# Transport: Light Vehicles - Electric

This lever controls the sublevers listed in the table, and ambition levels are for the end year shown on the right-hand side.

Light Vehicles refers to cars, vans and light lorries (rigid HGVs). In 2015, almost all the Kenya's light vehicles were powered by fossil fuels (petrol or diesel) although other lower carbon vehicles, such as electric vehicles (EV), were available. Battery electric vehicles have zero emissions at the tailpipe and are more energy- efficient than internal combustion engines. Uptake of current EVs is limited by higher up- front capital costs, limited refuelling infrastructure and limited range per charge, but this is expected to improve greatly in future, with costs falling below internal combustion engine vehicles.

BEV account for less than 1% of electric vehicles in Kenya. To reduce GHG emission contributed by ICEs, the share of PHEV, Hybrid Electric Vehicles and Battery Electric Vehicles which emit less GHG needs to be increased and ICEs reduced.

The base year selected is 2015. Four ambition levels are assumed as below.

## **Key interactions**

Low-carbon electricity must be generated to maximize emissions savings from electrified transport.

#### Level 1

Efforts to increase uptake of electric vehicles are abandoned and share remains at current levels.

#### Level 2

20% of cars and vans are electric along with 1% of light lorries

#### Level 3

30% of all cars and vans are electric along with 10% of light lorries

### Level 4

50% of all cars and vans together with small lorries are electric.

Default Timing Start year: 2020, End year: 2050

Sub-Lever	Units	2015	Level 1	Level 2	Level 3	Level 4
Car	share	0.0	0	0.25	0.5	0.9
LGV	share	0.0	0	0.25	0.5	0.9
HGV Rigid	share	0.0	0	0.1	0.3	0.5

#### **Electric Share of Car Distance**



