# 42. Outputs (cost)

Overview

Target

The target of this view is to show graphically the outputs on costs. The variables represented in the graphs contain information on the costs associated to the new vehicle registrations over time and due to the fuel consumption of the vehicle fleet. The NMT and PIPELINES modes are excluded of this view.

Structure

The first row of graphs refers to the cost including the purchase of new vehicles as well as the fuel consumption. In the second and third row the total amount of the costs is divided in cost of vehicles and fuel. Figure 42.1 shows the sketch of the view.

Figure 42.1   Sketch of the view "outputs (cost)"
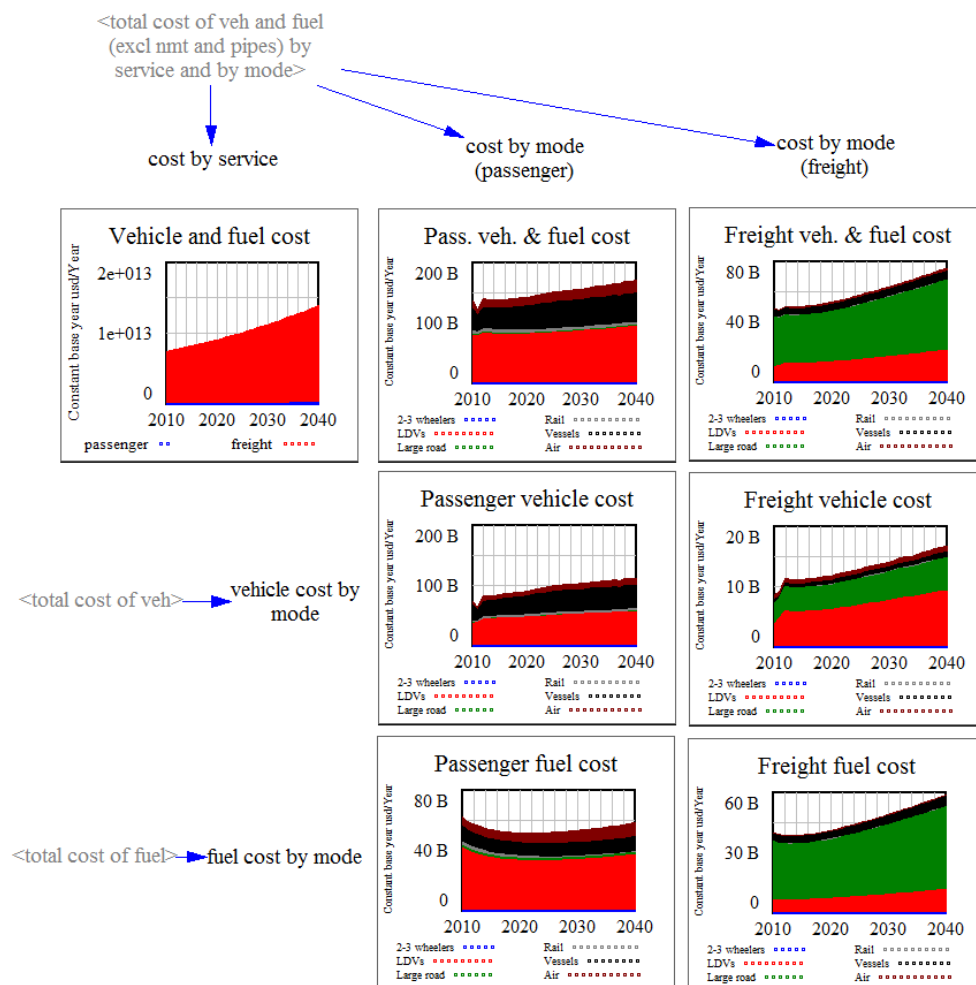
Detailed description of the view

Inputs

The three variables entering this view are calculated endogenously in the view "costs":

- "TOTAL COST OF VEH AND FUEL (EXCL NMT AND PIPES) BY SERVICE AND BY MODE"
  Variable aggregated at the mode level that includes the sum of the cost of vehicles and the cost of fuel detailed below.

- "TOTAL COST OF VEH"
  Variable disaggregated by powertrain that results from the multiplication between the new vehicle registrations and the purchase vehicle cost for each technology.

- "TOTAL COST OF FUEL"
  Variable disaggregated by fuel blend that contains the cost due to the energy consumption of the fleet taking into account the performance of the vehicles in the stock and the cost of the fuel blends.

Outputs

The three graphs on the first row show the total cost including both components (vehicles and fuel) aggregated at different levels and stacked in several ways. From left to right the information provided in the graphs is the following:

- Total cost by service
  It is achieved through summing up the available input across the different modes. The graph makes the distinction between the cost related to the PASSENGER and FREIGHT service.

- Total cost by mode in case of PASSENGER service
  It enables to see how the total cost in PASSENGER service is distributed across the modes: TWO and THREE WHEELERS (treated as one single mode), LDVS, LARGE ROAD, RAIL, VESSELS and AIR.

- Total cost by mode in case of FREIGHT service
  It shows the share of each mode in the total cost in FREIGHT service.

The second row shows the cost associated to the new vehicles over time. The available input split by powertrain is aggregated across the powertrains and vehicle classes and therefore is obtained by mode. The graph on the left is the cost associated to the new vehicles belonging to PASSENGER service while the one on the right corresponds to FREIGHT. In both cases the results are stacked by mode.

The third row deals with the costs due to the energy consumed by the vehicle fleet. The input is aggregated across the fuel blends and the vehicle classes in order to obtain results by mode. Both services (PASSENGER and FREIGHT) are shown in different graphs and in both cases the output is represented by mode.