

FUTURE of LEAD BATTERIES for AUTOMOTIVE APPLICATION

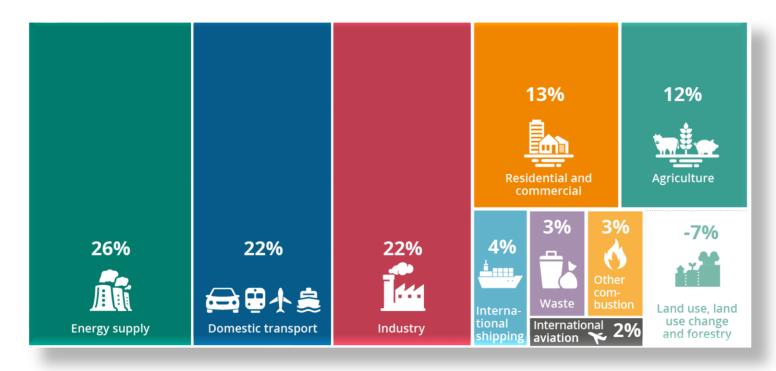
ELBC Milan/Italy 2024





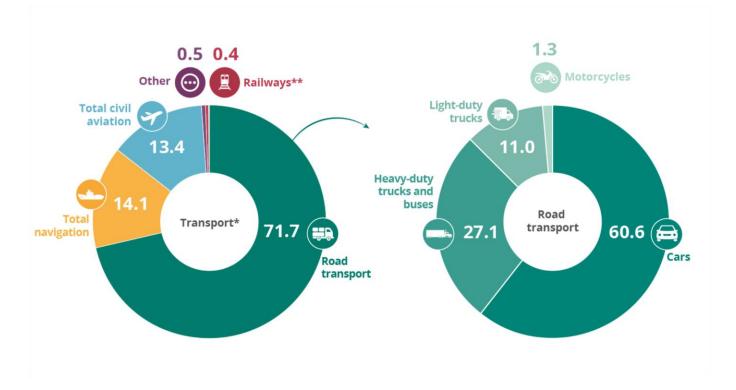
Sources of Greenhouse Gas Emissions in the EU





Greenhouse Gas Emissions from Transport in the EU



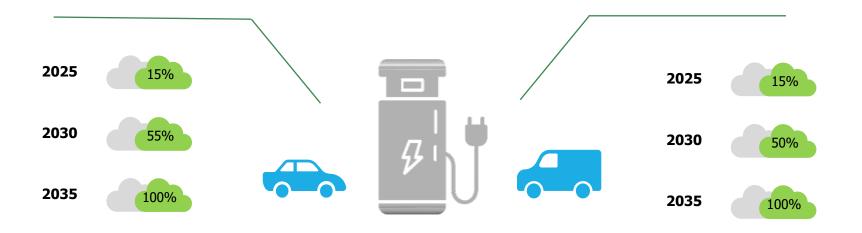


CO₂ Reduction Targets in EU



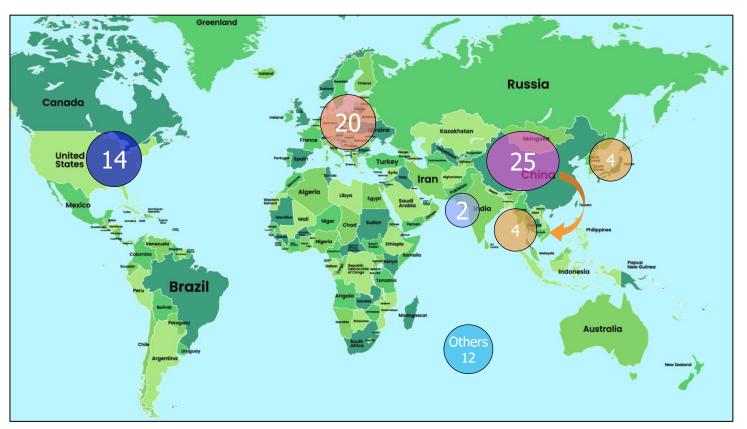
CO₂ Reduction Target for Passenger Car(%)

CO₂ Reduction Target for Light Commercial Vehicle (%)



2035 xEV New Vehicle Number

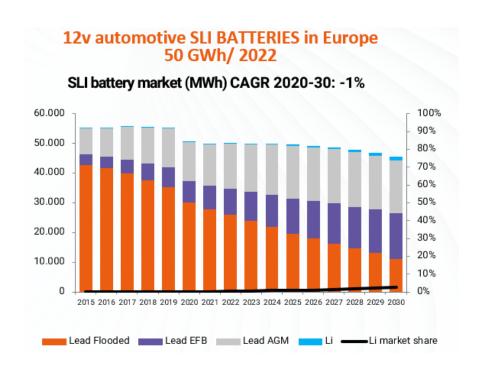


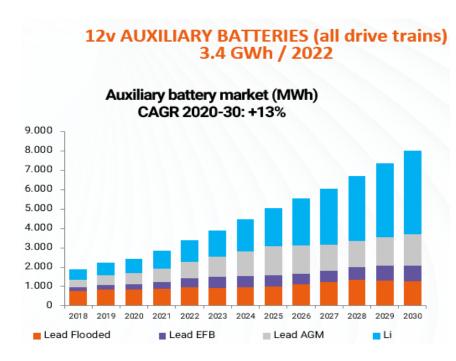


The total xEV market is expected to grow, reaching 80 million units by 2035

12V SLI and Auxiliary Battery Market in Europe



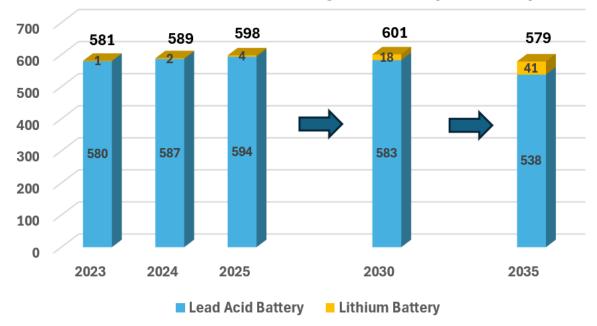




Global Automotive Battery Demand Forecast for 12V Systems



Estimated demand for 4-wheel drive starting and auxiliary batteries (million units)



- Electric vehicles often use lead-acid batteries as auxiliary batteries, so it's unlikely that demand for lead-acid batteries will decrease rapidly.
- In addition to the electrification of vehicles, increases or decreases in battery demand will also depend on factors such as population (number of people with driver's licenses), each country's infrastructure, and policies.

