Transport: Heavy Vehicles - Electric

Due to heavy loads and long distances involved with heavy duty vehicles pose significant problems when considering electrification to eliminate tailpipe emissions. One such problem is the size of the battery required to provide sufficient range. The increased size and weight of the battery reduces the amount of cargo the vehicle can carry.

Key Interaction

Low-carbon electricity must be generated to maximise emissions savings from electrified

Level 1

Efforts to start uptake of electric vehicles are abandoned and shares remains zero percent at level 1.

Level 2

Electric vehicle share increases gradually to 10% for HGV, 20% of passenger rail, and 20% of rail freight/buses.

Level 3

Electric vehicle share increases to 20% of passenger rail, 40% of rail freight, 20% of buses and 20% of articulated HGVs.

Level 4

Battery technologies allow buses and Lorries to be electrified at 80% for both HGV and Bus. While 60% for rail passenger and rail freight..

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Default Timing Start Year: 2030 End Year: 2050

Sub-Lever	Units	2015	Level 1	Level 2	Level 3	Level 4
HGV Articulated	share	0%	0%	10%	20%	80%
Bus	share	0%	0%	10%	20%	80%
Rail Passenger	share	0%	10%	20%	40%	60%
Rail Freight	share	0%	10%	20%	40%	60%