PLANETE ENERGIES

Transcript Vidéo – Electric Vehicles in 2 Minutes

Electric Vehicles in 2 Minutes

The first electric vehicle was developed at the end of the 19th century. After 1910, up to 1/3 of vehicles on the road were electric.

But in the 1920s, they were overtaken by gasoline-powered vehicles that were faster, more powerful and had a much longer range.

How do electric vehicles work?

Instead of an internal combustion engine (that uses gasoline or diesel), electric vehicles are equipped with an electric motor powered by a battery, which needs to be regularly charged with electrical energy.

There are different types of vehicles, some are fully electric, others have hybrid engines. Hybrid vehicles have an electric motor in addition to an internal combustion engine. The electric motor typically powers the vehicle at low speeds.

The battery also stores energy generated by the vehicle when it brakes.

Currently, there are over 1 billion cars on the road worldwide, but only 8 million of them are electric.

Fluctuating oil prices and increasing environmental concerns are making electric vehicles a viable alternative.

The number of electric cars, trucks and buses is increasing.

Advantages and disadvantages of electric vehicles

Lower CO₂ emissions: electric vehicles do not emit CO₂ while driving, as long as their electricity comes from low-emission sources.

Lower noise pollution: electric vehicles are very quiet.

Lower dependence on oil-producing countries.

However, it takes 2 times as much energy on average to manufacture an electric car as it does to produce an internal combustion engine model.

Summary:

Electric vehicles first appeared at the end of the 19th century, boomed in popularity, then were replaced by more convenient internal combustion vehicles.

Development of hybrid vehicles with both an internal combustion engine and an electric motor.

Only 8 million electric vehicles on the road worldwide. But they are making a comeback due to fluctuating oil prices and increasing environmental concerns.

Disadvantages: - 2 times as much energy needed on average to manufacture an electric vehicle versus an internal combustion model. - Batteries need to be charged.

Advantages: - Lower CO_2 emissions and noise pollution. - Lower dependence on oil-producing countries.