2022 Van TCO report: France

1. Electric van market in France

Based on Dataforce registration data for the first half of 2021, battery-electric vans make up 2.3% of the French van market (5548 e-vans registered in H1 2021). For reference, the e-van market share in the EU+UK in H1 2021 was 2.3%. Based on <u>ICCT market monitoring</u>, e-van market share in France is 3% in 2021, up from 2% in 2020. [EU average: 3% in 2021, up from 2% in 2020.]

Note that ACEA also publishes full-year data on fuel types of new vans, <u>available here</u>. However data is not disaggregated between kinds of electrically-chargeable vehicles (ECV). For information, "Electrically Chargeable" includes battery-electric vehicles, plug-in hybrids, fuel cell electric vehicles, and extended-range vehicles. "Alternative Fuel" includes natural gas, LPG, biofuels, and ethanol. Based on ACEA data, ECV vans made up 3.0% of all vans in France in 2021.

2. Van survey results

2.1. Characteristics of French van fleets

A survey of 745 van fleets in France, Germany, Italy, Poland, Spain and the UK found the following regarding French van users [*data in brackets is for the average for all six countries*]:

- 46% of their vans are large (above 1,800 kg) [54%]
- 67% of their vans are bought new [72%]
- Users own vans for 4 years on average, with 57% users owning vans for 4 years or longer [5, 70%]
- Users drive 192 km/day on average, with an average maximum daily distance of 487 km/day and an average annual distance of 40,057 km [avg: 175 km/day, max: 425 km/day, avg: 37,700 km/year]
- Their vans are parked during the day for 1h36/day on average [1h42/day]
- 77% of van users describe their use as planned, regular, or predictable, and thus easier to electrify [75%]



2.2. Attitudes towards electric vans

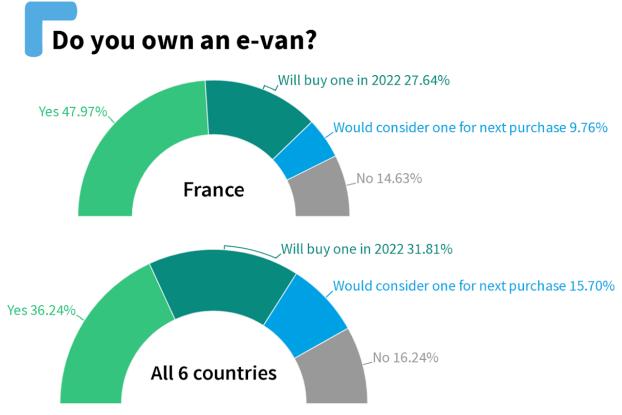


Figure 1: e-van adoption in the survey

In total, 85% of French fleets either already own an e-van, will buy an electric van in 2022, or would consider buying one for their next purchase [compared to 84% for the survey overall]. 67% of French respondents would consider a hydrogen fuel cell van for their next purchase [compared to 73% for the survey overall]. Of all six countries surveyed, this is the lowest share of fleets with a positive attitude towards fuel cell vans.



2.3. Reasons for/against e-van ownership

The top three reasons for e-van adoption in France are CO_2 savings, improving the company's image, and a lower TCO [same ranking as in the survey overall].

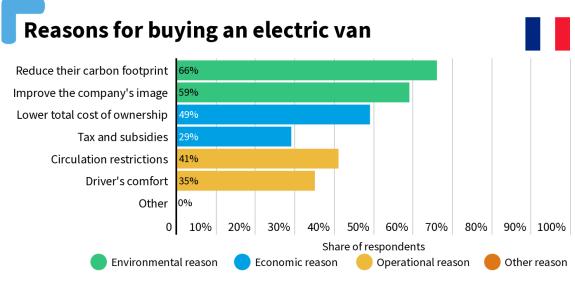


Figure 2: Reasons for e-van adoption in France

Reasons for buying an electric van

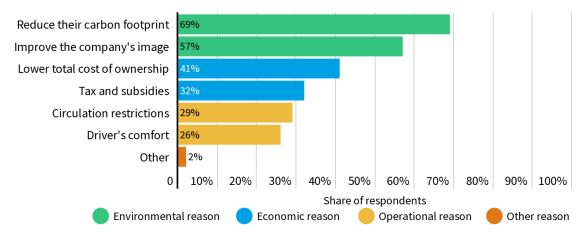


Figure 3: Reasons for e-van adoption in France, Germany, Italy, Poland, Spain, and the UK



The top three reasons against e-van adoption in France are purchase price, lack of range, and lack of offer of e-van models [top 3 in the survey overall: lack of range, purchase price, lack of public charging].

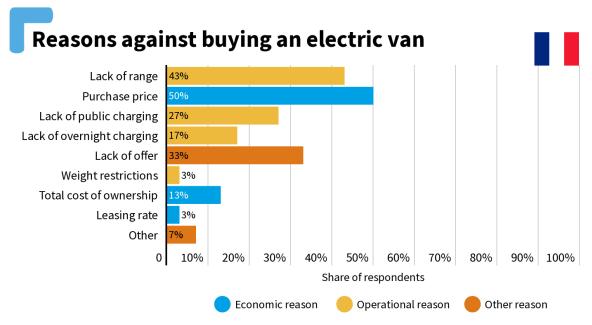


Figure 4: Reasons against e-van adoption in France

Reasons against buying an electric van

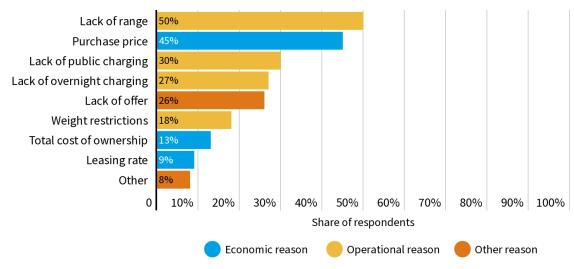


Figure 5: Reasons against e-van adoption in France, Germany, Italy, Poland, Spain, and the UK



3. Total Cost of Ownership

The total cost of ownership (TCO) for light and heavy, diesel and electric vans was estimated for several categories of end users. The main inputs are the average duration of ownership—5 years for all end users except short-term rental services (STR)—and the annual mileage. These inputs are based on data from all users in the survey, not just French users¹. As a result, differences in TCO between countries are due to differences in diesel and electricity prices, registration charges, purchases subsidies, etc.

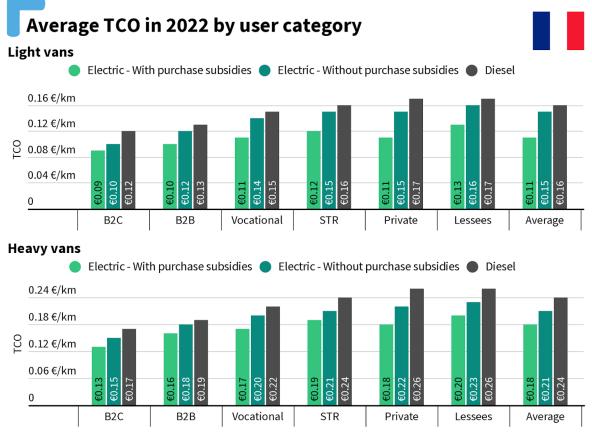
User category	Ownership years	Annual distance (km)
All respondents	5	37,700
Private	5	32,400
Short-term rental (STR)	4	41,800
Lessor / long-term rental	4	41,400
Business-to-Business (B2B)	5	39,500
Business-to-Consumer (B2C)	5	51,300
Vocational (i.e. user other than transport of goods)	5	33,000

Table 1: Van user characteristics used in the TCO model

Based on T&E TCO modelling, electric vans are already cheaper to own than diesel in France:

- For both light and heavy models
- For all average users (i.e. average ownership years, average mileage)
- Both with and without subsidies.

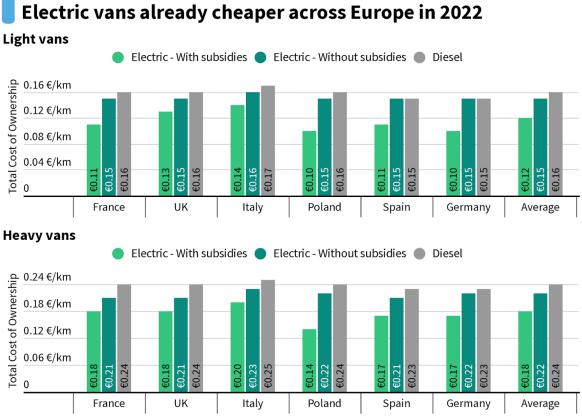
¹ This is because there are too few respondents of each user category in each group, so the results would not be reliable statistically speaking.



Source: Assuming 4 years ownership for short-term rental services, and 5 years for other user groups.

Figure 6: TCO of electric and diesel vans in France in 2022





Source: Assuming 4 years ownership for short-term rental services, and 5 years for other user groups.

Figure 7: Average TCO of electric and diesel vans in all six countries considered in 2022

4. Impact of higher targets

What adopting T&E targets rather than the EC proposal would mean for France [and the EU]:

- E-vans: 0.7 million e-vans missing on French roads by 2030 [2.4 million]
- TCO savings: 4.4 billion euros from 2025–2030 [13.1 billion euros]
- Oil savings: 33 million barrels of diesel saved in 2025–2030 [101]
- Emissions savings: 4.2 MtCO₂ saved in 2030, 13.7 MtCO₂ saved in 2025–2030 [2030: 12.8 MtCO₂, 2025–2030: 42.3 MtCO₂]



The figures below show the impact in France and the EU of opting for the EC proposal instead of the T&E targets.

Stronger targets for electric vans will save France emissions, oil, and money In comparison with the EU Commission's proposal, the targets proposed by T&E would lead to: 4 less MtCO₂ in 270,000 4 million 2 less MtCO₂ additional fewer oil 2030, equal to all emitted in vans on French barrels burnt Spanish vans in roads by 2027 in 2027 2020 **Cost savings for French businesses** 1.5B€ 1.5B€ 1.1B€ 1.0B€ 0.8B€ 0.6B€ 0.5B€ 0.3B€ 0.1B€ 0

Source: T&E EUTRM modelling of the EC proposal and T&E targets and TCO modelling. Total Cost of Ownership savings per van are assumed constant from 2027 onwards. Scope: France

2028

2029

2030

2027

2025

2026

Figure 8: Cost, emissions, and oil savings in France from adopting T&E's recommended targets instead of the Commission's proposed targets



Stronger targets for electric vans will save EU emissions, oil, and money

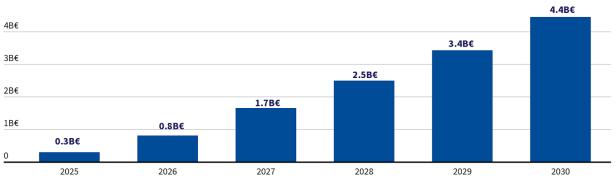
In comparison with the EU Commission's proposal, the targets proposed by T&E would lead to:





6 less MtCO2 in 2027, more than all Spanish vans in 2019

Cost savings for European businesses



Source: T&E EUTRM modelling of the EC proposal and T&E targets and TCO modelling. Total Cost of Ownership savings per van are assumed constant from 2027 onwards. Scope: EU27

Figure 9: Cost, emissions, and oil savings in the EU from adopting T&E's recommended targets instead of the Commission's proposed targets

