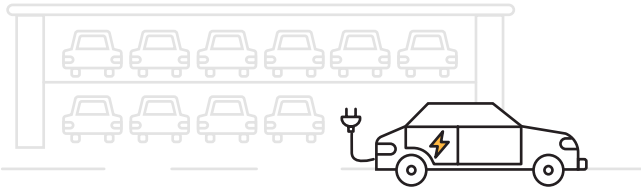


EV Factsheet 2022

iea.org



Number of electric cars on the road in 2021



16.5 million electric cars

Of which 6.6 million sold in 2021
(9% of global car sales)



7.8 million



5.5 million

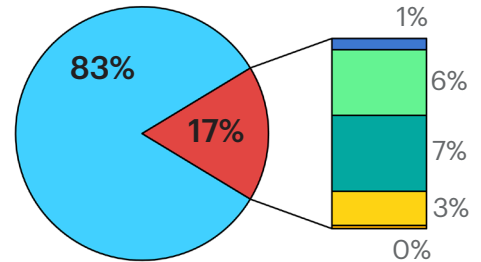


2 million

Electric cars on the road in 2021

Source: IEA, [GEVO 2022](#)

Global CO₂ emissions from fuel combustion, 2020



Other sectors

Road transport

Africa

Americas

Asia

Europe

Oceania

Source: IEA, [World CO2 emissions database](#)

Bestseller electric cars' battery capacity and range



China



India



South Africa



Chile



Indonesia



European Union



United States



9.2 kWh

30 kWh

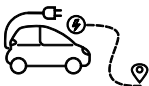
32.6 kWh

40.4 kWh

67.5 kWh

60 kWh

82 kWh



94 km

298 km

215 km

311 km

484 km

493 km

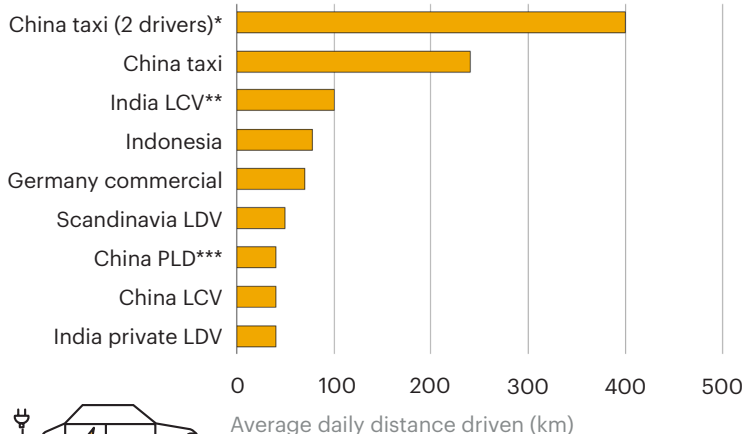
514 km

Note: These characteristics belong to the bestseller electric car in the year 2021 in the respective region or country. The range values are based on the [World-wide Harmonised Light Vehicles Test Procedure](#) (WLTP). Ranges can vary consequently depending on vehicle characteristics (weight, aerodynamics, etc.) and external parameters (temperature, driving style etc.).

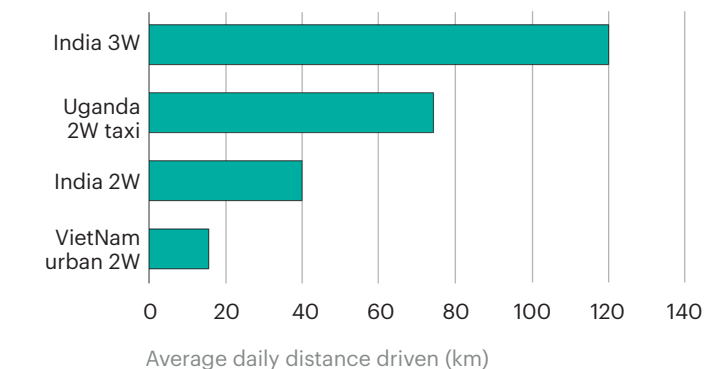
Source: IEA compilation of sources as detailed in the references

Average daily distances driven (km)

Light duty vehicles (LDV)



2/3 wheelers



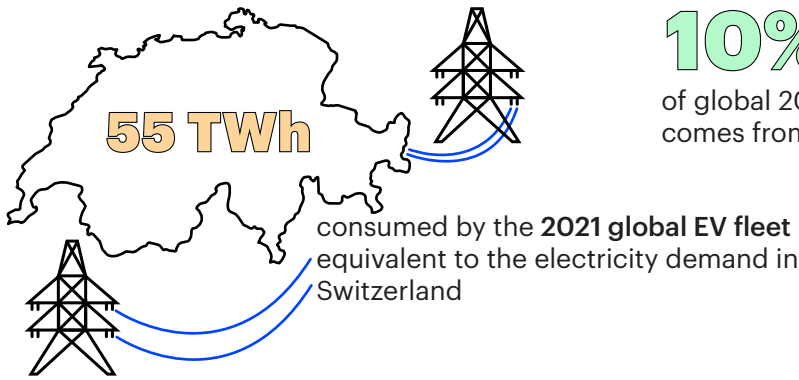
Note: *The taxi is shared by two drivers and operates all day long; **LCV - Light commercial vehicle; ***PLD - Private light duty vehicle.

Source: IEA compilation of sources as detailed in the references.

Energy system integration

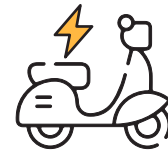


Electricity demand from global EV fleets



10%

of global 2021 EV electricity demand comes from **China's 2/3 wheelers**



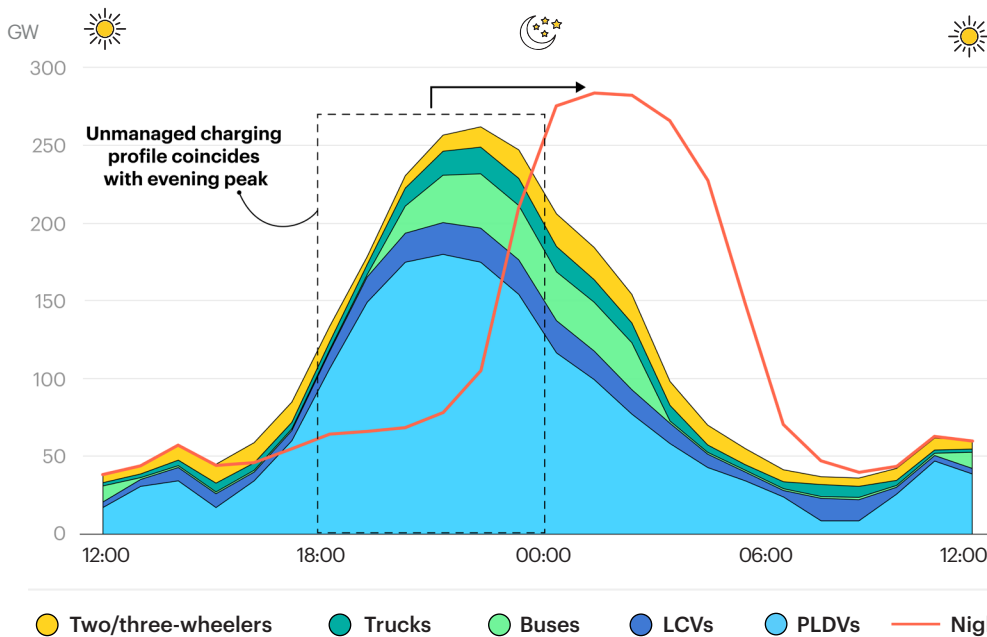
By 2030, EV electricity demand accounts for at least



2% of global final electricity consumption

Source: IEA, [GEVO 2022](#)

Benefits from managed charging



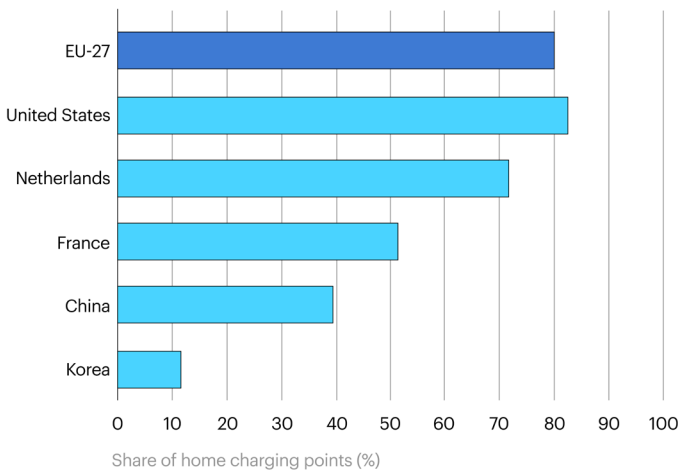
By 2030 managed charging could provide up to:

- 50 GW load shifted away from congested periods through workplace charging
- 110 GW avoided flexible generation capacity through shifting charging to late night
- 70 GW of peak reduction through smart charging (V1G)

Source: IEA, [GEVO 2020](#)

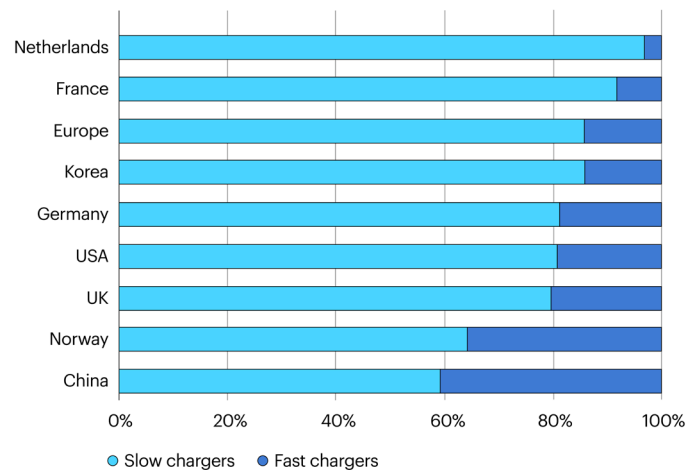
Charging electric vehicles

What is the share of home charge points?



Source: IEA compilation of sources as detailed in the references
 Note: Slow chargers are defined as having power of up to 22 kW. Chargers with power above this level are considered fast.

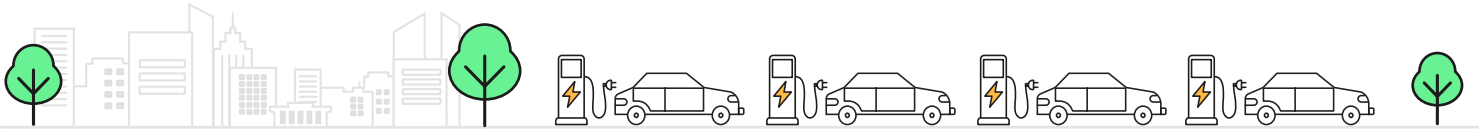
Share of fast/slow chargers



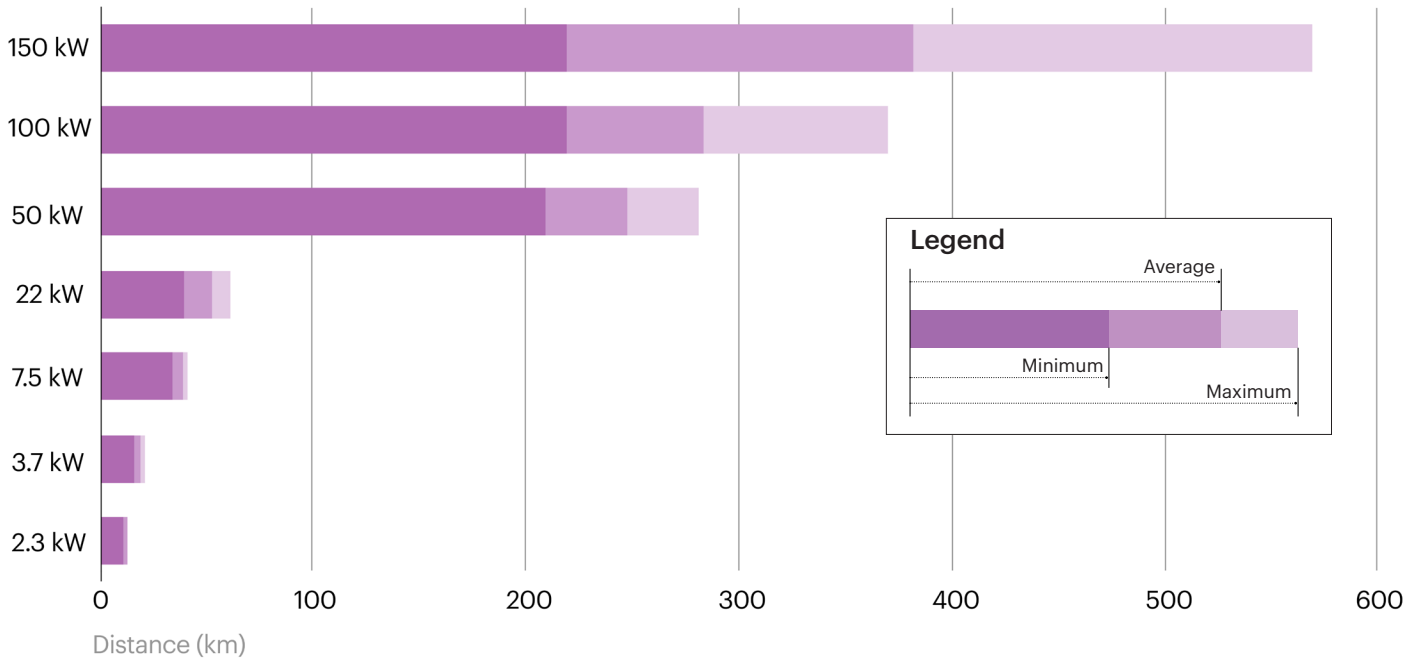
Source: IEA, [GEVO 2022](#)

Note: Only publicly accessible chargers included. Europe in this figure includes the EU27, Norway, Iceland, Switzerland and United Kingdom.

Charging electric vehicles



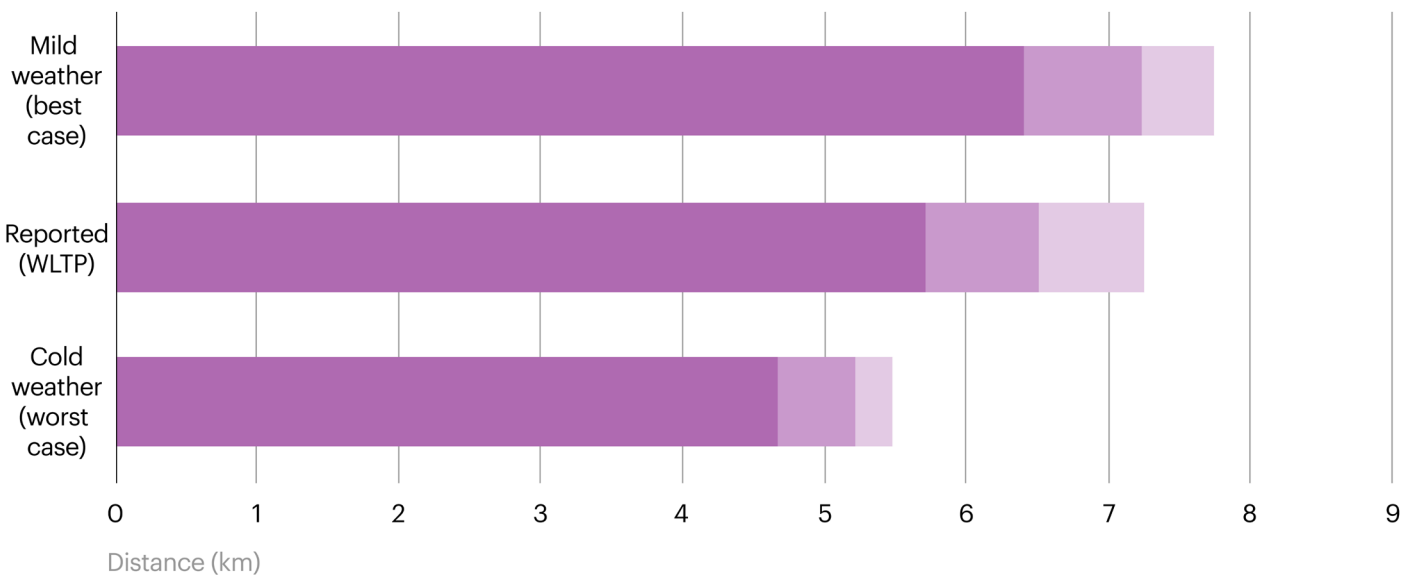
How far can one drive in 1 hour of charge at different charging speeds?



Note: The data shown is for the electric car bestsellers shown in page 1, excl. India and China. Ranges can vary consequently depending on vehicle characteristics (weight, aerodynamics, etc.) and external parameters (temperature, driving style etc.) For fast charging (>22kW), charging is considered from 10% to 80% battery capacity.

Source: IEA compilation of sources as detailed in the references.

How far can one drive on 1 kWh of charge?



Note: The data, based on the electric car bestsellers, excludes the Chinese and Indian electric car bestseller. The cold weather case considers -10 degrees of outside temperature and the use of heating, while in the mild weather case the outside temperature is 23 degrees with no AC.

Source: IEA compilation of sources as detailed in the references.

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