Europe is driving electric but are citizens following too?

The EAFO Consumer Monitor

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29/11/2023

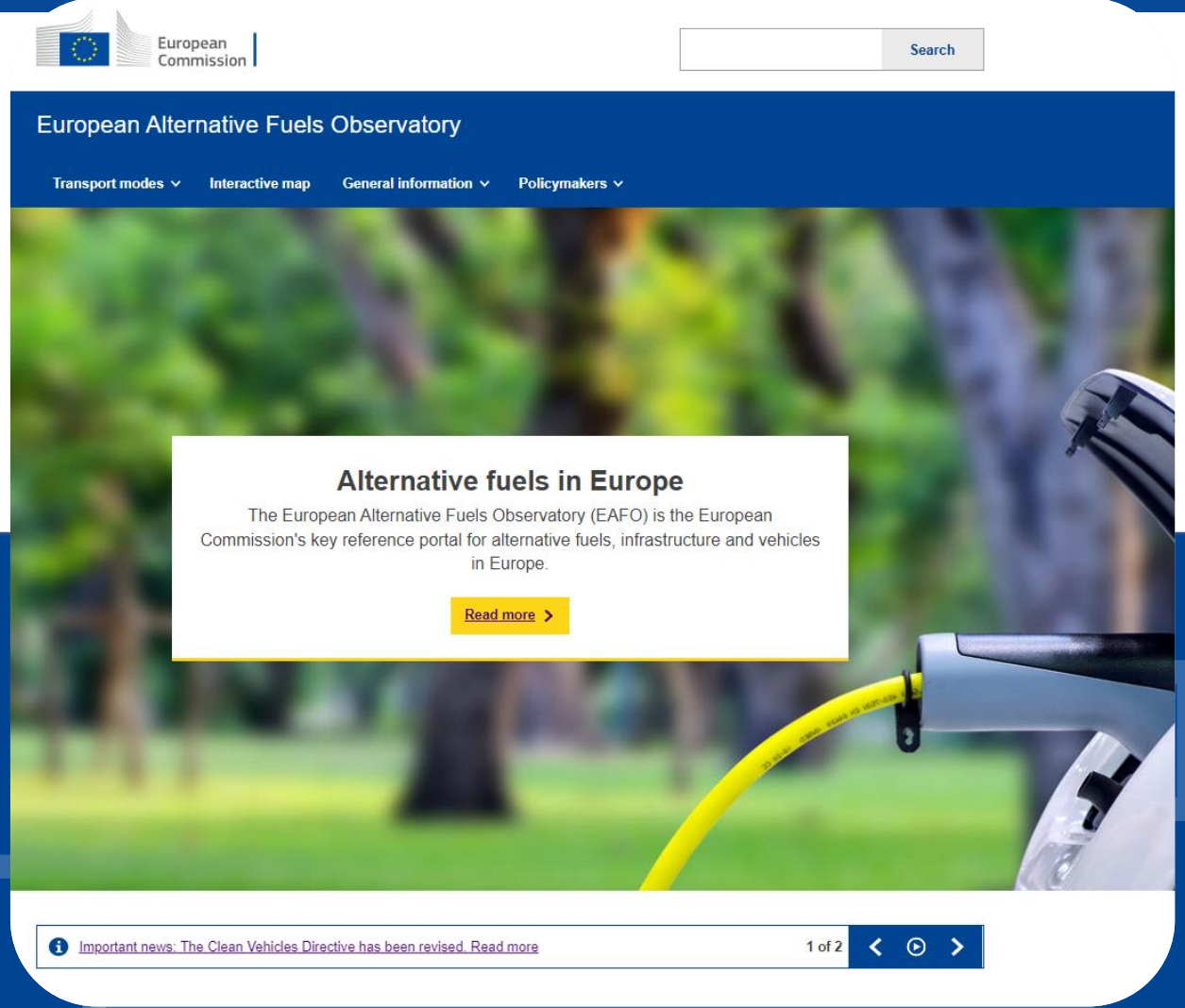
European Commission | European Alternative Fuels Observatory

European Alternative Fuels Observatory (EAFO)

How public authorities can shape zero emission mobility

European Commission's key reference portal for alternative fuels, infrastructure and vehicles in Europe

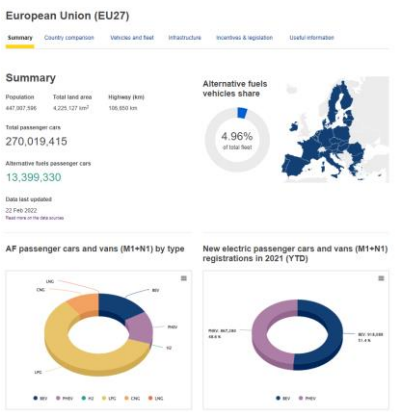
Provide openly accessible data at the highest of quality, in an easily accessible way on Alternative Fuels in Europe to Public Authorities, Consumers and the EU.



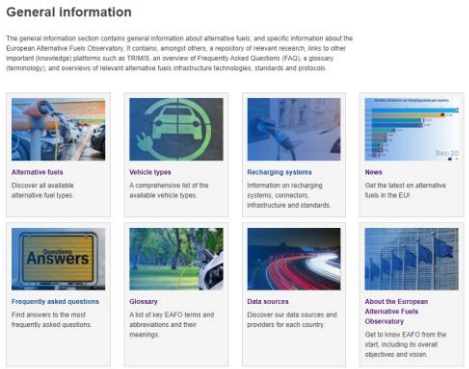
EAFO Structure

The key pillars of EAFO

Transport Modes



Knowledge Centre



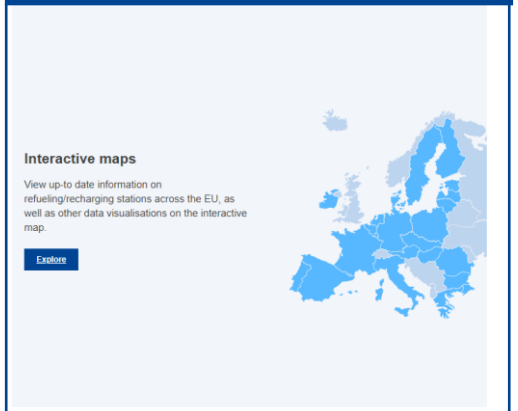
Public Authorities section

- E.g. Policies per country

Consumer information

- TCO
- **Consumer survey**
- Recharging pricing
- Models & characteristics of available EV's
- Fuel price comparison

Interactive Map



- Recharging and refueling stations map
- Interactive maps on fleet and infrastructure statistics
- Additional TENtec data layers

European Alternative Fuels Observatory

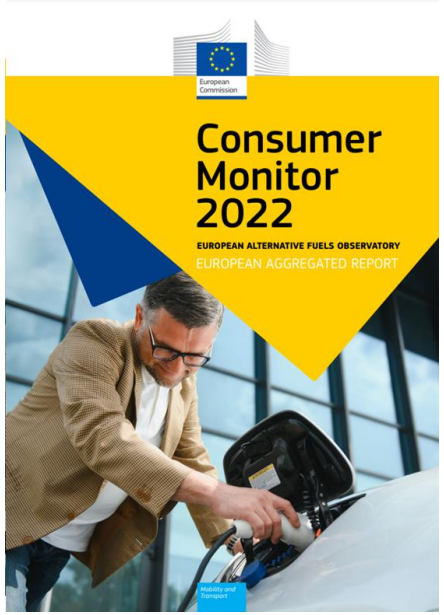
Why the EAFO Consumer Monitor

10 countries

11 reports

18000 responses

1400 BEV drivers



Understand citizens' views on electrification:

- Identify main challenges & needs
- Address those specific concerns and hurdles
- Further support decisions in the transition towards zero emission mobility

Support policy makers at EU, national & local level

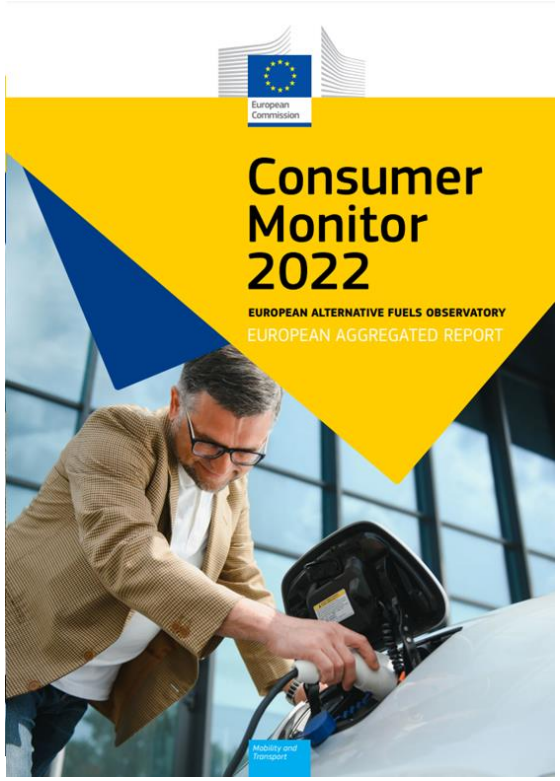
Support other key (industry) stakeholders

EAFO Consumer monitor

Confirming last years' trends but what about the future?

The EU BEV driver (2022)

- 81%: Male
- 51%: 35-55 years old
- 40%: > € 4000 / month
- 50%: University or other higher education
- 62%: Detached house
- 85% are homeowners
- 64% have a source of renewable energy at home



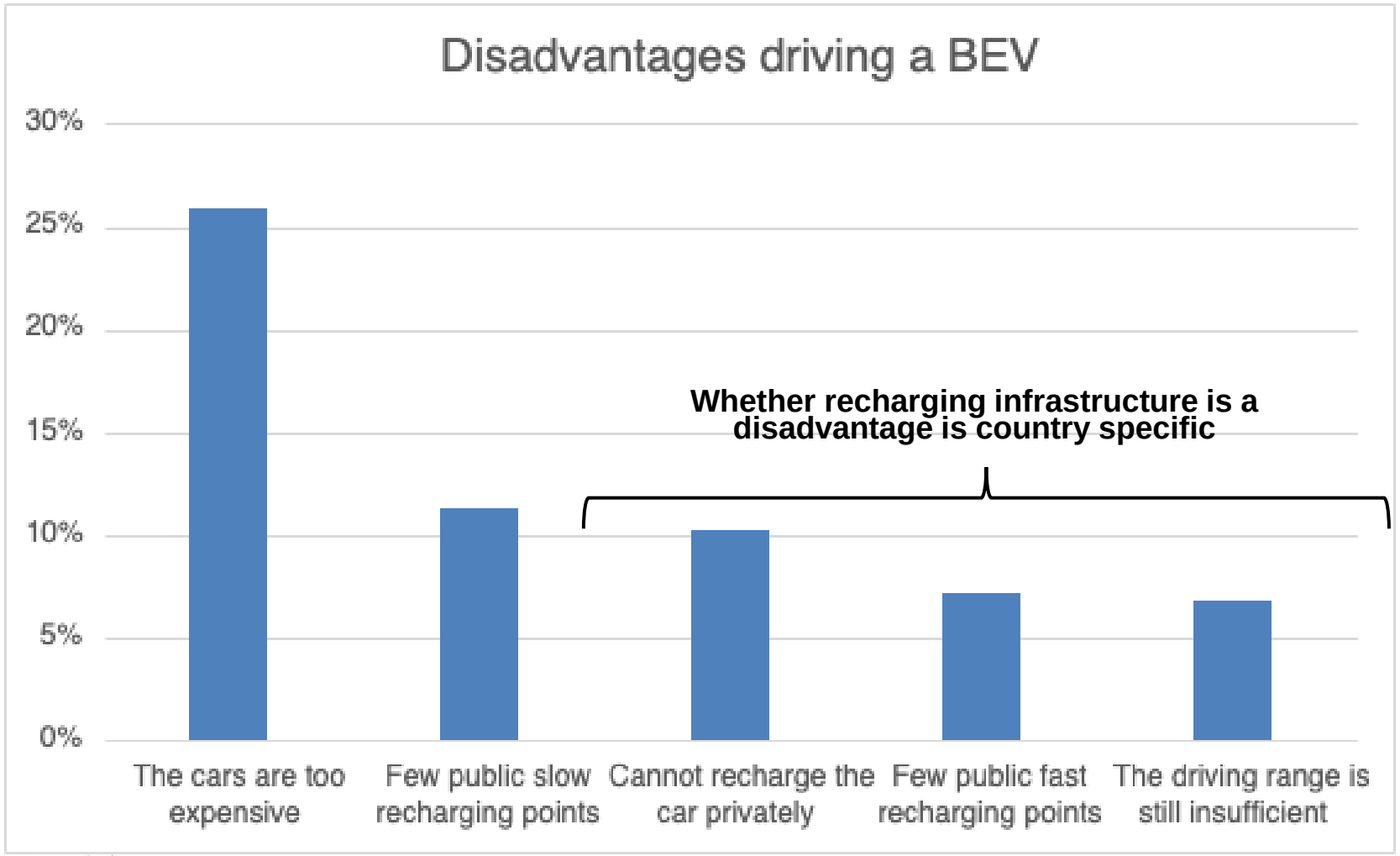
Understand needs & opportunities in the (just) transition towards zero emission mobility

- 2035!
- Recharging infrastructure barriers
- Price, range, and type BEVs
- Less represented groups?
- Data & Guidance

Challenges and needs (EU results 2022)

Main disadvantages of driving a Battery Electric Vehicle

1. **BEV Purchase price**
2. **Recharging infrastructure**
3. **BEV range**

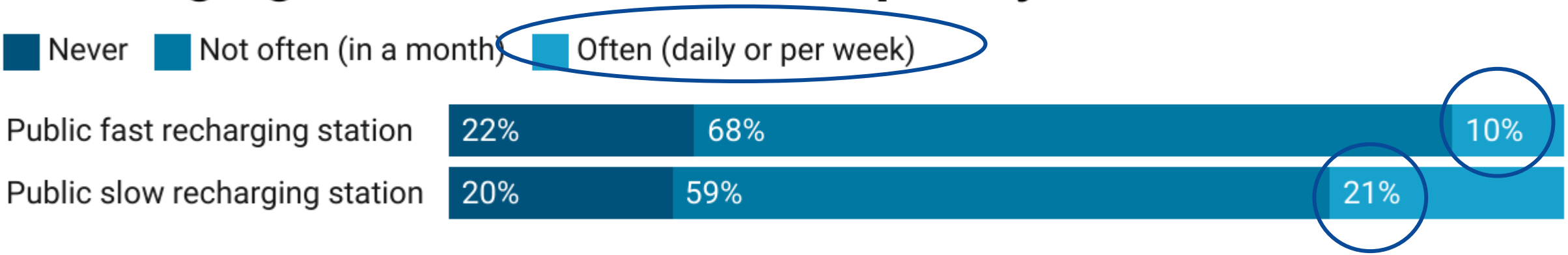


Non-BEV & BEV drivers respondents

Challenges and needs (EU results 2022)

Recharging infrastructure

Recharging infrastructure use frequency



Public recharging points main issues

Not a clear overview public recharging points vicinity

Don't know how long it will take to fully recharge my car

Not sufficient choice between operators/mobility providers

Challenges and needs (EU results 2022)

Recharging infrastructure

Public recharging points main issues

- Not a clear overview public recharging points vicinity
- Don't know how long it will take to fully recharge my car
- Not sufficient choice between operators/mobility providers

AFIR addressing BEV drivers concerns

Article 20

Data provisions

1. Member States shall appoint an Identification Registration Organisation ('IDRO'). The IDRO shall issue and manage unique identification ('ID') codes to identify at least operators of recharging points and mobility service providers, by … [one year after the date of application referred to in Article 26].

2. By … [1 year after the date of application referred to in Article 26], operators of publicly accessible recharging points and refuelling points for alternative fuels, or, in accordance with the arrangements between them, the owners of those points, shall ensure the availability of static data and dynamic data concerning alternative fuels infrastructure operated by them, or services inherently linked to such infrastructure that they provide or they outsource, at no cost. The following data types shall be made available:

(a) static data for publicly accessible recharging points and refuelling points for alternative fuels operated by them:

(i) geographic location of the recharging points and refuelling points for alternative fuels,

Challenges and needs (EU results 2022)

BEV ownership, second-hand market and potential buyers

Ownership model & second hand market BEVs*	EU 10 countries	Hungary	France
Leased (business or private)	22%	16%	20%
Privately owned	70%	75%	77%
Company car (if employee)	8%	9%	3%
New BEV	67%	49%	77%
Second-hand BEV	33%	51%	23%

**percentage respondents EU & selected countries (BEV-driver respondents)*

Time frame to buy a BEV*	EU 10 countries	Hungary	France
No intention to purchase another car	6%	8%	8%
No intention to purchase a BEV	24%	14%	30%
I don't know	17%	11%	21%
Within 0-5 years	31%	31%	30%
Within 5-10 years	9%	15%	6%
After 10 years/without time frame in mind	13%	21%	4%

**percentage respondents EU & selected countries (non-BEV & BEV-drivers respondents)*

Challenges and needs (EU results 2022)

BEV purchase price & range

- 44% of BEV drivers indicated a purchase price of under 30,000 €
- As of 2023 November: 12 models with a purchase price between 20,000-35,000 €
  - Range 125 km - 300 km
- Monitor the introduction of more affordable BEVs in the market

Filter Vehicles

Price (approx.)	Recharging speed	Range	
Under 30,000 €	- Any -	- Any -	Apply

Model
Dacia Spring Electric 45
Range
165 km
Efficiency
15.20 kWh/100km
Price (approx.)
22,200 €
Available from
07-2022
Battery size
25.0 kWh
Fastcharge speed
180 km/h

Model
Dacia Spring Electric 65 Extreme
Range
160 km
Efficiency
15.60 kWh/100km
Price (approx.)
24,000 €
Available from
01-2023
Battery size
25.0 kWh
Fastcharge speed
170 km/h

Model
e.Go e.wave X
Range
150 km
Efficiency
18.00 kWh/100km
Price (approx.)
25,000 €
Available from
12-2022
Battery size
27.0 kWh

Consumers challenges and needs

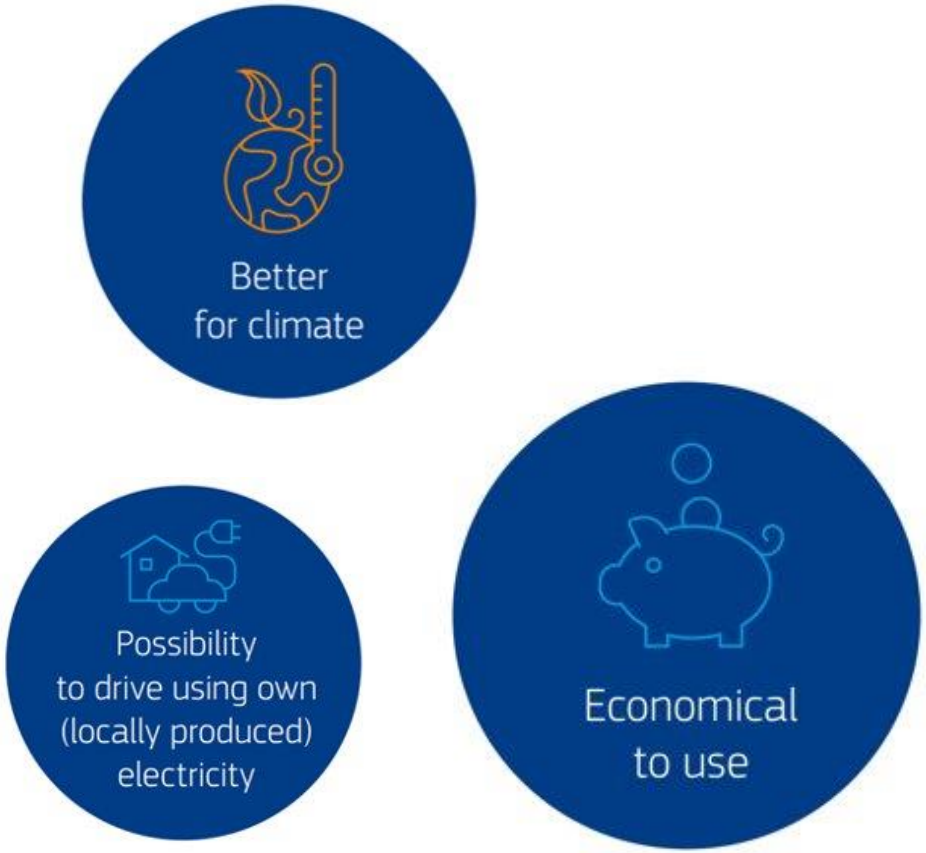
Will electric cars be affordable?

*It's more cost efficient to use electric-powered vehicles as **electricity prices are currently lower** than petrol prices and they require less maintenance. So once purchased, the **total cost of ownership** of a battery-driven car is the same or cheaper than a petrol or diesel car. However, today electric cars are expensive. The new rules should encourage more competition and encourage manufacturers to invest in **research and innovation** into electric vehicles, which should drive the purchase price down.*

*Another issue is **the second-hand car market**, which has **not yet developed** for electric vehicles.*

EU ban on sale of new petrol and diesel cars from 2035 explained | News | European Parliament (europa.eu)

Main conclusions



- Consumers: economical motivations > infrastructure availability
  - Infrastructure is a necessary condition, but not a sufficient condition for BEV adoption
- Importance of **survey data** to monitor citizens challenges, options and policy implementation **in combination with technical data** (registrations, recharging data)
  - Scientific grounds

Your voice matters!

Complete the 2023 EAFO survey

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👉 **Survey Links for Each Participating Country**:

Sweden: Survey Link
Spain: Survey Link
Slovenia: Survey Link
The Netherlands: Survey Link
Lithuania: Survey Link
Luxembourg: Survey Link
Italy: Survey Link
Hungary: Survey Link
Germany: Survey Link
France: Survey Link
Denmark: Survey Link
Belgium: Survey Link

🌿 **Let's Drive Sustainable Change!** Your participation is a catalyst for positive transformations in the e-mobility landscape of Europe and your country. Together, let's pave the way for a more sustainable future!

More information about the Consumer Monitor and Survey.

Thank you for being a vital part of this initiative and our community,and we can't wait to see the impact we create together!

Kind regards,
The EAFO Team

Thank you!

AVERE The European Association for Electromobility

eco-mo>ement

FIER Automotive & Mobility

netcompany intrasoft

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