



European
Commission

Consumer Monitor 2022

EUROPEAN ALTERNATIVE FUELS OBSERVATORY



COUNTRY REPORT:
BELGIUM



Mobility and
Transport

The reuse policy of European Commission documents is implemented by [Commission Decision 2011/833/EU of 12 December 2011 on the use of Commission documents \(OJ L 330, 14.12.2011, p. 39\)](#). Unless otherwise noted, the reuse of this document is authorised under a Creative Commons Attribution 4.0 International (CC BY 4.0) licence (<https://creativecommons.org/licenses/by/4.0/>). This means that reuse is allowed provided appropriate credit is given and any changes are indicated.

For any use or reproduction of elements that are not owned by the European Union, permission may need to be sought directly from the respective rightholders. The European Union does not own the copyright in relation to the following elements:
Pictures and icons: ©Shutterstock.com



European Alternative Fuels Observatory

Authors: Lieselot Vanhaverbeke, Dennis Verbist, Gabriela Barrera, VUB-MOBI Electromobility Research Centre, Máté Csukas, FIER

Reviewers: Alexander Verduyn European Commission DG-MOVE, Iris Welvaarts, ANWB

Contents

| | |
|---|----|
| 1. The EAFO EU consumer monitor: key findings & conclusions | 4 |
| 2. Consumer monitoring results: general population views on driving battery electric vehicles in Belgium..... | 6 |
| Socio-demographics general population | 6 |
| Attitude and motivation towards battery electric vehicles | 7 |
| Main barriers and opportunities to adopt battery electric vehicles | 7 |
| 3. Consumer monitoring results: Mobility and recharging behaviour of battery electric drivers in Belgium..... | 9 |
| Socio-demographic indicators for the BEV driver | 9 |
| Mobility behaviour and vehicle ownership of battery electric drivers | 10 |
| Purchase and lease price paid by BEV drivers | 10 |
| Factory range and range satisfaction of fully electric cars used by BEV drivers..... | 11 |
| Recharging behaviour of battery electric drivers | 11 |
| 4. Comparative results Belgium vs other EU countries..... | 15 |
| 5. Belgium in the European context | 17 |
| AI. Consumer monitoring methodology & approach..... | 18 |

1. The EAFO EU consumer monitor: key findings & conclusions

Through different European policies, the energy and transportation sectors are compelled to intensify the adoption of renewable energy sources and hasten the electrification of various transport modes. In particular, the recently approved Alternative Fuels Infrastructure Regulation (AFIR), sets a framework for an EU-wide approach for the deployment of refuelling and recharging infrastructure, including road transport electrification¹.

The European Alternative Fuels Observatory (EAFO) supports the EU transport electrification policies by providing information on the evolution of alternative fuel vehicles and recharging/refuelling infrastructure at the EU level and per country. The EAFO also includes a dedicated section for policy makers and consumers, addressing a wide range of stakeholders including different government levels, vehicle manufacturers and other e-mobility industry companies, automobile organisations, etc.

As part of the EAFO consumer section², a survey was launched in September 2022 in ten EU countries³ to better understand consumers' intentions to adopt battery electric vehicles (BEVs), their e-mobility and recharging behaviour, and the challenges they perceive or encounter in this sense. Detailed information on the survey methodology is available in annex I. Please note that the 2022 'elektrisch rijden monitor'³ (Electric driving monitor) of the Dutch partner ANWB was used as an example. Moreover, there were two channels used to distribute the EAFO Consumer Monitor survey:

- A panel to have a representation of the general population including non-BEV and BEV drivers.
- The EAFO partner AVERE reached BEV drivers with a broad dissemination of the survey.

This report highlights the main findings of the 2022 EAFO Consumer Monitor survey focusing on passenger BEV cars, and presents the results for **Belgium** in two main parts:

Part 1 presents the surveyed Belgian's attitude, interest, and the information that could support BEV (potential) drivers. It is based on the results of the Belgian general population surveyed through the panel, which include 1,668 valid responses from BEV (27) and non-BEV drivers (1,641).

Part 2 focuses only on BEV drivers, from both datasets by merging the panel and the AVERE dataset, with 49 valid responses in total. This gives an insight into the Belgian BEV drivers' e-mobility and recharging behaviour.

The report is complemented with a comparison of the results using key indicators for the ten countries surveyed and the EU aggregated results. Finally, this report includes an overview of the 2022 situation in Belgium in terms of passenger BEVs and recharging infrastructure using the EAFO's latest numbers.

For more than a decade, three main barriers have been identified regarding the mass up-take of passenger battery electric vehicles (BEVs): **purchase price, driving range and availability of recharging infrastructure**. There have been significant advances in this sense: battery costs have dropped by 90%, vehicle range has increased from 100-150 km up to 400+ km, there is an important growth in new BEVs registrations, and the recharging infrastructure network is expanding. Nevertheless, BEVs represent only 1.23% of the total passenger cars fleet in the EU, and the recharging infrastructure coverage is still limited in some countries and urban areas^{4,5}.

1 <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A52021PC0559>

2 <https://alternative-fuels-observatory.ec.europa.eu/consumer-portal>

3 [ANWB Elektrisch Rijden Monitor 2022. Rapportage consumenten perspectief elektrisch rijden](#)

4 [Van Mierlo, J., Bercibar, M., El Baghdadi, M., De Cauwer, C., Messagie, M., Coosemans, T., Jacobs, V. A., & Hegazy, O. \(2021\). Beyond the State of the Art of Electric Vehicles: A Fact-Based Paper of the Current and Prospective Electric Vehicle Technologies. World Electric Vehicle Journal, 12\(1\), 1-26. \[20\].](#)

5 <https://alternative-fuels-observatory.ec.europa.eu/>

* The ten countries surveyed were: Austria, Belgium, Denmark, France, Germany, Hungary, Italy, Netherlands, Slovenia, and Spain

Taking these barriers and developments into account, **the key findings of the 2022 EAFO consumer monitor are:**

- a. Focusing only on BEV driver respondents (part 2), the Belgian BEV driver is represented as a -35-year-old male, living in a detached house and with a high income who has a university or higher education diploma.
- b. Around a third of Belgian participants are interested in or familiar with BEVs, with 27% considering buying a BEV in a time frame of 0-5 years. 41% have a positive attitude towards BEVs, and as in the other EU surveyed countries, the most important BEVs advantage is that these are better for the climate. Belgians also see the possibility that BEVs offer to drive using their own produced electricity as an advantage.
- c. In the ten surveyed countries the number one BEVs disadvantage is their price. The Belgian participants are willing to pay 25,000 € for a BEV and 60% of the BEV drivers paid a purchase price between 20,000 € and 40,000 €.
- d. BEVs' insufficient range is also considered a limitation. A minimum desired range between 300 km and 500 km was the choice of 35% of all Belgian drivers surveyed. 500 km and more would be the preference of 41%.
- e. 54% of the surveyed Belgians indicated that they are not aware of any subsidies for electric vehicle driving despite the financial support measures applied by the Belgian government. Information on batteries and/or driving range was considered the most relevant to support electric driving.
- f. 90% of Belgian BEV drivers use their vehicles daily or several times a week. Their BEV is mostly new (60%) and privately owned (55%). Company cars represent 28% of BEVs (the highest percentage among the ten surveyed countries).
- g. As in the other nine countries surveyed the most important characteristic of a public recharging session is recharging speed. For the BEV Belgian drivers payments through a charging card or app are also important. The latest is the number one payment option in the ten EU countries. On the other hand, 64% of BEV respondents do not always take the battery level into account when recharging.
- h. Limited recharging private or public options are also considered a disadvantage. The Belgian BEV use public slow recharging points somewhat often (24%). Fast public recharging points use frequency is among the lowest of the EU countries surveyed (9%). Moreover, 52% of Belgian BEV drivers recharge often at home.

Thanks to these results, the following conclusions could be made about the three main barriers identified:

1. **BEV costs and desired range:** In March 2023 there were only twelve BEVs models available with a purchase price between 20,000 € - 35,000 €. These twelve models represent 5% of the total BEVs models in the market. The driving range barrier could be linked to a lack of affordable new BEVs with a range of 300 km or more⁶.
2. **BEV costs:** Information beyond the BEV purchase price, including the existing models' km range, the Total Cost of Ownership⁷, and the available financial support could help potential BEV drivers to have a clearer opinion on electric driving.
3. **BEV costs:** the second-hand and leasing options at an affordable price need to be further considered. 40% of the Belgian BEV drivers bought a second-hand BEV, while 17% indicated that they lease a car for which the majority (72%) pay between 700 € and more than 1,000 € per month (the most expensive monthly leasing price among the countries surveyed).
4. **BEV range insufficiency:** The BEV factory range was enough for 94% of the Belgian BEV drivers. 44% indicated a factory range of 200-400 km. Range satisfaction can be related to the km driven per day (127 km), and the main activity for which the BEV is used (leisure and other activities such as doctor's appointments). Moreover, for holidays or trips beyond 500 km, the Belgian BEV drivers considered problems related to '*charge anxiety*' and '*BEVs' range anxiety*' as relevant.
5. **Public recharging network:** Belgian BEV drivers do not have a clear overview of the public recharging points in their vicinity, and they do not consider that there is a sufficient choice between different operators of recharging points/mobility providers. In this sense, information on the recharging network was also one of the support measures that potential Belgian BEV drivers would welcome.

Finally, the EAFO 2022 Consumer Monitor survey results also show the need to address those groups less represented among BEV drivers in Belgium (and in other EU countries) such as females, households having a lower income, or lower education level.

6 <https://alternative-fuels-observatory.ec.europa.eu/consumer-portal/available-electric-vehicle-models>

7 <https://alternative-fuels-observatory.ec.europa.eu/consumer-portal/calculator>

2. Consumer monitoring results: general population views on driving battery electric vehicles in Belgium

This section presents the **results of the Belgian general population surveyed through the panel: 1,668 valid responses from BEV (27) and non-BEV drivers (1,641)**. It focuses on their attitude, interest and information that could support them to further drive BEV cars.

Socio-demographics general population

Based on the survey results, the **Belgian BEV driver** is represented as a 35-year-old male, living in a detached house, and with a monthly income between 2,000 € and 3,999 € who has a university or higher education diploma. The main difference between both groups are the percentage of female drivers and that non-BEV drivers are represented by an older age group.

Although most BEV drivers surveyed live in a detached house, 12% live in an apartment or studio, which could influence their recharging location options if they do not have access to a parking spot with a charging station/wallbox.

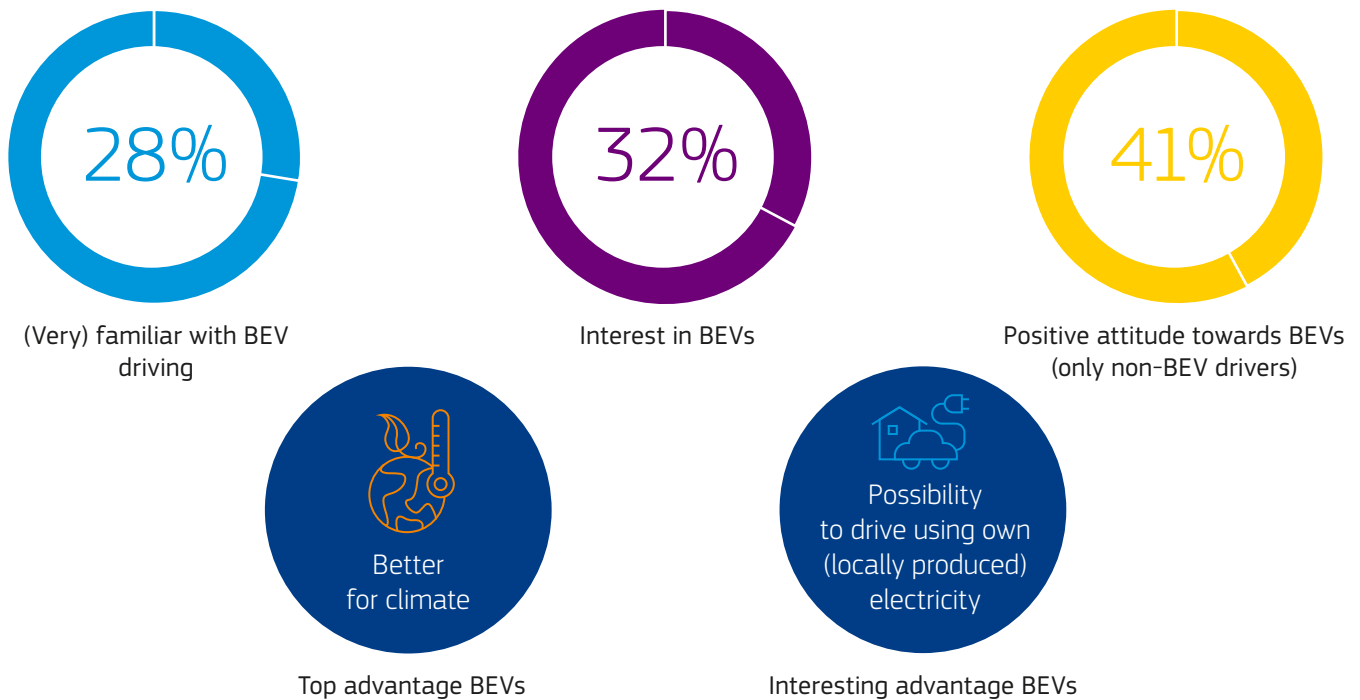
Table 1: Socio-demographic results from the survey for the general population

| | BEV driver | Non-BEV driver |
|--|------------|----------------|
| Gender | | |
| Female | 47% | 51% |
| Male | 53% | 49% |
| Other | 0% | 0% |
| Age group | | |
| -35 | 55% | 26% |
| 35-55 | 20% | 35% |
| 55+ | 25% | 39% |
| Net income | | |
| < 800 € | 13% | 26% |
| 800-1999 € | 39% | 45% |
| 2000-3999 € | 33% | 23% |
| 4000-5999 € | 15% | 6% |
| ≥ 6000 € | 12% | 4% |
| Education | | |
| Early childhood-primary education | 9% | 20% |
| Secondary education | 24% | 41% |
| University or other higher education (e.g., college, polytechnic, academy) | 67% | 39% |
| Accommodation | | |
| Apartment/studio | 12% | 21% |
| Semi-detached house | 2% | 18% |
| Attached house | 29% | 20% |
| Detached house | 57% | 40% |
| Other | 0% | 1% |

Attitude and motivation towards battery electric vehicles in Belgium

Almost a third of respondents in **Belgium** indicated that they are (very) familiar with or interested in battery electric driving. 41% have a positive attitude towards BEVs. As in the case of the other nine countries surveyed, the main advantage of BEVs is that these are better for the climate (no tailpipe emissions). Moreover, Belgian drivers are also interested in the possibility to drive using their own (locally) produced electricity.

Table 2: General population opinion and views on battery electric vehicles

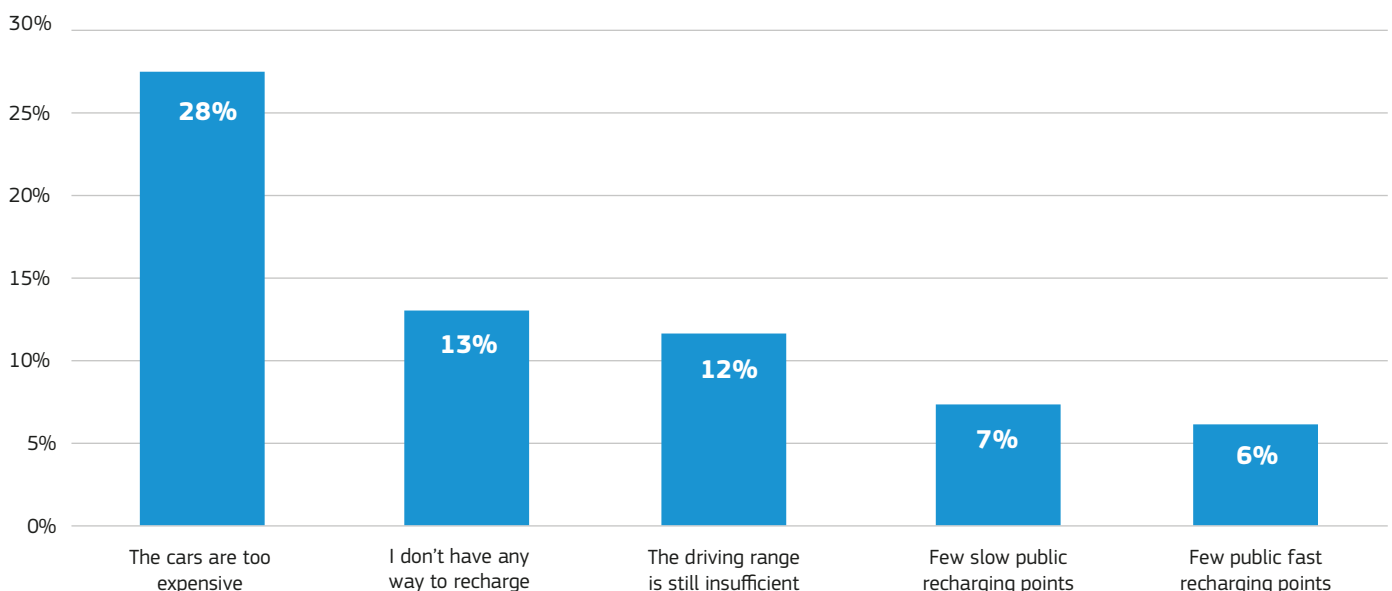


Main barriers and opportunities to adopt battery electric vehicles

Disadvantages of driving battery electric vehicles in Belgium

Belgian survey participants were asked to choose the most relevant disadvantages of driving battery electric vehicles. As previously reported, these include the price of BEVs, limited recharging options (either private or public), and BEVs' range.

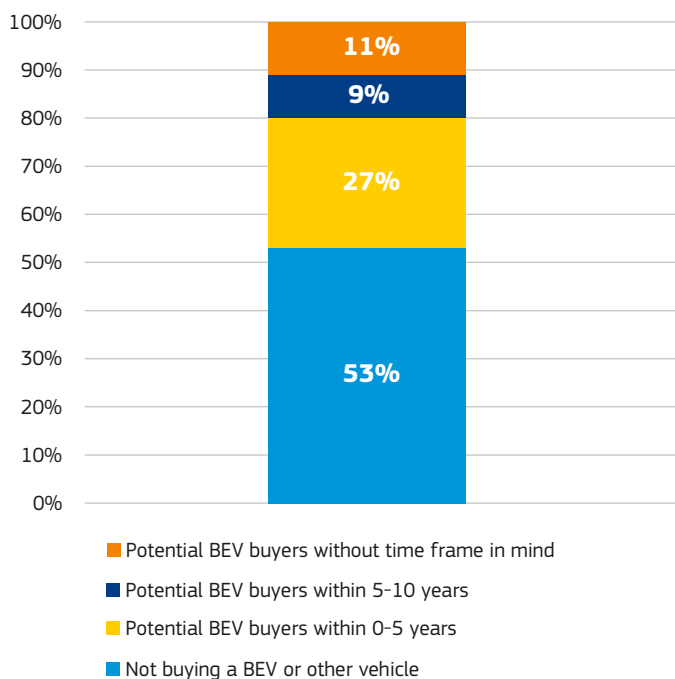
Figure 1: Belgian drivers' top five identified disadvantages of battery electric vehicles



Time frame to buy a battery electric vehicle in Belgium

53% of the **Belgian** respondents do not consider buying a battery electric vehicle. 27% would do so in a time frame of 0-5 years.

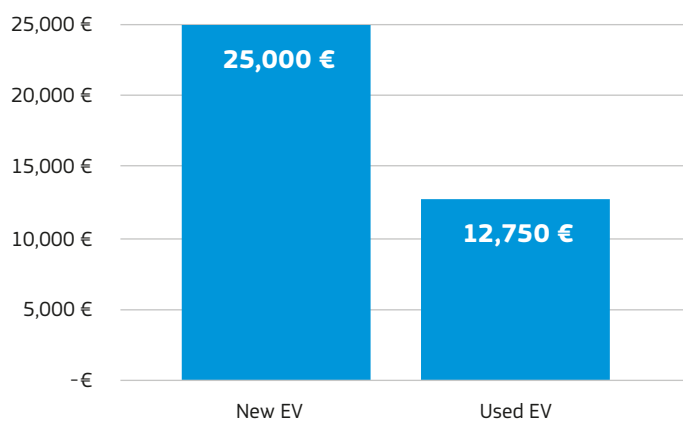
Figure 2: Belgian drivers' time frame to buy a battery electric vehicle



Willingness to pay and desired range of a battery electric vehicle in Belgium

The median price that all **Belgian** respondents are willing to pay for a new BEV is 51% higher than for a second-hand one. When looking at only the BEV drivers (merged datasets) for 60% the purchase price paid is between 20,000 € and 40,000 €.

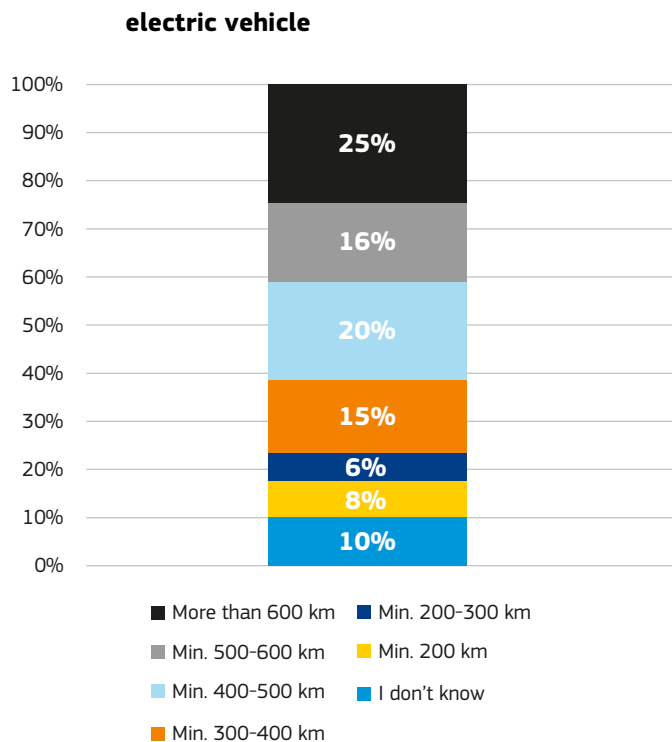
Figure 3: Belgian drivers' willingness to pay for a new & used battery electric vehicle



Desired range battery electric vehicle in Belgium

In the 2022 survey desired range was described as the number of km that can be driven with a full battery without recharging. A minimum desired range between 300 km and 500 km was the choice of 35% of all **Belgian drivers surveyed**. 41% would prefer a range of 500 km and more.

Figure 4: Belgian drivers desired range of a battery electric vehicle



The current BEV market consists of a considerable amount and variety of models (178) with a range between 300 and +600 km (models' variance in March 2023 according to the EAFO). On the other hand, there are only twelve BEVs models available with a purchase price between 20,000 € - 35,000 € (representing 5% of the total BEVs models in the market). These have an average range of 193 km (min 95 km, max 300 km), and include mostly cars in the A and B segments (supermini, e.g., city cars), with a couple of models in the C segment (compact, e.g., small family cars)⁸.

In Belgium, BEVs benefit from exemption or limited registration and ownership taxes at the regional level. The Federal government also provides investment deductions for companies but for commercial vehicles, not passenger ones⁹.

Interestingly, 54% of the surveyed Belgians indicated that they are not aware of any subsidies for electric driving and that they still will value more information on batteries and/or driving range to have a clearer opinion about electric driving. Information on cost comparison with fossil fuel cars was also considered relevant.

⁸ <https://alternative-fuels-observatory.ec.europa.eu/consumer-portal/available-electric-vehicle-models>

⁹ <https://alternative-fuels-observatory.ec.europa.eu/transport-mode/road/Belgium/incentives-legislations>

3. Consumer monitoring results: Mobility and recharging behaviour of battery electric drivers in Belgium

This section focuses on BEV Belgian drivers (only) from both datasets (the merged panel and AVERE dataset, with 49 valid responses in total). The results of the EAFO 2022 survey give an insight into who the Belgian BEV driver is, their mobility behaviour, purchase cost and range expectation towards BEVs. Results on recharging behaviour are also presented.

Socio-demographic indicators for the BEV driver in Belgium

The table below shows the main socio-economic indicators of the BEV respondents. Based on the survey results and when looking at a bigger sample of Belgian BEV drivers (only), they are represented as a -35-year-old male, living in a detached house, and with a monthly income between 4,000 € and 5,999 € who has a university or other higher education diploma.

Table 3: Socio-demographic results from the survey for the BEV Belgian driver

| | |
|--|-----|
| Gender | |
| Female | 26% |
| Male | 74% |
| Other | |
| Age groups | |
| -35 | 38% |
| 35-55 | 35% |
| 55+ | 27% |
| Net income | |
| < 800 € | 1% |
| 800-1999 € | 7% |
| 2000-3999 € | 40% |
| 4000-5999 € | 42% |
| ≥ 6000 € | 10% |
| Education | |
| Early childhood-primary education | 5% |
| Secondary education | 22% |
| University or other higher education (e.g., college, polytechnic, academy) | 73% |
| Accommodation | |
| Apartment/studio | 12% |
| Semi-detached house | 7% |
| Detached house | 23% |
| Attached house | 57% |
| Other | 1% |

Mobility behaviour and vehicle ownership of battery electric drivers in Belgium

Most **Belgian BEV drivers** surveyed use their vehicle several times a week or daily. Most BEVs are new privately owned cars, driven by 'recent' BEV drivers.

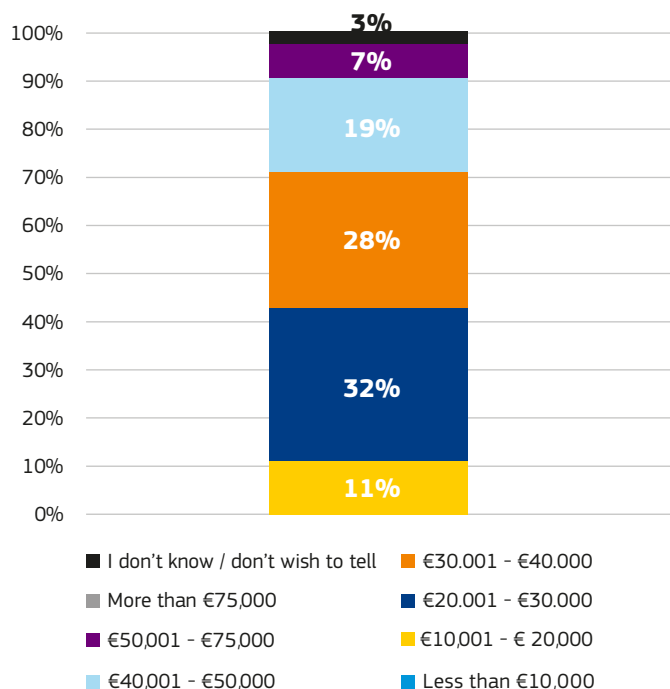
Table 4: BEV driver behaviour and vehicle ownership

| | |
|---|---|
| <1 year to 3 years as BEV driver | 89% |
| 3 years to 5 years or longer as a BEV driver | 11% |
| Average km driven a year | 18,910 |
| Average km driven a day | 127 |
| BEV drivers using their vehicle daily to several times a week | 90% |
| Main activity when driving their BEV | Leisure e.g., visit family, shopping, day trips & other |
| BEV ownership | |
| Leased BEV | 17% |
| BEV company car (if employee) | 28% |
| Privately owned BEV | 55% |
| New vs., second-hand BEVs | |
| New BEV | 60% |
| Second-hand BEV | 40% |

Purchase and lease price paid by BEV drivers in Belgium

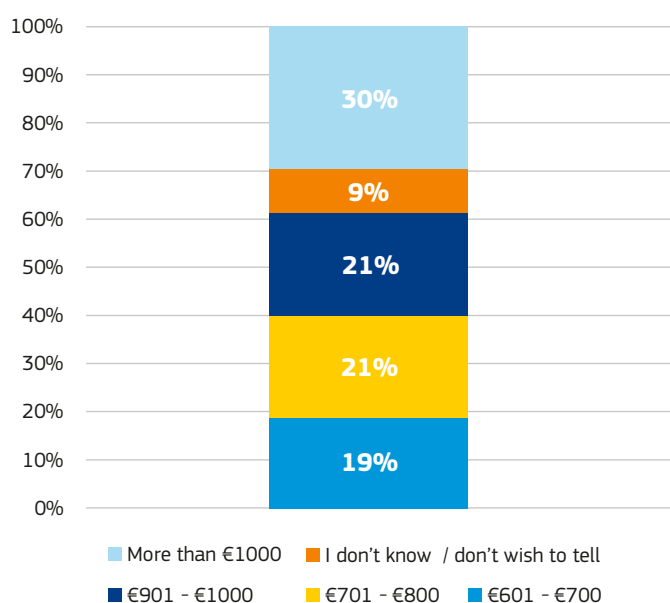
60% of the **BEV Belgian drivers** surveyed indicated that the purchase price paid for a BEV is between 20,000 € and 40,000 €. 26% paid between 40,000 € and 75,000 € for their BEV. 11% paid between 10,000 € and 20,000 €.

Figure 5: Belgian BEV drivers' purchase price for their battery electric vehicle



On the other hand, 72% of the **Belgian BEV driver** participants that responded that their first car is leased (privately or for business purposes) pay between 700 € and more than 1,000 € per month. Only 17% of the Belgian full electric car drivers surveyed lease a BEV.

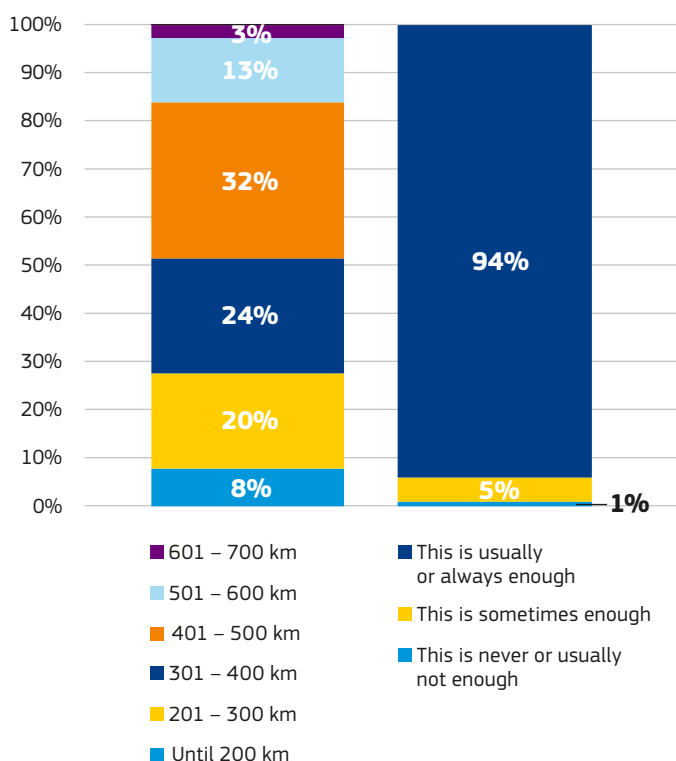
Figure 6: Belgian BEV drivers lease price for their battery electric vehicle



Factory range and range satisfaction of fully electric cars used by BEV drivers in Belgium

Factory range refers to the km a new BEV can drive with the available vehicle battery after running a World Harmonised Light Vehicle Test Procedure (WLTP) test cycle. 44% of the Belgian BEV drivers indicated a factory range of 200-400 km.

Figure 7: Factory range and range satisfaction according to Belgian BEV drivers



It is noteworthy that most Belgian drivers who drive battery electric vehicles reported that the original range of their vehicles was sufficient when asked about it.

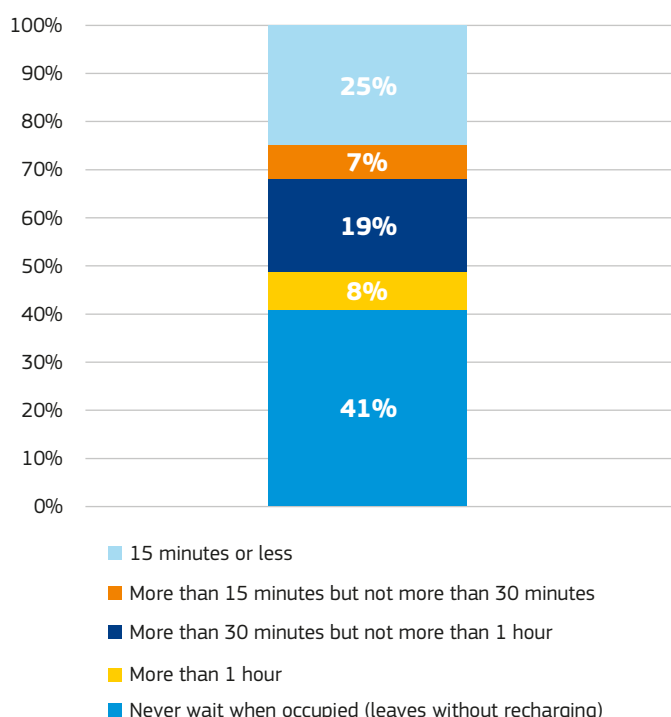
In addition, range satisfaction can be related to the km driven per day (127 km), and the main activity for which the BEV is used (leisure and other activities e.g., doctor's appointments).

Recharging behaviour of battery electric drivers in Belgium

Recharging according to battery level and waiting time at public recharging points of Belgian BEV drivers

Surveyed BEV Belgian drivers were asked what the longest waiting time was to use a public recharging point. 41% never wait when this is occupied (they leave without recharging), while 25% waited for 15 minutes or less. Still, 26% waited between 15 minutes to 1 hour. Furthermore, 64% of respondents do not always take the battery level into account when recharging.

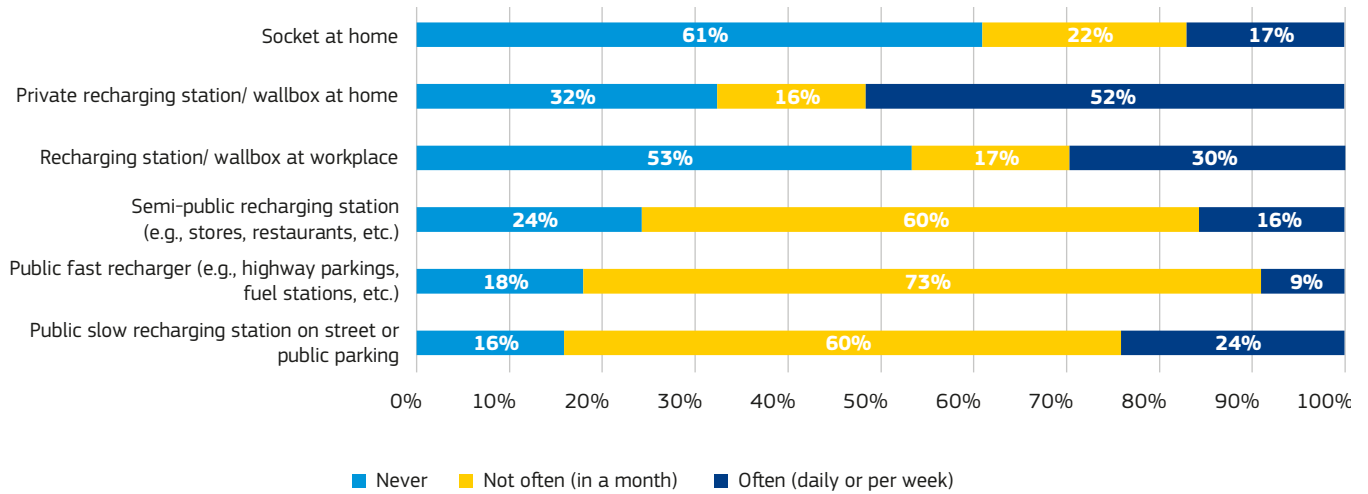
Figure 8: Belgian drivers waiting times when using a public recharging point



Recharging location and frequency of use by BEV Belgian drivers

For **BEV Belgian drivers** a private recharging station or wallbox at home is the most frequently used location. Public slow recharging stations are relatively often used, while public fast recharging stations are not often used (24% and 9% respectively).

Figure 9: Recharging location and frequency used by Belgian BEV drivers



Important characteristics of a public recharging session for BEV Belgian drivers

Belgian BEV driver respondents were asked to indicate the most important characteristics of a public recharging session. The recharging speed for a quick session was the most important. Next to this, characteristics related to payment options were considered relevant, with a subscription pass/app being chosen above a spot payment option. Moreover, the possibility to pay per kWh was also considered as a convenient option.

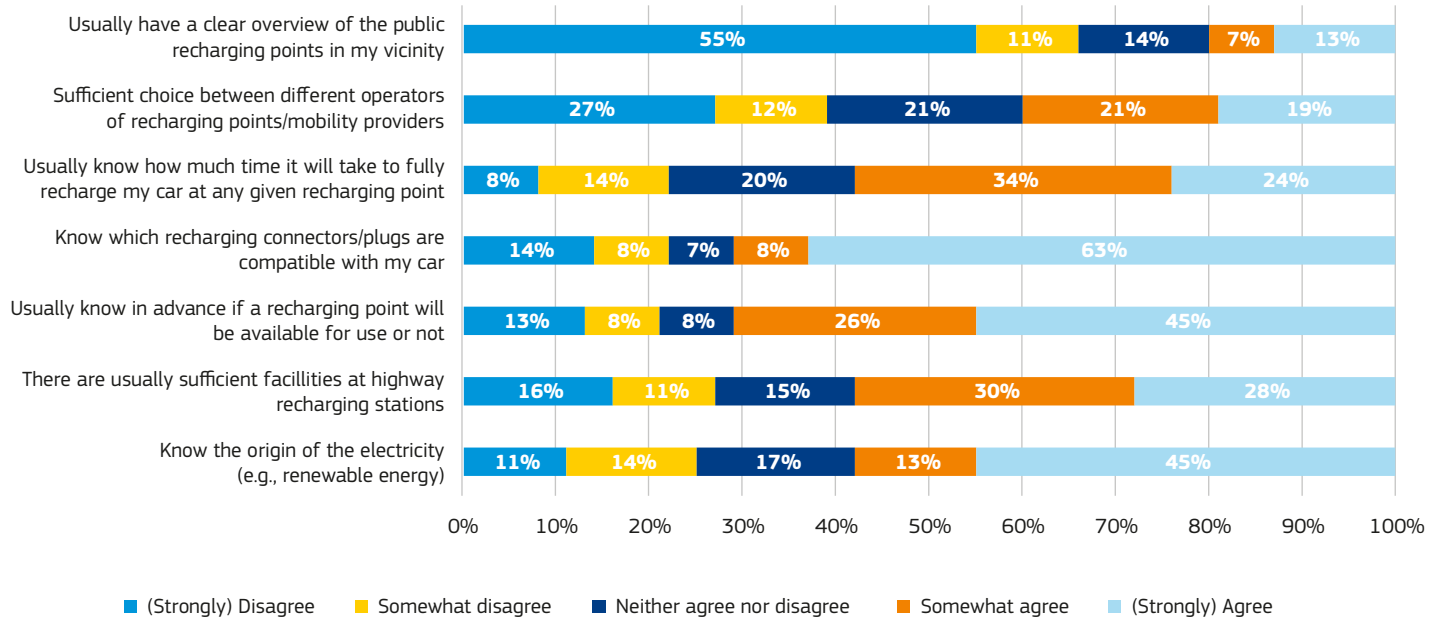
Table 5: Important characteristics of a public recharging session

| | |
|---|----------|
| Recharging speed/power output of the recharging point, so I can get the quick-est possible recharge | 1 |
| Easy access and payment via my recharging subscription (pass/app) | 2 |
| Short/no waiting time to access the recharging point, to avoid queuing | 3 |
| Clear and transparent price information, so I know how much I will be charged for my recharging session | 4 |
| Convenient on-the-spot payment options (e.g., debit/ credit card) | 5 |
| Possibility to do something else while your car recharges/amenities on site (food, coffee, toilets, etc) | 6 |
| Possibility to pay per kWh only (instead of per minute or per session) | 7 |
| Integrated cable, so there is no need to get the cable out of the trunk | 8 |

BEV Belgian drivers' opinion and payment options at public recharging points

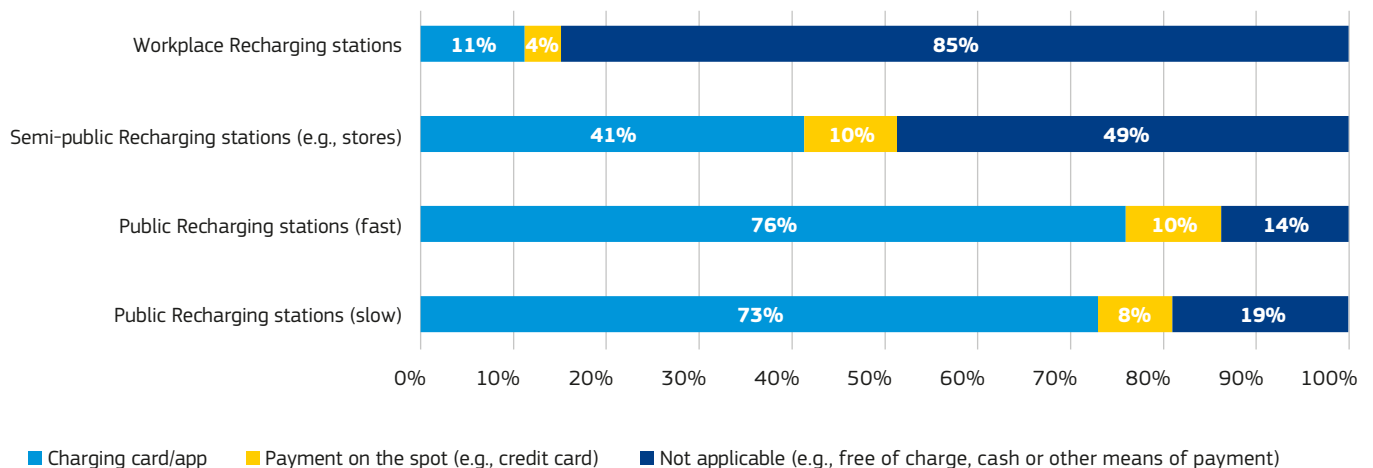
Most **Belgian BEV drivers** know which recharging connector is compatible with their car, know in advance if a recharging point is available, and know the origin of the electricity at the public recharging point. On the other hand, they do not have a clear overview of the public recharging points in their vicinity, and they do not consider that there is a sufficient choice between different operators of recharging points/mobility providers. In this sense, information on the recharging network was also one of the support measures that potential Belgian BEV drivers would welcome.

Figure 10: Public recharging points opinions of Belgian BEV drivers



In the case of public recharging stations (both slow and fast), a charging card/app is the first option used. Workplace recharging stations mostly use other payment means or are free of charge, while for semi-public recharging stations, both cards/apps and other payment means are an option.

Figure 11: Payment options at recharging stations



Main problems encountered by **Belgian BEV drivers** when travelling abroad

Holidays or other trips beyond 500 km were an important activity for 29% of the **Belgian BEV drivers**. When they were asked to rank the main problems they encountered when travelling abroad, the range limitations of their BEV came in third place.

Table 6: Problems encountered when travelling abroad

| | |
|---|----------|
| I don't think I can recharge my car at my travel destination | 1 |
| There are too few recharging stations along the way | 2 |
| Due to the limited range of my electric car, I would have to stop too often to recharge my car along the way | 3 |
| I don't have enough information about where to recharge while on the road | 4 |
| Due to the slow and therefore long recharging times, I would lose too much time for recharging my car | 5 |
| I find it overly burdensome to plan my trip in function of my recharging needs | 6 |
| I find it complicated or prohibitively expensive to pay for my recharging abroad (roaming issue) | 7 |

4.

Comparative results Belgium vs other EU countries

The number one BEV driving disadvantage identified in all cases is the purchase price of the cars. The percentage of BEV drivers in **Belgium** not aware of existing subsidies for electric driving was the highest of the ten surveyed countries. Belgium has also the lowest percentage of BEV drivers with 3 to 5 years (or longer) experience. On the other hand, they are the ones with the higher percentage of BEV company cars. Moreover, the most important characteristic of a public recharging session in the ten EU countries surveyed is recharging speed, with a charging card or app being the most used payment option at public recharging points. Finally, the highest percentage of BEV drivers recharging without considering the battery level are also the Belgian ones.

Table 7: Barriers and opportunities BEV driving (general population)

| Country | Main disadvantage | % BEV potential drivers | Not aware of subsidies for electric driving | Existing financial incentive (end 2022) ¹⁰ |
|-----------------|------------------------|-------------------------|---|---|
| Austria | BEVs are too expensive | 48% | 34% | VAT deduction and exemption from tax for BEVs. No CO ₂ tax. Purchase subsidies. |
| Belgium | | 47% | 54% | Limited or exemption from registration and ownership taxes at the regional level. Federal deduction of investments for companies. Limited or exemption on road taxes. |
| Denmark | | 56% | 49% | Registration tax reductions. Company car tax deduction. Taxes on ownership are based on CO ₂ emissions. |
| France | | 40% | 35% | Registration tax exemption. BEVs, FCEVs (fuel cell electric vehicles), and PHEVs (Plug-in Hybrid Electric Vehicles -with a range of > 50km) are exempt from the mass-based malus. Purchase subsidies. Exemption from CO ₂ -based tax components. |
| Germany | | 53% | 33% | Motor vehicles tax exemption. Company car tax deduction. Tax exemption for charging at the workplace. Exemption from the annual circulation tax for CO ₂ emission. Purchase subsidies. |
| Hungary | | 66% | 44% | Tax-exempt from registration, ownership, company car tax and property transfer tax. |
| Italy | | 63% | 45% | Ownership tax exemption for a period of five years after registration. Afterwards reduced rate (compared to petrol cars). Company car tax discount. Purchase subsidy. |
| Netherlands | | 49% | 41% | No purchase & motor vehicle taxes. Minimum rate (16%) for company car tax. Purchase subsidy. |
| Slovenia | | 39% | 47% | Purchase subsidy & long-term loans at subsidised rates. The minimum additional tax rate on acquisition. |
| Spain | | 67% | 44% | Ownership tax reduction of 75% for BEVs in main cities. Purchase subsidies. BEVs are fully exempt from paying the car registration tax. Exemption from 'special tax' for CO ₂ emissions. |
| EU 10 countries | | 53% | 42% | Financial support through grants and loans. |

¹⁰ For more detailed overview, please refer to the "Incentives & legislation" page on the country report pages of [EAFO](#)

Table 8: Mobility & ownership of car BEV driver (merged datasets)

| Country | 3 years to 5 years or longer as BEV driver | BEV drivers using vehicle daily / several times a week | Leased BEV (business or private) | BEV company car (if employee) | Privately owned BEV | New BEV | Second-hand BEV |
|-----------------|--|--|----------------------------------|-------------------------------|---------------------|---------|-----------------|
| Austria | 42% | 95% | 29% | 11% | 60% | 73% | 27% |
| Belgium | 11% | 90% | 17% | 28% | 55% | 60% | 40% |
| Denmark | 15% | 90% | 3% | 3% | 94% | 50% | 50% |
| France | 46% | 99% | 20% | 3% | 77% | 77% | 23% |
| Germany | 20% | 92% | 26% | 9% | 65% | 79% | 21% |
| Hungary | 47% | 99% | 16% | 9% | 75% | 49% | 51% |
| Italy | 28% | 91% | 16% | 13% | 71% | 87% | 13% |
| Netherlands | 28% | 97% | 21% | 16% | 63% | 70% | 30% |
| Slovenia | 45% | 93% | 61% | 8% | 31% | 60% | 40% |
| Spain | 63% | 97% | 4% | 12% | 84% | 77% | 23% |
| EU 10 countries | 38% | 97% | 22% | 8% | 70% | 67% | 33% |

Table 9: Recharging behaviour BEV drivers (merged datasets)

| Country | Waiting time 15 min or less at recharging point | Never waits for recharging point (leaves without recharging) | BEV drivers recharging often without/ not always considering battery level | % time using slow public recharging point daily/ per week | % time using fast public recharging point daily/ per week | Most important characteristic public recharging session | Most used payment option at slow & fast public recharging point |
|-----------------|---|--|--|---|---|---|---|
| Austria | 32% | 46% | 32% | 9% | 5% | Recharging speed to get the quickest possible recharge | Charging card or app |
| Belgium | 25% | 41% | 64% | 24% | 9% | | |
| Denmark | 21% | 14% | 34% | 47% | 28% | | |
| France | 21% | 31% | 38% | 18% | 9% | | |
| Germany | 22% | 44% | 18% | 14% | 10% | | |
| Hungary | 22% | 37% | 21% | 11% | 8% | | |
| Italy | 17% | 30% | 45% | 53% | 22% | | |
| Netherlands | 30% | 32% | 31% | 29% | 16% | | |
| Slovenia | 20% | 36% | 43% | 35% | 13% | | |
| Spain | 21% | 42% | 31% | 28% | 14% | | |
| EU 10 countries | 25% | 37% | 30% | 21% | 10% | | |

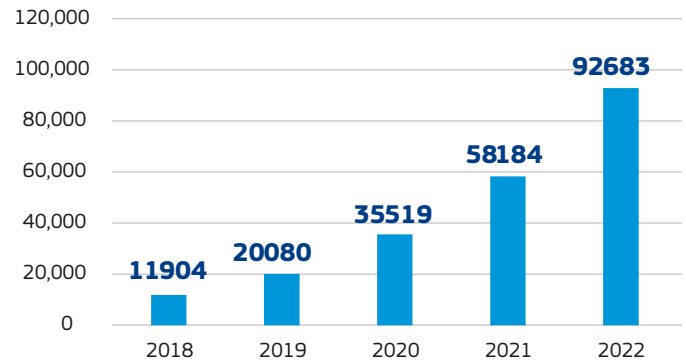
5. Belgium in the European context

Belgium has a population of 11,566,041 inhabitants¹¹, with 98% living in urban areas. The Belgian government has developed policies that promote climate-friendly, sustainable, and energy-efficient mobility^{12 13 14}. Different actions are taken in this sense, including road transport electrification.

The Belgian government has implemented different incentives, including tax benefits, VAT exemptions and subsidies to support the uptake of electric vehicles and recharging infrastructure (an overview of these can be found in [EAFO incentives & legislation, Belgium](#)).

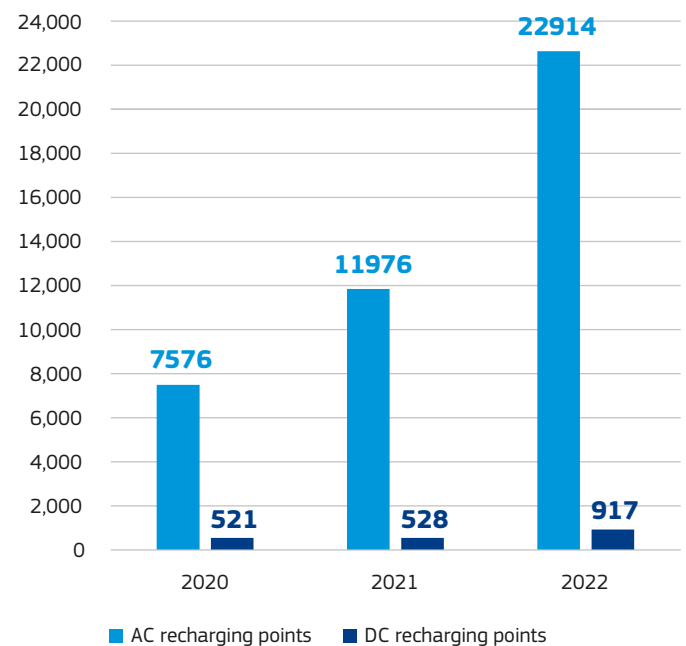
The EAFO portal shows that at the end of 2022, there were 92,683 battery electric vehicle cars in the country, with 37,815 of them being registered that year. This means that 1.56% of the total passenger vehicles in Belgium are now fully electric.

Figure 12: Evolution of BEV cars in Belgium (EAFO portal)



Moreover, the public recharging infrastructure network has considerably grown in the last couple of years. According to the EAFO portal, by the end of 2022, there were 22,914 (AC) slow public charging points, and 917 (DC) fast public ones¹⁵.

Figure 13: Evolution of recharging points in Belgium (EAFO portal)



11 <https://alternative-fuels-observatory.ec.europa.eu/transport-mode/road/Belgium>

12 <https://environnement.brussels/citoyen/nos-actions/projets-et-resultats/strategie-low-emission-mobility-lez>

13 https://assets.vlaanderen.be/image/upload/v1645112287/Vlaamse_mobiliteitsvisie_2040_DEF_kospcu.pdf

14 https://mobilite.wallonie.be/files/eDocsMobilite/politiques%20de%20mobilit%3a9/SRM_PERSONNES_2019.pdf

15 The EAFO and the 2022 consumer monitor use the AFIR definition of recharging points. More information can be found at [Recharging systems | European Alternative Fuels Observatory \(europa.eu\)](#)

Annex I: Consumer monitoring methodology & approach

For the 2022 launch of the EAFO consumer monitor survey, ten countries¹⁶ were selected as the representative first scope to further promote the EAFO consumer monitor towards all EU-27 countries. Furthermore, the results of the ten countries surveyed are the basis for an EU aggregated report.

The survey was conducted using a panel on the general population of each of the selected countries. In parallel, the same survey was addressed to BEV drivers of each country via the EAFO partner AVERE. Both surveys were launched at the beginning of September 2022.

For the panel, the aim was to reach 2,000 responses per country.

The survey was open for 1 month. For the survey launched through AVERE, the threshold was to reach 100 respondents per country. To achieve this, the survey was closed at the beginning of December 2022.

The datasets were subjected to validation tests, including:

- Respondents should have completed the survey until the end and should have agreed to the terms and conditions of the survey.
- Respondents who filled out the survey in less than three minutes are excluded from the survey, as it was deemed impossible to fill out the survey thoroughly and in its entirety in under three minutes.
- Respondents who indicated unusually high values to open questions with continuous variables (kilometres driven in a day, kilometres driven in a year, purchase price of a BEV and purchase price of an Internal Combustion Engine Vehicle-ICEV) were excluded from the results.
- Respondents who indicated not owning a driver's licence were excluded.
- Respondents who came up with nonsensical patterns of answers to open questions were excluded.

The validation of the datasets was finalised in mid-October. For the AVERE dataset, the validation was conducted in early January 2023. A total of 1,668 responses were considered valid for the general population. Out of these, there were 1,641 non-BEV and 27 BEV drivers (2.4% of the total responses). For the AVERE data set, there were a total of 25 responses, 22 from BEV drivers. The total number of BEV Belgian drivers surveyed from both datasets is 49.

To compare and later weigh the results per education level, the respondent's answers were standardised and converted to the International Standard Classification of Education (ISCED) notation¹⁶. Moreover, respondents were considered BEV drivers when their first, second or third car is a BEV. The results of the survey were weighted according to education levels, age group and gender of the population, respective to each country. The survey weights were computed using the post-stratification and conditional variance estimation techniques. The resulting weights were trimmed between 0.3 and 3. The weighting process allows to make claims about the target population, instead of the survey sample alone. Because of the weighting process, all results are presented as a percentage of the total.

To improve the relevance of the analysis of the BEV drivers alone, the survey conducted on BEV drivers (from AVERE) was combined with the survey conducted on the general population. As previously mentioned, the total BEV responses after combining both data sets are 49. As a result of the choice to combine the datasets, the proportion of BEV drivers in the analysis is not representative of the population proportion. However, claims can be made about the BEV-driving population.

¹⁶ [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=International_Standard_Classification_of_Education_\(ISCED\)](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=International_Standard_Classification_of_Education_(ISCED))

* The ten countries surveyed were: Austria, Belgium, Denmark, France, Germany, Hungary, Italy, Netherlands, Slovenia, and Spain

Getting in touch with the EU

In person

All over the European Union there are hundreds of Europe Direct centres. You can find the address of the centre nearest you online (european-union.europa.eu/contact-eu/meet-us_en).

On the phone or in writing

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696,
- via the following form: european-union.europa.eu/contact-eu/write-us_en.

FINDING INFORMATION ABOUT THE EU

Online

Information about the European Union in all the official languages of the EU is available on the Europa website (europa.eu).

EU publications

You can view or order EU publications at op.europa.eu/en/publications. Multiple copies of free publications can be obtained by contacting Europe Direct or your local documentation centre (european-union.europa.eu/contact-eu/meet-us_en).

EU law and related documents

For access to legal information from the EU, including all EU law since 1951 in all the official language versions, go to EUR-Lex (eur-lex.europa.eu).

Open data from the EU

The portal data.europa.eu provides access to open datasets from the EU institutions, bodies and agencies. These can be downloaded and reused for free, for both commercial and non-commercial purposes. The portal also provides access to a wealth of datasets from European countries.

