Electric vehicle deployment policies and measures

The table highlights key policies and measures that support the deployment of electric vehicles (EVs) and zero-emission vehicles (ZEVs) for light-duty and heavy-duty vehicles. It summarises current measures as well as announced targets and ambitions by region and country. These policies and measures take a variety of forms, e.g. fuel economy standards, CO_2 emissions standards, deployment roadmaps, and sales or stock targets and ambitions. The table does not include fiscal measures such as subsidies, tax incentives, carbon taxes or similar policy instruments.

The policies and measures are structured in three categories:

- ***Legislation***: legally binding commitments such as regulations and standards.
- ***Targets***: announced government targets incorporated in legislation, budgetary commitments, Nationally Determined Contributions to the Paris Climate Agreement or national climate plans such as those submitted by member states to the European Union.
- ***Ambitions***: government goals or objectives (also known as unofficial targets) as set out in a policy document such as a deployment roadmap or strategy.

Acronyms used in the table: EVs = electric vehicles, which include battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs). HEVs = hybrid electric vehicles. Electrified vehicles include BEVs, PHEVs and HEVs. ZEVs = zero-emissions vehicles, which include BEVs, PHEVs and fuel cell electric vehicles (FCEVs). NEV = new energy vehicle (China) and includes BEVs, PHEVs and FCEVs. LDV = light-duty vehicle (cars and vans); MDV = medium-duty vehicle; HDV = heavy-duty vehicle. GHG = greenhouse gases. CO_2 = carbon dioxide. g/km = grammes per kilometre. g CO_2/km = grammes of carbon dioxide per kilometre. L/km = litres per kilometre. kWh/km = kilowatt-hour per kilometre. WLTP = Worldwide Harmonized Light Vehicle Test Procedure. NEDC = New European Driving Cycle. JCO8 = Japan emissions test cycle. OEM = original equipment manufacturer. MY = model year. CNG = compressed natural gas. LPG = liquefied petroleum gas. ICE = internal combustion engine. CAFE = corporate average fuel economy.

The table indicates countries that are members of the Electric Vehicle Initiative (EVI). The EVI is a multi-governmental policy forum established in 2010 under the Clean Energy Ministerial. Recognising the opportunities offered by electric vehicles, the EVI is dedicated to accelerating the adoption of EVs worldwide. To do so, it strives to better understand the policy challenges related to electric mobility, help governments address them and to serve as a platform for knowledge sharing.

Region / country	Key policy measures and targets	Year announced	Category	Source
Global				
	COP26 ambition: 100% share of ZEVs in new car and van sales by 2040 globally, and by 2035 in "leading markets". Signatories include: Austria, Azerbaijan, Belgium, Canada, Cape Verde, Chile, Croatia, Cyprus, Denmark, El Salvador, Finland, Iceland, Ireland, Israel, Lichtenstein, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Slovenia, Sweden, The Holy See, United Kingdom, Uruguay, Armenia, Dominican Republic, Ghana, India, Kenya, Mexico, Morocco, Paraguay, Rwanda, Turkey, and Ukraine.	2021	LDV	Government of the United Kingdom (2021)
Africa				
Cabo Verde	Target: 100% EVs in government LDV stock by 2030. Target: 35% share of EVs in passenger LDV sales by 2025, 70% by 2030 and 100% by 2035. Target: 15% share of EVs in medium truck sales by 2025, 35% by 2030 and 100% by 2035. 25% share of EVs in heavy truck sales by 2030 and 100% in 2035. Target: 100% EV stock by 2050. Target: 50% share of EVs in urban bus sales by 2025, 75% in 2030 and 100% by 2040.	2019	Multiple vehicle categories	Government of Cabo Verde (2019)

Egypt	Ambition: 42 000 public charging stations across governorates, with 3 000 stations to be built in phase one of the programme.	2021	Charging	Government of Egypt (2021)
Kenya	Ambition: 5% share of EVs in total vehicle imports by 2025.	2021	Multiple vehicle categories	Government of Kenya (2020)
	Fuel economy standard: set an average fuel consumption (LDVs) target of 6.5 L/100km and average CO_2 emissions target of 160g/km by 2025.	2021	LDV	Government of Kenya (2020)
South Africa	Ambition: convert 5% of the public and national vehicle fleet to cleaner alternative fuels and efficient technology by 2025, with annual increase of 2% thereafter.	2018	Multiple vehicle categories	Government of South Africa (2018)
Asia				
China (EVI member)	**National level**			
	Fuel economy standard tightened: 4.6 L/100 km (WLTP) or 4.0 L/100km (NEDC) by 2025 for passenger LDVs.	2017	LDV	Government of China (2021)
	New Energy Vehicle (NEV) mandate sets annual ZEV credit targets for OEMs to reach as a percentage of annual vehicle sales: 12% NEV credit for passenger LDV sales by 2020 (with each EV sold eligible to earn multiple credits depending on the all-electric range, battery density and vehicle efficiency). Targets are 14% in 2021, 16% in 2022 and 18% in 2023 (with gradual tightening of credits to 2023).	2020	LDV	Government of China (2020)

	Target: 20% share of NEVs in LDV and HDV sales by 2025.	2020	Multiple vehicle categories	Government of China (2020)
	Ambition: 72% share of NEVs in national urban public transport and 20% in logistics distribution by 2025.	2021	Multiple Vehicle Categories	Government of China (2021)
	Ambition: 100% share of EVs in passenger LDV sales by 2035 (of which 50% are NEVs and 95% of those are BEVs). Ambition: 100 000 FCEV sales in LDVs and HDVs by 2025 and around 1 million stock in the 2030-35 period.	2020	Multiple vehicle categories	SAE China (2020)
	Fuel economy standard (legislation): Stage III National Standard of 10.6 – 41.5 L/100 km for new type approvals (July 2019) and all sales and registrations (July 2021) for heavy commercial vehicles (depending on vehicle class and weight). Target: reduce fuel consumption by 14 - 16% compared to Stage II.	2018	HDV	Government of China (2018)
	Ambition: charging infrastructure sufficient to meet the needs of more than 20 million NEVs by 2025.	2022	Charging	Government of China (2022)
	Ambition: 60% of expressway service areas to have rapid charging by 2025.	2022	Charging	Government of China (2022)
	Ambition: average electricity consumption of new passenger BEVs ≤ 12.0 kWh/100 km by 2025.	2020	LDV	Government of China (2020)
	Ambition: >80% NEVs in new (or replaced) public fleets (e.g. buses, taxis, delivery vehicles) in pilot zones and key air pollution regions by 2025.	2020	All	Government of China (2020)

	Ambition: 100% electrification of the public fleet stock by 2035.			
	Ambition: 13 million slow charging stations and 0.8 million fast charging stations by 2025. 15 million (cumulative) slow charging stations and 1.46 million (cumulative) fast charging stations by 2035.	2020	Charging	SAE China (2020)
	Ambition: 1 000 battery swap stations and production of more than 100 000 vehicles capable of battery swapping.	2021	Charging	MIIT (2021)
	Subnational level			
	Shanghai ambition: 1.2 million NEV annual production capacity by 2025.	2021	LDV	Government of Shanghai (2021)
	Shanghai target: 96% of all buses and all new coaches to be new energy or clean energy vehicles by 2025.	2022	HDV	Government of Shanghai (2021)
	Tianjin ambition: 25% NEVs in new vehicle sales, and 80% NEVs in public transport, rental, logistics and delivery vehicles by 2025.	2021	Multiple Vehicle Categories	Government of Tianjin (2021)
	Beijing ambition: 10 000 FCEVs on the road by 2025.	2021	LDV	Government of Beijing (2021)
	Chongqing ambition: 40% NEVs in new vehicle sales, reaching more than 500 000 NEVs on the road by 2025.	2021	LDV	Government of Chongqing (2021)
	Guangxi ambition: 80 000 public charging stations and 147 000 private public chargers by 2025.	2022	Charging	Government of Guangxi (2022)

	Guangzhou ambition: 800 000 NEVs on the road, accounting for 20% of all cars by 2025.	2022	Multiple Vehicle Categories	Government of Guangzhou (2022)
	Shaanxi ambition: 102 800 charging stations to meet the demand of 600 000 NEVs by 2025.	2021	Charging	Government of Shaanxi (2021)
	Ningxia ambition: 15% of new vehicle sales to be NEVs and 45% of new buses by 2025.	2021	Multiple Vehicle Categories	Government of Ningxia (2021)
	Guangdong ambition: 100% of new or upgraded buses and 80% of all taxis and delivery vehicles should be NEVs starting by 2021.	2021	Multiple Vehicle Categories	Government of Guangdong (2021)
	Hainan ambition: phase out sales of new diesel and gasoline passenger cars, light commercial vehicles, coaches, and buses by 2030.	2019	Multiple Vehicle Categories	Government of Hainan (2019)
India (EVI member)	**National level**			
	Corporate average fuel economy standard: 4.77 L/100 km (NEDC) in 2022 for passenger LDVs.	2015	LDV	Government of India (2020)
	CO_2 emissions standard: equivalent to corporate average fuel economy of 113 g CO_2/km for passenger LDVs in 2022.	2015	LDV	Government of India (2017)
	Ambition: 30% share of EVs in passenger LDV sales by 2030.	2017	LDV	Government of India (2019)
	Ambition: 2 877 charging stations in 25 states and 1 576 charging stations across 9 expressways and 16 highways.	2021	Charging	Government of India (2021)

	Ambition: charging stations every 40 - 60 km on national highways or 700 charging stations by 2023 covering 35 000 - 40 000 km of national highways.	2021	Charging	India Brand Equity Foundation (2022)
	Subnational level			
	Delhi target: 25% share of BEVs in new vehicle sales by 2024.	2020	Multiple vehicle categories	Government of New Delhi (2020)
	State of Chandigarh ambition: 50% of passenger vehicle sales and 100% of commercial vehicle sales are electric within 5 years.	2022	LDV	Government of Chandigarh (2022)
	State of Haryana ambition: convert 100% of state-owned bus fleet to electric buses by 2029, phase out all fossil fuel based commercial and logistic vehicles in all cities by 2030, and all forms of government vehicles to be converted to electric cars by 2024.	2021	Multiple vehicle categories	Government of Haryana (2021)
	State of Assam ambition: 25% share of BEVs in of passenger LDV sales by 2026.	2021	LDV	Government of Assam (2021)
	State of Maharashtra target: 10% share of BEV sales for all vehicles (two/three wheelers and LDVs), 25% share of EVs in public transport and last-mile delivery vehicles by 2025 in target urban centres.	2021	Multiple vehicle categories	Government of Maharashtra (2021)
	State of Goa: 30% share of BEVs in all vehicle registrations (two/three wheelers and LDVs) by 2030.	2021	Multiple vehicle categories	Government of Goa (2021)
Indonesia	Target: 2 million passenger EVs and 13 million electric motorcycles by 2030.	2020	Multiple vehicles categories	Government of Indonesia (2020)

	Ambition: production of 600 000 EVs and 2.45 million electric two-wheelers by 2030.	2021	Multiple vehicle categories	Government of Indonesia (2021)
	Target: 30 000 charging stations and 67 000 battery swap stations by 2030.	2021	Charging	Government of Indonesia (2021)
	Proposed Ambition: 100% EV cars and 2W sales by 2050.	2021	Multiple vehicle categories	Reuters (2021)
Japan (EVI member)	Fuel economy standard: 25.4 km/L for passenger LDVs by 2030, equivalent to a 32.4% improvement relative to 2016 and includes EVs. Well-to-wheel methodology approach adopted that includes grid electricity energy consumption for EVs.	2019	LDV	Government of Japan (2020)
	Ambition: carbon-neutral manufacturing including production, use and disposal of cars by 2050.	2020	LDV	Government of Japan (2020)
	Target: 20 - 30% share of BEVs and PHEVs, 30 - 40% share of HEVs and 3% share of FCEVs in passenger LDV sales by 2030.	2018	LDV	Government of Japan (2018)
	Ambition: 100% electrified vehicles in passenger LDV sales by 2035.	2020	LDV	Government of Japan (2020)
	Target: 1 200 fuel cell urban bus stock by 2030.	2019	HDV	Government of Japan (2019)
	Fuel economy standard: 6.52 - 7.63 km/L (JC08) by 2025 (depending on vehicle class and weight) for heavy commercial vehicles. Target to reduce fuel consumption by 13.4 - 14.3% relative to 2015 standard.	2019	HDV	Government of Japan (2019)
	Target: 150 000 EV charging points (including 30 000 fast chargers) and 1000 hydrogen refuelling stations by 2030.	2021	Charging	Government of Japan (2021)

Korea	Ambition: production of 81 000 passenger FCEVs by 2022, 100 000 by 2025 and 6.2 million by 2040 (3.3 million for export and 2.9 million for domestic use).	2019	LDV	Government of Korea (2019)
	Target: 1.13 million passenger BEV and 200 000 passenger FCEV stock by 2025.	2020	LDV	Government of Korea (2020)
	Ambition: 80 000 FCEV taxi stock by 2040.	2019	LDV	Government of Korea (2019)
	Ambition: 40 000 FCEV urban bus stock and 30 000 FCEV truck stock by 2040.	2019	HDV	Government of Korea (2019)
	Ambition: 51% share of EVs in new vehicle sales by 2025 and 83% by 2030.	2021	LDV	Government of Korea (2021)
	Ambition: reach total cost of ownership-parity with ICEs by 2025 for EVs and by 2030 for FCEVs.	2021	LDV	Government of Korea (2021)
	Ambition: 430 000 charging stations in residential apartments, 146 000 charging stations in commercial areas and 12 000 fast chargers along highways by 2025.	2021	Charging	Government of Korea (2021)
Malaysia	Ambition: 100% (electrified, CNG, LPG or biofuel-fuelled vehicle) stock for all private transport by 2030 and 40% in public transport (across all modes).	2017	Multiple vehicle categories	Government of Malaysia (2017)
	Ambition: 9 000 alternating current charging stations and 1 000 direct current charging stations by 2025.	2021	Charging	Government of Malaysia (2021)

Nepal	Target: 25% share of EVs in private passenger vehicle sales (including two-wheelers) and 20% in four-wheel (i.e., buses and taxis) public passenger vehicle sales by 2025. Target: 90% share of EVs in private passenger vehicle sales (including two-wheelers) and 60% in four-wheel (i.e., buses and taxis) public passenger vehicle sales by 2030.	2021	Multiple vehicle categories	Government of Nepal (2021)
Pakistan	Ambition: 30% share of EVs in passenger LDV and HDV sales by 2030 and 90% by 2040. Ambition: 50% share of EVs in urban bus sales by 2030 and 90% by 2040.	2019	Multiple vehicle categories	ICCT (2020)
	Ambition: fast charging stations every 10 km^2 in all major cities and every 15 - 30 km on all motorways (convert 3 000 CNG stations to charging stations) in next four years.	2019	Charging	Government of Pakistan (2019)
Singapore	Target: phase out passenger ICE vehicles by 2040.	2020	LDV	Government of Singapore (2020)
	Ambition: 60 000 charging stations by 2030 (40 0000 in public carparks and 20 000 in private premises).	2021	Charging	Government of Singapore (2022)
Sri Lanka	Target: all state-owned vehicles to be electric by 2025 (across all modes).	2017	Multiple vehicle categories	Government of Sri Lanka (2017)
	Target: all passenger LDVs to be electrified by 2040.	2017	LDV	Government of Sri Lanka (2017)

Thailand	Ambition: 1.2 million passenger EV stock by 2036.	2016	LDV	Royal Thai Government (2016)
	Ambition: 100% share of ZEVs in new car sales by 2035. Ambition: 30% share of ZEVs in domestic LDV production by 2030, 50% by 2035. Ambition: 35% share of ZEVs in domestic bus production by 2025, 50% by 2030 and 85% by 2035.	2021	Multiple vehicle categories	Government of Thailand (2021)
	Ambition: production of 250 000 EVs, 3 000 electric buses and 53 000 motorcycles by 2025.	2020	Multiple vehicle categories	UNEP (2020)
	Ambition: 12 000 public fast charging stations by 2030 and 1 450 battery swapping stations for electric motorcycles by 2030.	2021	Charging	EVAT Online (2021)
Central and South America				
Brazil	Ambition: 600 000 EV stock across all modes by 2030.	2019	Multiple vehicle categories	Government of Colombia (2019)
	Proposal: Senate Bill No. 454/2017 aims to ban the sale of fossil fuel-powered cars by 2060.	2018	LDV	Federal Senate (2017)
Chile (EVI member)	Legislation: approval of Chile's first CO_2 and energy efficiency standard for vehicle importers. Standards for LDVs come into effect in 2024. Standards for MDVs and HDVs to be determined.	2020	Multiple vehicle categories	Government of Chile (2021)

	EVs to be included in the efficiency standard for vehicle importers, with ZEV counting as a multiplier (up to three times) to meet fleet energy efficiency performance requirements.			
	Ambition: 40% share of EVs in passenger LDV stock by 2050.	2019	LDV	Government of Chile (2019)
	Ambition: 100% share of ZEVs in light and medium vehicle sales by 2035. Ambition: 100% share of EVs in public transport vehicle sales (buses, taxis and shared taxis) by 2035. Ambition: 100% share of ZEVs in freight transport and intercity bus sales by 2045. Ambition: 100% share of ZEVs in large mobile machinery sales, including extraction trucks and heavy mining equipment by 2035. 100% share of ZEVs in small mobile machinery sales, including construction, agriculture and forestry machinery by 2040.	2021	Multiple vehicle categories	Government of Chile (2021)
	Ambition: 30% zero-emission new truck and bus sales by 2030, 100% by 2040.	2021	M/HDV	CALSTART (2022)
Colombia	Target: 10% share of ZEVs in urban bus sales by 2025 and 100% by 2035.	2019	HDV	Government of Colombia (2019)
Costa Rica	Target: 70% share of ZEVs in bus and taxi sales by 2035, and 100% by 2050.	2018	Multiple vehicle categories	Government of Costa Rica (2020)
	Ambition: 60% share of ZEVs in the LDV (private and institutional) fleet by 2050. Ambition: 100% share of ZEVs in new LDV sales by 2050.	2018	LDV	Government of Costa Rica (2018)

Ecuador	Ambition: 100% of the public transport fleet is electric by 2025.	2019	HDV	Government of Ecuador (2019)
Panama	Ambition: 25 - 40% share of EVs in private vehicle sales by 2030; 10 - 20% of EVS in private vehicle fleet, 15 - 35% of buses; 25 - 50% of public vehicle fleets by 2030.	2019	Multiple vehicle categories	Government of Panama (2019)
Uruguay	Ambition: 30% share of ZEVs in new truck and bus sales by 2030, 100% by 2040.	2021	M/HDV	CALSTART (2022)
Eurasia				
Kazakhstan	Ambition: production of 2 000 electric vehicles of various models, including buses by 2022.	2020	Multiple vehicle categories	Government of Kazakhstan (2020)
Turkey	Ambition: 30% of ZEVs in new truck and bus sales by 2030, 100% by 2040.	2021	M/HDV	CALSTART (2022)
Europe				
European Union	**Supranational**			
	CO_2 emissions standard for new cars: 95 g CO_2/km from 2020.	2019	LDV	European Union (2019)
	Proposed CO_2 emissions standard: 55% emissions reductions for cars and 50% for vans by 2030 (relative to 1990 levels), and 100% reduction in both categories by 2035.	2021	LDV	European Commission (2021) European Parliament (2021)

	In response, the European Parliament Committee on Environment, Public Health and Food Safety (ENVI), proposed more stringent emissions reductions leading up to the 2035 ICE ban of 75% for cars and 70% for vans by 2030, plus a new target to reduce CO_2 emissions by 45% for cars and 40% for vans by 2027. It also has proposed a reduction in CO_2 emissions of 25% for cars and 20% for vans by 2025 (compared with the current legislated reduction target of 15%).			
	CO_2 emissions standards for new heavy commercial vehicles to tighten by 15% by 2025 and 30% by 2030 (reference period: 2019/2020).	2019	HDV	European Union (2019)
	Revision of the Clean Fuels Directive including minimum requirements for aggregate procurement for urban buses (24 - 45% in 2025 and 33 - 65% in 2030), and for trucks (6 - 10% in 2025 and 7 - 15% in 2030) with the share varying across member states.	2019	HDV	European Parliament (2019)
	Target: 13 million passenger ZEV stock by 2025.	2019	LDV	European Green Deal (2019)
	Voluntary ZEV targets: 15% share of car sales by 2025 and 35% by 2030; 15% share of van sales by 2025 and 30% by 2030 by vehicle manufacturers. If met, the CO_2 emissions target can be relaxed for that manufacturer.	2019	LDV	European Commission (2019)
	Ambition: at least 30 million passenger ZEV stock by 2030 and nearly all passenger LDV and heavy commercial vehicle stock by 2050.	2020	Multiple vehicle categories	European Commission (2020)
	Ambition: 1 million publicly accessible charging stations by 2025 and 3 million by 2030.	2020	Charging	European Commission (2020)
	Proposed Alternative Fuels Infrastructure Regulation: a total of at least 1 kW charging power output provided for every light-duty BEV registered in	2021	Charging	European Commission (2021)

	an EU member state, and 0.66 kW charging power output provided for every light-duty PHEV. EV charging stations for LDVs every 60 km along the *core* (to be completed by 2030 consisting of 9 corridors of major long-distance routes focused on cross-border links between Member States) Trans-European Transport Network (TEN-T). They are to have a power output of at least 300 kilowatts (kW) for a charging station with at least one charging point with an individual output of 150 kW by 31 December 2025. Have a power output of at least 600 kW for a charging station with at least two charging points with an individual output of 150 kW by 31 December 2030. EV charging stations for LDVs every 60 km along the *comprehensive* (to be completed by 2050 containing strategically relevant corridors and nodes, the core network is a part of this) TEN-T network. They are to have a power output of at least 300 kW for a charging station with at least one charging point with an individual output of 150 kW by 31 December 2030. Have a power output of at least 300 kW for a charging station with at least one charging point having an individual output of 150 kW by 31 December 2035. EV charging stations for HDVs every 60 km along the *core* TEN-T network. They are to have a power output of at least 1 400 kW for a charging station with at least one charging point with an individual output of 350 kW by 31 December 2025. Have a power output of at least 1 400 kW for a charging pool with at least two charging stations with an individual output of 350 kW by 31 December 2030. EV charging stations for HDVs every 60 km along the *comprehensive* TEN-T network for HDVs. They are to have a power output of at least 1 400 kW for a charging station with at least one charging point with an individual output of 350 kW by 31 December 2030. Have a power output of at least 1 400 kW for a charging station with at least one charging point with an individual output of 350 kW by 31 December 2035.			
	National			

Austria	Ambition: 100% share of ZEVs in new car and two-wheeler sales by 2030. Ambition: 100% share of ZEVs in new bus sales by 2032. Ambition: 100% share of ZEVs in new heavy goods vehicle sales (under 18 tonnes) by 2030 and in new heavy goods vehicle sales (above 18 tonnes) by 2035. Ambition: 100% share of ZEVs in new light commercial vehicle sales by 2030.	2021	Multiple vehicle categories	Government of Austria (2021)
	Ambition: 30% of ZEVs in new truck and bus sales by 2030, 100% by 2040.	2021	M/HDV	CALSTART (2022)
Belgium (EVI member)	Flanders region target: 20% ZEV sales by 2025 and 50% BEV or FCEV sales and 20% PHEV in 2030.	2020	LDV	Flemish Government (2019)
Denmark (EVI member)	Ambition: 1 million passenger ZEVs in LDV stock by 2030.	2020	LDV	Government of Denmark (2020)
	Ambition: end the sale of new petrol and diesel cars from 2030. PHEVs will no longer be sold from 2035. Ambition: 100% share of ZEVs in urban bus procurements by 2025 and 100% ZEV urban bus fleet by 2030.	2018	LDV	Government of Denmark (2018)
	Ambition: 30% of ZEVs in new truck and bus sales by 2030, 100% by 2040.	2021	M/HDV	CALSTART (2022)

Finland (EVI member)	Ambition: 700 000 electric car and 45 000 electric van stock by 2030 (of which at least 50% are BEVs).	2021	LDV	Government of Finland (2021)
	Ambition: 4 600 electric HDV stock by 2030.	2021	HDV	Government of Finland (2021)
	Ambition: 1 public faster charger per 100 BEVs	2021	Charging	Government of Finland (2021)
	Ambition: 30% of ZEVs in new truck and bus sales by 2030, 100% by 2040.	2021	M/HDV	CALSTART (2022)
France (EVI member)	Target: 500 000 passenger PHEVs, 660 000 passenger BEVs and FCEVs, and 170 000 light commercial BEV and FCEV stock by 2023. Target: 1.8 million passenger PHEVs, 3 million passenger BEVs and FCEVs, and 500 000 light commercial BEV and FCEV stock by 2028.	2020	LDV	Government of France (2020)
	Target: 100 000 public EV charging points by 31 December 2023.	2020	Charging	Government of France (2020)
	Ambition: 200 heavy commercial FCEV stock by 2023. Ambition: 800 - 2 200 heavy commercial FCEV stock by 2028.	2018	HDV	Government of France (2019)
	Ambition: domestic production of 2 million electric and hybrid cars by 2030.	2021	LDV	Government of France (2021)
	Target: 7 million public and private EV charging stations by 2030.	2015	Charging	Government of France (2016)
Germany (EVI member)	Ambition: 50 000 EV charging stations (20 000 of which are fast chargers) by 2025.	2021	Charging	Government of Germany (2021)

	Ambition: 50% share of electric urban buses by 2030.	2020	HDV	Hybrid and Electric Vehicle Technology Collaboration Programme (2020)
	Ambition: 15 million EVs on the road by 2030.	2021	LDV	Coalition Agreement (2021)
	Ambition: 1 million EV charging stations by 2030.	2019	Charging	Government of Germany (2019)
Greece (EVI member)	Target: 30% share of EVs in passenger LDV sales by 2030.	2019	LDV	Government of Greece (2019)
Hungary	Target: 1 290 (CNG and electric) urban bus stock by 2029. Only electric buses will be funded as from 2022.	2019	HDV	Government of Hungary (2019)
Iceland	Target: ban sales of passenger petrol and diesel LDVs by 2030.	2018	LDV	Government of Iceland (2018)
Ireland	Target: 950 000 electric passenger LDV stock by 2030.	2019	LDV	Government of Ireland (2019)
	Target: 100% share of EVs in passenger LDV sales by 2030.	2019	LDV	Government of Ireland (2019)
	Target: ban sales of diesel-only urban buses from 2019.	2018	HDV	Government of Ireland (2018)
Italy	Target: 6 million passenger electric LDV stock (including 4 million BEVs) by 2030.	2019	LDV	Government of Italy (2019)
	Target: 21 400 fast and ultra-fast charging stations by the end of 2025 (7 500 on motorways or extra-urban areas, 13 755 in urban centres and 100 experimental chargers with energy storage technology).	2021	Charging	Government of Italy (2021)

	Target: electric cars to account for 6% of gross final energy consumption to come from electric cars in 2030.	2019	LDV	Government of Italy (2019)
	Proposal: mandatory purchase by public bodies of 30% share of alternative fuel vehicles (ZEV and methane vehicles) by 2022, 50% by 2025 and 85% by 2030 across all modes.	2019	Multiple vehicle categories	Government of Italy (2019)
Luxembourg	Ambition: 30% of ZEVs in new truck and bus sales by 2030, 100% by 2040.	2021	HDV	CALSTART (2022)
Netherlands (EVI member)	Target: 15 000 stock of passenger FCEVs by 2025 and 300 000 by 2030. Target: 3 000 heavy-duty FCEVs by 2025. Target: 50% share of ZEVs in taxi stock by 2025. Target: all vehicles on the road should be ZEVs by 2050.	2019	Multiple vehicle categories	Government of Netherlands (2019)
	Ambition: 100% share of ZEVs in passenger LDV sales by 2030.	2017	LDV	Government of Netherlands (2019)
	Zero emission transport zones to be introduced in 26 cities by 2025.	2021	Multiple vehicle categories	Government of Netherlands (2021)
	Ambition: charging infrastructure to meet the needs of 1.9 million BEVs on the road by 2030.	2019	Charging	Government of Netherlands (2019)
	Ambition: 30% of ZEVs in new truck and bus sales by 2030, 100% by 2040.	2021	HDV	CALSTART (2022)

	Ambition: 100% share of ZEVs in sales of vehicles in the cleaning industry (i.e., garbage trucks, sweepers)] by 2030.	2020	Multiple vehicle categories	Government of Netherlands (2020)
Norway (EVI member)	Target: 100% share of ZEVs in passenger LDV sales by 2025.	2016	LDV	Government of Norway (2016)
	Target: 100% share of ZEVs (or biogas) in urban bus sales by 2025. Target: 75% share of ZEVs in long-distance bus sales, 50% ZEVs in truck sales and 100% share of ZEVs in heavy van sales by 2030.	2016	HDV	Government of Norway (2016)
	Ambition: 30% of ZEVs in new truck and bus sales by 2030, 100% by 2040.	2021	M/HDV	CALSTART (2022)
Poland (EVI member)	Target: All modes of public transport to be EVs by 2030 in cities of over 100 000 residents.	2021	Multiple vehicle categories	Government of Poland (2021)
	Ambition: 1 million EVs in passenger LDV stock by 2025.	2016	LDV	Government of Poland (2016)
	Proposal: 50% share of EVs in public institution fleets by 2025.	2018	Multiple vehicle categories	Government of Poland (2018)
Portugal (EVI member)	Target: more than 30% share of EVs in passenger LDV sales by 2030 and 100% by 2050.	2019	LDV	Government of Portugal (2019)
Scotland	Ambition: 30% of ZEVs in new truck and bus sales by 2030, 100% by 2040.	2021	M/HDV	CALSTART (2022)
Slovenia	Target: no new sales of passenger LDVs with CO_2 emissions above 50 g CO_2/km in 2030.	2017	LDV	Republic of Slovenia (2017)

Spain	Target: 5 million electric LDVs, buses and two/three-wheelers in 2030.	2020	Multiple vehicle categories	Government of Spain (2020)
	Target: 500 000 EV charging stations in 2030.	2020	Charging	Government of Spain (2020)
Sweden (EVI member)	Proposed: ban on new petrol or diesel cars sales after 2030.	2019	LDV	Government of Sweden (2019)
	Ambition: 2 400 km of electrified road by 2037. An electric road is supplemented by an electrical installation intended for the transmission of electrical energy to vehicles while driving	2020	Charging	Government of Sweden (2020)
Switzerland	Ambition: 30% of ZEVs in new truck and bus sales by 2030, 100% by 2040.	2021	HDV	CALSTART (2022)
United Kingdom (EVI member)	Ambition: phase out petrol and diesel passenger LDV sales by 2030. All sales of passenger LDVs to be BEVs or FCEVs by 2035.	2020	LDV	Government of the United Kingdom (2021)
	Ambition: government car and van fleet to be 100% ZEV by 2027. Proposal: introduce a new road vehicle CO_2 emissions regulatory regime in 2024.	2021	LDV	Government of the United Kingdom (2021)
	Ambition: 300 000 public charging stations by 2030.	2022	Charging	Government of the United Kingdom (2022)
	Proposal: introduce a ZEV mandate to set targets for a percentage of manufacturers' new car and van sales to be ZEVs each year from 2024.	2021	LDV	Government of the United Kingdom (2021)

	Ambition: 30% of ZEVs in new truck and bus sales by 2030, 100% by 2040.	2021	M/HDV	CALSTART (2022)
	Ambition: support the uptake of at least an additional 4 000 ZEV buses.	2021	HDV	Government of the United Kingdom (2021)
	Ambition: phase out the sale of new small petrol and diesel trucks by 2035 and larger trucks (>26 tonnes) by 2040.	2021	HDV	Government of the United Kingdom (2021)
Middle East				
United Arab Emirates	Proposal: 20% of government vehicles procured are electrified in 2025 and 30% in 2030.	2020	Multiple vehicle categories	Government of Dubai (2020)
Qatar	Proposal: 10% of total cars on the road is electric by 2030.	2020	Multiple Vehicle Categories	Marhaba Information Guide (2020)
North America				
Canada (EVI member)	**National level**			
	Target: 20% ZEV LDV sales by 2026, 60% by 2030 and 100% by 2035.	2021	LDV	Government of Canada (2021)
	Target: 35% ZEV M/HDV sales by 2030, 100% by 2040 (for a subset of vehicle types based on feasibility).	2022	M/HDV	Government of Canada (2022)
	Target: add 50 000 charging and hydrogen stations to the charging network.	2021	Charging	Government of Canada (2021)

	Ambition: 30% of ZEVs in new truck and bus sales by 2030, 100% by 2040.	2021	M/HDV	CALSTART (2022)
	Legislation: standards to reduce GHG emissions from LDVs by 1.5% per year from model year (MY 2021/2022; 10% for MY 2022/2023; 5% for MY 2023/2024 and 6.6% for MY 2025/2026. (These standards align with those in the United States).	2021	LDV	U.S. Environmental Protection Agency (2021)
	Corporate Average Fuel Economy (CAFE) standard: improve the fleet average fuel economy of LDVs by 1.5% for MY 2022/2023, 8% for MY 2024/2025 and by 10% for MY 2026. (These align with the CAFE standards in the United States).	2021	LDV	NHTSA (2021)
	Legislation: standard to reduce CO_2 emissions from HDVs by 5-27% in 2027 (depending on vehicle category and weight) relative to 2017. (This aligns with the Phase 2 standard in the United States.) The Phase 2 CO_2 emission standard is 432 - 627 g CO_2 per brake horsepower-hour for tractors, vocational vehicles and spark ignition engines, and 48.3 - 413 g CO_2/ton-mile for other heavy commercial vehicles by 2027. Proposed changes to MY 2027 would result in a more stringent standard, reducing CO2 emissions by an additional 1.5% compared to the original standard in 2027 for vocational vehicles and day cab tractors and to create new CO2 emissions standard for MY 2030.	2022	HDV	U.S. Environmental Protection Agency (2022)
	Ambition: purchase 5 000 ZEV public transit and school buses in the period to 2026.	2021	HDV	Government of Canada (2021)

	Subnational level			
	Province of British Columbia legislation: Zero-Emission Vehicle Act requires 26% share of ZEVs in passenger LDV sales by 2025, 90% by 2030 and 100% by 2035.	2021	LDV	Government of British Colombia (2021)
	Province of British Columbia: Low Carbon Fuel Standard sets annual carbon intensity (CI) targets. Transport fuel suppliers generate credits for fuels below the CI target (including electricity and hydrogen). By 2030 the fuel pool supplied is to have a 20% lower CI than in 2010.	2019	LDV	Government of British Colombia (2019)
	Province of British Columbia: 10 000 public charging stations by 2030.	2021	Charging	Government of British Colombia (2021)
	Province of Quebec: Zero-Emission Vehicle Standard requires automakers to acquire credits through the sale of ZEV passenger LDVs. An increasing percentage of credits must be earned from ZEVs from 6% in 2020 to 16% in 2025.	2019	LDV	Government of Quebec (2019)
	Province of Quebec proposal: 100% share of ZEVs in passenger vehicle sales by 2035.	2021	LDV	Government of Quebec (2021)
	Province of Quebec: 100% share of EV public transport bus sales by 2025. 55% of city buses and 65% of school buses are electrified by 2030. 100% share of government cars, SUVs, vans and minivans and 25% of pickup trucks are electrified by 2030. 40% share of taxi stock is electric by 2030.	2020	Multiple vehicle categories	Government of Quebec (2020)
	National level			

United States (EVI member)				
	Legislation: standards to reduce GHG emissions from LDVs by 1.5% per year from MY 2021/2022, 10% by MY 2022/2023, 5% by MY 2023/2024 and 6.6% by MY 2025/2026.	2021	LDV	U.S. Environmental Protection Agency (2021)
	Corporate Average Fuel Economy (CAFE) standard: improve the fleet average fuel economy of LDVs by 1.5% for MY 2022/2023, 8% for MY 2024/2025 and by 10% for MY 2026.	2021	LDV	NHTSA (2021)
	Ambition: 100% share of ZEVs in federal government vehicle procurement by 2035, including 100% share of ZEVs in light-duty vehicle acquisitions by 2027.	2021	Multiple vehicle categories	The White House (2021)
	Phase 2 CO_2 emission standard: 432-627 g CO2/bhp-hr (tractors, vocational vehicles and spark ignition engines) and 48.3-413 g CO2/tonne-mile (all other) for various heavy commercial vehicles, which reduces CO2 emissions by 5-27% in 2027 (depending on vehicle category and weight) compared to 2017. Proposed changes to MY 2027 would result in a more stringent standard, reducing CO_2 emissions by an additional 1.5% compared to the original standard in 2027 for vocational vehicles and day cab tractors and to create new CO_2 emissions standard for MY 2030.	2022	HDV	U.S. Environmental Protection Agency (2022)
	Target: 500 000 charging stations.	2021	Charging	The White House (2021)
	Ambition: 50% share of EVs in passenger LDV sales by 2030.	2021	LDV	The White House (2021)
	Subnational level			
	ZEV mandate: 22% ZEV credit sales in passenger LDVs by 2025 in ten states. (California, Connecticut, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Rhode Island and Vermont.)	2016	LDV	State of California (2021)
	Ambition: 30% share of ZEV in all new medium- and heavy-duty	2020	HDV	Bipartisan Clean Trucks Agreement (2020)

	commercial vehicle sales by 2030 and 100% by 2050 in 15 states and the District of Columbia. (California, Colorado, Connecticut, Hawaii, Maine, Maryland, Massachusetts, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont and Washington.)			
	Target: 3.3 million ZEVs in LDV stock (combined) in eight US states by 2025. (California, Connecticut, Maryland, Massachusetts, New York, Oregon, Rhode Island and Vermont.)	2014	LDV	ZEV Program (2014)
	State of California: Target of 1.5 million ZEV stock (LDV, MDV, HDV) by 2025 and 5 million by 2030.	2012	Multiple vehicle categories	State of California (2018)
	State of California: Advanced Clean Trucks Rules requires 40 - 75% of sales by manufacturers (varied by vehicle class and weight) to be ZEV by 2035 (increasing targets from 2024).	2020	HDV	California Air Resources Board (2020)
	State of Oregon: Clean Truck Rules requires 40-75% of sales by manufacturers (varied by vehicle class and weight) to be ZEV by 2035 (increasing targets from implementation beginning in MY 2025).	2021	HDV	State of Oregon (2021)
	State of Washington: Clean Truck Rules requires 40-75% of sales by manufacturers (varied by vehicle class and weight) to be ZEV by 2035 (increasing targets from implementation beginning in MY 2025). State of Washington ambition: 100% EVs in LDV sales by 2035, and 100% EVs in HDV sales by 2040.	2021	Multiple Vehicle Categories	State of Washington (2021)
	State of New Jersey: Advanced Clean Truck and Fleet Reporting Rules requires 40-75% of sales by manufacturers (varied by vehicle class and weight) to be ZEV by 2035 (increasing targets from implementation beginning in MY 2025).	2021	HDV	State of New Jersey (2021)

	State of California: Low Carbon Fuel Standard sets annual carbon intensity targets. Transport fuel suppliers generate credits for fuels below the CI target (including electricity and hydrogen). The aim is to reduce the CI of the transportation fuel pool at least 20% by 2030 relative to 2010.	2009	Multiple vehicle categories	State of California (2021)
	State of New York: Advanced Clean Truck Rule requires 40-75% of sales by manufacturers to be ZEVs (varied by vehicle class and weight) by 2035 (increasing targets from implementation beginning in MY 2025). State of New York target: 100% share of ZEVs in passenger LDV sales by 2035 and 100% share of ZEVs in medium- and heavy-duty vehicle sales by 2045.	2021	Multiple Vehicles Categories	New York State Senate (2021)
	State of California target: 100% ZEV transit bus acquisitions by 2029, with a goal of full transition by 2040.	2019	HDV	California Air Resources Board (2019)
	State of California legislation: 100% share of ZEVs in passenger vehicles sales by 2035. 100% share of ZEVs in medium- and heavy-duty vehicle sales by 2045, for all operations where feasible and by 2035 for drayage trucks (i.e., operating in ports).	2020	Multiple vehicle categories	State of California (2020)
	State of California target: 250 000 charging stations by 2025.	2018	Charging	State of California (2018)
	State of Massachusetts ambition: 100% share of ZEVs in passenger LDV sales by 2035.	2020	LDV	State of Massachusetts (2020)
	State of Massachusetts: Advanced Clean Truck and Fleet Reporting Rules requires 40-75% of sales by manufacturers (varied by vehicle class and weight) to be ZEV by 2035 (increasing targets from implementation beginning in MY 2025)	2021	HDV	State of Massachusetts (2021)

Oceania

Australia	Ambition: deploy EV charging stations in over 400 businesses, 50 000 households as well as access to 1 000 public fast charging stations.	2021	Charging	Government of Australia (2021)
New Zealand (EVI member)	Target: 64 000 EV stock in passenger cars by 2021.	2016	LDV	Government of New Zealand (2016)
	CO_2 emissions standard for imported passenger LDVs: starting in 2023, targets reduce approximately 60% by 2027 with a 2027 target of 63 gCO_2/km (passenger vehicles) and 87 g CO_2/km (commercial vehicles) (WLTP).	2022	LDV	Government of New Zealand (2021)
	Target: 100% share of ZEVs in urban bus sales by 2025 and 100% stock by 2035.	2021	HDV	Government of New Zealand (2021)
	Ambition: nationwide coverage of fast/rapid direct current charging stations every 75km across state highway networks.	2017	Charging	Government of New Zealand (2017)
	Ambition: 30% of ZEVs in new truck and bus sales by 2030, 100% by 2040.	2021	M/HDV	CALSTART (2022)

Other Countries

Israel	Ambition: 5% share of EVs in passenger LDV sales by 2022, 23% by 2025, 61% by 2028 and 100% by 2030.	2018	LDV	Government of Israel (2018)
	Ambition: 1.4 million private vehicles sold will be electric by 2030.	2018	Multiple vehicle categories	Government of Israel (2018)
	Ambition: 100% of new city buses brought into service will be electric by 2025.	2020	HDV	Government of Israel (2020)