

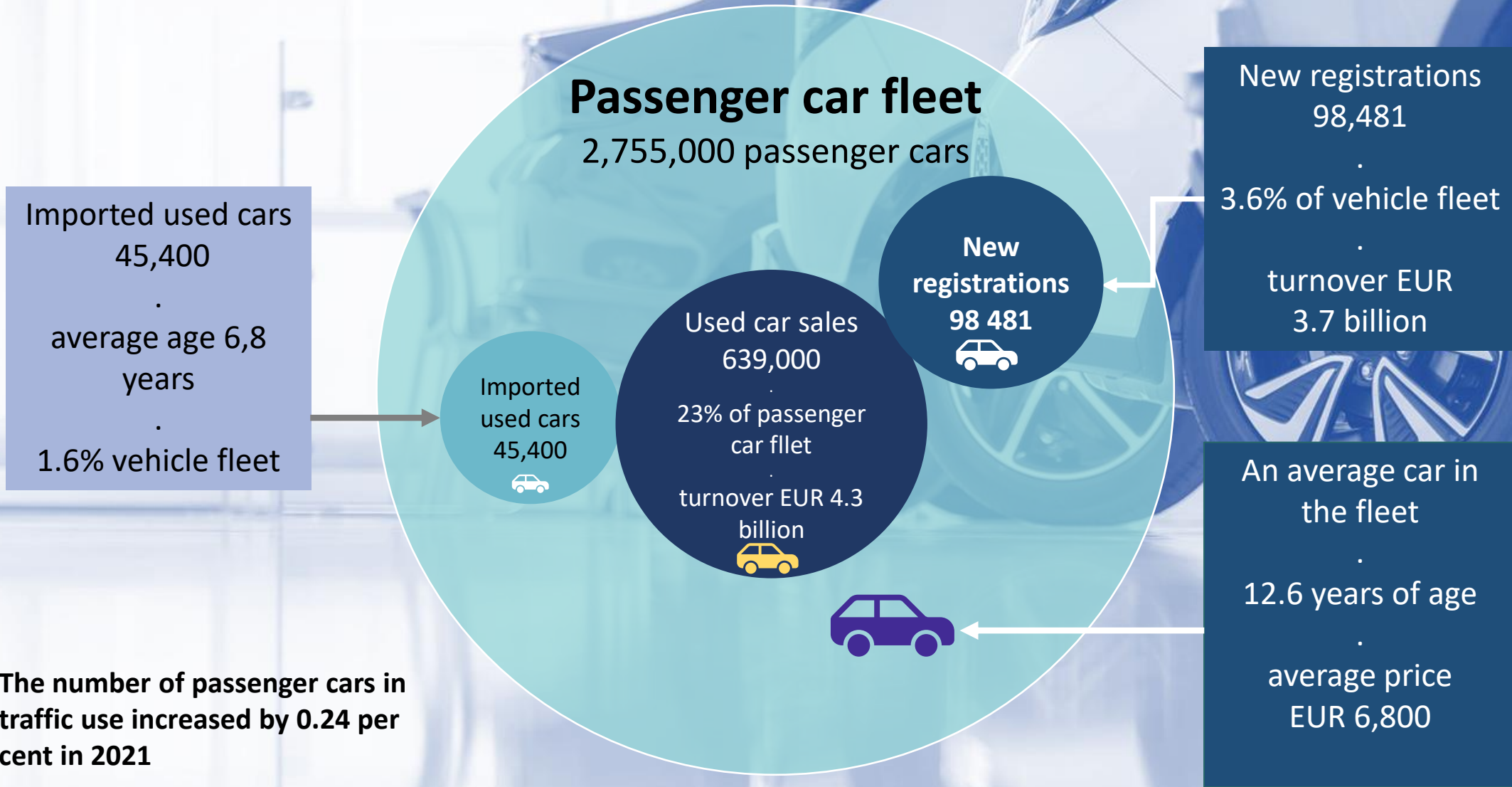
Annual statistics of car market in Finland

Vehicle fleet and new registrations

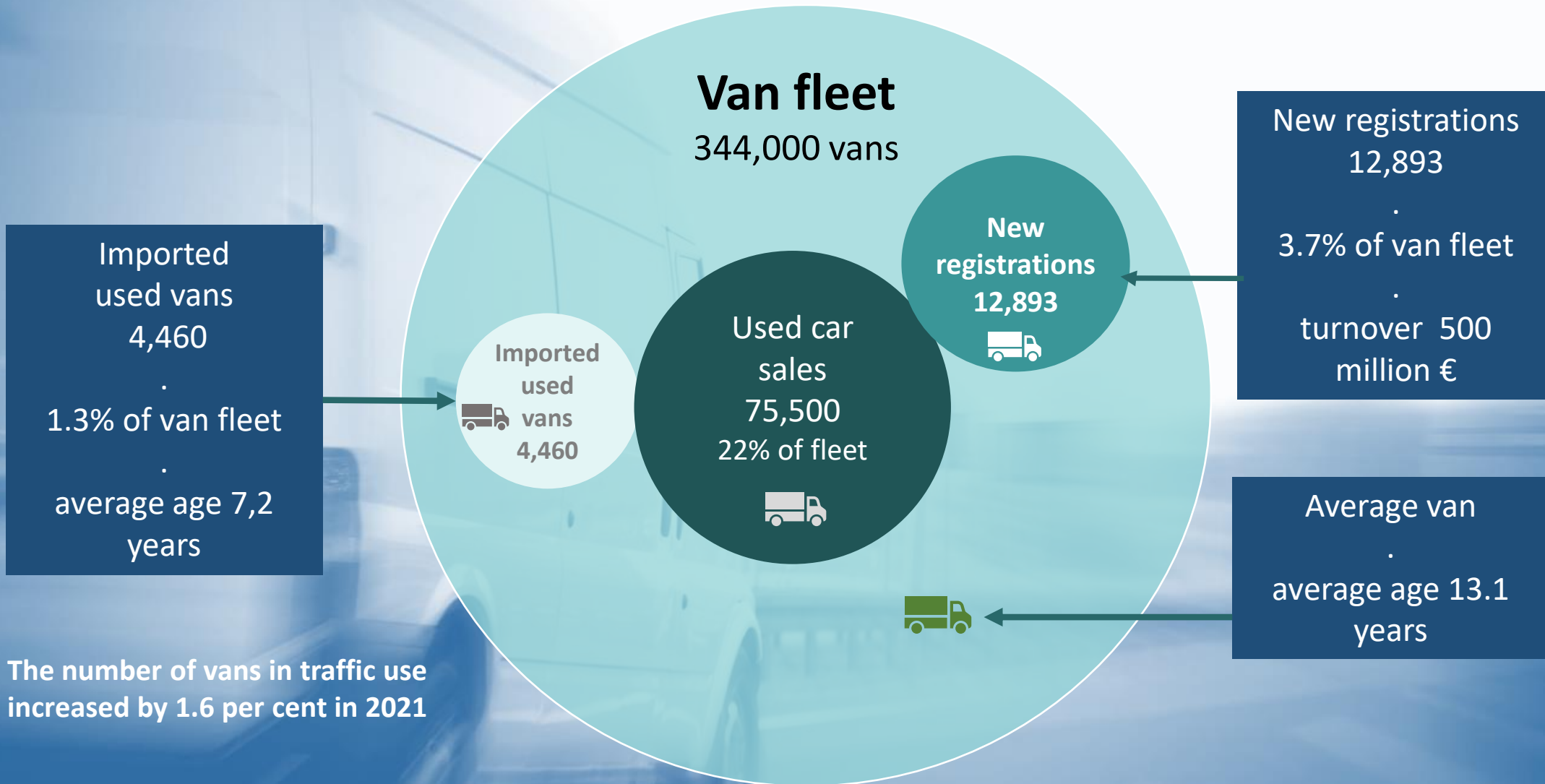
3.1.2022



Changes in passenger car fleet in 2021

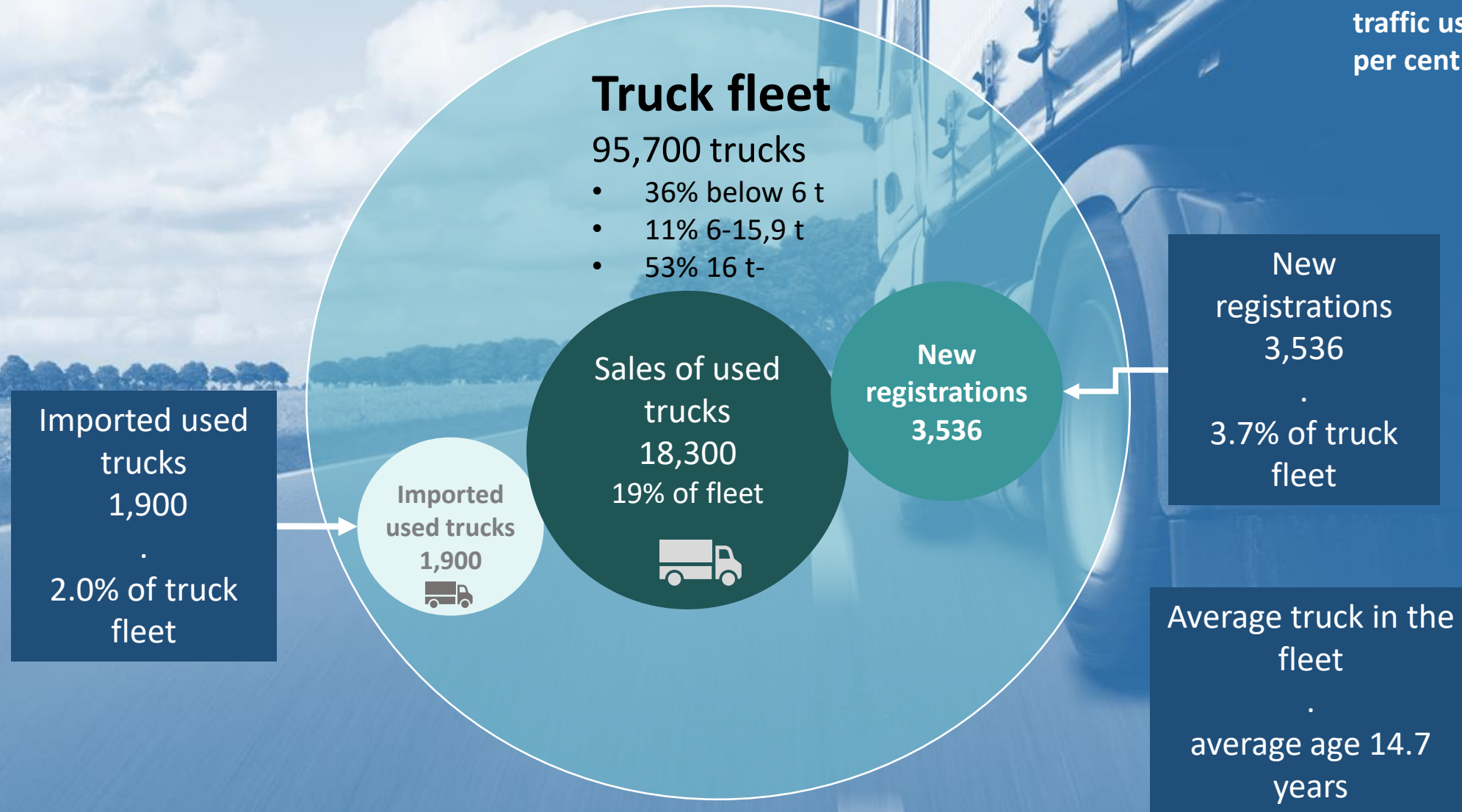


Changes in van fleet in 2021



Changes in truck fleet in 2021

The number of trucks in traffic use increased by 1.1 per cent in 2021



Changes in bus fleet in 2021

The number of buses in traffic use increased by 5.1 per cent in 2021.

Size of the bus fleet has in 2010-2020 been on average 12,000 buses. There is still a relatively many buses not in traffic use due to covid pandemic.

Bus fleet

10,464 buses

- 65% 8 t or more
- 35% below 8 t

Sales of used buses
1,600
15% of fleet

New registrations
382

New registrations
382
3.6% of bus fleet

Average bus in the fleet
average age 12.3 years

Imported used buses
350
3.3% of bus fleet

Imported used buses
350

Development of fuel prices

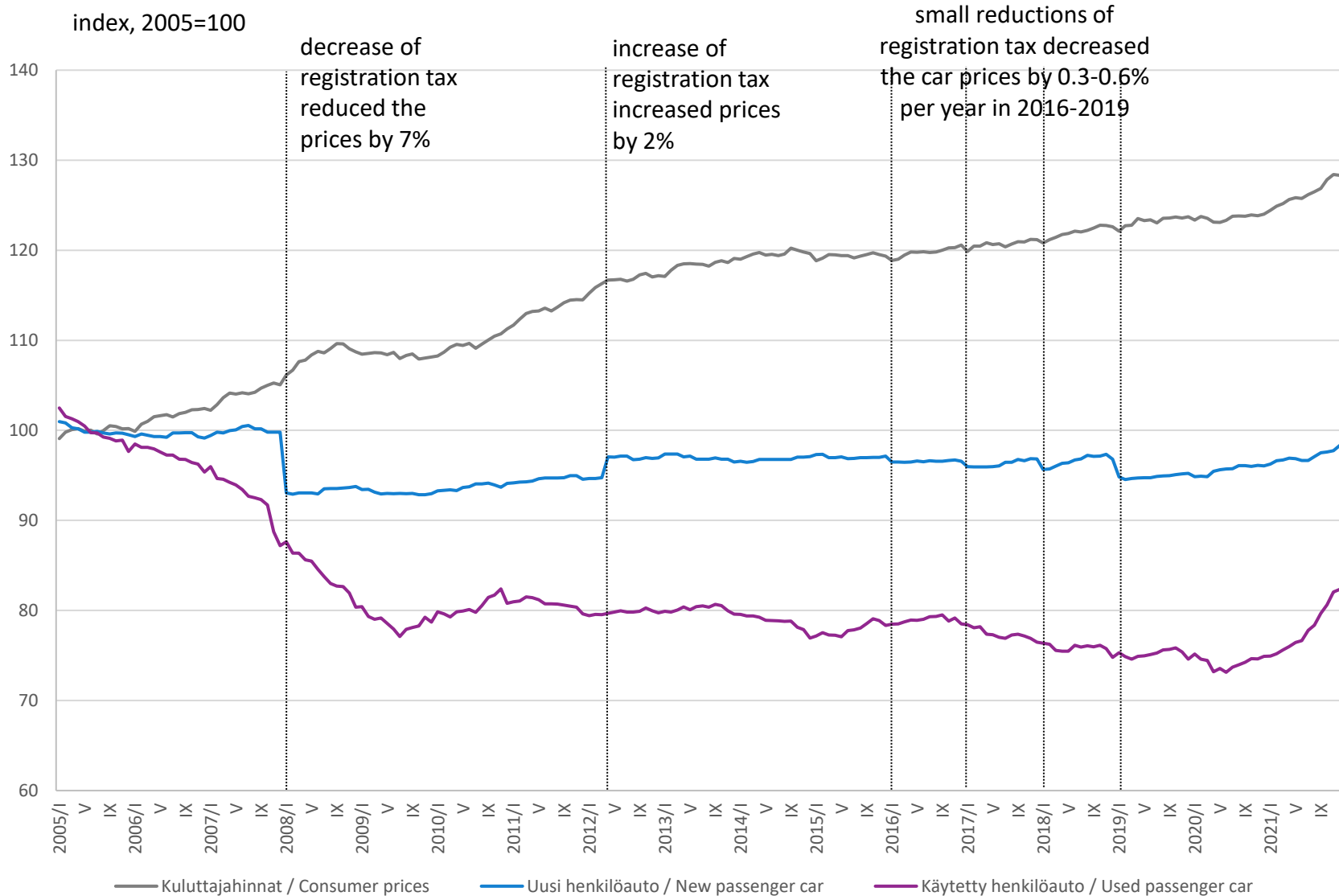
index, 2005=100



Statistics Finland

- the fuel tax was last increased in Finland in 2011, 2012, 2015, 2017 and 2020
- the decrease of crude oil price reduced fuel prices during the pandemic in 2020
- at the end of 2020, the price of crude oil began to rise
- during 2021, fuel prices have risen above pre-crown levels
- fluctuations in the energy market also affect the price of crude oil

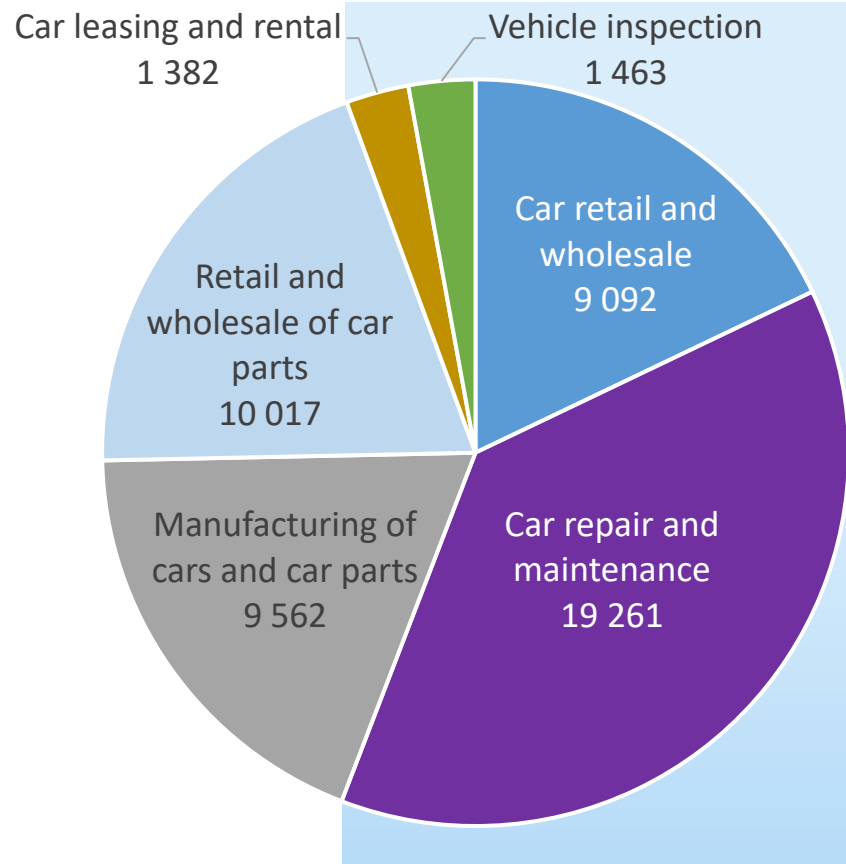
Price development of new and used passenger cars



Statistics Finland

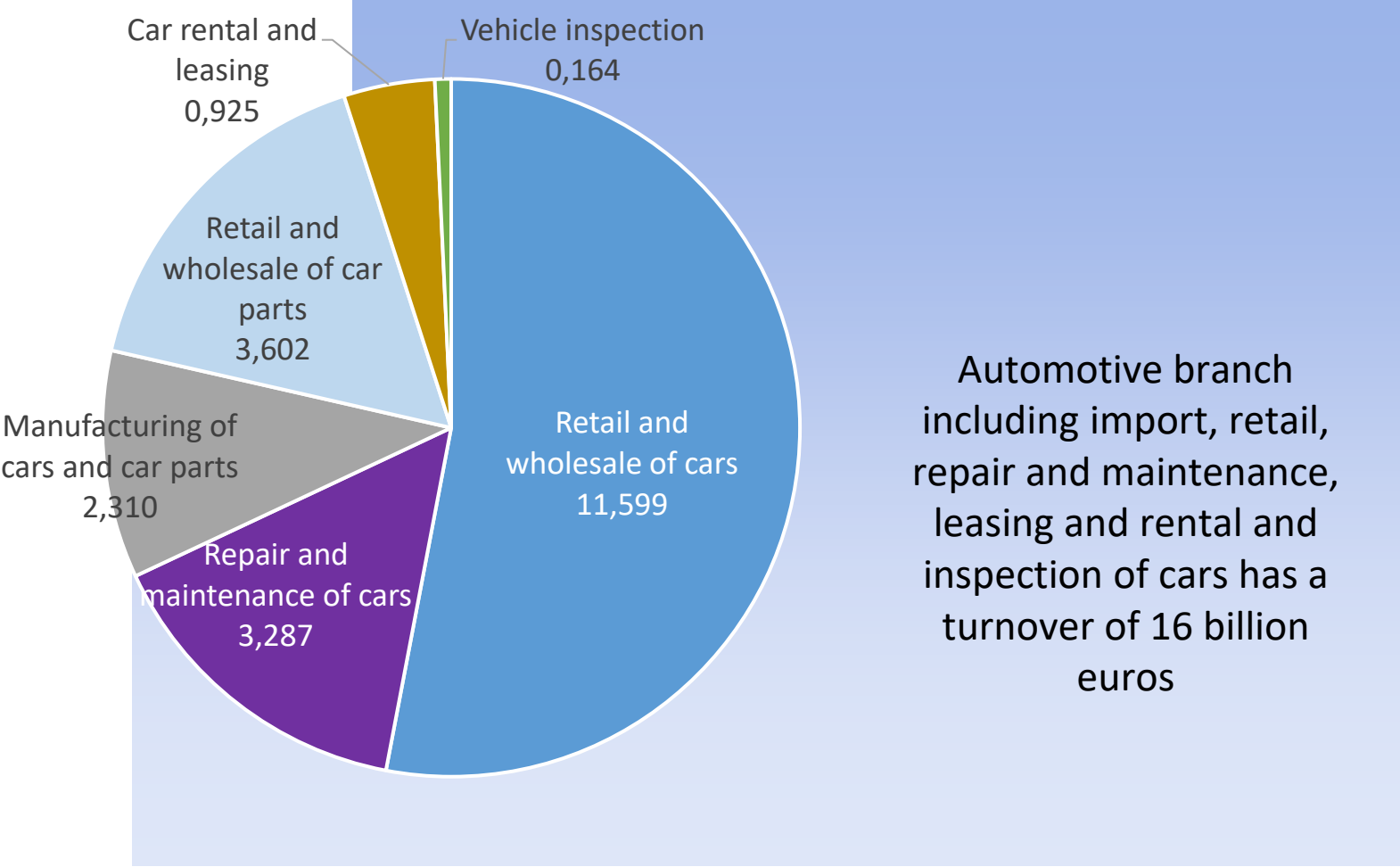
- overall consumer prices have increased while car prices have been relatively stable
- measured by the index, new car prices have remained almost unchanged over the past decade
- changes in registration tax are reflected in the prices of new cars
- the increased share of electric cars has during recent years raised the average price of a new car
- second-hand car prices have fallen slightly in the long term, but prices started to rise during the covid pandemic, as the availability of new cars has declined

Automotive sector employs 50,800 people in Finland



Automotive branch including import, retail, repair and maintenance, leasing and rental and inspection of cars employs 31 000 people

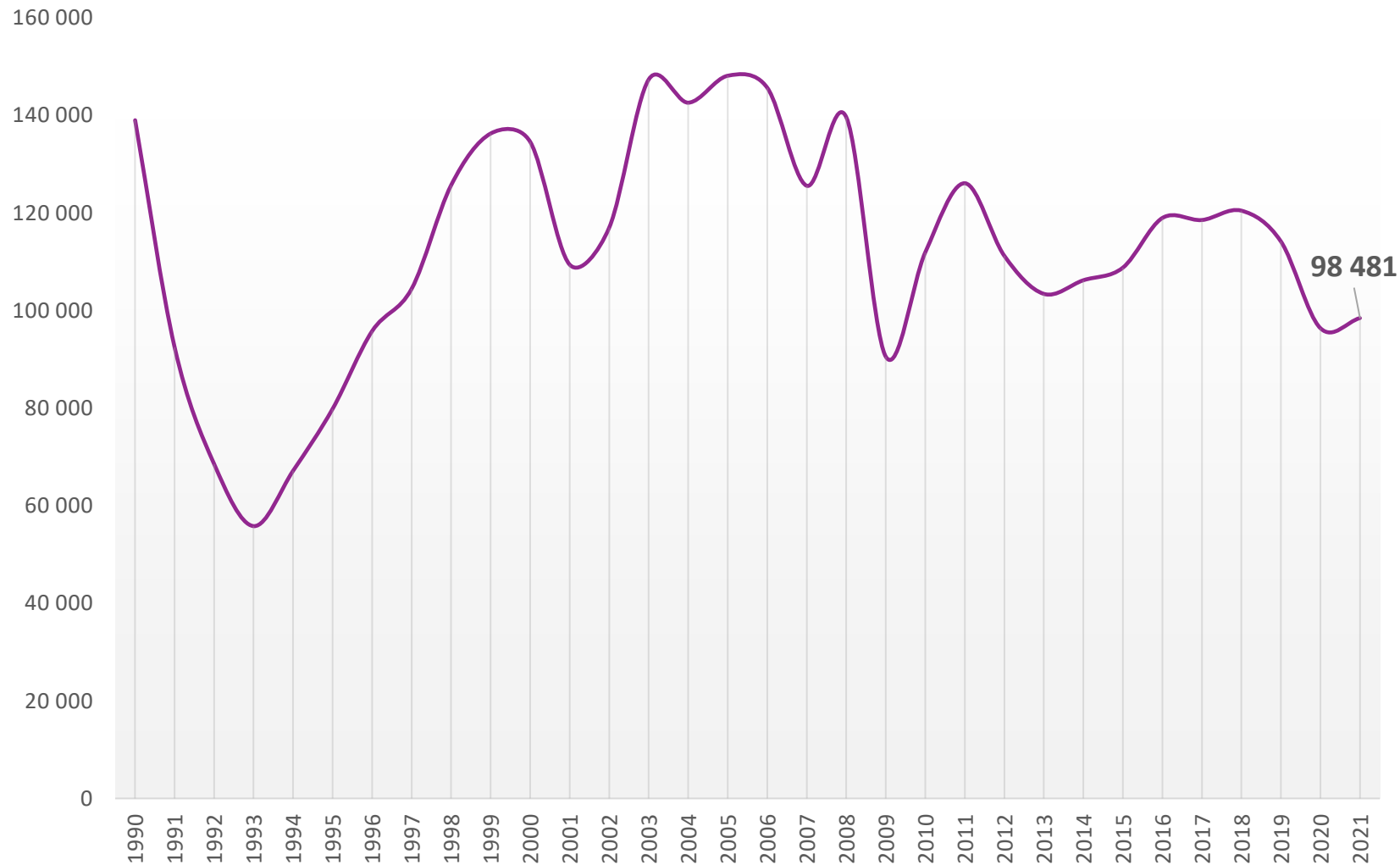
The turnover of automotive sector was in 2019 21,9 billion euros





New registrations in 2021

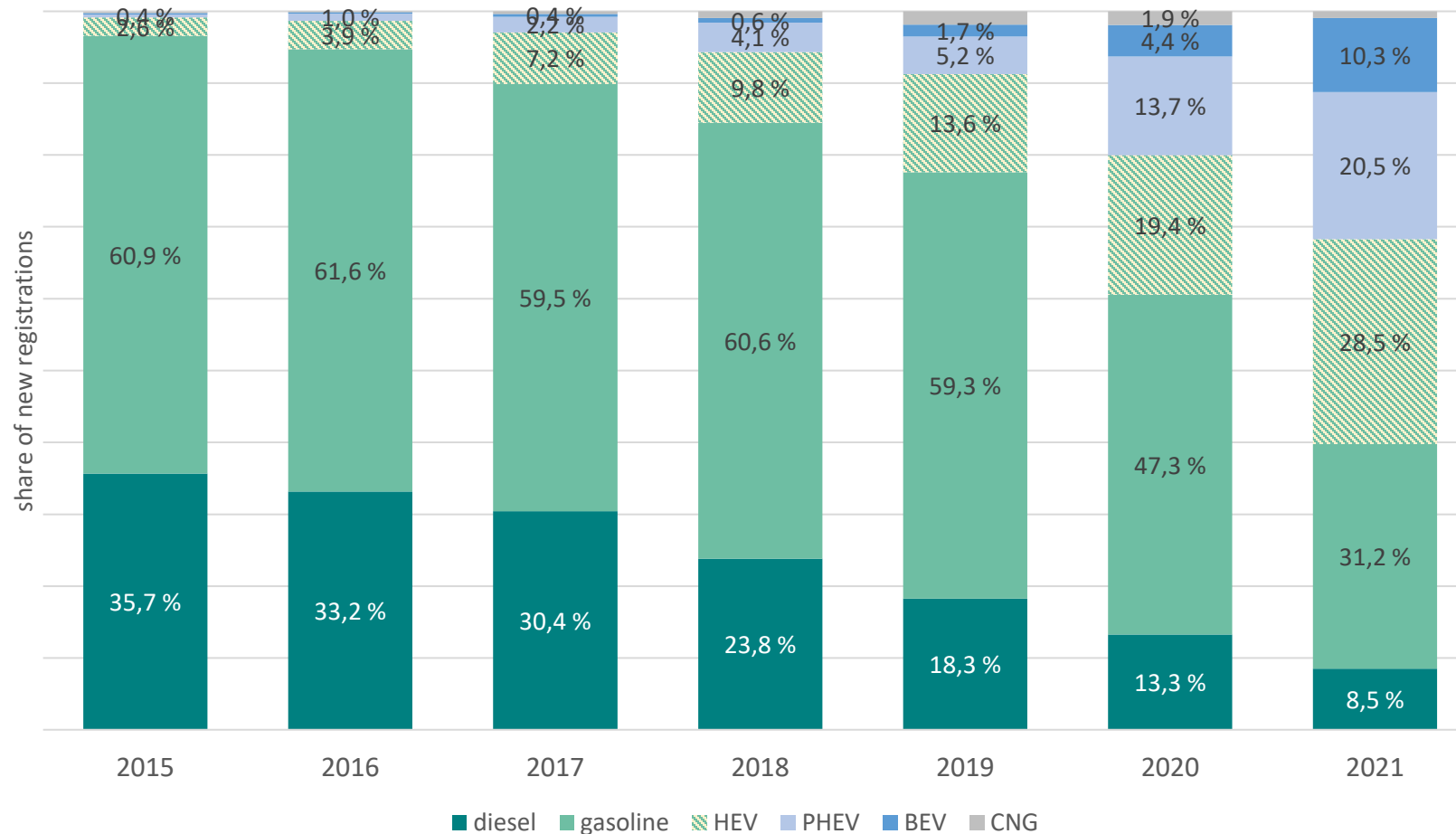
New registrations of passenger cars



Transport and Communications Agency Traficom, Statistics Finland
Netwheels Ltd and Traficom

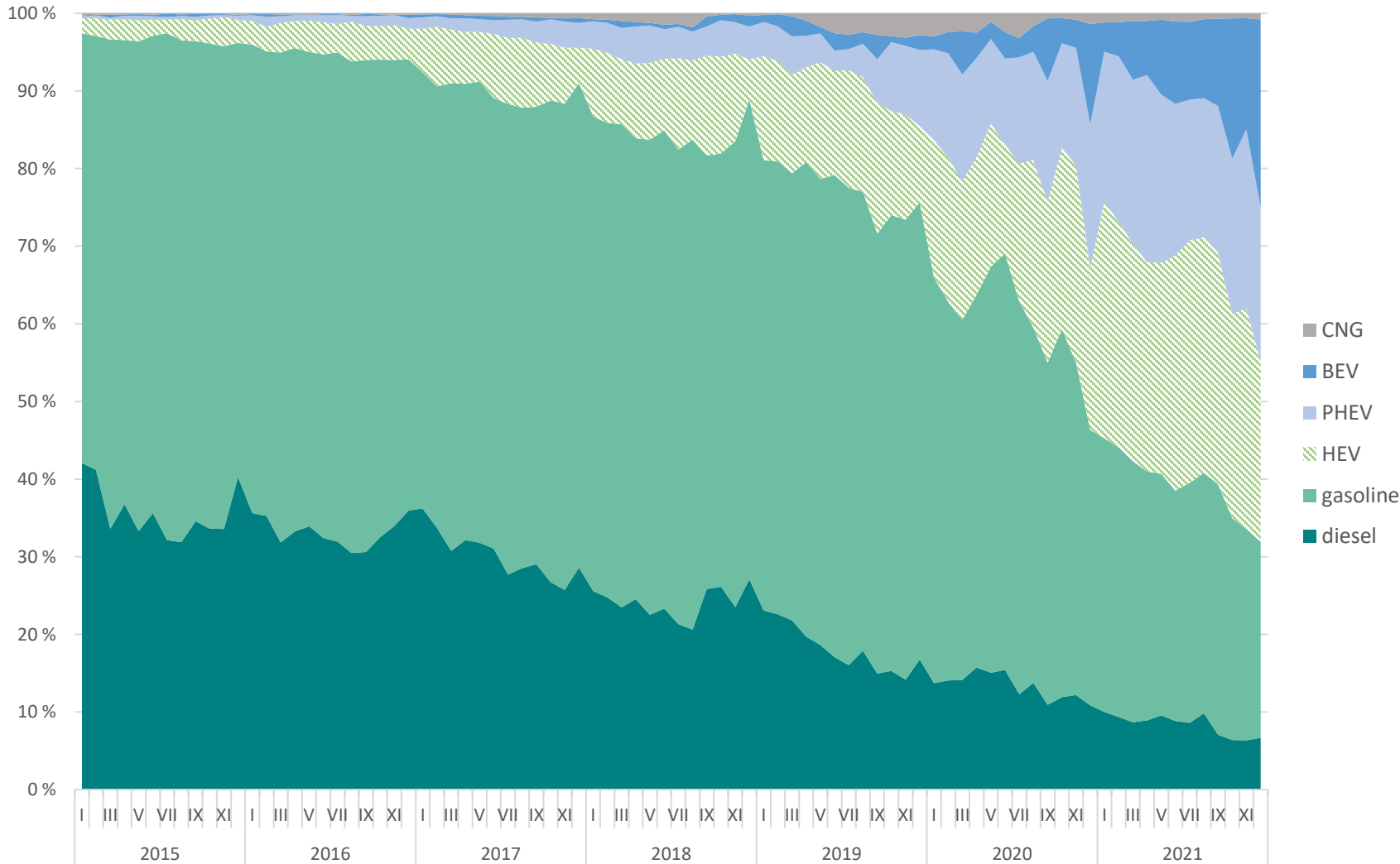
- in 2021, about 98,500 passenger cars were new registered
- the number of registrations increased by about 2.1 per cent from 2020, when the covid pandemic cut the number of registrations to less than 100,000 passenger cars for the first time since 2009
- the number of registrations in 2021 is well below the long-term average
 - the average for the previous five years (2016-2020) is 114.000
 - the average for the 21st century is 120.000

New registrations of passenger cars by fuel type



- electrification of the car fleet has accelerated during recent years
- in 2021, just over 30 percent of new-registered passenger cars were chargeable
- the share of hybrid vehicles (HEV) has also grown rapidly in recent years

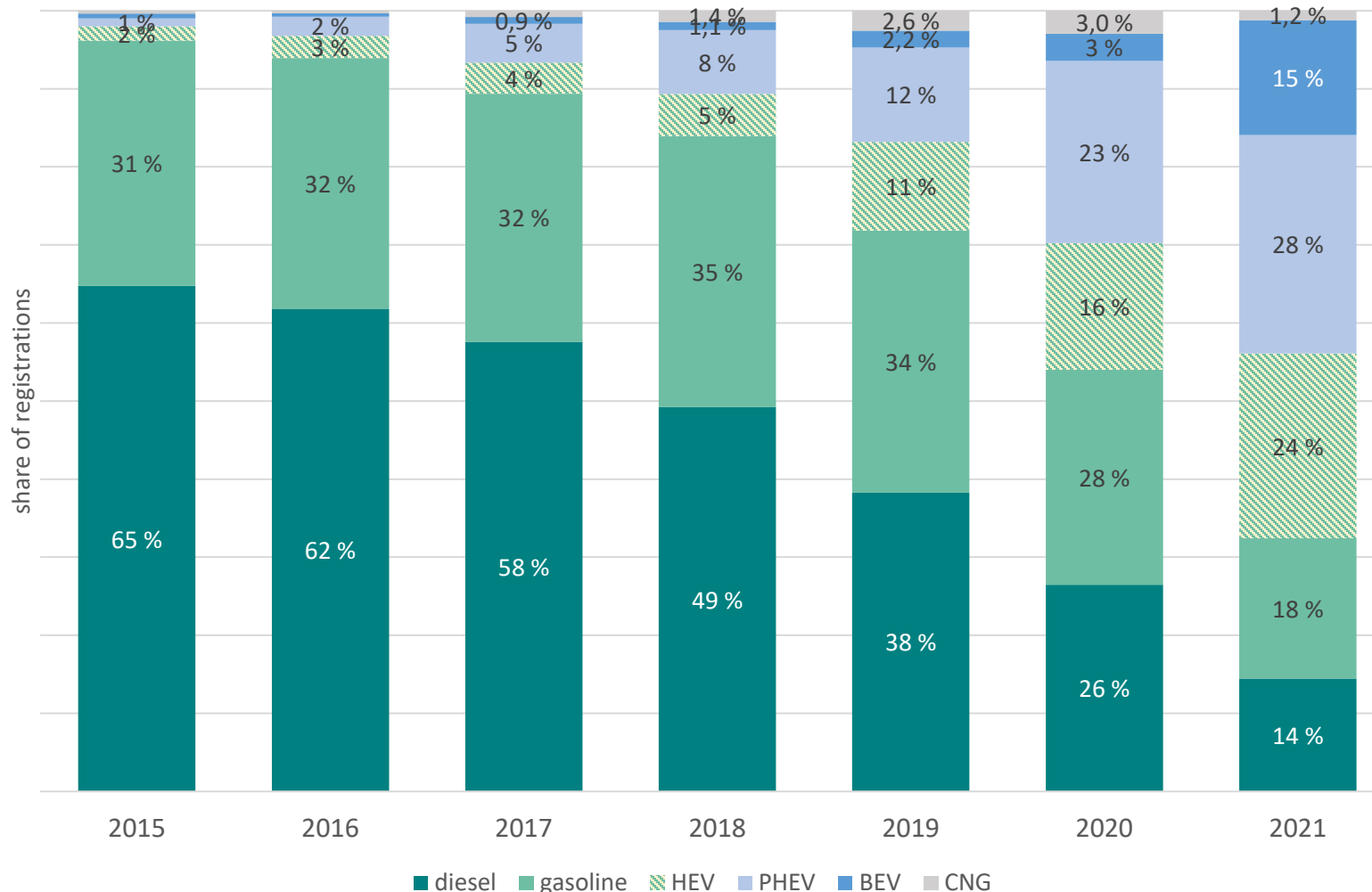
New registrations of passenger cars by fuel type



- electrification has increased especially in the second half of 2021
- the last month of the year has typically an exceptionally high share of all-electric cars - in December 2021 the share of all-electric cars in new registrations increased to 24 per cent and the share of electric cars in total to about 44 per cent
- the share of all-electric cars is expected to level off during the first half of the year, but growth will continue rapidly next year as well

Hybrid electric vehicles (HEV) includes also mild hybrids (MHEV)
 Netwheels Ltd and Traficom

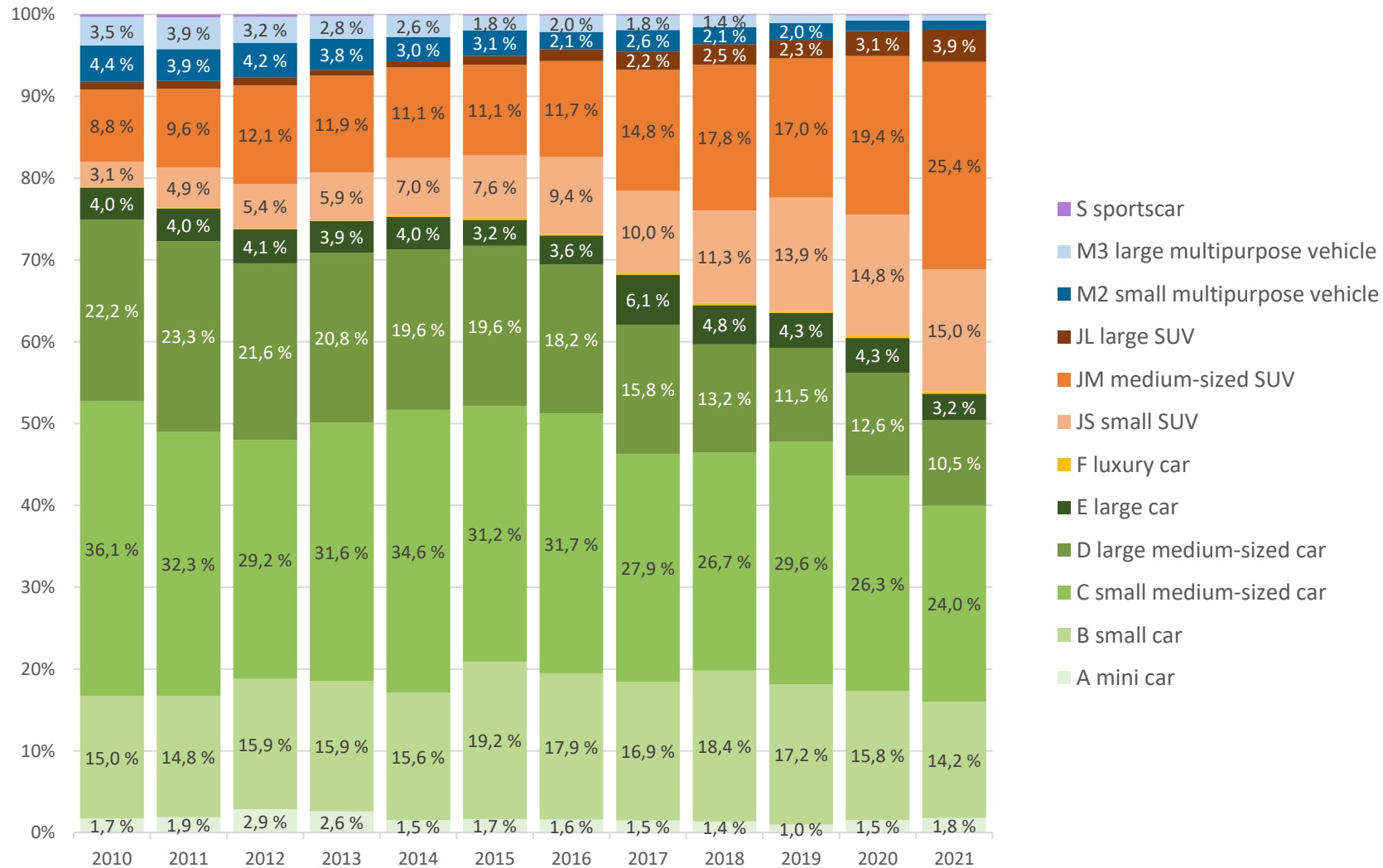
Fuel types of new registered company cars



- in company cars, electrification has progressed notably in 2021
- in 2020, the share of all-electric cars in new registered company cars was lower than in cars purchased by households
- in 2021, the share of electric cars is higher than the average for first registrations
- in 2021, 43 percent of the cars registered as company cars were electric (including PHEV)
- electrification has been accelerated by the reduction in the taxable value of electric company cars from the beginning of 2021

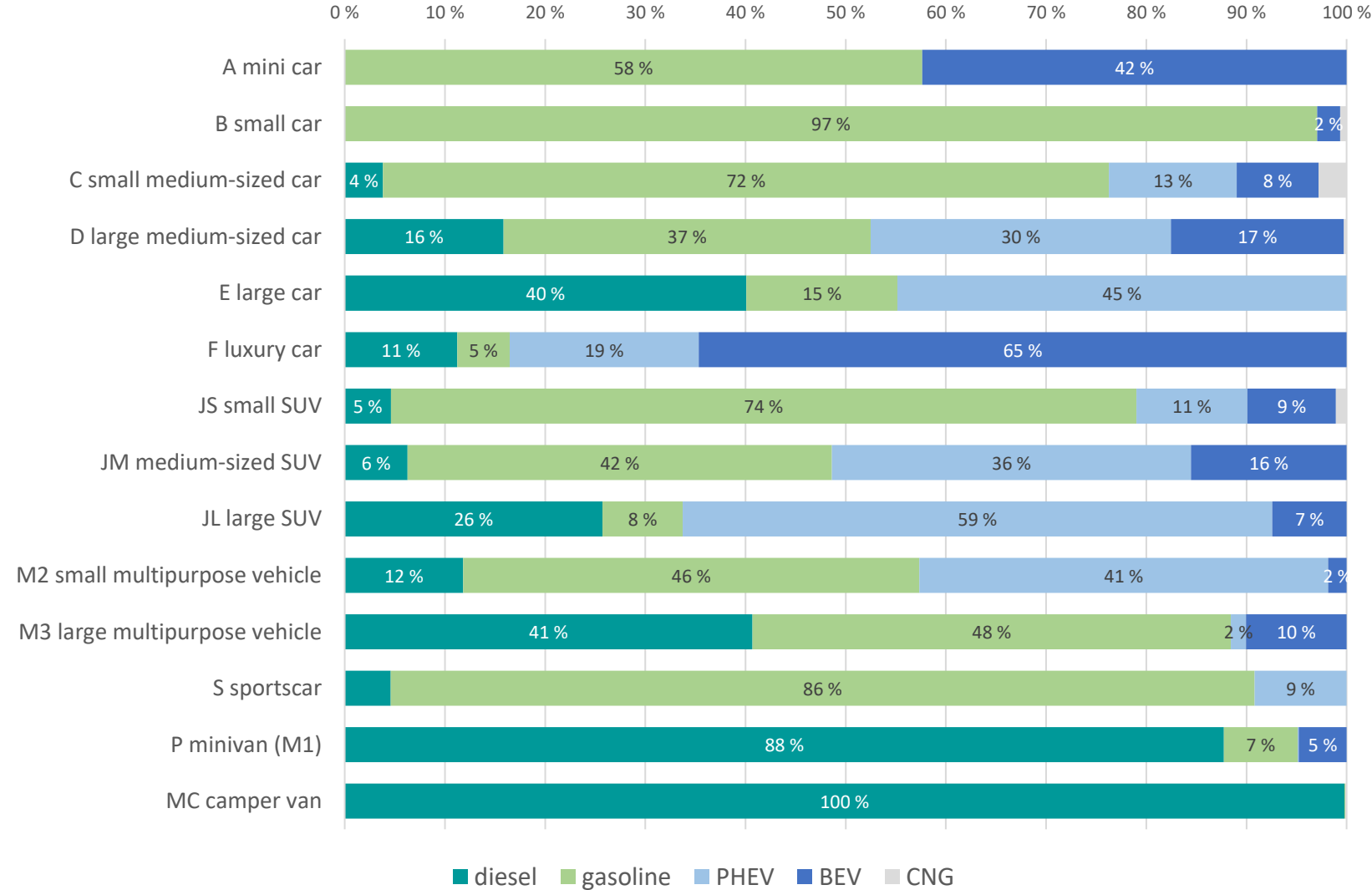
Hybrid electric vehicles (HEV) includes also mild hybrids (MHEV)
 Netwheels Ltd and Traficom
 statistics include company cars registered for private use

New registrations of passenger cars by segment



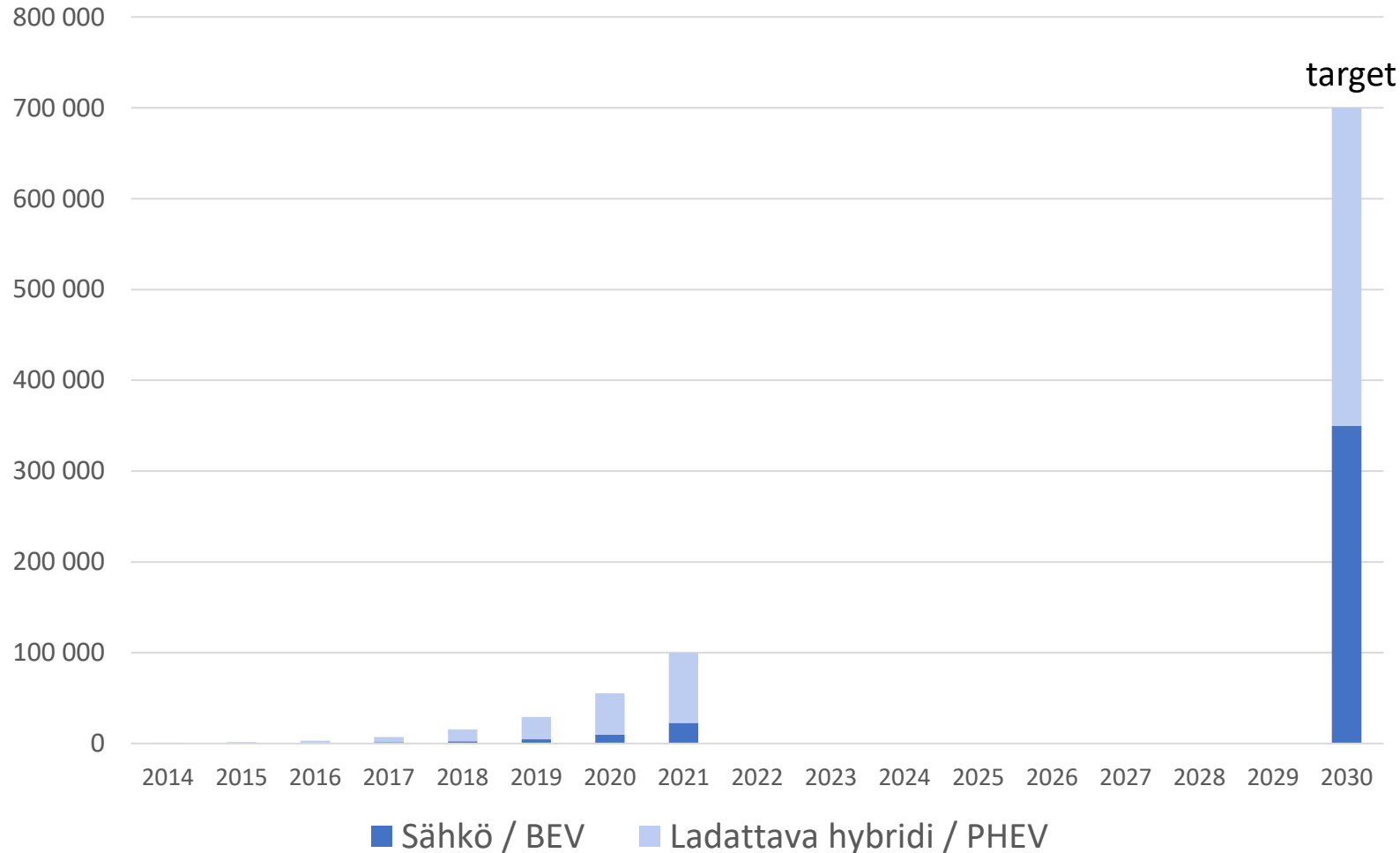
- the share of SUVs (including various crossover models) has already risen to more than 40% of first-time car registrations
- the range of medium-sized SUVs has expanded, especially with the new electric SUV models

Fuel types of new registered cars by segment type in 2021



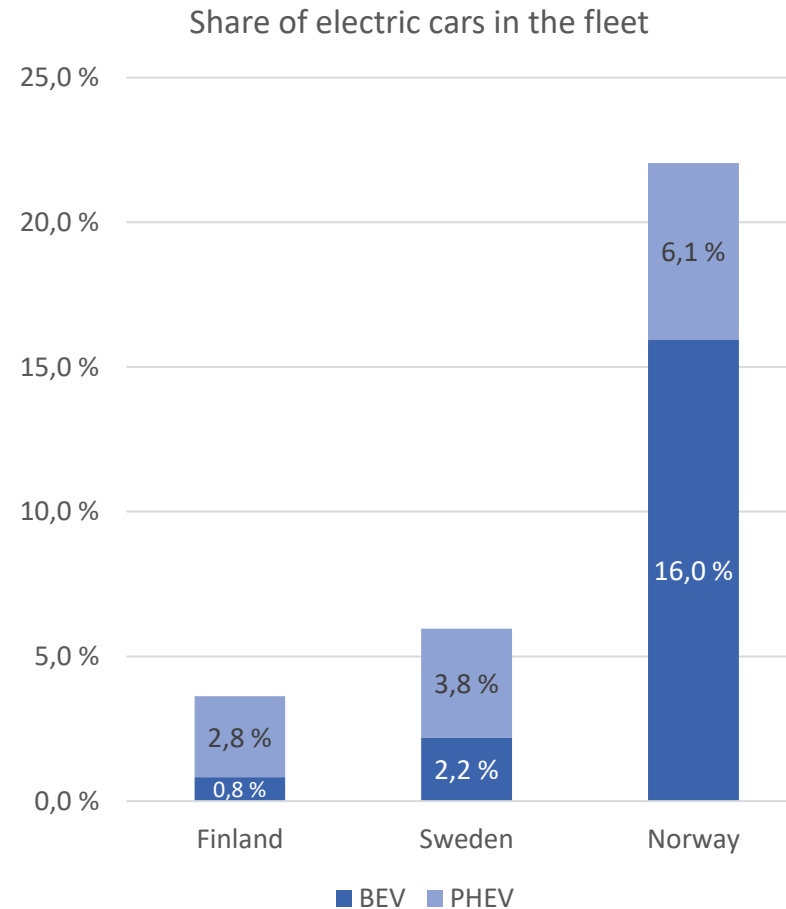
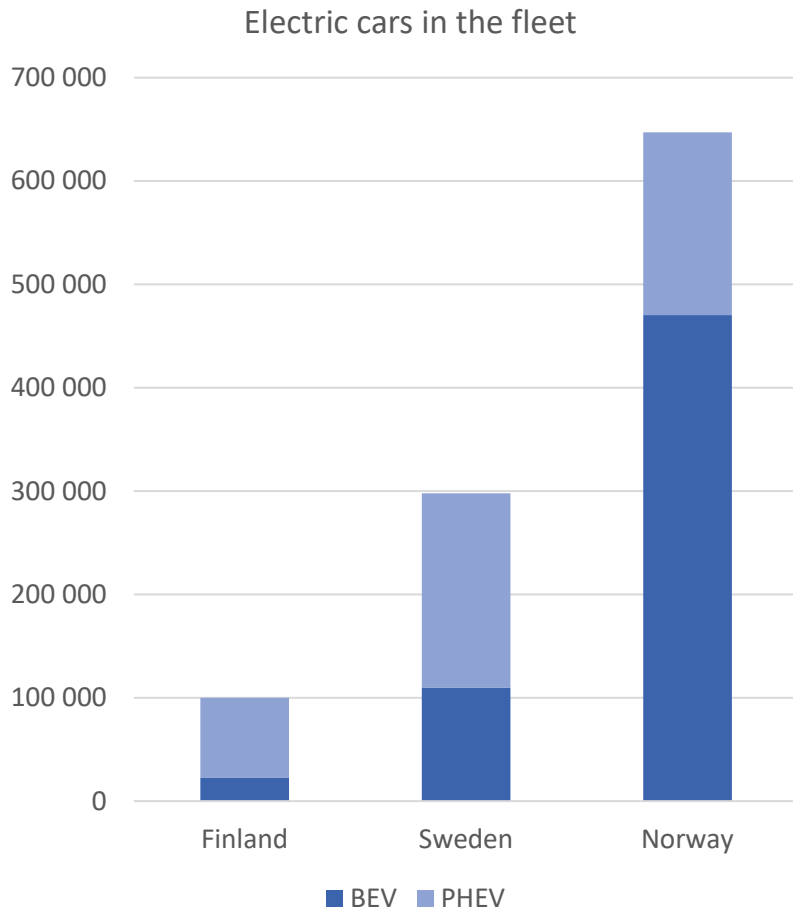
- petrol cars are the most popular in the B and C segment categories
- electric vehicles and plug-in hybrids are common among SUVs
- the share of diesel is high in the size class of large SUVs and MPV's, and minivans
- plug-in hybrids and diesel cars models are not available on the A and B segment

The amount of electric vehicles in the fleet



- at the end of 2021, there were about 99,400 electric cars in the passenger car fleet, of which about 23,000 are all-electric cars and about 77,000 plug-in hybrids
- at the end of 2021, there were only about 800 electric vans in the van fleet (0.2 per cent of the fleet)
- in Finland the target is to reduce transport emissions by 50% by 2030 from the 2005 level
- in the roadmap to fossil-free transport the aim is 700,000 electric cars by 2030
- at least half of these cars should be all-electric cars

Electrification in Nordic countries



- at the end of 2021, there were about 99,400 chargeable cars in the passenger car fleet - chargeable cars accounted for about 3.6 per cent of the fleet
- there are about 600,000 electric cars in Norway's passenger car fleet - almost the same target has been set for the end of the decade in Finland
- Finland is 7-8 years behind Norway and about 3 years behind Sweden in electrification

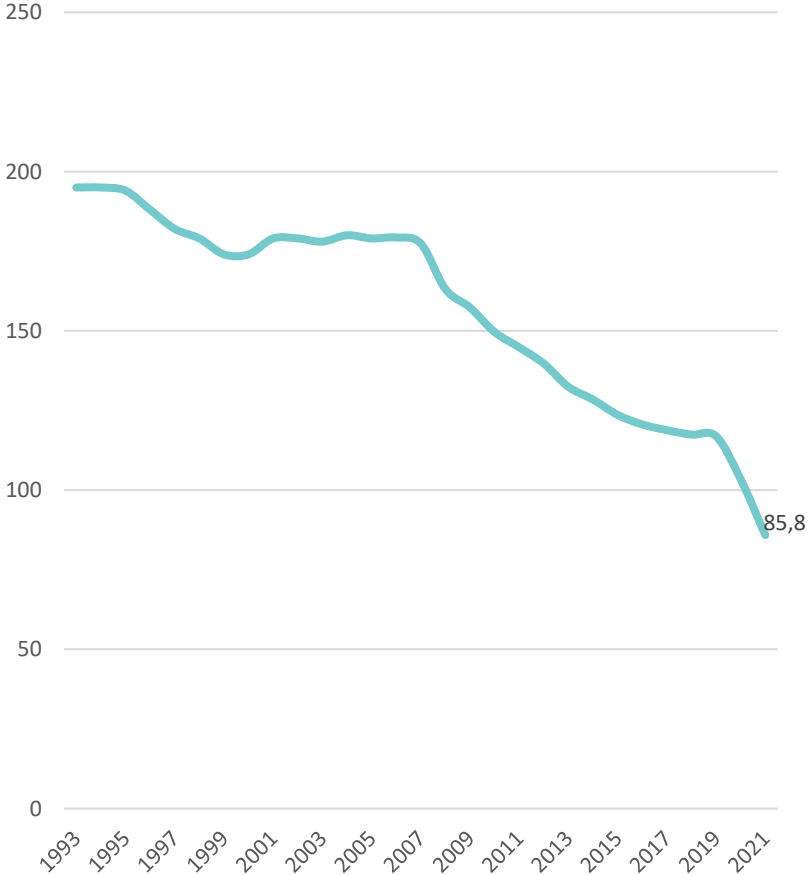
Norway, 31.12.2021, <https://elbil.no/om-elbil/elbilstatistikk/elbilbestand/>

Sweden, 31.12.2021, <https://www.elbilsstatistik.se/>

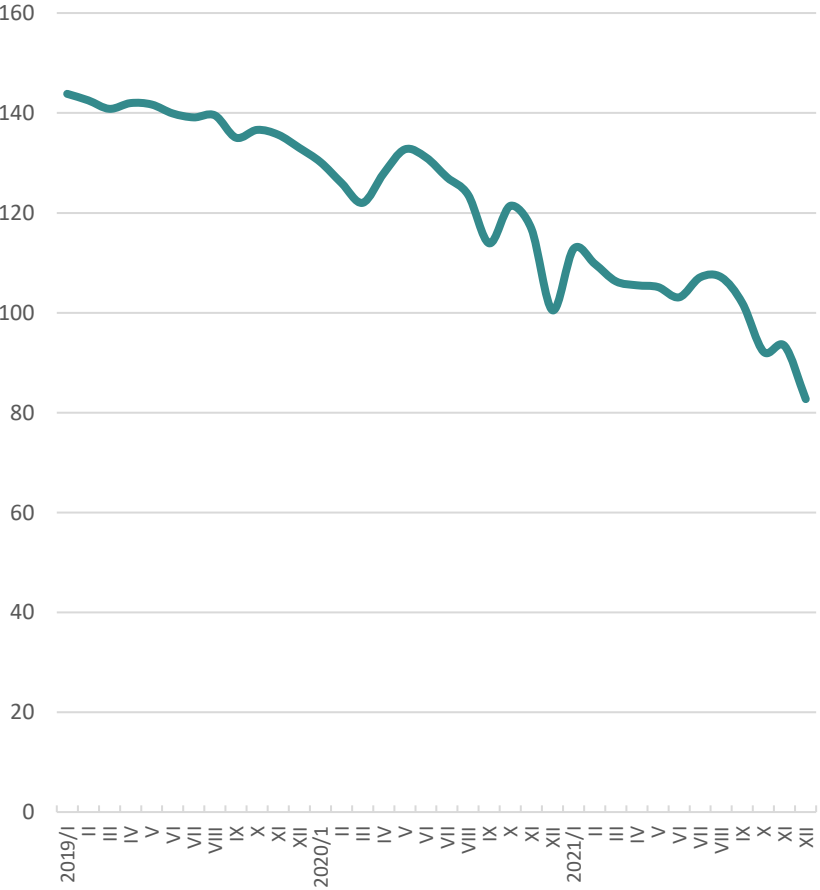
Finland, 31.12.2021, Transport and Communications Agency Traficom, Statistics Finland, Netwheels Ltd and Traficom

Carbon dioxide emissions of new registered passenger cars

Carbon dioxide emissions in 1993-2021
g/km (NEDC)



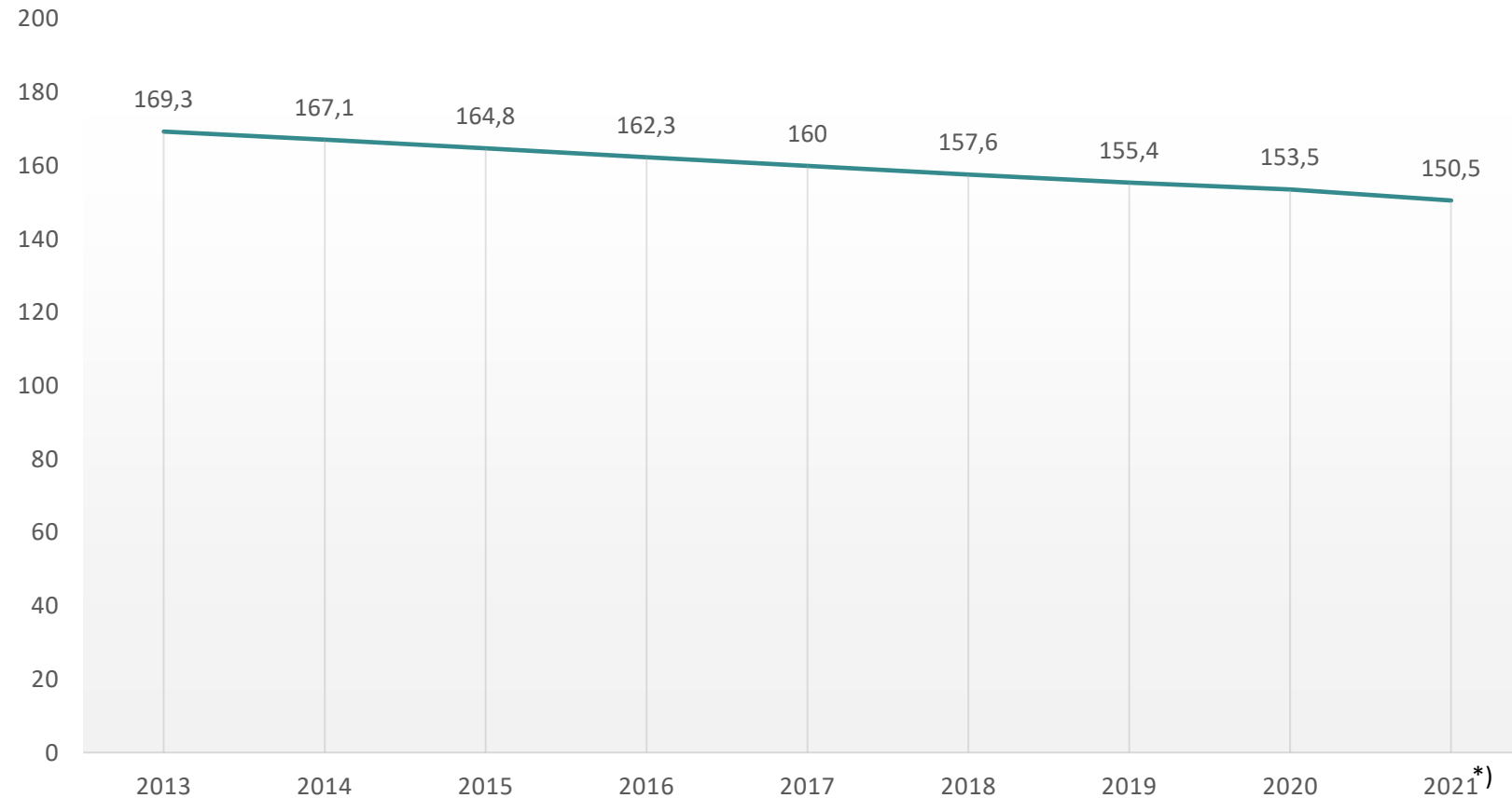
Carbon dioxide emissions monthly in
2019-2021
g/km (WLTP)



- CO2 emissions from new-registered passenger cars averaged 103 g/km (WLTP) in 2021
- average emissions decreased by about 16% compared to the previous year (123 g/km)
- the average emissions measured in NEDC declined to 86 grams per kilometer in 2021

Average carbon dioxide emissions of passenger car fleet

carbon dioxide emissions (g/km, NEDC)



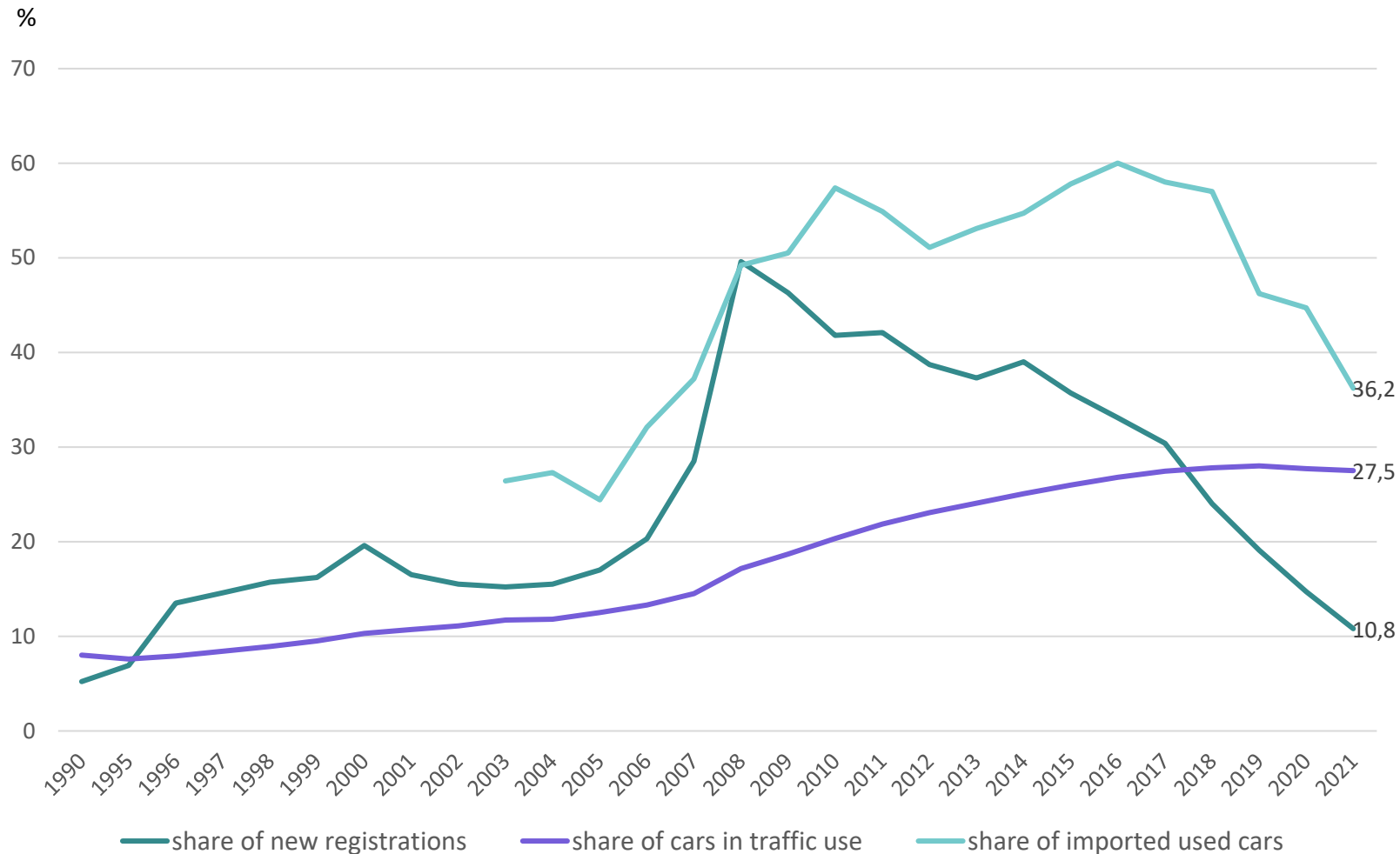
Transport and Communications Agency Traficom, Statistics Finland

Netwheels Ltd and Traficom

*) figure for 2021 is preliminary

- the average emissions of the car fleet have decreased in recent years

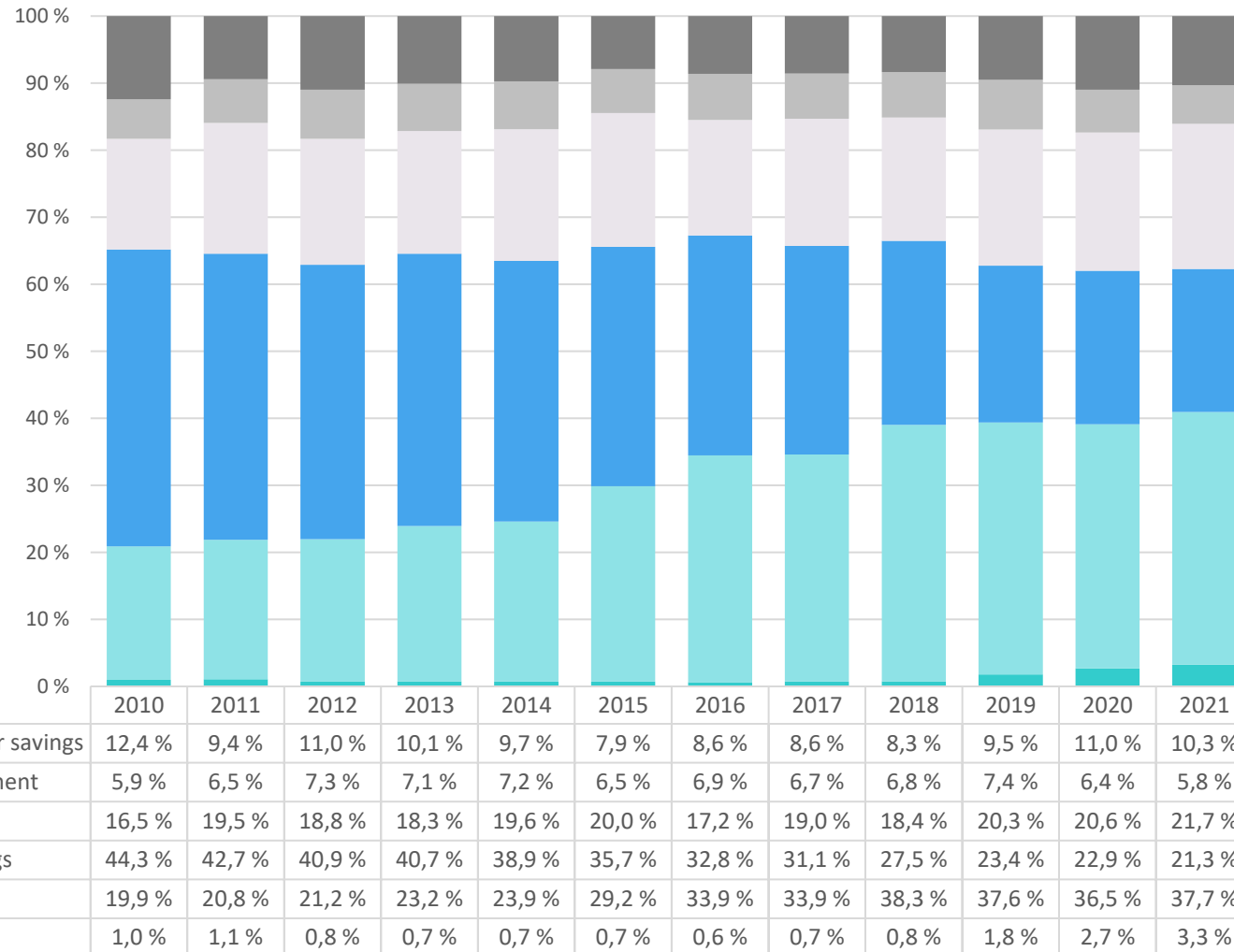
The share of diesel cars of new registrations, fleet and imported new cars



- the share of diesel cars in new registrations has fallen steadily since its peak in 2008
- about 11% of passenger cars registered for the first time in 2021 were diesel cars
- diesel accounts for about 40 percent of imported used cars
- diesel cars account for about 28 percent of the car fleet

The statistics for 1990-2006 describe the share of passenger cars in the register and the figures for 2007-2021 the share of passenger cars in traffic use.

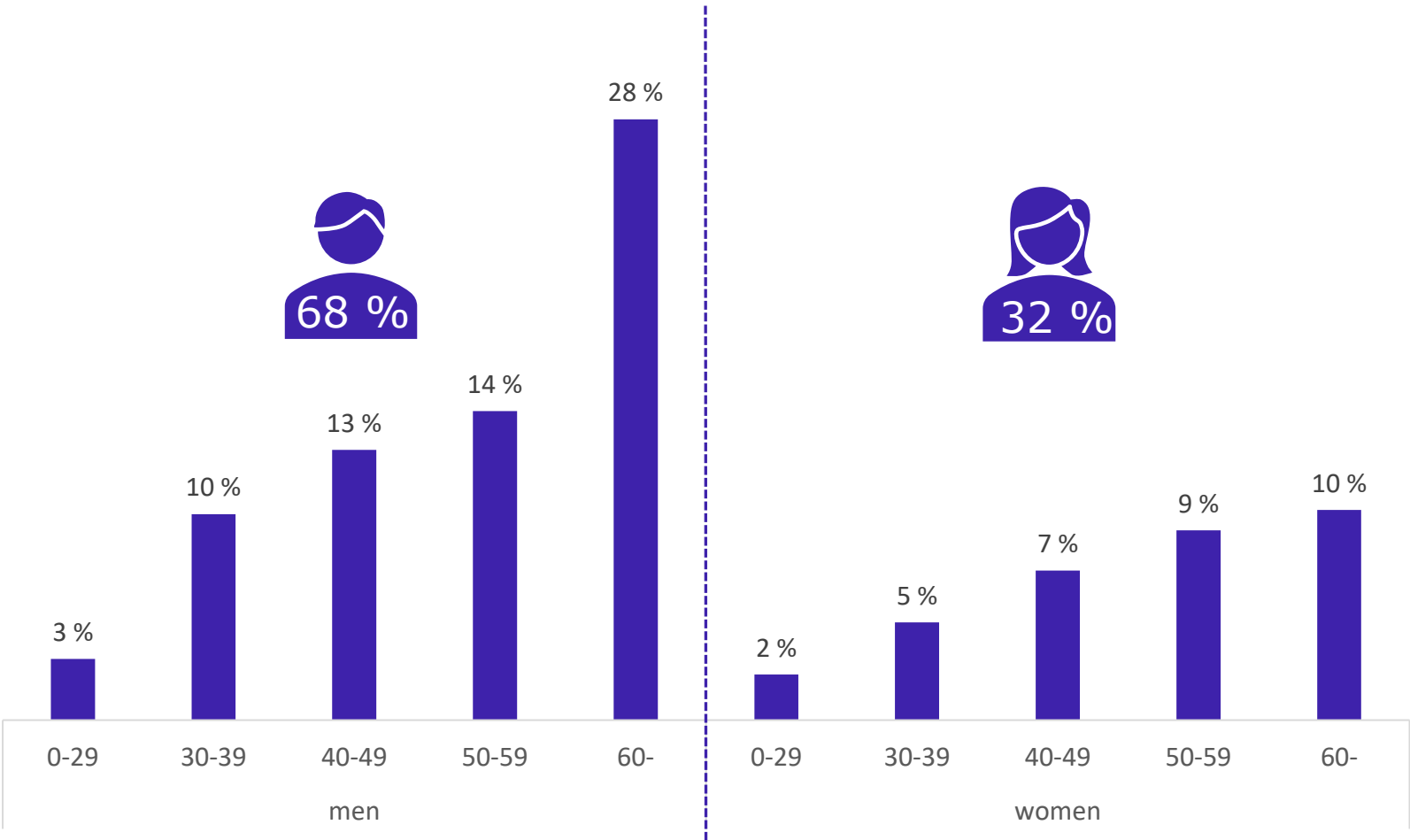
New registrations of passenger cars divided into different owner groups



- the share of cars acquired directly by households has decreased in recent years
- the popularity of partial payment has grown in recent years
- at the same time, the share of companies in car purchases has increased
- the share of private leasing has increased slightly in recent years

New registrations by owner's age group

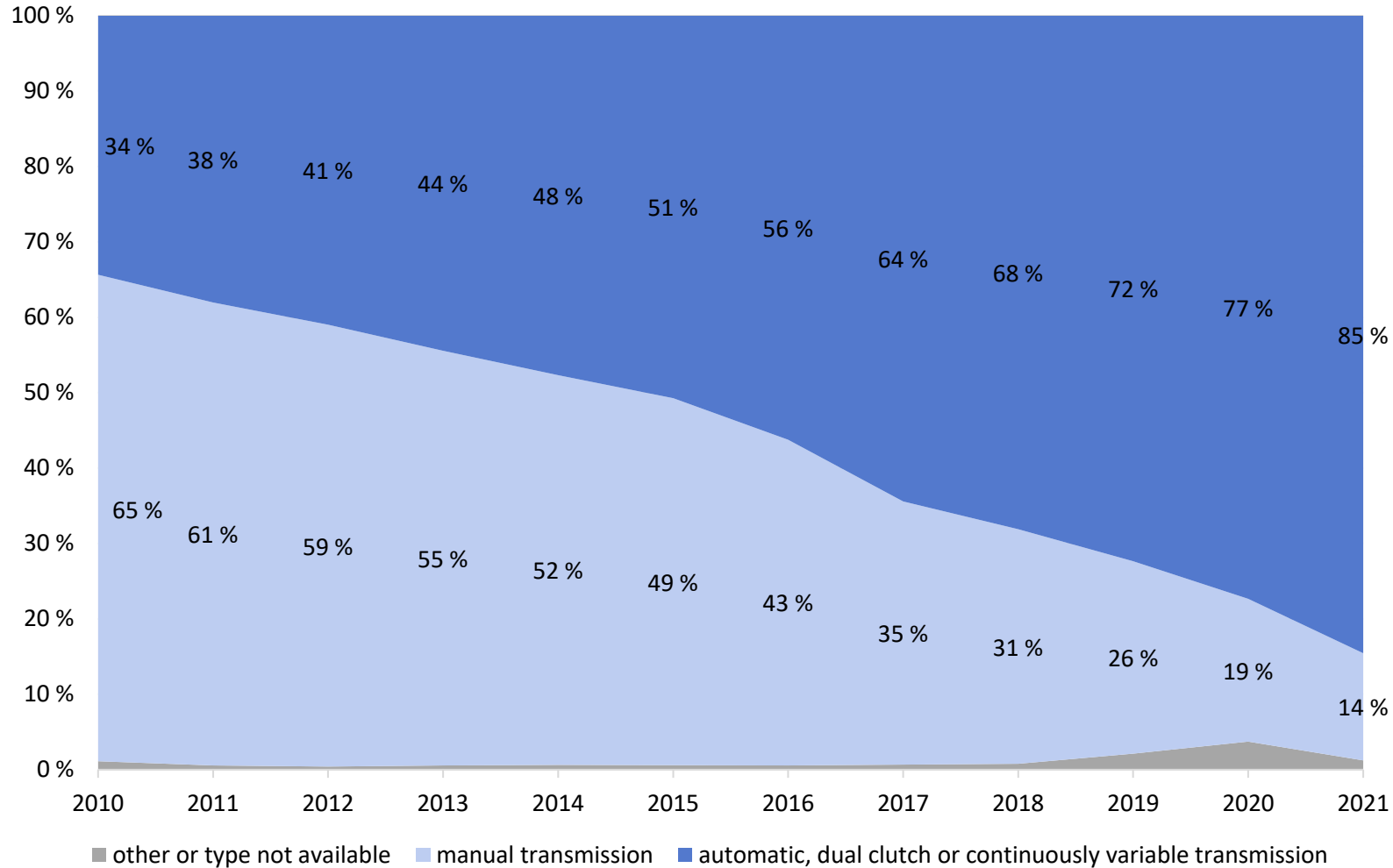
Owners of new passenger cars acquired by households by age and gender in 2021



- the largest group of buyers of a new passenger car is men over the age of 59 - they accounted for almost 30 per cent of all cars purchased by households

Transmission type of new registered passenger cars

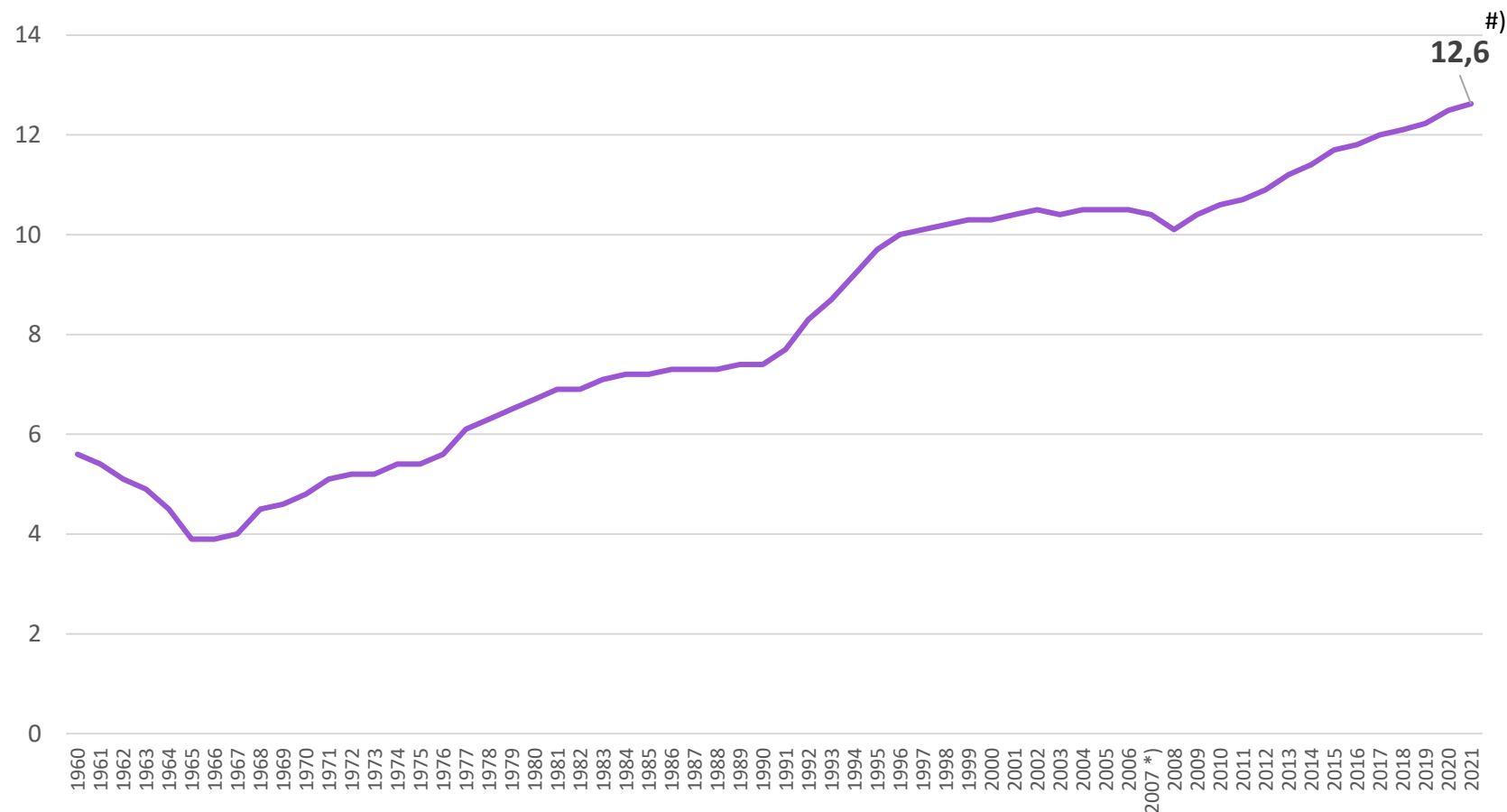
share of registrations



- the share of manual transmission is declining

Average age of passenger car fleet

average age in years



Age statistics includes all the cars at traffic use, also museum vehicles.

*) Statistics of 1960-2006 describes the average age of cars in register and statistics of 2007-2021 the average age of passenger car fleet at the end of the year.

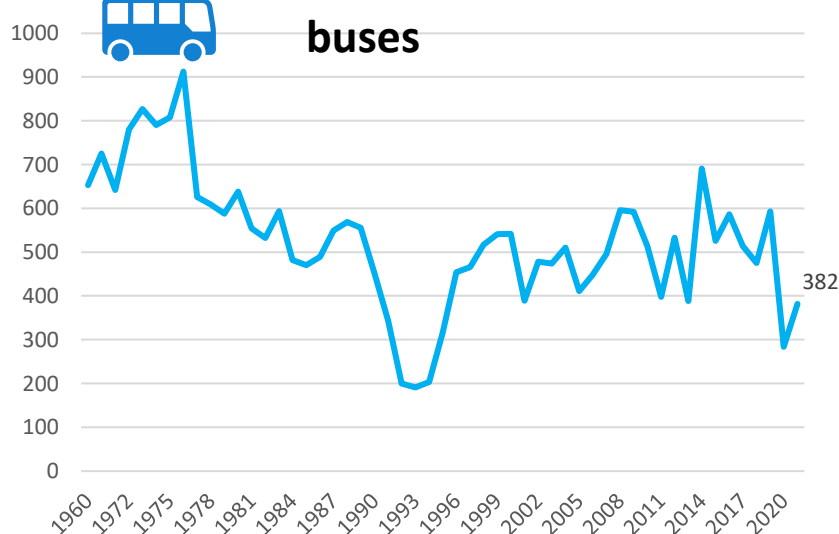
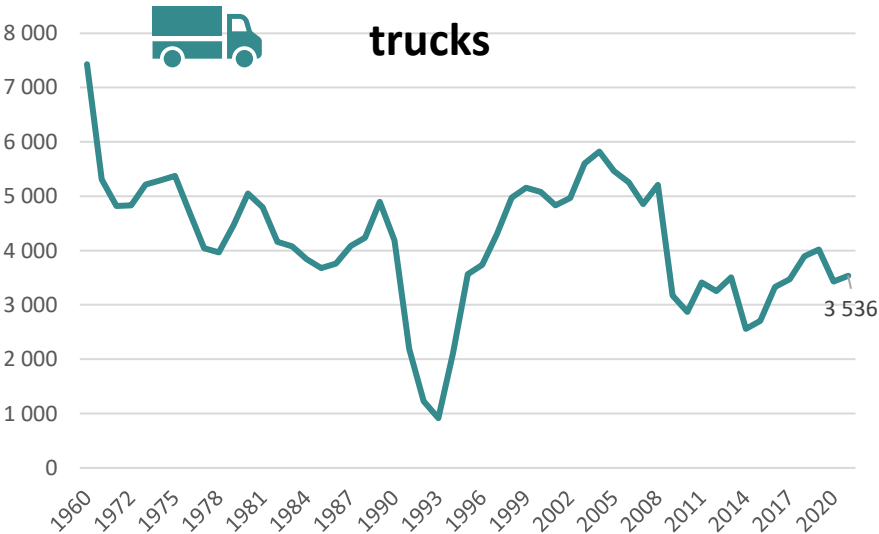
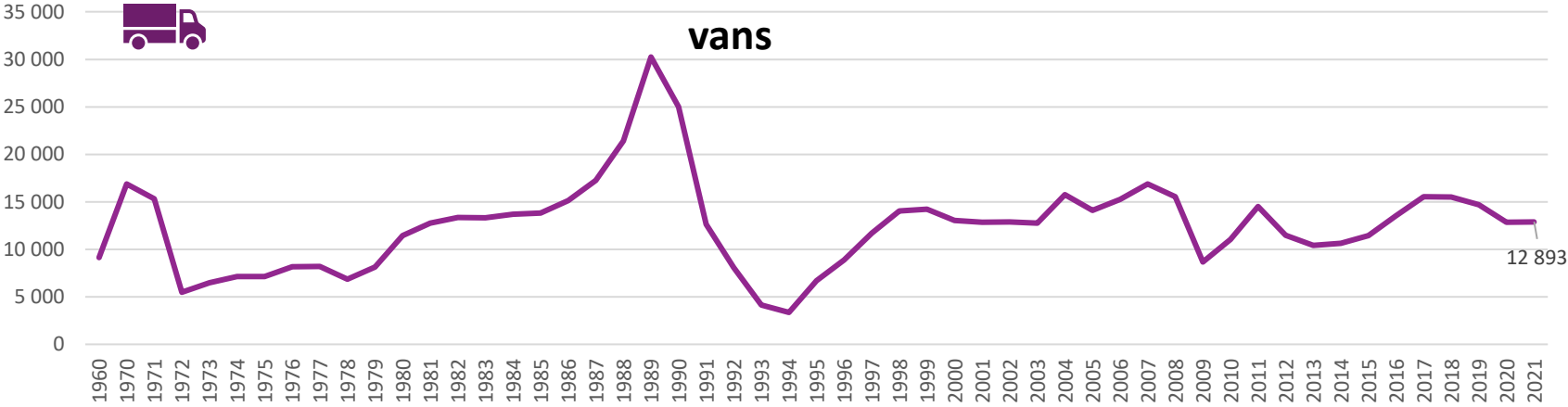
#) Preliminary statistics

Statistics Finland (1960-2020), preliminary figure for 2021 is based on fleet statistics of Traficom

- the average age of the passenger car fleet increased to 12.6 years in 2021
- the average age increased by about 1.6 months from 2020
- the average age of the fleet has been growing steadily since 2007
- the average age of the car fleet has increased by an average of 2 months in the 2010s

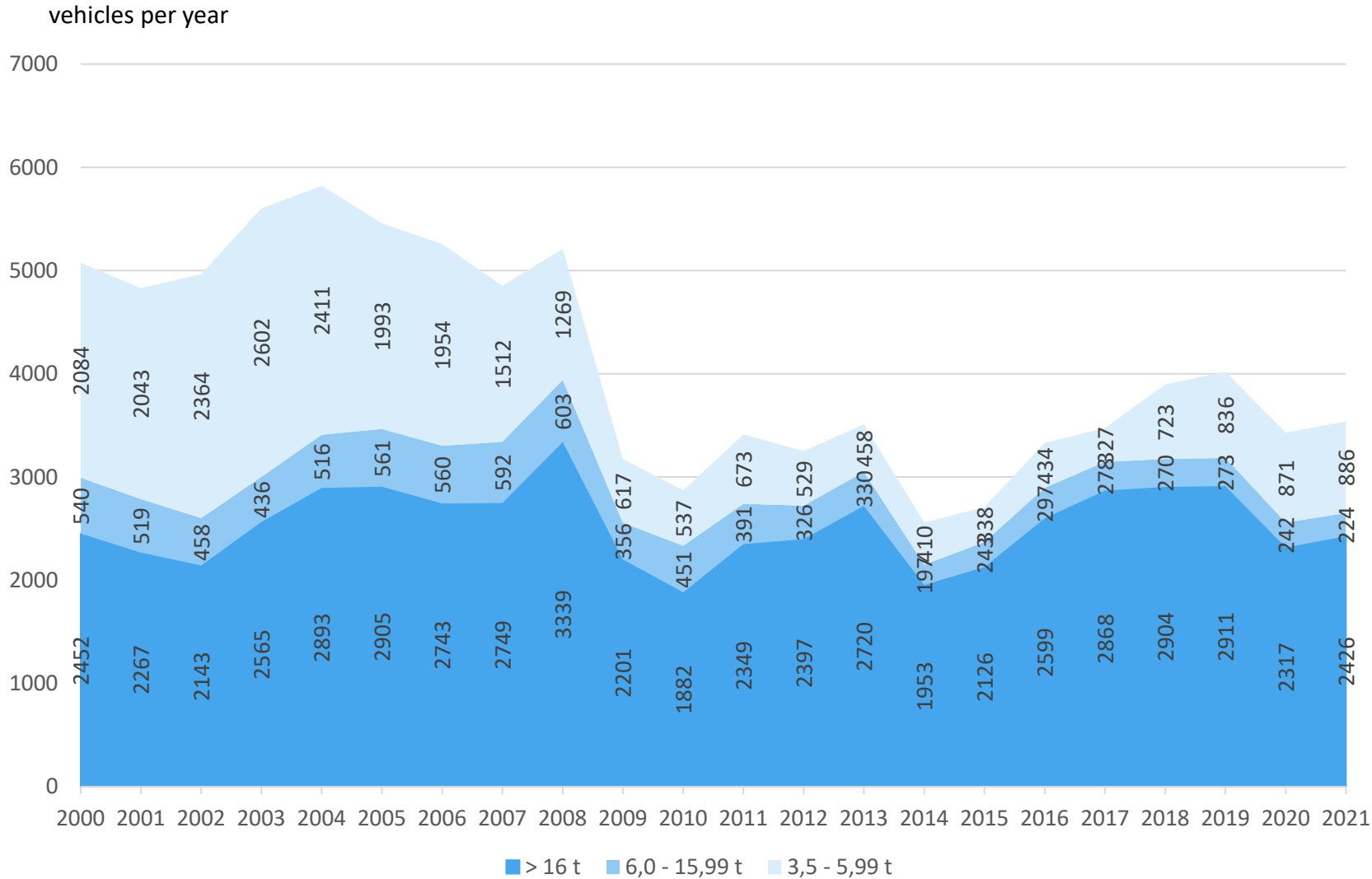
New registrations of vans, trucks and buses

in vehicles per year



- the number of new registrations of vans increased in 2021 by about 0.4 per cent compared to 2020
- the number of truck registrations increased by 3.1 per cent
- also registrations of new buses increased, but due to the pandemic, demand for buses is still exceptionally low

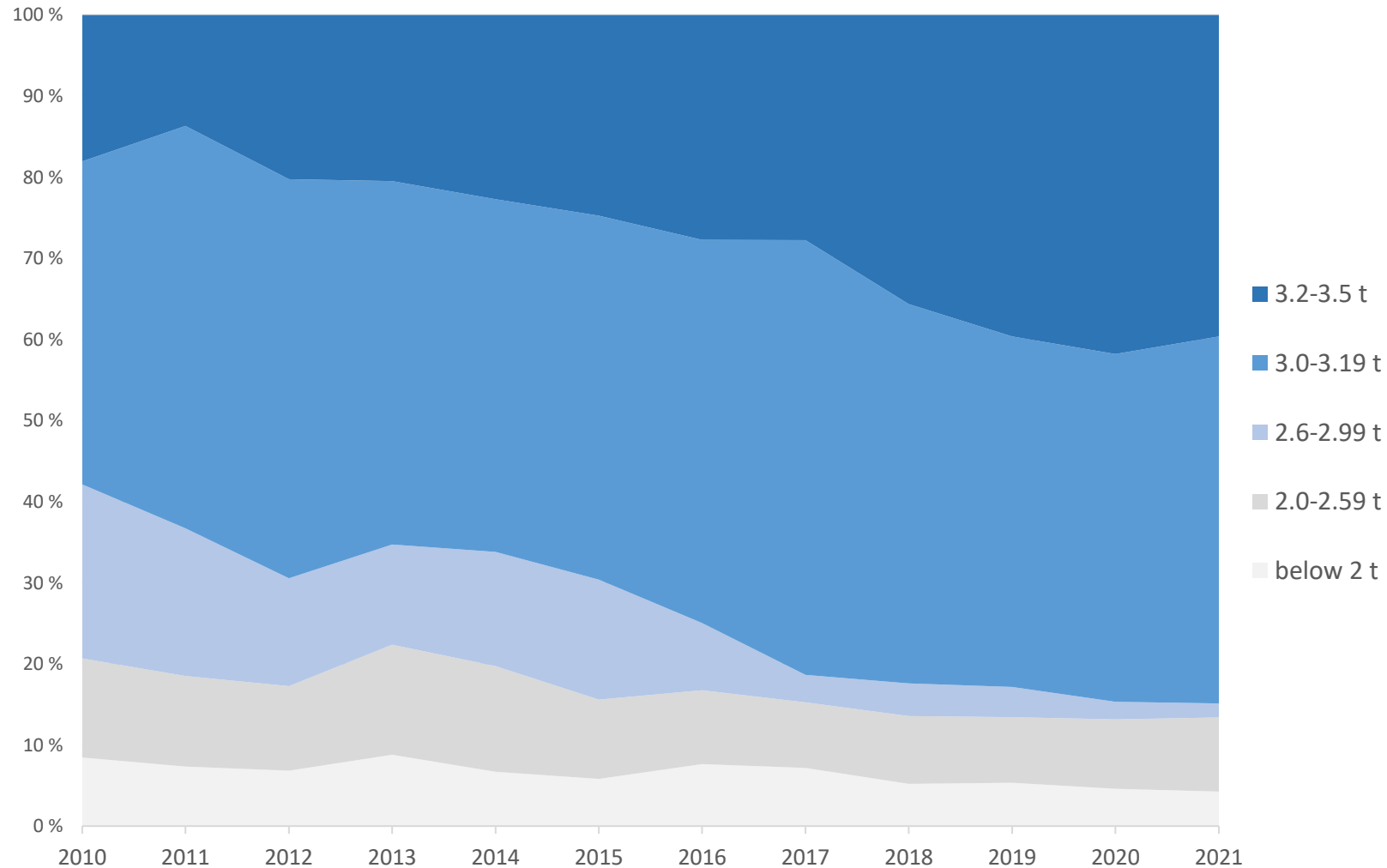
Registrations of new trucks by weight class



- demand for trucks has not as a result of the pandemic declined as much as in the economic downturns of 2008-2009 and 2014-2015
- the number of registrations increased in 2021, especially in trucks over 16 tonnes, compared to last year

Registrations of new vans by weight class

share of new registrations



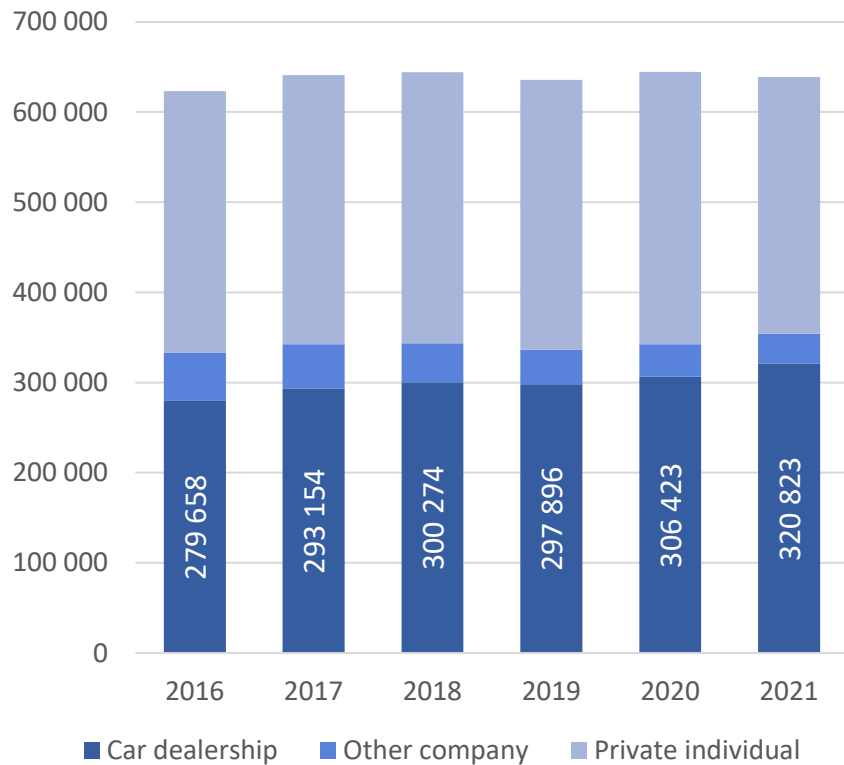
- the average size of new-registered vans has increased over the last decade
- about 40% of new registered vans are at least 3.2 tonnes
- only about a fifth of vans has a total weight of less than 2.6 tonnes, compared to more than 40% at the beginning of the last decade



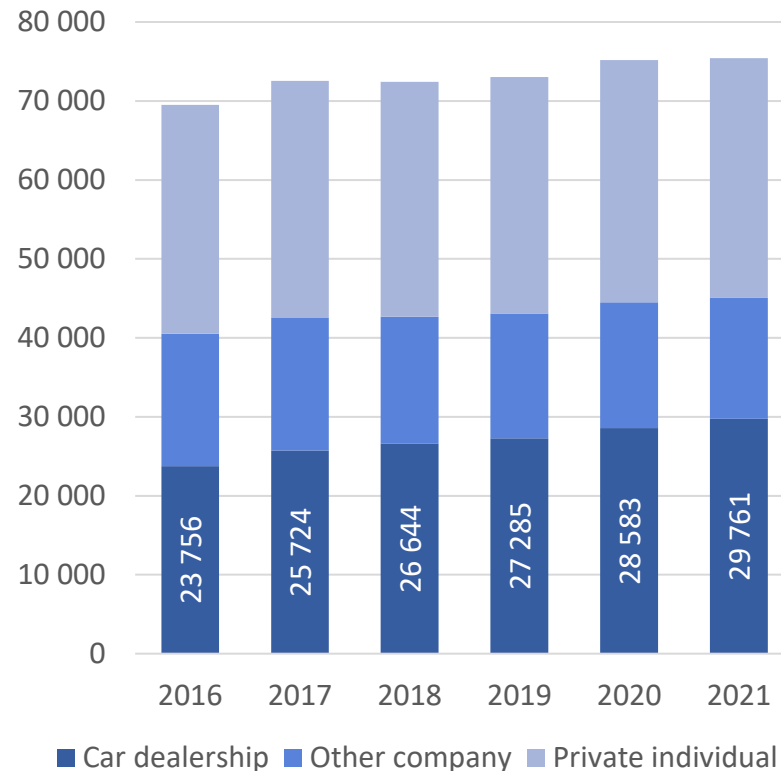
Market of second-hand cars

Market of second-hand passenger cars and vans

Second-hand passenger car sales by car dealerships and between households



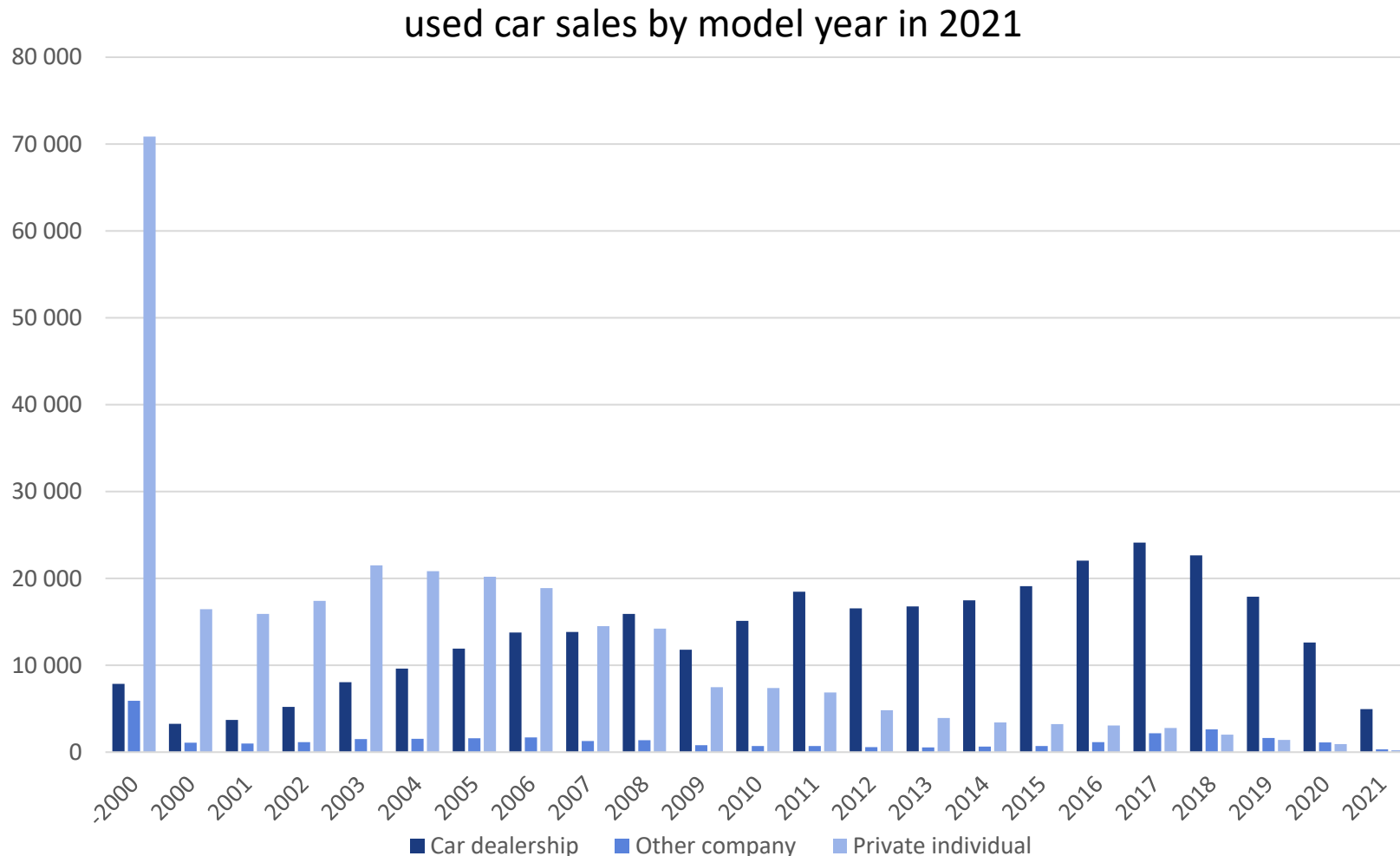
Second-hand van sales by car dealerships and between households



Does not include imported used cars.
 Transport and Communications Agency Traficom
 Netwheels Ltd and Traficom

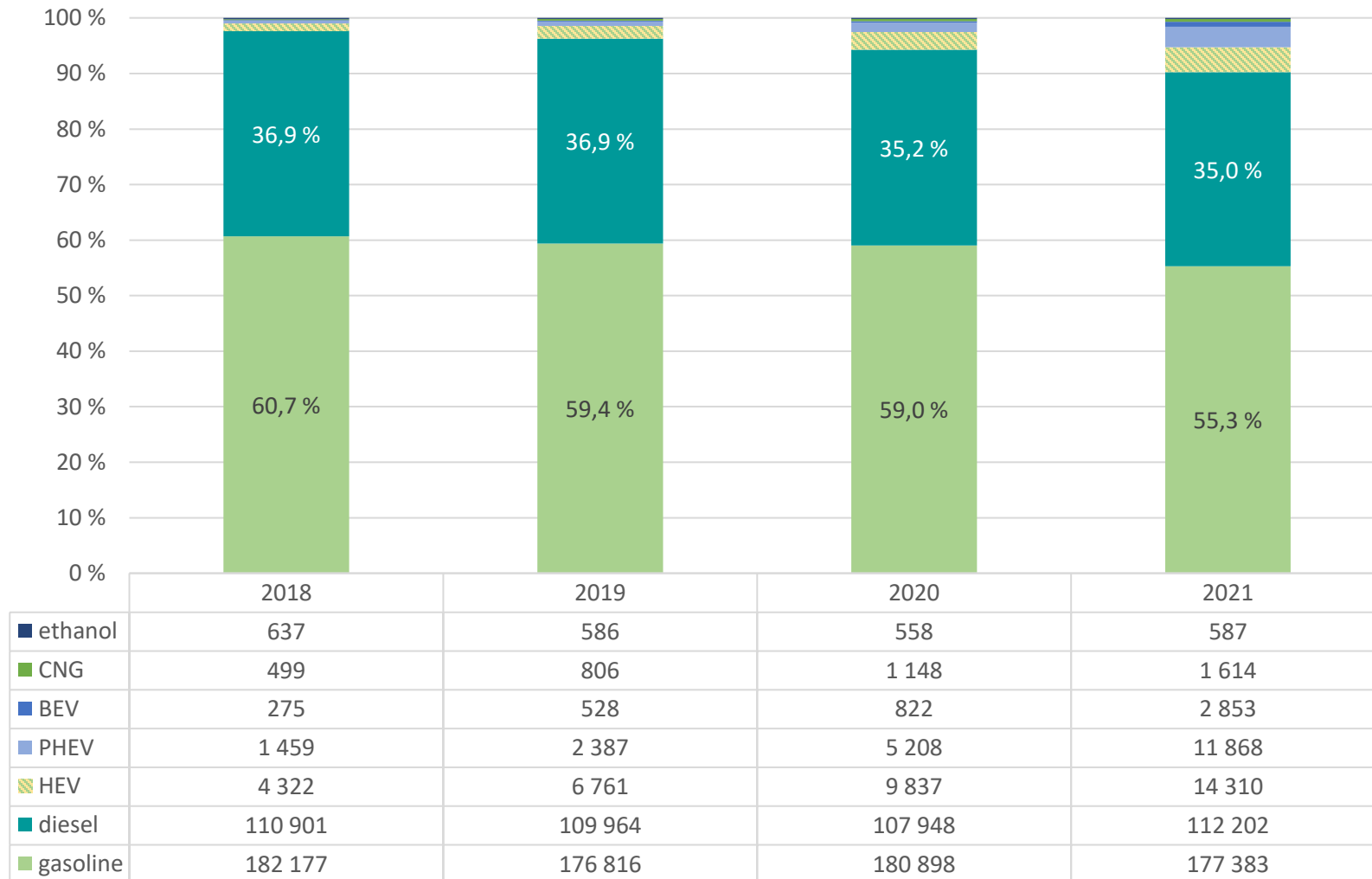
- unlike new vehicles, used car sales were brisk also during the coronavirus year 2020
- the year 2021 was even busier at car dealers with regard to the sales of used vehicles
- in 2021, about 639,000 used passenger cars were traded, about half of which were in car dealerships
- in 2021, about 75,500 used vans were traded, of which about 40 percent were in car dealerships
- the used passenger car sales of car dealers increased in 2021 to around 321,000 passenger cars from around 306,000 cars in 2020
- around 29,800 used vans were sold by car dealers last year, compared to 28,600 in 2020

Newest second hand-cars are traded in car dealerships



- the average age of used cars sold by car dealerships is about 10 years
- the average age of cars moving in inter-household trade is about 18 years
- cars under the age of 10 most typically pass through car dealerships

Fuel type of used cars sold by car dealers



- about 90% of the used car trade is sales of petrol and diesel cars
- the share of alternative fuels in used sales in car dealerships increased to around 5% in 2021, from less than 3% in 2020

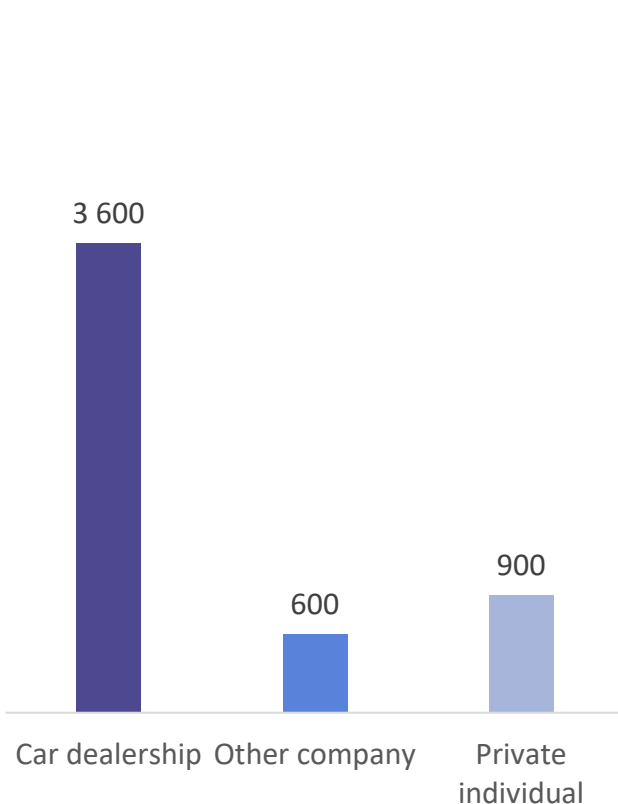
Does not include imported used cars. Hybrid electric vehicles (HEV) includes also mild hybrids (MHEV).

Transport and Communications Agency Traficom

Netwheels Ltd and Traficom

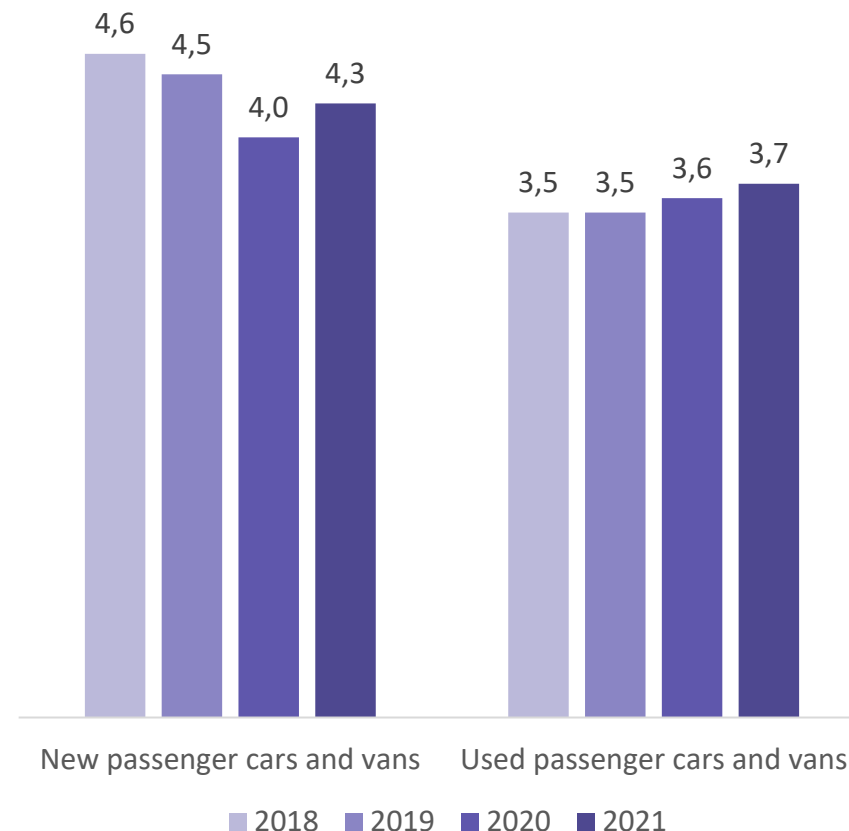
The turnover from the retail sales passenger cars and vans

Turnover of second hand car sales in 2021 (million €)



Does not include imported used cars.
Transport and Communications Agency Traficom
Netwheels Ltd and Traficom

Turnover from retail sales at car dealerships (billion €)



- the turnover from the retail sales of new passenger cars and vans increased from approximately EUR 4.0 billion in 2020 to approximately EUR 4.3 billion
- the increase is due to an increase in sales volume as well as an upsurge in the average price of a new car as a result of the significant increase in the share of electric vehicles
- the average electric vehicle costs about EUR 20,000 more than the average new petrol car
- the turnover of car dealers from the sales of used passenger cars and vans increased from approximately EUR 3.6 billion to approximately EUR 3.7 billion, or nearly five per cent



Market forecasts

Short term market forecast of passenger cars and vans



Positive market factors

- effects of covid-19 have been mitigated as a result of vaccinations
- the economy is projected to grow steadily
- industry and consumer confidence are well above the long-term average
- demand of consumer durables is expected to increase, as possibilities for travelling abroad are still limited
- the household savings rate has increased and allows for even larger investments
- the outlook for the construction and services sectors has improved during the spring and summer
- importance of car as a mode of travel has been emphasized during the covid crisis
- outlook of construction and service sector has improved
- demand for electric and hybrid cars is high and new incentives of electrification are planned
- order stock of passenger cars and vans is exceptionally high
- interest rates are projected to remain low



Negative market factors

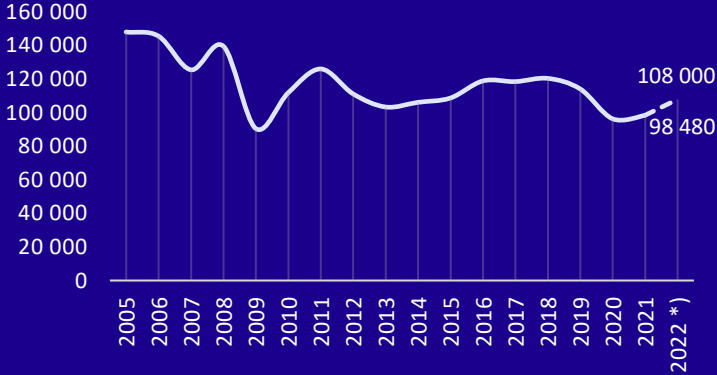
- global microchip and component shortage has reduced production and increased delivery times of new cars
- component shortage is estimated to be relatively long lasting
- long delivery times reduce the demand of new cars
- increased demand of raw materials caused by the rapid economic growth increases prices of raw materials and reduces their availability
- the number of new covid cases has increased and new restrictions on mobility will slow the recovery of the services sector
- the import of used cars decreases the new car market especially when the supply of new cars is limited



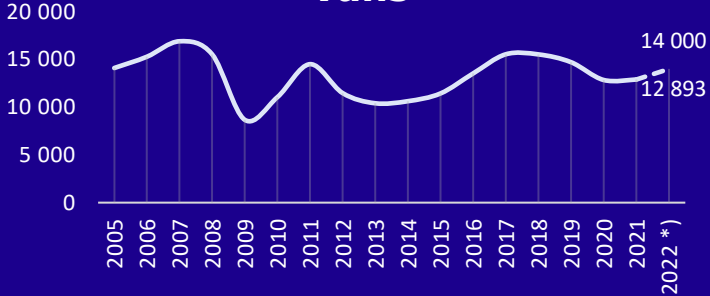
Market risks

- pandemic is not yet under control and the development of viral variants may be unpredictable
- rising inflation may pose a risk to economic development
- global economic forecasts are uncertain - the effects of the covid crisis on the economy and mobility may be long-lasting

New registrations of passenger cars



New registration of vans

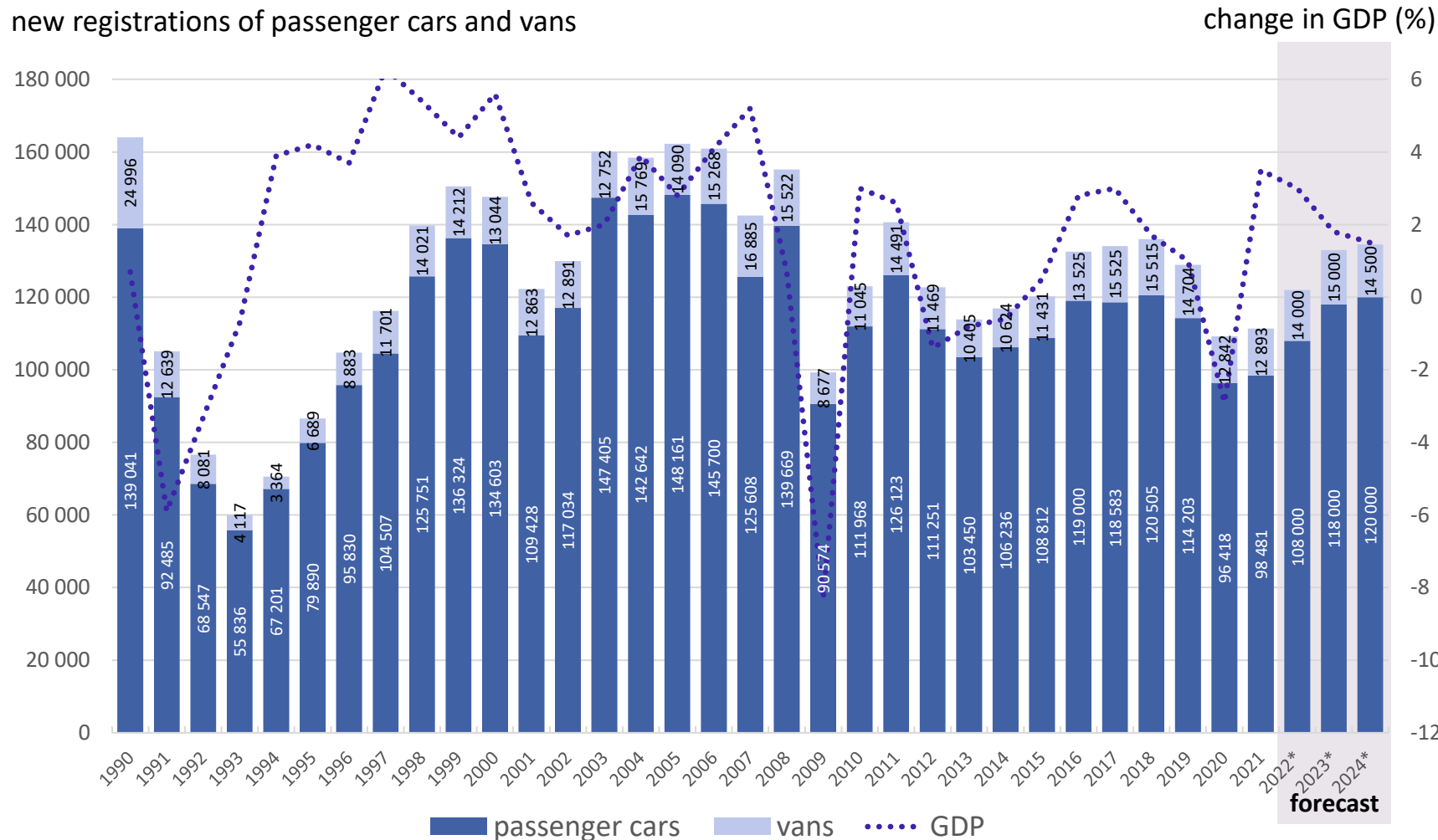


	passenger cars	vans
2018	120,505	15,515
2019	114,203	14,704
2020	96,415	12,842
2021	98,481	12,893
2022	108,000 *)	14,000 *)
2023	118,000 **)	15,000 **)

*) forecast updated in 25.11.2021

***) trend forecast

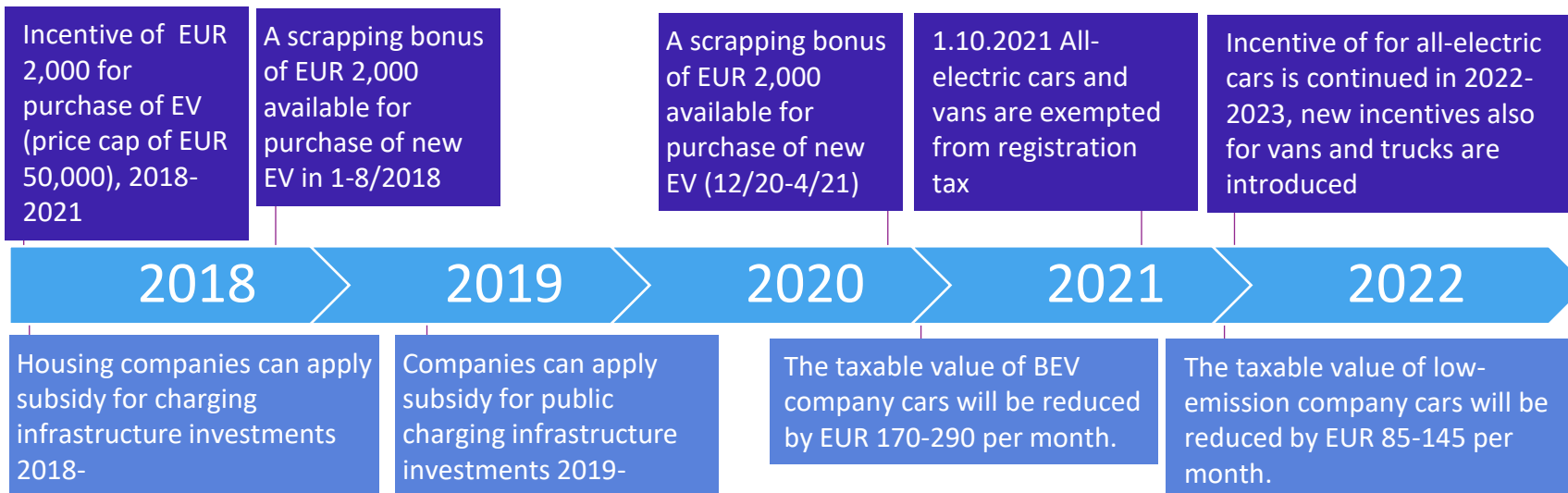
New registrations of passenger cars are expected to recover slowly from the economic downturn caused by the pandemic



- the economic outlook remains good for the development of the automotive market, although recent forecasts suggest that next year's economic growth will be slightly more modest than expected
- the component shortage is expected to ease gradually, but the development of the raw materials market and bottlenecks in supply chains will also be reflected in the automotive industry for a longer period of time than anticipated
- according to the automotive industry market forecast, new registrations will increase to around 108,000 passenger cars and 14,000 vans in 2022
- even these figures are still below the long-term average





*) The figures for 2022 are forecasts of forecast group of car branch. Forecasts of 2023-2024 are based on the economic outlook.

Incentives for electrification of transport in Finland



- the new purchase subsidy, which entered into force at the beginning of the year, will stimulate the market for electric vans and trucks, in particular
- the purchase subsidy for passenger cars will continue, and a new tax reduction for low-emission company cars will enter into force, complementing the incentive for fully electric company cars that came into force in 2021
- the new incentive of EUR 85 per month applies to vehicles with CO2 emissions between 1 and 100 g/km
- the abolition of the registration tax on electric cars, which entered into force at the beginning of October 2020, will also increase demand for fully electric cars

Tax deductions of zero and low emission company-cars

	All-electric car (CO ₂ emissions 0 g/km, WLTP) 	Plug-in hybrid or CNG car  & 	Other fuel type 
Limited benefit	<ul style="list-style-type: none"> Taxable value is reduced by EUR 170 per month, if company-car is registered in 2020 or later for the first time 	<ul style="list-style-type: none"> Taxable value is reduced by EUR 85 per month, if emissions are 1-100 g/km (WLTP) and if company-car is registered in 2021 or later for the first time 	<ul style="list-style-type: none"> Taxable value is reduced by EUR 85 per month, if emissions are 1-100 grams/km (WLTP) and if company-car is registered in 2021 or later for the first time
Unlimited benefit	<ul style="list-style-type: none"> Taxable value is reduced by EUR 170 per month, if company-car is registered in 2020 or later for the first time Reduction of EUR 120 per month from the operating costs of unlimited benefit 	<ul style="list-style-type: none"> Taxable value is reduced by EUR 85 per month, if emissions are 1-100 grams/km (WLTP) and if company-car is registered in 2021 or later for the first time Reduction of EUR 60 per month from operating costs of unlimited benefit 	

If the employer pays all the expenses, the benefit is an Unlimited Benefit. If the employee at least pays for the energy to run the vehicle, it is a Limited Benefit. The taxable value of a company-car is calculated based on so called basic value and operating costs. Basic value means the percentage calculated on the replacement price (list price) of the car. Operating costs are based on the average operating costs assessed by the Tax Administration and the amount of mileage related to private driving.