

How an electric bike works

Parts of an electric bike

There are two ways to get an **electric bike**: buying a model manufactured as such or converting a conventional bike by fitting an electric kit. These are the parts of the kit and the main features that distinguish it from a standard bike:

- 1

Electric motor

assists pedalling and reduces effort, particularly on hills, long journeys or when setting off
- 2

Rechargeable battery

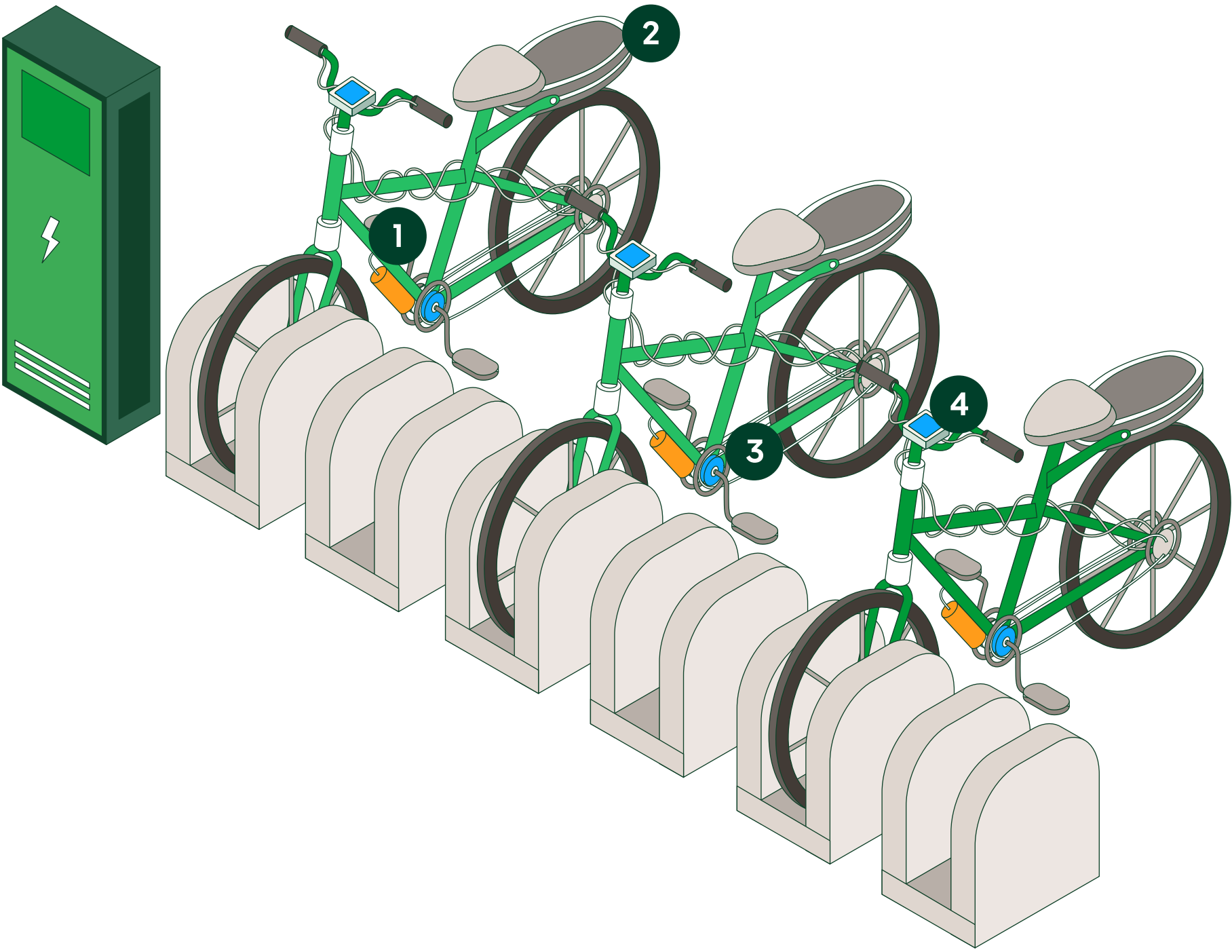
stores the energy that powers the electrical system. In many models, the range can be approximately between 30 and 100 kilometres, depending on usage, weight, terrain and the level of assistance
- 3

Sensor and controller

these detect pedalling and regulate the motor's assistance to ensure it is progressive
- 4

Assistance modes

these allow you to adapt battery consumption and physical effort to each journey



Chargers

Riders can charge e-bikes by plugging their battery into a standard mains socket, whether at home, at work or at public charging points. Depending on the model, the battery may be integrated into the bike itself or be removable to make charging easier.

They can be classified according to

 Type of connector

 Charging speed

 Battery technology

 Battery capacity

 Type of charger

 The model's specifications

The type of connector, charging speed and battery technology – in each case these must match **the bike's system voltage** (36 volts, 48 volts, 52 volts, etc.).

The time taken to fully charge the battery depends on factors such as battery capacity, the type of charger and the model's specifications. Furthermore, to ensure safe operation and extend the battery's service life it is advisable to always use the charger supplied by the manufacturer or one that is compatible with the bicycle's specifications.