

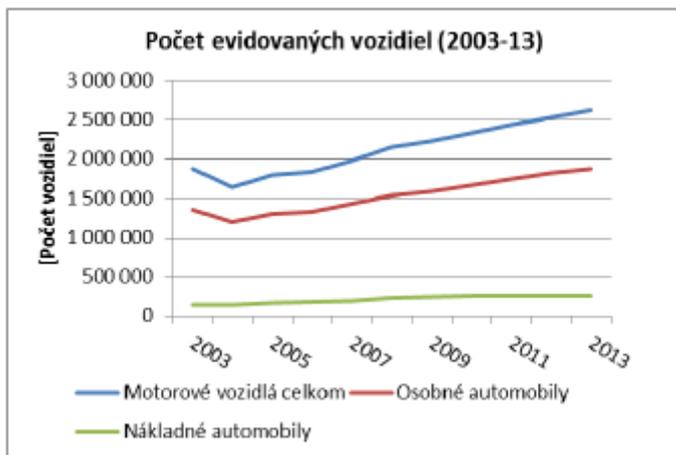
Annex 3: Analysis of how the factors behind energy consumption growth in transport developed in 2003-2013

In 2003-2013, the number of registered motor vehicles climbed by approximately 40 %. This rise was underpinned primarily by the increasing numbers of passenger vehicles (by 38.61 %) and by the major growth in the number of freight vehicles (by 84 % compared to 2003). The rising numbers of motor vehicles not only directly increases fuel consumption, but also increases the intensity of vehicles in the road network. This results – especially during rush-hour – in large-scale traffic congestion, longer journey times and the related further fuel consumption.

As the number of passenger cars in individual automobile transport increases (by 39.6 %), thereby also pushing up the number of persons engaged in such individual transport (by 9 %), the number of persons transported by public transport is declining (-27 % in 2013 versus 2003). The growth in individual passenger transport is reflected in steadily rising output (growth of 7.66 % in 2003-2013). In contrast, public transport has registered a decline in output (passenger kilometres), by 26 % overall between 2003 and 2013, with the largest decline – as much as 41 % – recorded between 2008 and 2010).

Rising energy consumption is also being fuelled by the freight sector, where the transport capacity is rising (an overall rise in freight transport by 43 % between 2003 and 2013), despite the falling quantities of goods being carried (a 21 % drop in freight transport in the same period). This implies that the average distance travelled for purposes of haulage is rising, in tandem with fuel consumption. The highest growth in output has been registered in road freight transport (77 % growth), but this has been to the detriment of rail freight transport (813 % decline in 2013 versus 2003).

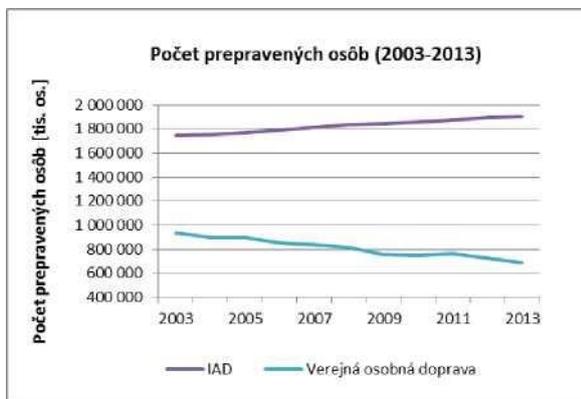
Figure 1: Overview of the most important factors behind energy consumption trends in transport (2003-2013)



Number of registered vehicles (2003-13)

(Number of vehicles)

- Total motor vehicles
- Passenger vehicles
- Freight vehicles



Number of persons transported (2003-13)

Number of persons transported (thousands)

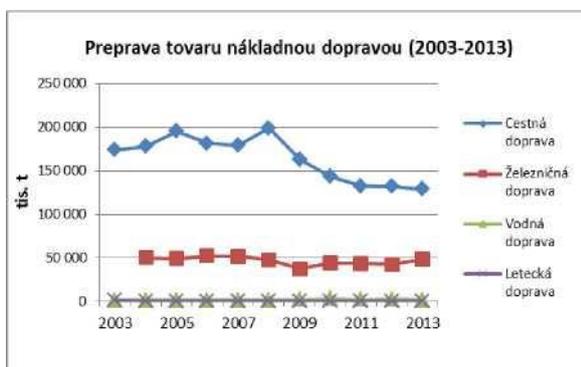
- Individual car transport
- Public passenger transport



Passenger transport output (2003-2013)

Transport output (millions of passenger kilometres)

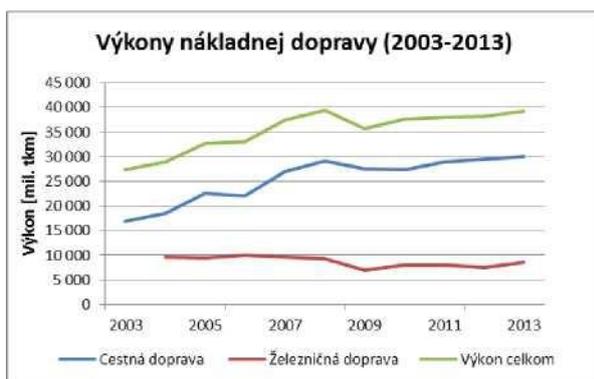
- Public passenger transport
- Individual car transport



Goods carried within the scope of freight transport (2003-2013)

Thousands of tonnes

- Road transport
- Rail transport
- Water transport
- Air transport



Zdroj: ŠÚSR (2015), VÚD (2015)

Freight transport output (2003-2013)

Output (millions of tkm)

- Road transport
- Rail transport
- Total



Goods carried within the scope of freight transport and freight transport output (2003-2013)

Quantity of goods (thousands of tonnes)

Transport output (millions of tkm)

- Quantity carried
- Output

Source: Statistical Office of the Slovak Republic (2015), Transport Research Institute (2015)