VROOM EV

Research

Electric Vehicle acceptance in Belgium

Executive summary
April 2022

The Belgian Electric Vehicle Study

“Would driving electric be interesting for me?” The number of opinions on this topic are extensive, but neutral facts and figures are hard to find.

As Belgium’s largest free online automotive magazine VROOM.be, we noticed that many of our customers and followers are very unclear about the operational and financial impact of driving electric, in comparison to driving on fossil fuels.

During the month of **February 2022**, we launched a research campaign that helped users to find **accurate and neutral information on whether driving electric would be beneficial for them**. This initiative suits within VROOM.be’s broader mission to become Belgium’s most intuitive and personalized car comparison website.

During the one month research period, over **5.200 Belgian citizens** filled in the campaign survey, which is almost 10 times the amount of people who showed interest in a similar campaign that ran early 2020. The market’s interest and momentum for new energy vehicles is high and will only accelerate.

In this report, we **analysed the participant’s views, needs and concerns**. We hope you will find this outcome inspiring and innovative.

Jointly, we can create transparency on where we stand in the shift towards sustainable personal mobility and which roadblocks are still to be overcome.

Donald Wolfs,
CEO VROOM.be

Context on the **shift towards sustainable personal mobility**

Policy & Regulations

- The EU aims to be climate-neutral by 2050 and expects local governments and enterprises to achieve the same
- In Belgium, all new vehicles are required to be emission-free by 2029
- Belgian regions are taking strong initiatives to enable their citizens to organise their mobility in a sustainable manner

Market offer & supply chain impact

- COVID has led to increased complexity in the electric vehicle supply chains, thus increasing the prices of essential material and components
- Many established car brands have committed to going full electric between 2025 and 2035
- Many new electric vehicle brands are entering the European market, coming mainly from Asia and the United States

Customer's mindset

- Both individuals and enterprises are committed to contribute to more sustainable ways of mobility
- Besides providing actual solutions, education on what it means to drive electric operationally and financially is equally crucial for people to feel comfortable with the change

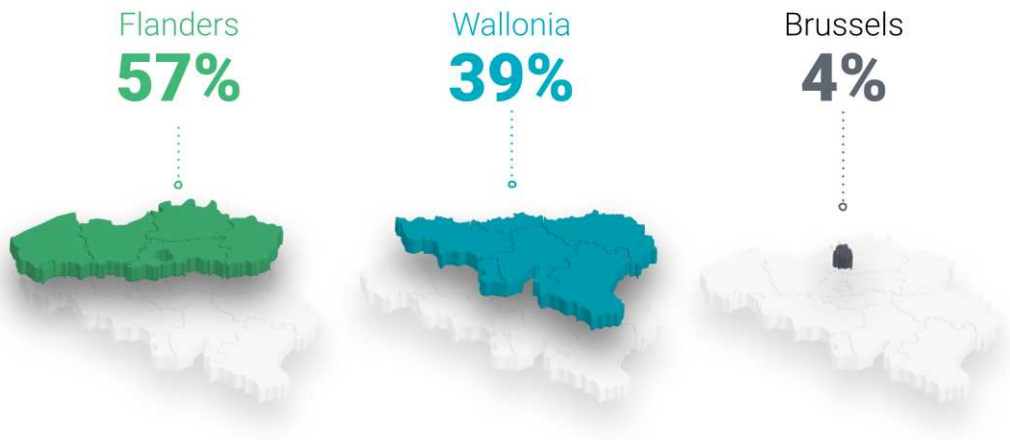
Part 1

Context & interest

We aimed to **mirror the Belgian Mobility market**

5.200 participants
have been surveyed during the month of February 2022

Among them, **approximately 400 participants**
took part in a deep dive session



National & Regional governments will be banning carbon-emitting vehicles over time. A milestone extract*:

2026	**National EV policy** Fiscal push for emission-free company cars
2029	**Flanders** (regional EV policy) All new vehicles emission-free
2030	**Brussels Capital Region** (regional EV policy) No Diesel & Petrol cars allowed (except Fuel - Euro 6d)
2035	**Brussels Capital Region** (regional EV policy) Only emission-free cars allowed

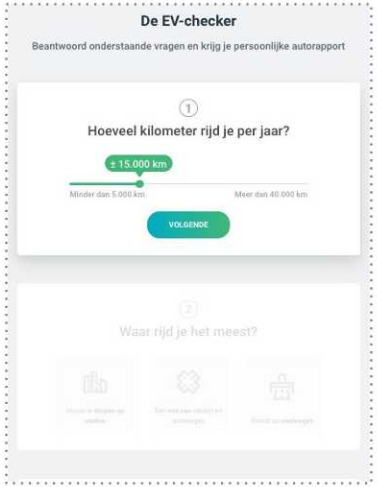
Note *: This is an extract, not the complete overview of all initiatives being taken by Belgian regions and cities

Research **methodology**

User journey extracts:

1 Research landing page

2 Indicate your driving behaviour



3 Select your personal preferences

4 Get your personalised car report

We noticed a **relatively equal interest** in this topic for all **three regions**

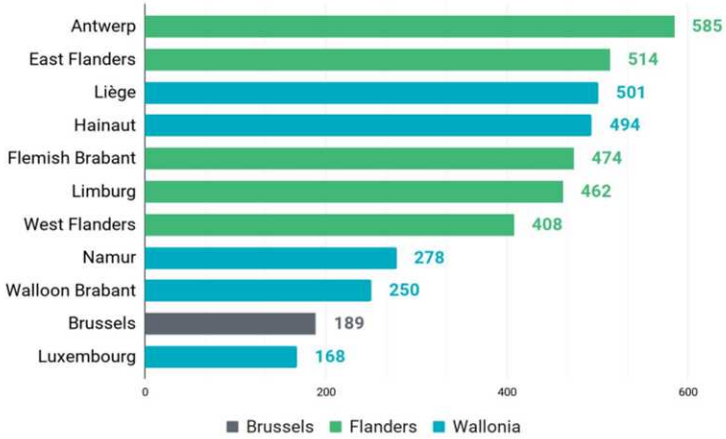
Given the highest proactive push towards electric driving in **Flanders**, compared to the policies set in **Wallonia** and the **Brussels Capital Region**, we expected this to reflect in the relative interest of its inhabitants in this campaign.

However, we noticed that the relative interest between **Flanders**, **Wallonia** and the **Brussels Capital Region** is relatively equal, with 3 Walloon regions showing the highest relative interest.

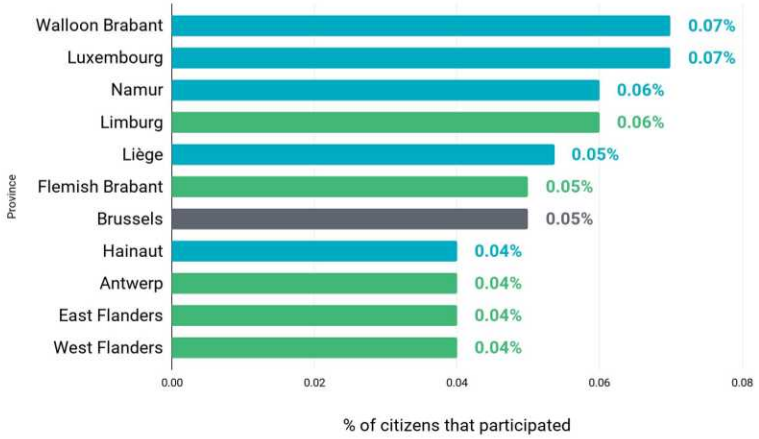
Within Flanders, the highest EV interest was noticed in Limburg, whereas the lowest interest was in West Flanders

Within Wallonia, the highest EV interest was noticed in Walloon Brabant, whereas the lowest interest was in Hainaut

Absolute interest per province



Relative interest per province



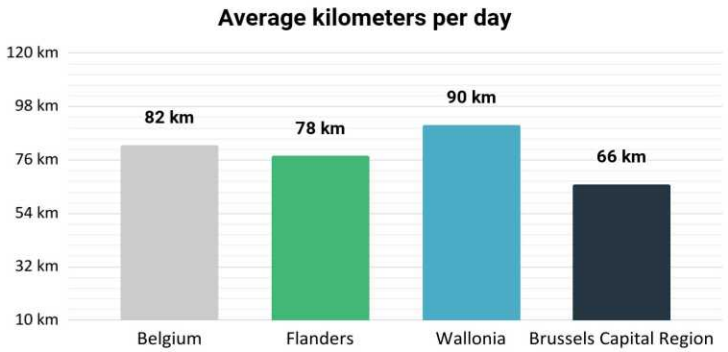
Part 2

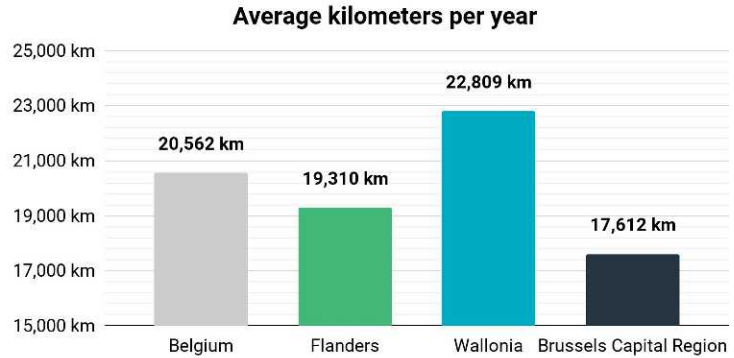
Driving & charging behaviour

The **urban-rural differences** between the regions reflect in the **driving patterns**

- Belgians, on average, drive 82 kilometers per day, with **Walloons** driving 90 kilometers, **Flemish** residents driving 78 kilometers, and **Brussels Capital Region** residents driving 66 kilometers.
- A charging session* for 82 km would approximately take
  - **At home:** 234 minutes, using a simple socket or 96 minutes using a home wallbox
  - **Public:** 78 minutes using a default public charger or 6 minutes using a fast charger
- On a yearly basis, **Walloons** indicate driving approximately 22.800 km, which is approximately 3.500 km more than **Flanders** inhabitants and approximately 5.000 km more than **Brussels Capital Region** inhabitants. Moreover, part of the reason is that **Walloons** indicate using highways more often than their **Flanders** and **Brussels** counterparts
- 59% of all participants indicate that mixed travel (combination of highway & city driving) is the dominant form of travel in all three regions

Note *: calculation is based on the 5 most selected models, calculating at average capacity rates per device and considering that the vehicle has fast charging capacity





Having **convenient charging options** is crucial for **EV acceptance**

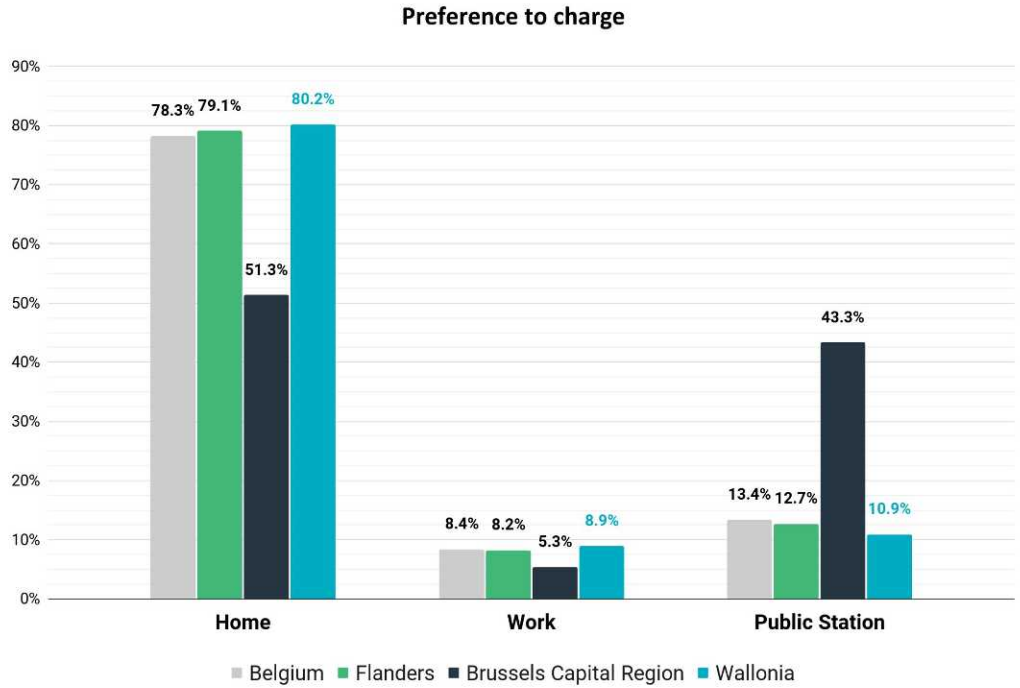
- **78% of all participants prefer charging at home.**

This preference is especially high in **Flanders** and **Wallonia**, with preference rates of 79% and 80%, respectively.

Even in the **Brussels Capital Region**, 51% of citizens would prefer charging at home.

- Looking at this from an inverse perspective, one might argue that electric vehicle interest is higher when a convenient charging method is available.

- Belgium's largest electricity distribution operators (Fluvius, Sibelga,..) have confirmed that the energy grid can handle a large amount of electric vehicle owners charging their vehicle at the same time. Besides, the planned move from the dual day and night tariffs towards capacity tariffs should flatten the number of vehicles being charged at the same time.



Flanders is leading in available **(semi-)public charging infrastructure** and will **continue to do so**

• **Flanders** has taken a **clear lead** in terms of public charging infrastructure. At the end of 2021, **Flanders** counted approximately 5.800 public charging stations, with the highest presence in Ghent (478 public charging stations)

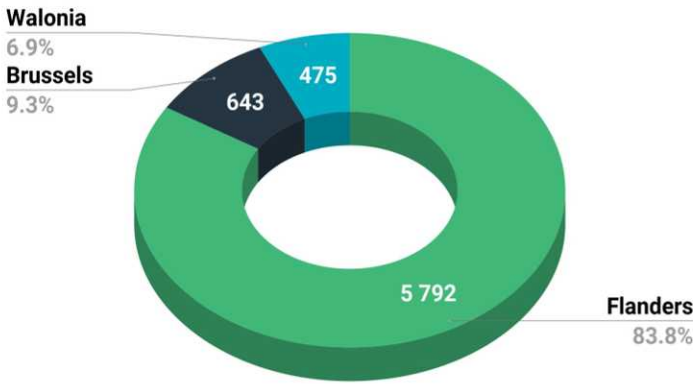
• This reflects in **1 public charging station per 1.138 citizens** in the **Flanders** region, with **Wallonia** and the **Brussels Capital Region** lagging behind with respectively **1 charging station per 7.680 citizens** in the **Wallonia** region and **1 charging station per 1.895 citizens** in the **Brussels Capital Region***

• Knowing that people prefer to charge at home when they have the option to, the focus of the public charging rollout should be set primarily on cities where individual charging options are limited, in order to create as many opportunities for convenient charging as possible

• Whereas in the **Brussels Capital Region**, the need for public charging infrastructure is the highest, the current capacity and ambition per capita is far lower than in **Flanders**. This partly reflects the contrasting decisions of cities and regions on how to handle the vehicle acceptance within large cities towards the future. On one side, cities like **Brussels** feel the need to enable EV adaptations by providing the right public infrastructure. On the other hand, there is a political will to reduce individual car usage within large cities.

Source *: Statistiek Vlaanderen, Statbel

Distribution Public Charging points in Belgium end 2021



Foreseen semi-public charging infrastructure

Flanders	**35.000** by 2025 **100.000** by 2030
Brussels Capital Region	**11.000** by 2035
Wallonia	**7.000** by 2025

Part 3

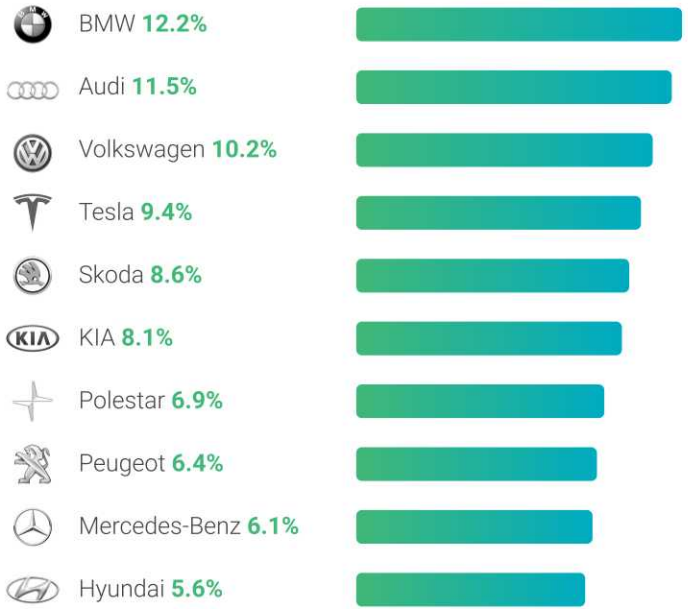
Preferred brands & models

The **shift towards electric** enables **manufacturers** to **reposition** themselves

When giving participants the opportunity to compare their favourite electric vehicle (selected based on their mobility needs) with an internal combustion engine-based vehicle, we noticed that:

- The **established brands BMW, Audi** and **Volkswagen** score **strong** in terms of electric vehicle interest.
- The **BMW's** and **Audi's** success relies on the **popularity of individual models**
    - The popularity of BMW is highly driven by the performance of the **i4**. The interest in this model is four times higher than the combined interest for the iX3, iX and i3(s).
    - We can notice a similar situation at Audi, with the **Q4 e-tron and Q4 Sportback e-tron** leading the brand interest. The combined interest in these models is more than three times higher than the combined interest in other electric models within the Audi portfolio.
- For **Volkswagen**, a more **balanced** set-up was noticed, with similar interest in the ID3 and ID4, closely followed by the ID5
- The new electric vehicle brands **Tesla** and **Polestar**, which had to put considerable efforts into their market entry, have already established a **strong brand position**
- **Skoda, Kia and Hyundai** aim to use the shift towards electric vehicles to **reposition** their **brand positioning** by achieving a strong balance between the price point, vehicle range, vehicle quality and in-vehicle (digital) experience. This repositioning seems to be working out well, with a significant increase of interest in their electric vehicles compared to their internal combustion engine-driven vehicles.

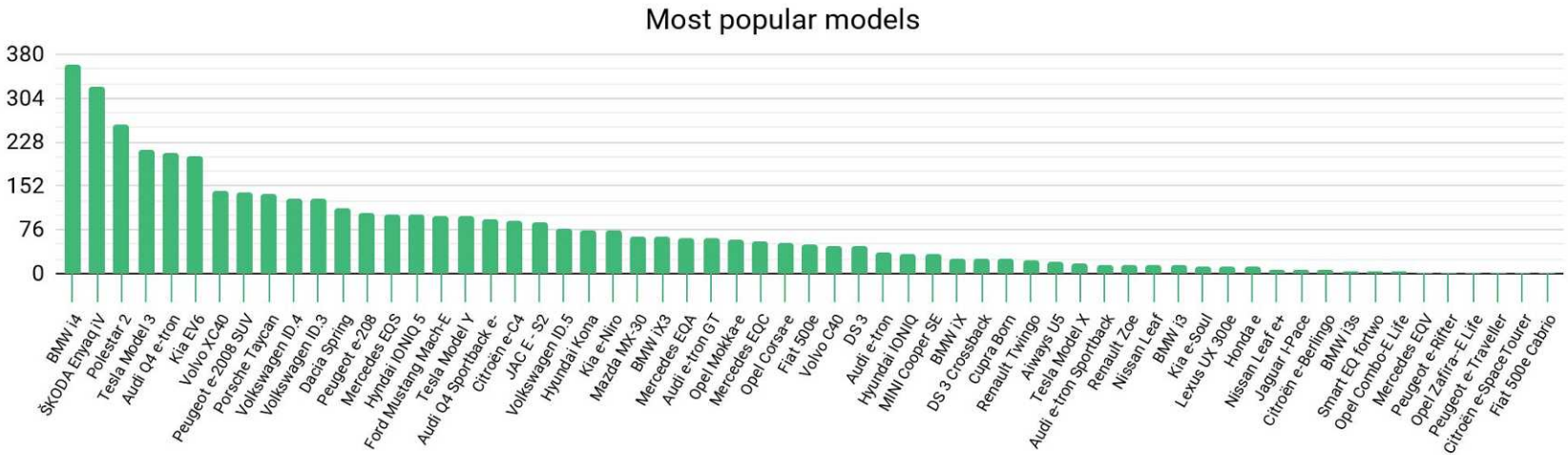
Most popular brands



Certain **car brands** use the **shift towards electric** to **reposition** themselves

When giving participants the opportunity to compare a favorable electric vehicle (selected based on their mobility needs) with an internal combustion engine-based vehicle, we noticed that:

- The **average retail price** of the **top 10** vehicles was 51.240,23 euro. According to the 2022 Deloitte Global Automotive Study, 80% of Belgian consumers are willing to pay a maximum amount of 50.000 euro. This confirms that the interest is present, but the **high retail prices** could be a **bottleneck** for individuals. Most **leasing** companies aim to offer electric vehicles at a **monthly rate equal** to internal combustion engine vehicles, which works well commercially in the short term. The effects on the residual value and therefore successful choice of these lease companies is to be seen in the future
- The average range of the top 10 models was 434 km. Knowing that this is significantly higher than the average daily range driven, we conclude that range anxiety still plays an important role in the selection of EV models (see later in this presentation for more details). When choosing a vehicle, people expect to have full freedom in terms of driving range and benchmark the desired range with the range of their current internal-combustion-powered vehicle



Most **popular brands** per **region**

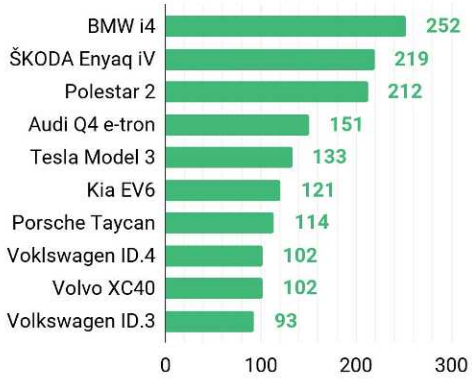
	Belgium (Reference)	**Flanders**	**Brussels**	**Wallonia**
1	BMW	BMW =	Volkswagen ↑	BMW =
2	Audi	Audi =	Tesla ↑	Tesla ↑
3	Volkswagen	Volkswagen =	BMW ↓	Audi ↓
4	Tesla	Skoda ↑	KIA ↑	KIA ↑
5	Skoda	Polestar ↑	Audi ↓	Volkswagen ↓

When giving participants the opportunity to compare a favorable electric vehicle (selected based on their mobility needs) with an internal combustion engine-based vehicle, we noticed that:

- When comparing the regional differences in brand popularity, BMW remains in the dominant position in **Flanders** and **Wallonia**
In the **Brussels capital region**, Volkswagen and Tesla have a higher popularity, due to a different vehicle mix (see later in this presentation for more details)
- Especially in the **Brussels capital region** and **Wallonia**, Kia and Tesla score higher than in the northern part of Belgium

Most **popular models** per **region**

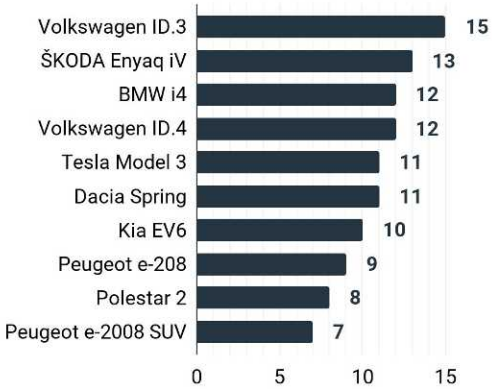
Flanders



436 km
Average range

€50,832
Average price

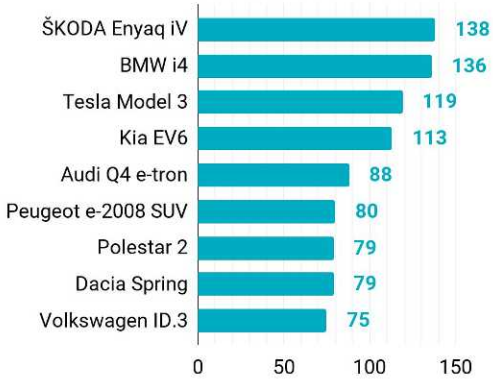
Brussels capital region



410 km
Average range

€40,934
Average price

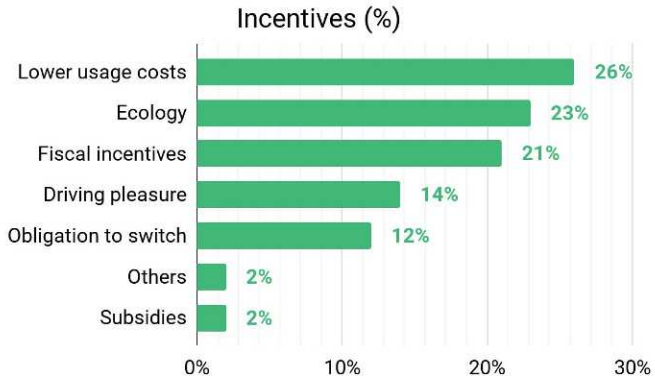
Wallonia

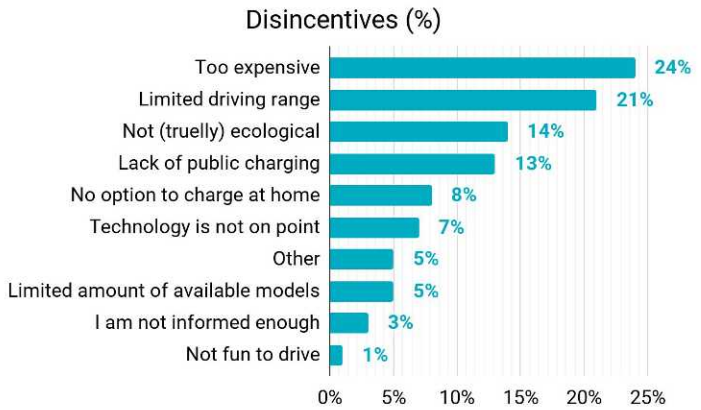


392 km
Average range

€41,450
Average price

What **incentivizes** and **prevents** people from going electric





- Key reasons for people to switch to electric vehicles are the **lower usage cost** and the **ecological benefits.**
- Besides, especially for company car owners, there are the **fiscal incentives** and the fact that many corporations **oblige** their staff to **switch** before the official regulations come into effect
- **Subsidies** score very low in Belgium, given that besides a tax incentive, no specific subsidies are being allocated during the campaign period

- The **price point** is the most important factor for people not to switch to electric vehicles. Knowing that 31% of all Belgian citizens search for a car in a range of up to 15.000 euro and 65% in a range of up to 30.000 euro, the availability of affordable EV's for private individuals stays limited at this point in time[1]
- **Range anxiety** and the **lack of (public) charging** options remain an important bottleneck in EV adaptation
- Besides, there is still a significant amount of people who voice their concern that electric vehicles are **not truly ecological** and that the **technology is not on point yet**

Conclusion

Future outlook

Our takeaways
Future outlook

A key premise to bring change is having the interest and willingness from the end users to adapt. Knowing that this study – which was based on voluntary interest in electric vehicles – had ten times more interest than a similar initiative that was launched early 2020 shows that the momentum for this topic has grown substantially over the past two years.

However, there are some key bottlenecks that are still on the table to ensure a durable transition towards electric mobility.

· **The price point**: 65% of Belgian consumers aim to spend less than 35k euro on their next vehicle. Most of the 75 models available on the market are above this price point, with the new cheapest EV being the Dacia Spring, with a starting price of just under 19.000 euro (VAT incl.).
The fact that the leasing market is already transitioning towards electric vehicles will be beneficial for the young used car market, and will help affordability for individuals.

· **The (semi-)public charging infrastructure**: Flanders has an ambitious plan to foresee 100.000 charging stations by 2030. Knowing that at the end of 2021, there were approximately 5.000 charging stations available and that the tender process is ongoing, the implementation speed should be closely monitored. The Brussels Capital Region and Wallonia are lagging behind in terms of foreseeing public charging installations and will need more ambitious plans towards the future in order to ensure enough customer acceptance.

· **Driving range (perspective)**: although we are at the point where the electric range of new vehicles is getting closer to the range of internal combustion engine-driven vehicles, customers still require education on public charging for long distance driving in order to increase its acceptance.

Want to know more?
For questions we can be reached by email:
contact@vroom.be