

Decarbonising the transport sector

141 governments have now ratified the Paris Agreement which set the global target to reduce greenhouse gas emissions and keep global temperature rise below 2°C.

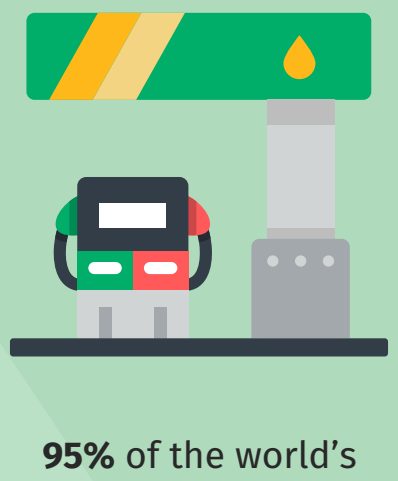
Transport represents almost **1/4** of global greenhouse gas emissions and is the main cause of air pollution in cities. Decarbonising transport is therefore instrumental in achieving the commitments set out by the Paris Agreement.



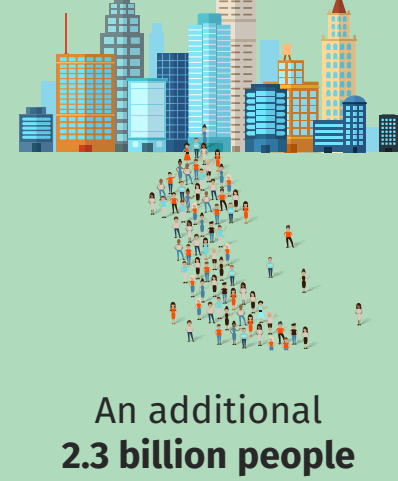
The challenge



The transport sector accounts for **23%** of global energy-related GHG emissions



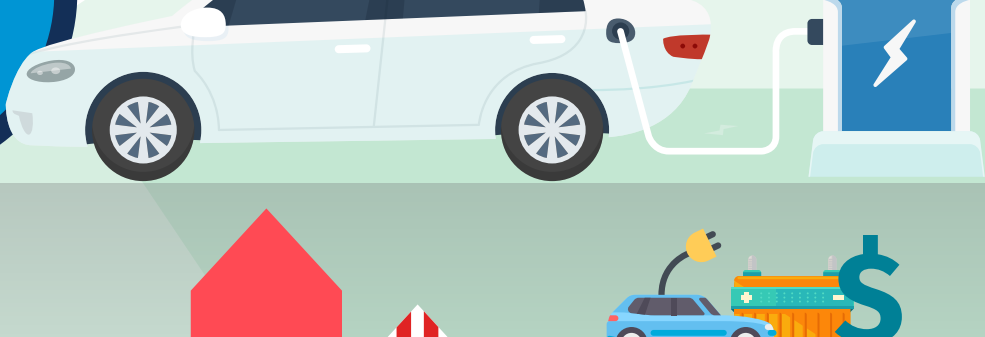
95% of the world's transportation energy comes from petroleum-based fuels, largely gasoline and diesel



An additional **2.3 billion people** are expected to live in cities by 2050, increasing pressure on urban transport systems

Solutions

EVs



+42%
Worldwide plug-in vehicle sales in 2016 were 773,600 units - **42% higher than for 2015**

China led the EV market in 2015, overtaking the U.S. for the first time

The total cost of ownership of EV will fall below those with internal combustion engines by 2022

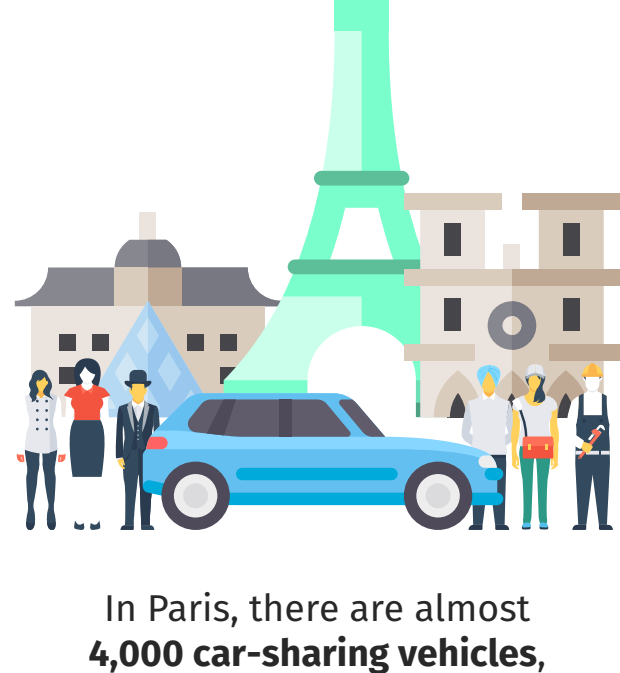
According to the BNEF, **35%** of global new car sales - **41 million a year** - will be EVs in 2040

Transport for London is investing **£18 million in EV infrastructure** between now and 2020

Beijing will replace its **67,000 petrol-powered taxis** with EVs

Car sharing

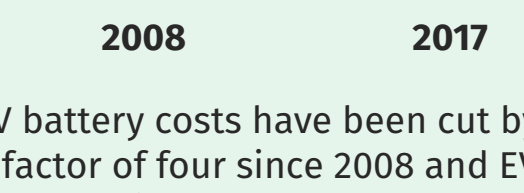
In 2016, car sharing operations could be found in **33 countries** on **five continents**, with approximately **4.8 million members**



In Paris, there are almost **4,000 car-sharing vehicles**, providing **16,000 rentals a day**, with more than **100,000 annual subscribers** to carpool services

Innovations

EV Batteries

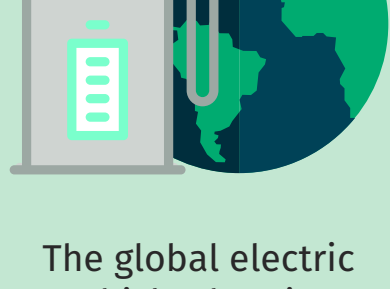


EV battery costs have been cut by a factor of four since 2008 and EV battery prices could be lower than \$100 per kilowatt-hour by 2020

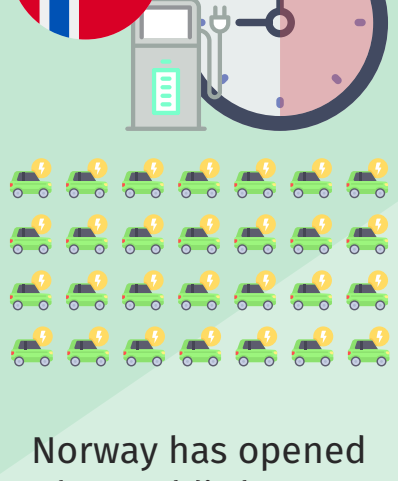


Recent carmaker announcements suggest **EV ranges will soon be exceeding 300km**

EV Chargers



The global electric vehicle charging stations market is on track to reach approximately \$28.2 billion by 2025

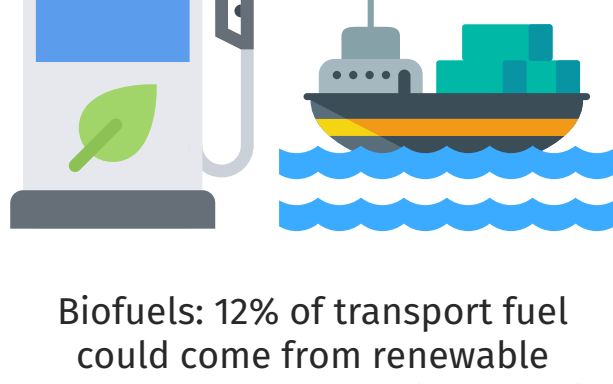


Norway has opened the world's largest fast-charging station, which can charge up to 28 vehicles in about 30 minutes

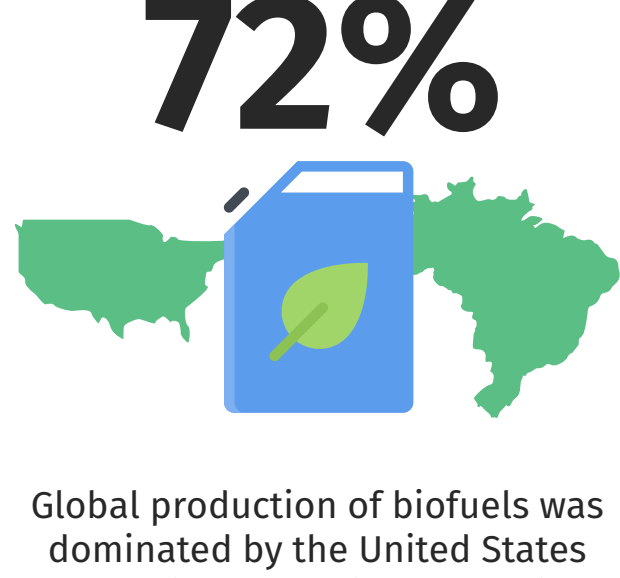


Nissan and BMW are working together to set up public DC fast charging facilities at 120 locations across 19 states in the US

Biofuels



Biofuels: 12% of transport fuel could come from renewable sources by 2030, especially for air travel and shipping



Global production of biofuels was dominated by the United States and Brazil - producing a combined total of 72% - followed by Germany, Argentina and Indonesia

Join us at the Sustainable Innovation Forum at COP23 to hear more on decarbonising transport solutions from world-leading speakers...