SOLVAY
Progress Beyond

COP26
WHY DOES CLEAN MOBILITY MATTER?

Over 130 countries are contemplating or have already committed to reducing emissions to net zero by mid-century. Meanwhile, COP26 has pinpointed Clean Mobility as a key driver to achieve this climate-neutral target. **Let's find out why.**

WHAT IS CLEAN MOBILITY?

Clean mobility spans all modes of transportation that use **alternative fuels** or **advanced technology** to reduce greenhouse gas emissions. This can include plug-in hybrid and electric vehicles, or hydrogen, biofuel, natural gas, ethanol, and even propane-powered vehicles.

THE NEED FOR CLEAN MOBILITY

At **COP26**, countries will be asked to present ambitious targets to achieve a climate-neutral society by 2050 by addressing:

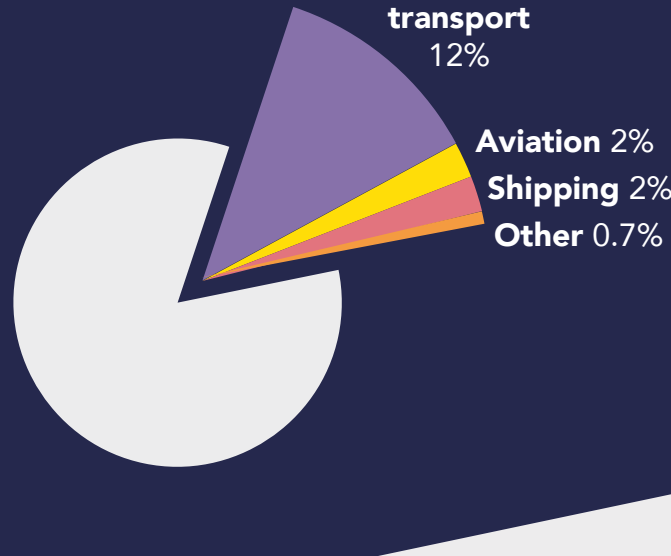Phasing out **coal**

Curtailing **deforestation**

Encouraging investment in **renewables**

Speeding up the transition to **electric vehicles**

DID YOU KNOW?

Transportation currently accounts for **16%** of global greenhouse gas emissions

Road transport 12%

Aviation 2% Shipping 2% Other 0.7%

'STOP' CO₂

THE MARCH FOR CLEAN MOBILITY

To **accelerate the switch to electric vehicles**, several forward-looking nations have introduced **green stimulus packages** that include the automotive industry's transition to electric and hybrid transportation as a key component to revive their economies.

This is where Solvay's contribution particularly stands out.

Key figures

50% of vehicles in global production will be electric or hybrid by 2030

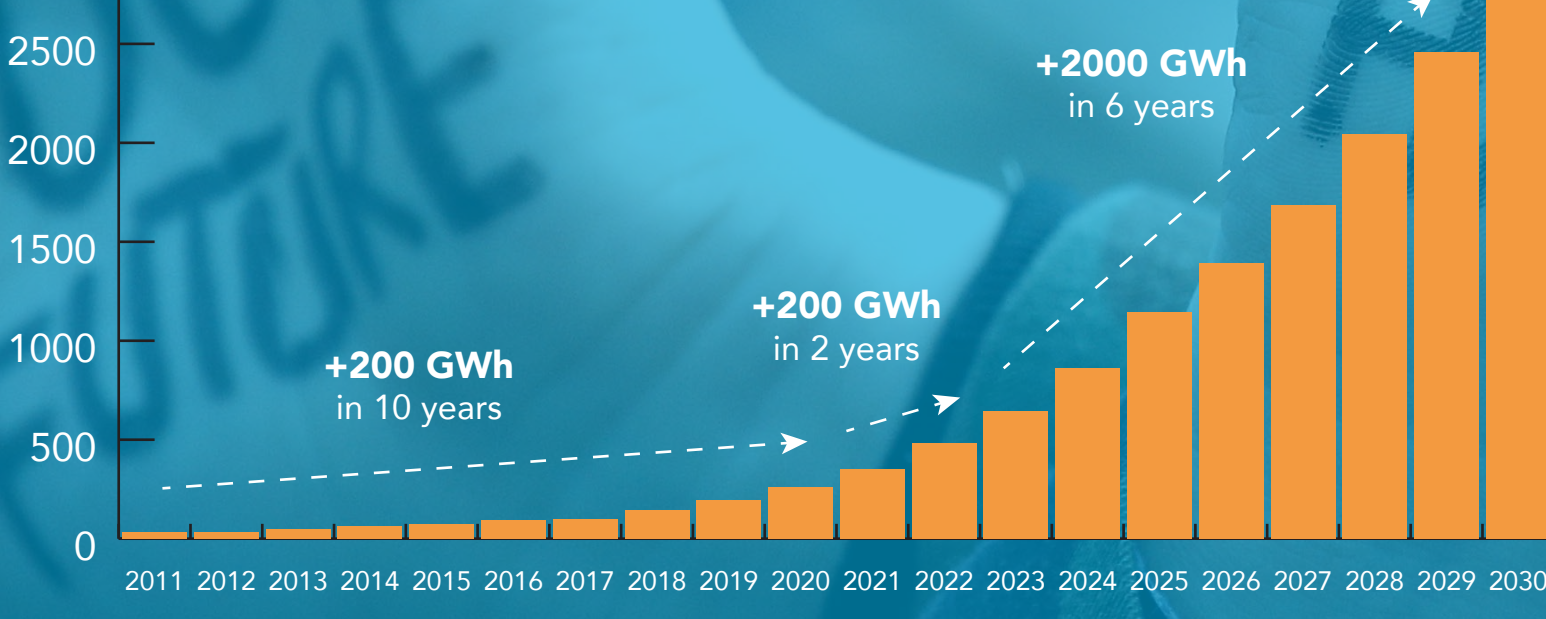**25%** CAGR growth in batteries expected between 2018 and 2030

170 million will be the global passenger electrical vehicles fleet on the road by 2030

1.5Gt CO₂ per year expected global CO₂ emissions reduction enabled by electric vehicles by 2050, equivalent to Russia's current emissions

LI-ION BATTERY MARKET DEMAND FORECASTS

+200 GWh in 10 years

+200 GWh in 2 years

+2000 GWh in 6 years

2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030

THE CHALLENGES FOR CLEAN MOBILITY

With the positive message surrounding clean mobility, we tend to forget that the concept poses challenges for **Original Equipment Manufacturers (OEM)** wanting to make it affordable for consumers:

DID YOU KNOW?

€600m each year
What the EU could lose each year without full-value end-of-life battery metals recovery

18x more lithium
5x more cobalt
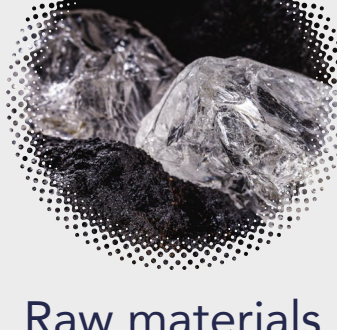What the EU will need to manufacture enough EV batteries and energy storage systems by 2030

Scaling up infrastructure

Reducing vehicle mass and rolling resistance

Raw materials availability

More efficient recycling process

RECY

Chemistry and scientific innovation are key to providing solutions to OEM's challenges, promoting clean mobility and creating a closed-loop process for the EV batteries of the future.

Solvay is uniquely positioned to provide solutions in clean mobility, now and in the future.

Discover how

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