

Short-term Forecast for the Vehicle Fleet 2022–2025

The forecasts for the year are characterised by clearly increasing electrification across all vehicle types. The forecasts are also affected by parts shortages, which have led to a diminished offering of new vehicles.

The development of the vehicle fleet during 2022–2025 is thus fraught with significant uncertainties.

The Covid-19 pandemic has led to fewer new registrations. Some recovery was seen in 2021, although it is now considered to have slowed as a result of difficulties in manufacturing and delivering new vehicles.

Electrification will likely continue to accelerate over the coming four years.

About the short-term forecasts

The short-term forecasts are based on a method that follows developments in the total number and types of vehicles on the road with regard to decommissioned, deregistered and newly registered vehicles. The methodology builds on historical trends, other organisations' forecasts for various relevant external factors, and Transport Analysis's own assessments of anticipated developments in the near future. The method is described in greater detail in PM 2022:3 *Korttidsprognoser för den svenska fordonsflottan – metoder och antaganden* [Short-term forecasts for the Swedish vehicle fleet – methods and assumptions].

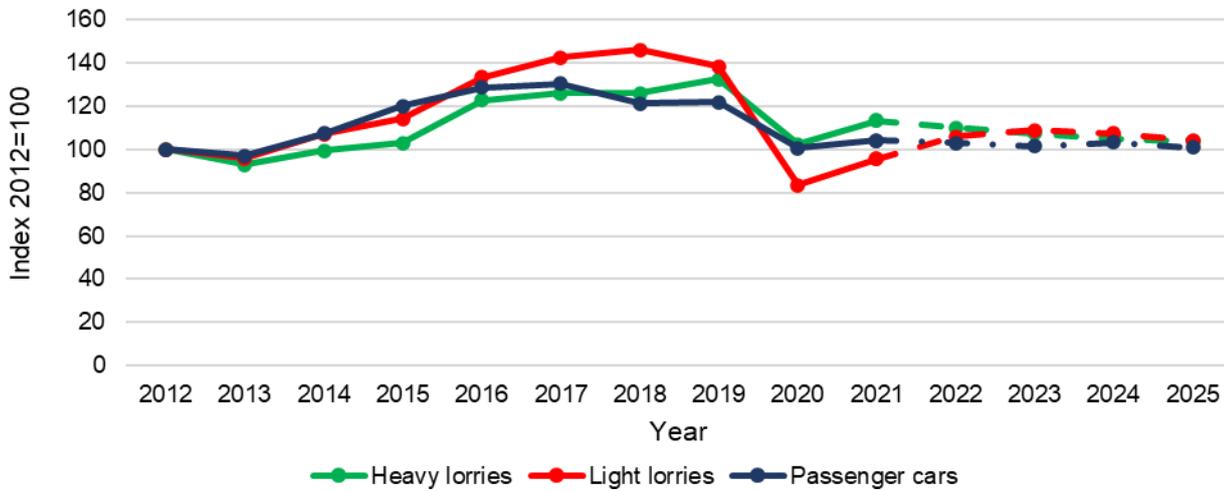


Figure 1. Change in newly registered vehicles, 2012–2024, (index 2012 = 100).
 NOTE: The y-axis scale does not start at 0. 100 corresponds to 301,000 passenger cars, 40,000 light lorries and 6,100 heavy lorries.

Slow recovery in the number of newly registered vehicles

The forecast for the year is characterised by significant uncertainty, due to parts shortages and supply chain problems. The number of newly registered vehicles decreased in 2020 as a result of the Covid-19 pandemic. We believed that the number of newly registered light vehicles would start to increase again in 2021, as was the case up until the autumn. The increase in newly registered vehicles in 2021 was less pronounced than forecast, due mainly to shortages across all semiconductors, and to delivery problems.

The problems in accessing parts and the supply chain problems were then exacerbated by the Russian invasion of Ukraine.

The rate of increase for newly registered vehicles, both light and heavy, is consequently believed to be hindered by inadequate offerings rather than by lower demand for new vehicles.

We consider that the problems associated with parts shortages and inadequate offerings will suppress the number of newly registered vehicles in 2022 and 2023.

There is also currently high inflation, which means that household purchasing power will decrease in the long term. The Swedish National Institute of Economic Research's GNP forecast for 2024 and 2025 is pessimistic. This is expressed in our forecasts in the form of continued relatively low numbers of newly registered passenger cars and light lorries compared to the years prior to 2020.

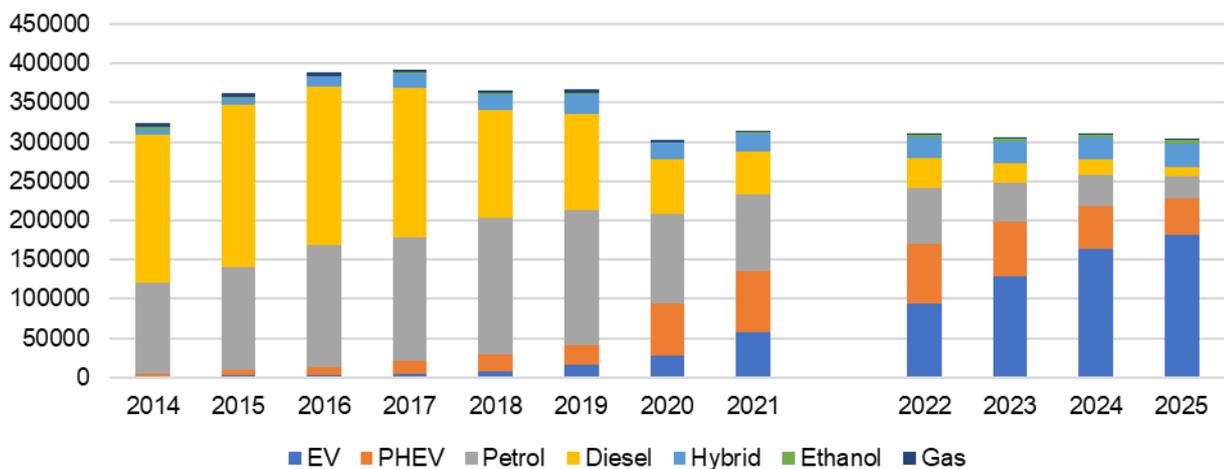


Figure 2. Newly registered passenger cars by fuel type, 2014-2025.

Continued robust electrification

EU requirements calling for reduced carbon dioxide emissions from new vehicles and Sweden's national policy instruments for reduced emissions from its vehicle fleet have contributed greatly to a dramatic rise in the number of newly registered vehicles that are rechargeable.

Rechargeable passenger cars accounted for 43 per cent of newly registered passenger cars in 2021, an increase of 12 percentage points compared to 2020.

The forecast for the year points to a continued dramatic increase in the proportion of rechargeable passenger cars in the years ahead, and we believe that electric cars will surpass the number of newly registered plug-in hybrids in 2022.

We consider that the increased rapid increase in rechargeable passenger cars will be attributable to the fact that private individuals will be purchasing and leasing rechargeable cars to an ever-greater extent.

Newly registered passenger cars that are rechargeable are now sufficiently numerous that they are starting to be reflected in the number of vehicles on the road. We believe that there will be roughly 1 million rechargeable passenger cars on the road by 2025, some 600,000 of which will be purely electric cars. This means that roughly 20 per cent of the passenger cars on the road will be rechargeable by 2025.

The number of diesel cars on the road decreased in 2021 compared to previous years, which represents a clear break from the trend. We believe that the numbers of both petrol and diesel cars on the road will decrease continuously up to 2025. However, they will still account for nearly 70% of all passenger cars on the road, according to our forecast for 2025.

With regard to light lorries, we consider that diesel will remain the dominant fuel up to 2025. In 2021, 7 per cent of the newly registered light lorries were rechargeable, with nearly all being pure electric vehicles. However, we find that the number of newly registered electric light lorries could increase rapidly, assuming that the range of available models expands. In our forecast up to 2025, we believe that the number of electrically powered light lorries will grow considerably in 2024 and 2025.

Increasing electrification of heavy vehicles

The forecast for 2025 indicates that over 25 per cent of newly registered light lorries will be powered electrically. We consider that 6 per cent of all light lorries on the road will be rechargeable by 2025.

Up until 2020, new registrations of electrically powered heavy lorries comprised just a few vehicles. However, this is changing. Fifty new electrically powered heavy lorries were registered in 2021.

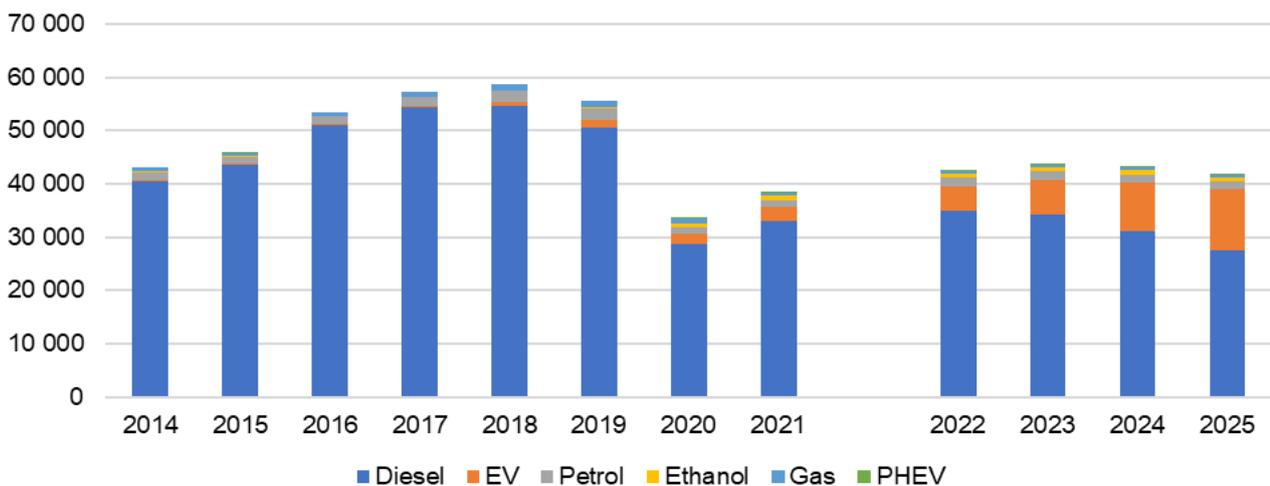


Figure 3. Newly registered light lorries by fuel type, 2014-2025.

These consisted mainly of relatively light heavy lorries, i.e. up to 24 tonnes. We believe that the number of heavy lorries will increase yearly up to 2025 and, according to the forecast, will come to account for 10 per cent of newly registered heavy lorries in 2025. The number of natural gas-fuelled heavy lorries is also forecast to increase leading up to 2025, and these two types will account for nearly 10 per cent of newly registered heavy lorries in 2025.

The number of newly registered buses depends in large part on the relevant procurement processes. The number of newly registered electric buses has increased since 2019, totalling roughly 200 per year. Given that electric buses have become available in more bus classes, we believe that they will become increasingly common. According to our forecast, 18 per cent of the buses on the road will be powered electrically by 2025.

For more information

Tables with statistics and forecasts, as well as our methodology report, can be accessed here:

www.trafa.se/etiketter/prognoser-for-fordonsflottan

Contact:

Mikael Levin, 010-414 42 27, e-mail: mikael.levin@trafa.se

Björn Tano, 010-414 42 28, e-mail: bjorn.tano@trafa.se