

# Petrol? No. Electricity's time is coming



A Volkswagen electric car with a recharging cable. [Photo: Volkswagen.]

## ZACHARY JOHN tells us why electric vehicles are getting more popular.

German car manufacturer Volkswagen's attempt at an April Fool's joke **backfired** recently. The company announced on its website that it would change its name to "Voltswagen" as part of their push to go electric. Volt, as you may know, is a measure of electric force: you will see "1.5 volts" or "1.5V" stamped on standard batteries, for example.

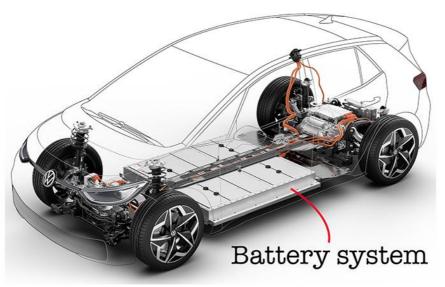
Many people believed the announcement, so the company was forced to issue a statement saying it was just a joke. Environmentalists were annoyed because they feel that the push for electric vehicles is no laughing matter.

To make matters worse, Volkswagen had a bad record in protecting the environment. In 2014, Volkswagen was caught cheating on its emissions tests: it claimed that its cars were less polluting than they actually were.

Although environmentalists have not forgotten the company's past misbehaviour, Volkswagen has been very serious about investing in electric vehicles. It says it wants to overtake Tesla as the world's leading electric vehicle manufacturer.

It is not just Volkswagen that is taking the electric route. Experts say it will not be long before electric vehicles are more widely used around the world than diesel or petrol cars. This is because electric battery prices are falling and the technology is improving very quickly.

In 2020, global sales of electric cars grew by more than 40 percent, while the rest of the vehicle market **slumped**. In Norway last year, more electric cars were sold than those with petrol, diesel, and hybrid engines combined. This was largely because the government rewarded those buying electric vehicles by giving them hefty **subsidies**.



Volkswagen batteries are beneath the passenger compartment. [Graphic: Volkswagen]

#### Cheaper and better

"There's been a tipping point in Norway. Consumers voted with their wallets," Tim Lenton, a professor who specialises in climate change, told *The Guardian*.

A recent survey in Britain showed that three in four drivers said electric vehicles were still too expensive. Professor Lenton's research shows that people will turn to electric vehicles in large numbers as soon as prices dip close to regular vehicle prices. Recharging an electric car is much cheaper than filling the tank of a petrol vehicle. The problem is that it usually costs more to buy an electric car.

Experts say electric vehicles are only going to get cheaper, and not just in Norway. Bloomberg analysts predict electric cars will be able to match the price of petrol or diesel cars by 2023. The reason? The falling price of lithium-ion batteries. While a 30kWh battery for a small car cost US\$30,000 (S\$39,800) about 10 years ago, such a



battery pack costs just US\$4,100 (S\$5,400) today. The price is expected to keep falling.

Electric vehicle parts are becoming cheaper to make because governments and companies are investing in improving the technology. Governments subsidise the research and development of electric vehicles because they are much less harmful to the environment. They have no carbon emissions. This means electric vehicles do not add to the greenhouse gasses in the atmosphere that lead to global warming and other problems for our planet.

#### SINGAPORE'S PLANS

In Singapore, the government has announced that 100 percent of vehicles here will be electric by 2040. The government added that it plans to subsidise electric vehicle purchases. However, a lot of work needs to be done before Singapore's vehicles can go fully electric. For example, there are not enough places where drivers can charge their cars' batteries. Minister Heng Swee Keat promised that 28,000 charging points will be built here over the next 10 years.

Charging stations require space, and charging a car takes a few hours. Despite all this, Singapore aims to have ten times more charging stations here than in Norway, according to Channel News Asia.

Despite the initial challenges, governments, car manufacturers, and consumers around the world are quickly shifting lanes towards the silent, rapid, and green alternative to the cars we know.

The improvements in electric vehicles' technology not only make them greener, but also more powerful machines. Today's electric cars can pick up speed much faster than conventional cars. A Tesla Model 3, the most basic Tesla, can go from 0 to 100kmh in 3.1 seconds, like a Porsche 911 Turbo — at just a third of the price.

Electric vehicles are not only extremely quick but also silent. There are many videos on YouTube showing people shocked by the electric vehicles' silent approach!

No wonder then that electric cars are here to stay. In a recent poll, more than 90 percent of electric car users said they would never go back to using conventional vehicles.



#### **VOCAB BUILDER**

**backfired** (say "**bak** fa-yerd"; verb) = had an unintended bad effect.

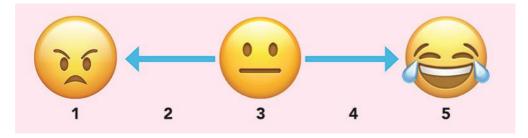
**conventional** (say "kon-**ven**-she-nel"; adjective) = traditional or ordinary.

**subsidies** (say "**sub**-si-dees"; noun) = money given by the government to reduce how much buyers have to pay for something. The verb is **subsidise** (say "**sub**-si-dyz").

**slumped** (say "sluhmp'd"; verb) = had a big drop.

### Activity

#### Funny or not?



- 1. Why did some people find Volkswagen's "Voltswagen" joke not funny at all?
- 2. How funny is the joke to you? On this scale of one to five, circle your rating in red.
- 3. Ask four friends how funny they found the Voltswagen joke. Circle their individual ratings on the scale.
- 4. Looking at the five ratings, speculate about what makes jokes funnier to some people than to others.
- 5. The emissions test incident was no joke. In your view, will Volkswagen's electric cars repair its bad image for having cheated on emissions tests?