



CLIMATE CLUB

ELECTRIC VEHICLES

1. Cleaner Air & Lower Emissions

- EVs produce zero tailpipe emissions, eliminating CO₂, NO_x, particulate matter, and other harmful pollutants. This significantly improves urban air quality and supports public health.
- On a yearly basis, a single EV can reduce around 1.5 million grams of CO₂ emissions—equivalent to four round-trip flights from London to Barcelona.

2. High Energy Efficiency

- EVs convert about 60–80% of energy from the grid into motion, compared to just 20% for petrol or diesel vehicles.
- Their efficiency leads to lower energy consumption and a reduced ecological footprint.

3. Support for Renewable Energy

- Charging EVs with renewable sources like solar or wind further reduces the environmental impact.
- EVs also support grid stability through vehicle-to-home (V2H) and energy storage applications using recycled batteries.

4. Reduced Noise & Brake Pollution

- The near-silent operation of EVs reduces noise pollution, creating quieter, more pleasant urban environments.
- Regenerative braking reduces brake usage and particulate emissions, offering cleaner air even beyond vehicle exhaust.

5. Lifecycle Environmental Advantages

- While EV production—especially batteries—can be more energy-intensive than conventional cars, lifetime emissions are still lower due to cleaner operation and ongoing improvements in production and recycling.
- Advances in battery recycling and ethical sourcing reduce environmental and social costs, enhancing EV sustainability further.

6. Health Improvements & Societal Benefits

- Reduced air pollution from EVs correlates with fewer cases of asthma, respiratory illnesses, and associated healthcare burdens.
- Cities with high EV adoption benefit from cleaner, quieter, and healthier communities.