39. Outputs (vehicle cost)

Overview

Target
The target of this view is to show graphically the outputs concerning the vehicle stock.

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.

Detailed description of the view

Inputs
The only input is the variable "VSTOCK BY PWTRN", calculated in the view "vehicles by age". This variable is disaggregated by area, service, mode, vehicle class and powertrain.

Outputs
All the outputs provided have been aggregated across the different areas and the different vehicle classes.

The first row of graphics shows the results split by POWERTRAIN GROUP A. The latter includes the following technologies:

- **ICE**
  It is the aggregated value of the powertrains GASOLINE PI ICE, METHANE PI ICE, LPG PI ICE, DIESEL CI ICE, DME CI ICE, HYDROGEN ICE and KEROSENE TURBINE.

- **ICE-HYDRAULIC HYBRID**
  It is the aggregated value of the powertrains GASOLINE PI ICE-HYDRAULIC HYBRID, METHANE PI ICE-HYDRAULIC HYBRID, LPG PI ICE-HYDRAULIC HYBRID, DIESEL CI ICE-
HYDRAULIC HYBRID, DME CI ICE-HYDRAULIC HYBRID and HYDROGEN ICE-HYDRAULIC HYBRID.

- ICE-ELECTRIC HYBRID
  It is the aggregated value of the powertrains GASOLINE PI ICE-ELECTRIC HYBRID, METHANE PI ICE-ELECTRIC HYBRID, LPG PI ICE-ELECTRIC HYBRID, DIESEL CI ICE-ELECTRIC HYBRID, DME CI ICE-ELECTRIC HYBRID and HYDROGEN ICE-ELECTRIC HYBRID.

- ICE-ELECTRIC HYBRID PLUG-IN
  It is the aggregated value of the powertrains GASOLINE PI ICE-ELECTRIC HYBRID PLUG-IN, METHANE PI ICE-ELECTRIC HYBRID PLUG-IN, LPG PI ICE-ELECTRIC HYBRID PLUG-IN, DIESEL CI ICE-ELECTRIC HYBRID PLUG-IN, DME CI ICE-ELECTRIC HYBRID PLUG-IN and HYDROGEN ICE-ELECTRIC HYBRID PLUG-IN.

- FUEL CELLS
  It is the aggregated value of the powertrains FC, FC-ELECTRIC HYBRID and FC-ELECTRIC PLUG-IN HYBRID.

- ELECTRIC
  It corresponds to the powertrain ELECTRIC MOTOR.

From left to right, the graphics in the first row contain the following information stacked by POWERTRAIN GROUP A:

- "Passenger 2W stock"
  Vehicle stock over time corresponding to the service PASSENGER and to the mode TWO WHEELERS. Units: Vehicles.

- "Passenger 3W stock"
  Vehicle stock over time corresponding to the service PASSENGER and to the mode THREE WHEELERS. Units: Vehicles.

- "PLDV stock"
  Vehicle stock over time corresponding to the service PASSENGER and to the mode LDVS. Units: Vehicles.

- "Road freight HDV stock"
  Vehicle stock over time corresponding to the service FREIGHT and to the mode LARGE ROAD. Units: Vehicles.

- "Passenger Rail stock"
  Vehicle stock over time corresponding to the service PASSENGER and to the mode RAIL. Units: Vehicles.

- "Freight vessels stock"
  Vehicle stock over time corresponding to the service FREIGHT and to the mode VESSELS. Units: Vehicles.

- "Passenger Air stock"
Vehicle stock over time corresponding to the service PASSENGER and to the mode AIR.
Units: Vehicles.

The first graph of the second row represents the transport volume, expressed in m$^3$, corresponding to the mode PIPELINES and the service FREIGHT (powertrain: PIPELINE PUMP).
The next graphs are equivalent to the first row but now stacked by POWERTRAIN GROUP B. This includes the following technologies:

- **PI ICE LIQUID**
  It is the aggregated value of the powertrains GASOLINE PI ICE, GASOLINE PI ICE-HYDRAULIC HYBRID, GASOLINE PI ICE-ELECTRIC HYBRID and GASOLINE PI ICE-ELECTRIC HYBRID PLUG-IN.

- **PI ICE LPG**
  It is the aggregated value of the powertrains LPG PI ICE, LPG PI ICE-HYDRAULIC HYBRID, LPG PI ICE-ELECTRIC HYBRID and LPG PI ICE-ELECTRIC HYBRID PLUG-IN.

- **PI ICE METHANE**
  It is the aggregated value of the powertrains METHANE PI ICE, METHANE PI ICE-HYDRAULIC HYBRID, METHANE PI ICE-ELECTRIC HYBRID and METHANE PI ICE-ELECTRIC HYBRID PLUG-IN.

- **CI ICE LIQUID**
  It is the aggregated value of the powertrains DIESEL CI ICE, DIESEL CI ICE-HYDRAULIC HYBRID, DIESEL CI ICE-ELECTRIC HYBRID, DIESEL CI ICE-ELECTRIC HYBRID PLUG-IN and KEROSENE TURBINE.

- **CI ICE DME**
  It is the aggregated value of the powertrains DME CI ICE, DME CI ICE-HYDRAULIC HYBRID, DME CI ICE-ELECTRIC HYBRID and DME CI ICE-ELECTRIC HYBRID PLUG-IN.

- **ICE HYDROGEN**
  It is the aggregated value of the powertrains HYDROGEN ICE, HYDROGEN ICE-HYDRAULIC HYBRID, HYDROGEN ICE-ELECTRIC HYBRID and HYDROGEN ICE-ELECTRIC HYBRID PLUG-IN.

- **FCELLS**
  It is the aggregated value of the powertrains FC, FC-ELECTRIC HYBRID and FC-ELECTRIC PLUG-IN HYBRID.

- **ELECTR**
  It corresponds to the powertrain ELECTRIC MOTOR.

- **PIPELINE**
  It corresponds to the powertrain PIPELINE PUMP.