In Wallonia, the majority of ground passenger transport<sup>1</sup> is by road. The composition of the vehicle fleet (number of vehicles, types of engines, age, etc.) is therefore an important parameter for assessing the impact of the mobility of people on the environment and human health.

## Growth of the vehicle fleet

In 2016, cars accounted for 77% of the vehicle fleet in Wallonia. Their number increased by 34% between 1995 and 2016, with an average annual growth rate of 1.5% over the last 10 years. The number of commercial vehicles grew at a faster rate (nearly 2.9% over the same period) but accounted for only 10.8% of the fleet in 2016. It should be noted that a significant development in this category is the increasing use of light commercial vehicles over transport using trucks and semi-trailers. This evolution is due in particular to the multiplication of small-sized shipments or batches and the development of new needs linked to e-commerce.

## The diesel trend is slowing down

Diesel cars accounted for 60% of the fleet in 2016 compared to 30% in 1995. The growth of the fleet with diesel engines, which had occurred since the 1990s, stopped in 2014, while the fleet with petrol engines has risen again since 2013. These recent developments are encouraged, *inter alia*, by the reform of excise duties² initiated partly for environmental reasons. In effect, although diesel engines of equivalent capacity typically emit less  $\mathrm{CO}_2$  than petrol engines³, they emit more fine particulate matter (PM) and nitrogen oxides (NO $_\mathrm{x}$ ) that contribute to acidification and ozone formation in ambient air.

The number of cars running on LPG is decreasing, while the number of electric cars, although increasing in recent

years, continues to represent a negligible proportion of the Walloon car fleet (0.4% in 2016).

## An improving Ecoscore

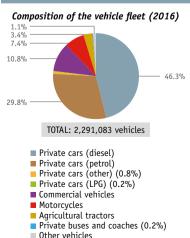
The Ecoscore<sup>4</sup> is a composite index that takes into account  $\mathrm{CO}_2$  emissions, the impact on air quality and the noise pollution specific to each vehicle. The closer the score gets to 100, the better the result. The average score for the Walloon vehicle fleet was 58.4 in 2015, an increase of one point per year since the indicator was created in 2008<sup>5</sup>. Although the average Ecoscores of the three Regions is tending to converge, the Walloon average remained the highest in 2015, notably due to a smaller average cylinder capacity<sup>6</sup>.

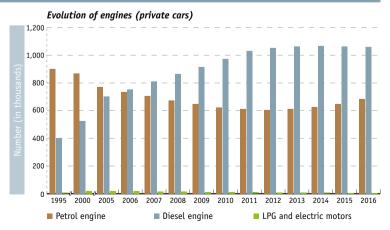
## Promoting cleaner vehicles

Several measures in the Air Climate Energy Plan 2016-2022 (*Plan air climat énergie 2016-2022*)<sup>7</sup> aim to make the composition of the vehicle fleet less impactful, in particular by promoting the purchase of low-emission vehicles (through premiums, taxation, Ecoscore, etc.). The application of Directive 2014/94/EU on the deployment of alternative fuels infrastructure (natural gas, electricity, hydrogen, etc.) also follows this trend.

 $^{[1]}$  Pass-km for road and rail transport  $\mid$   $^{[2]}$  Royal Decree of 26/10/2015 and Law of 27/06/2016  $\mid$   $^{[3]}$  However, this advantage may be partially offset by the increase in vehicle weight and equipment level.  $\mid$   $^{[4]}$  www.ecoscore.be  $\mid$   $^{[5]}$  VITO, 2016  $\mid$   $^{[6]}$  VITO, 2014  $\mid$   $^{[7]} \rightarrow$  AIR Focus 3







SOERW 2017 - Source: IWEPS

http://etat.environnement.wallonie.be