CALIFORNIA: TAKING ACTION ON ZERO EMISSION VEHICLES

California has a long history of strong leadership in climate action and the roll-out of zero emission vehicles (ZEVs).

The government has set a target to reach 100% ZEV sales for passenger cars and trucks and implemented ZEV standards for manufacturers. These are ambitious steps towards the decarbonisation of the transport system. The government is supporting ZEV uptake through a strong regulatory environment and investment in infrastructure improvements.

- **ZEVs on the road:** 763,816 (cumulative sales, Q3 2020)
- **EV charging plugs:** 67,343 (and 44 hydrogen stations)
- **Country:** United States
- **Area:** 163,696 miles² (423,970 km²)
- **Population:** 39.51 million (2019)
- **GDP:** $3.2 trillion (2019-Q4)
- **Total vehicles registered:** 28.5 million light-duty vehicles (2019)

**KEY POLICIES**

- **Incentives:** $1,500 base incentive on the purchase or lease of a new zero emission or plug-in hybrid light-duty vehicle. Some incentive programs go up to $7,000. Rebates are also available from electric utility companies to customers driving plug-in electric vehicles (PEVs).

- **Emissions standards:** The Advanced Clean Cars regulations include increasingly stringent standards for criteria pollutants and greenhouse gases emitted by new passenger vehicles and light-duty trucks.

**Manufacturing:** To support the growth of ZEV-related industries and meet increasing demand, automakers must produce a number of ZEVs and plug-in hybrids each year based on the total number of cars sold in California.

**Fuelling:** “Time-of-use” energy rates encourage charging during “off-peak” hours and help minimise the impacts on the grid. Plan for 200 hydrogen fuelling stations by 2025.
GHG EMISSIONS TARGETS

California emitted 425.3 million metric tons of carbon dioxide equivalent (MMTCO2e) in 2018. The state has set goals to reduce emissions below 1990 levels:

- **40%** reduction by **2030**
- **Carbon neutrality** by **2045**

41% of California’s greenhouse gas emissions (2018) are from transport.

89% of transport emissions are from on-road vehicles.

ZEV TARGETS

- **250,000** EV charging stations and **200** hydrogen stations by **2025**
- **100%** ZEV sales for all passenger and off-road vehicles by **2035**
- **100%** ZEV sales for on-road medium and heavy-duty vehicles by **2045**

KEY OUTCOMES

- **ZEV market**: Around 50% of ZEV sales in the US happen in California. ZEVs were California’s largest export in the 2nd half of 2020.
- **ZEV annual sales**: 105,999 EVs sold in 2020 (Q1-Q3), close to the 147,347 sold in 2019.
- **Increasing ZEV uptake**: 63% increase in EV sales between 2015 and 2020 (Q1-Q3), cumulative sales from 2011-2020 were 763,816.
- **Job creation**: The development of the ZEV industry has contributed to the creation of 275,600 new jobs.