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 ICCT market monitoring, 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, available here. 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

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 CO₂ 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

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

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 users. As a result, differences in TCO between countries are due to differences in diesel and electricity prices, registration charges, purchases subsidies, etc.

Table 1: Van user characteristics used in the TCO model

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

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.

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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.
Average TCO in 2022 by user category

### Light vans
- **Electric - With purchase subsidies**
- **Electric - Without purchase subsidies**
- **Diesel**

### Heavy vans
- **Electric - With purchase subsidies**
- **Electric - Without purchase subsidies**
- **Diesel**

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
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:

- 270,000 additional e-vans on French roads by 2027
- 4 million fewer oil barrels burnt in 2027
- 2 less MT CO₂ emitted in 2027
- 4 less MT CO₂ in 2030, equal to all Spanish vans in 2020

**Cost savings for French businesses**

![Cost savings chart]

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

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:

- 1 million additional e-vans on EU roads by 2027
- 14 million fewer oil barrels burnt in 2027
- 10 less MtCO2 emitted in 2025–2027
- 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