

Does the electric car help to counteract climate change?

TESLA MODEL 3

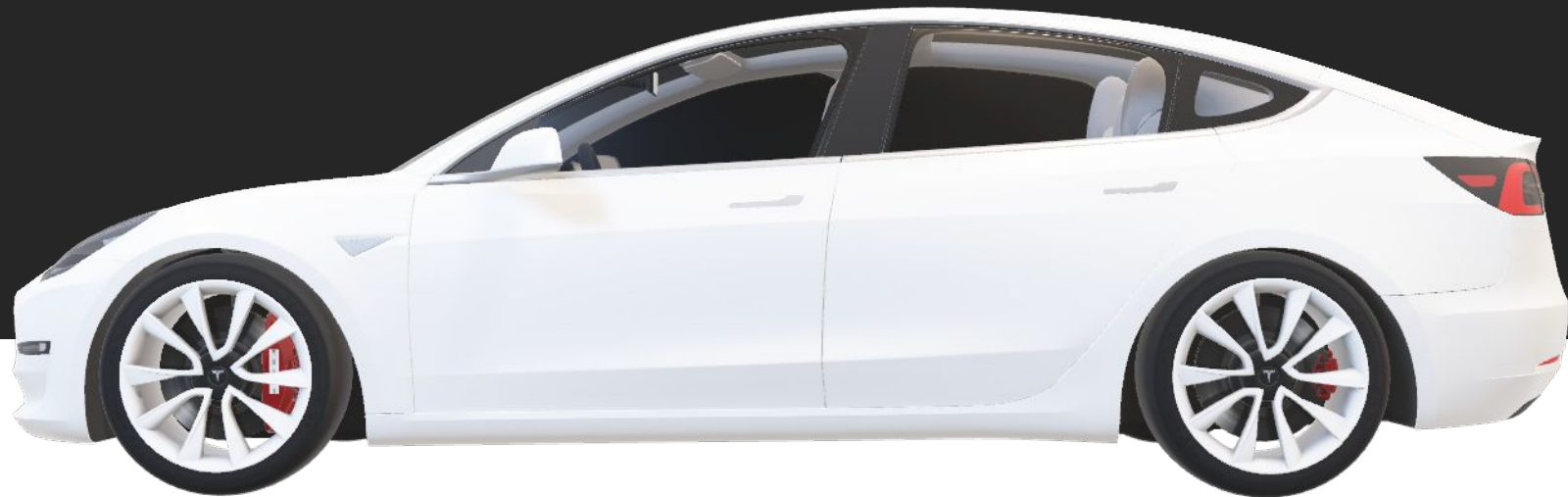


Fig. 1

Modern Design



Modern Design

**Advanced
infotainment system**



Modern Design

**Advanced
infotainment system**

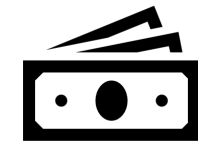
Self-driving technology



140 mph



272 mi



\$40,240

**“The future is electric.
Hydrogen is a waste of time.”**

~ Elon Musk



Fig. 1

Does the electric car help to counteract climate change?

Structure

- Energy production
-

- Comparing conventional and electric cars
-

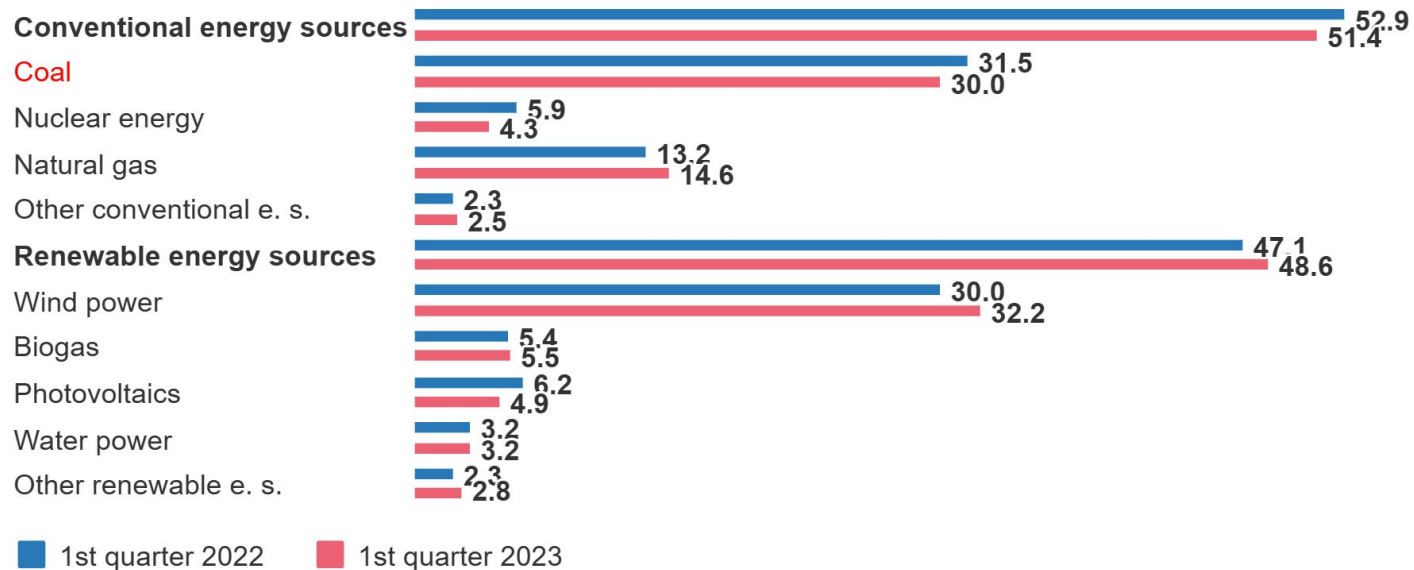
- Government policy and support measures
-

- Future of electric cars
-

Energy production

Electricity fed in from conventional and renewable energy resources

in percent



© Statistisches Bundesamt (Destatis), 2023

Fig. 2

Energy production



Fig. 3

Comparison (range)

Conventional car	Electric car
621+ mi	149 – 484 mi

Comparison (components)

Conventional car	Electric car
Combustion engine	Electric motor
Tank	Battery
Filler pipe	Charging port

Comparison (environmental impact)

- CO2 emissions during production
- Battery is made of Lithium
- Lithium is mined in South America
- Groundwater is pumped up
- Turns the landscape into a desert

Comparison (environmental impact)

- Conventional energy sources
- Transport
- Oil spills

Government

2030	2040
Denmark	Great Britain
Sweden	France
Iceland	
Netherlands	
India	

Outlook

- Less noise in the cities
- Technical development
- Charging grid expansion
- Environmentally friendly lithium mining

Does the electric car help to counteract climate change?