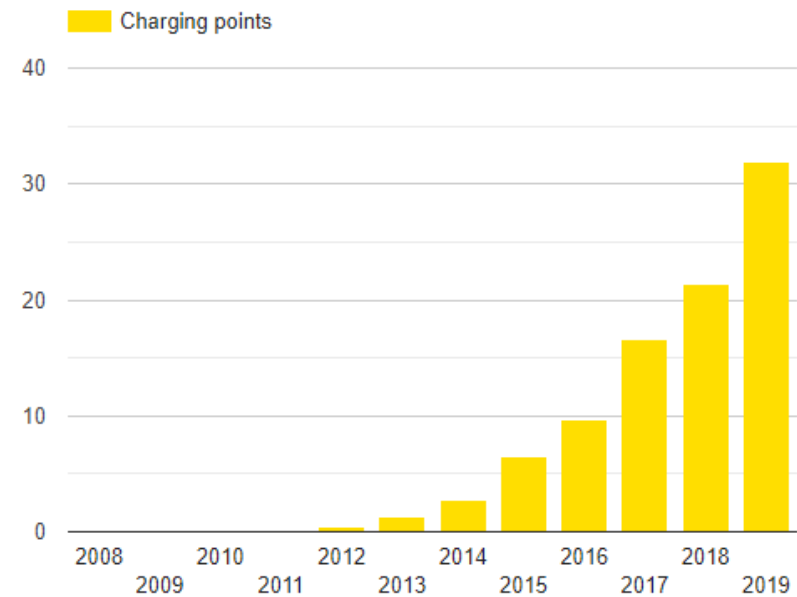

NORMAL AND FAST PUBLIC CHARGING POINTS (2019)

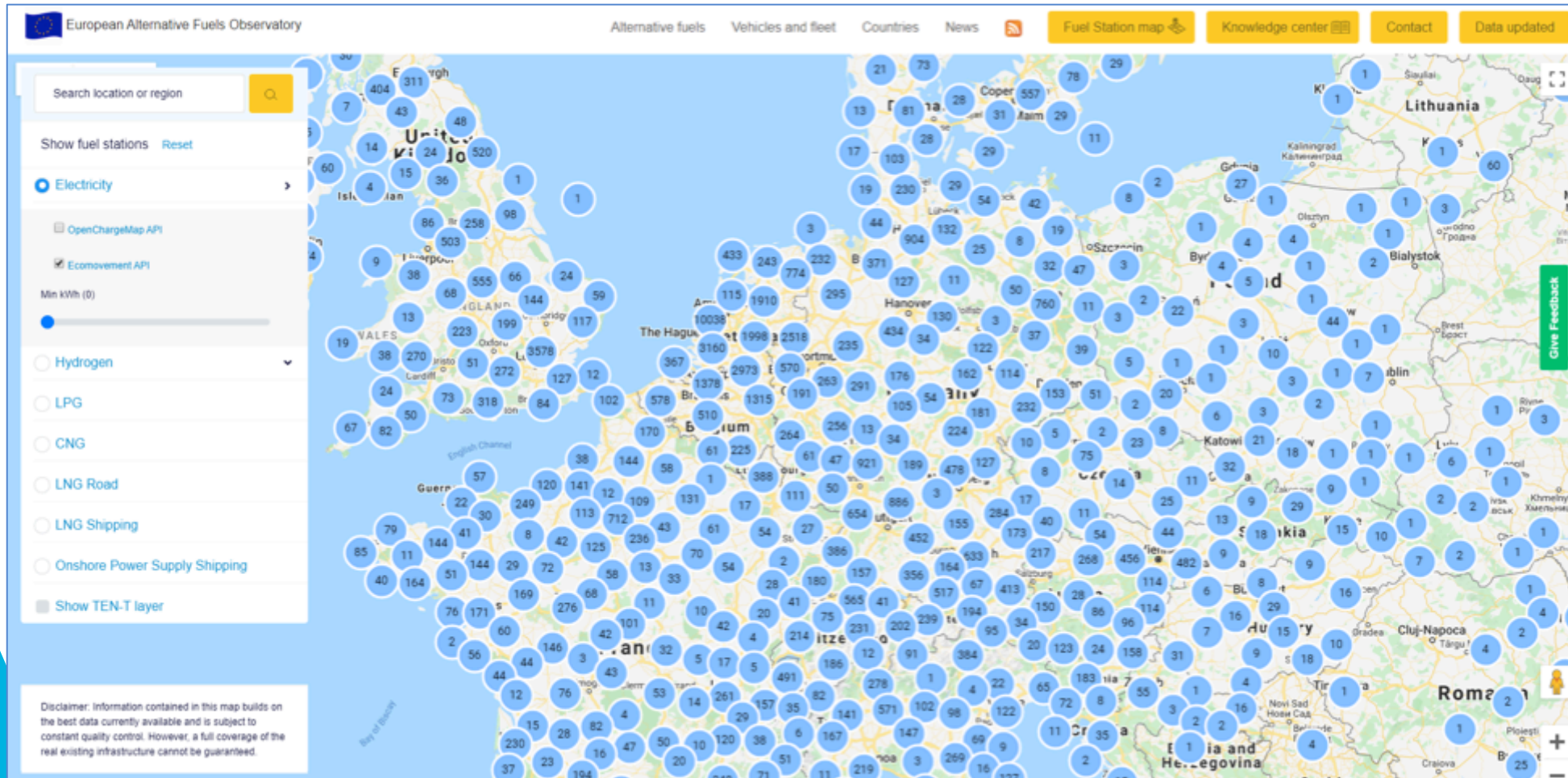Total number of Normal and Fast public charging points

Charger type - All -

- Fast Charge (>22kW)
- Normal Charge (<=22kW)

FAST PUBLIC CHARGING POINTS PER 100 KM HIGHWAY (2019)

Fast public charging points per 100 km highway

- Charging points

Fuel Station Map: AF Infra (Chargepoints)

More about EAFO

Visit the EAFO channel on **You Tube** ,
for an introduction video.

Or surf directly to www.eafo.eu

On www.eafo.eu you can find data, information and relevant news items

European Alternative Fuels Observatory EAFO

Members

Diverse network across the Continent <u>across the entire e-mobility value chain</u>:

OEMs, CPOs, EV users, Public Institutions, Research & Development entities, and other relevant companies.

AVERE represent:
21 members present in 18 states
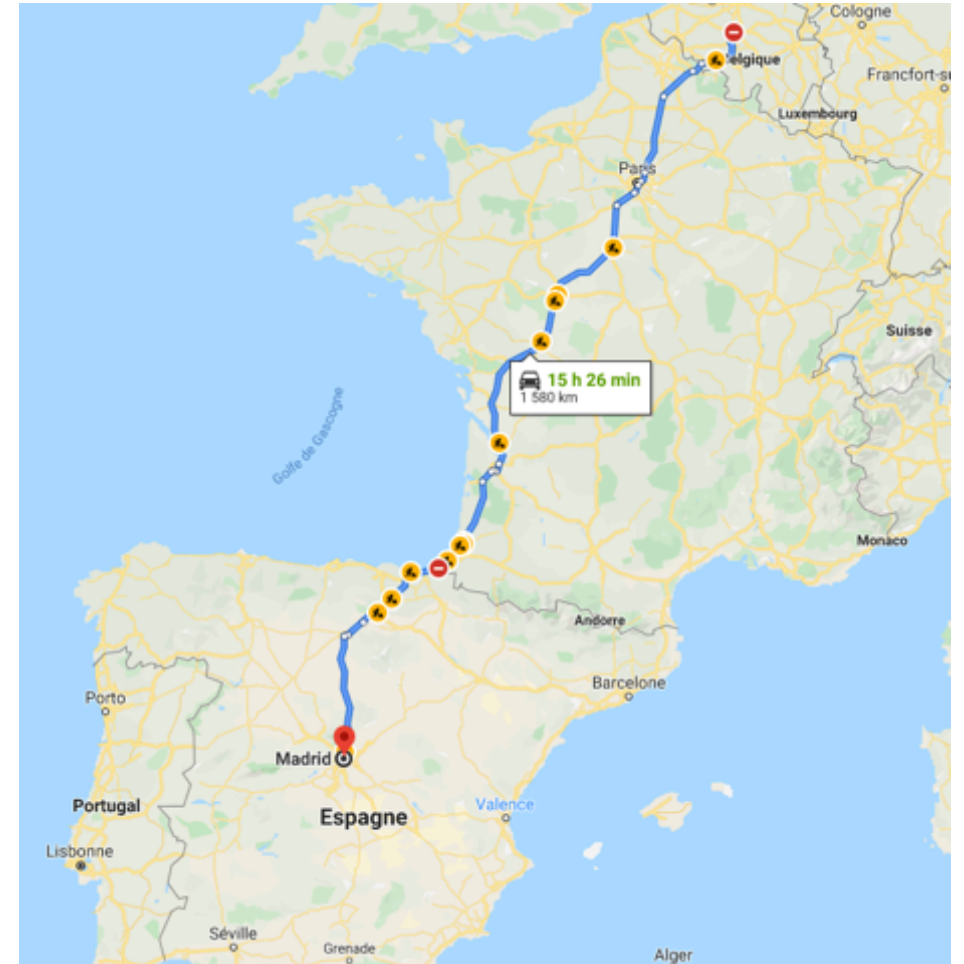*2400 direct & indirect industry members*
Over 100000 EV users

EV charging – user experience

I am an EV driver and I want to travel to Madrid. How will I organize my trip?

- I will have to stop every 200km approximately

- Focus on fast charging point (50kW or more)

- What app/EMSP should I use to find charging stations?

Two EMSP considered:

Here are some of my options if I want to charge...

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Chargemap

plugsurfing

In Belgium before crossing the border

- Allego – 0.276€/min + 0.759€/kWh
- Ionity – 0.86€/kWh

- Allego – 0.72€/kWh
- Ionity – 0.87€/kWh

Across France, on the high way

- Izivia Corri-Door – 0.247€/min + 1.452€/charge
- Ionity – 0.86€/kWh

- Sodetrel – 0.79€/session + 0.29€/min
- Ionity – 0.87€/kWh

The different charging standards for electric vehicles are not considered here.

Here are some of my options if I want to charge…

Chargemap

plugsurfing

On the Western part of France using local networks

- MODULO SIEIL – 0.092€/min
- AlterBase-Sorégies – Free
- AlterBase Séolis – 0.132€/kWh
- Mobive network – 3.854€/session + 0.176€ after 15 minutes of charge

- SIEIL, Indre-et-Loire – 0.092€/min
- SDEEG, Gironde – 0.064€/min under 1h then 0.044€/min
- SYDEC, Landes – 43kW 00.65€/min under 1h then 0.043€/min; 50kW 0.257€/min under 15 min then 0.176€/min

In Spain

- IBIL – 0.386€/kWh
- EDP Comercializadora – Free
- EDP MOP – 0.532€/kWh

- IBIL – 0.52€/kWh
- Iberdrola – 0.80€/kWh
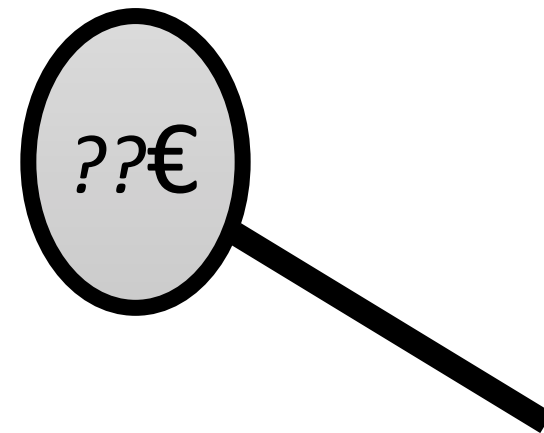- GIC – 0.60€/kWh (Madrid)

The different charging standards for electric vehicles are not considered here.

EV user – Difficulties

What are my first comments as a driver?

- The many pricing schemes make it difficult to anticipate the cost of charging.

- My apps do not give me access to the same charging networks, am I missing some of them?

??€

Credit: Mohamed_hassan

Unclear prices

Prices are not easily and clearly comparable due to a variety of tariff structures.

- Charging time
- Energy used
- Session fees

- Day and night tariffs
- Parking fees
- Extra fee after a certain time charging

Poll #1

Credit: docstockmedia

Research goals and methodology

Goals
o Pointing out the difficulties for drivers to understand the market and anticipate driving costs.
o Providing recommendations on how to address these issues through legislation.

Methodology
o Drawing a distinction between at home and (semi) public charging.
o Collecting charging price data with the tools available to consumers.
o Drawing a distinction between normal (up till 22kW) and fast charging (above 22kW).
o Focus on the biggest CPOs per country.

3 main issues identified.

Price Transparency

Lack of a comprehensive source collecting and making charging prices available to consumers.

Poll #2

PRICE

?

Credit: Openclipart-vectors

Network interoperability – Roaming

Subscribing a contract to an EMSP does not guarantee access to a comprehensive network, leading to the problem of multi-contract subscriptions.

Roaming is not well established among operators and among countries.

Poll #3


Credit: TheAndrasBarta

Conclusion

Recharging an electric vehicle should be as easy as refuelling a traditional car.

Consumers should not be facing any difficulties in finding a charging station, accessing it, and anticipating the cost of charging.

All barriers should be minimum to ensure the massive uptake of electromobility.

EAFO already offers a map of the charging points' locations across Europe.

The next step is to work on a centralised database for making charging prices accessible to drivers.
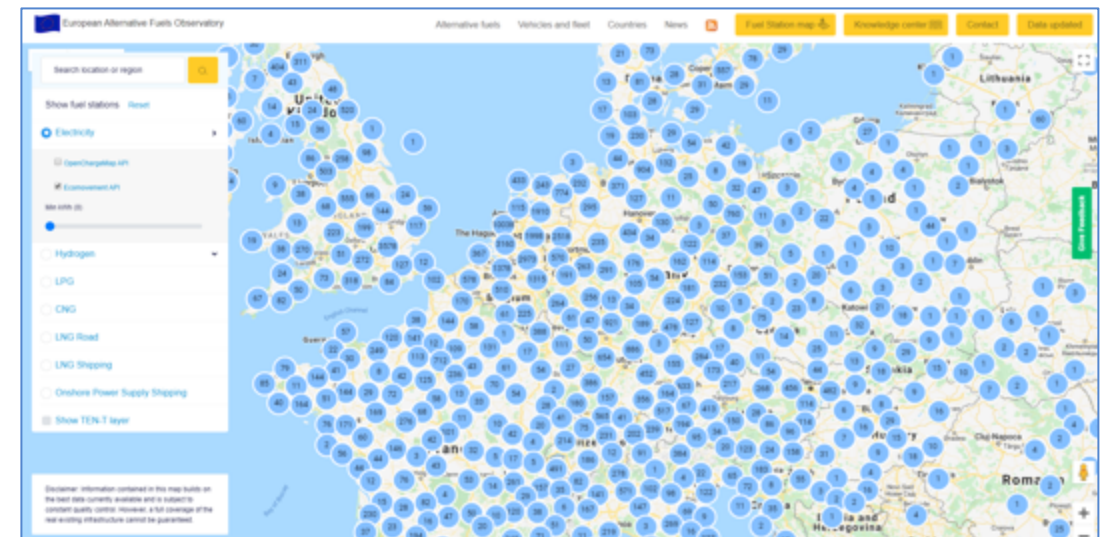
Q/A

Please submit your questions through the attendee chat

Join our upcoming webinars

09/04 – 10am CET: **Raw materials supply chain for batteries**: We will focus on the future of the supply chain for raw materials for batteries used in electric vehicles, from available resources, responsible sources, potential substitutes and the future of the supply market.

22/04 – 10am CET: SEEV4City: 6 pilot projects that pave the way for smart electric mobility solutions

6/05 – 10am CET: Vehicle-to-grid (V2G): the future symbiosis between emission-free transport and sustainable energy

20/05 – 10am CET: Learning from local V2G pilots: what policies do we need for the future?