



Advertisement

World

North America

Renewables

Tesla shares dive by \$US50b as Musk says cheaper cars three years away

Tina Bellon

Sep 23, 2020 - 9.18am



CEO Elon Musk outlined Tesla's plans to cut electric vehicle battery design and manufacturing costs so radically that a \$US25,000 (\$34,870) car that drives itself will be possible, at the company's "Battery Day" on Tuesday, US time. But the car maker's shares tumbled as Musk forecast the change could take three years or more.

All told, Tesla's market capitalisation plunged \$US50 billion from its Monday close, as investors wiped out \$US20 billion of that in just two hours after trading closed on Tuesday.



Elon Musk: "We've got to get the cost of batteries down."

Musk acknowledged that Tesla does not have its ambitious new vehicle and battery designs and manufacturing processes fully complete. Tesla has frequently missed production targets.

Tesla expects to eventually be able to build as many as 20 million electric vehicles a year. This year, the entire auto industry expects to deliver 80 million cars globally.

Tesla shares, which closed Tuesday down 5.6 per cent, fell a further 7 per cent in after-hours trade.



Musk acknowledged that Tesla does not have its new battery design and manufacturing process fully complete.

At the opening of the event, which drew more than 270,000 online viewers, Musk walked on stage in a black T-shirt and jeans as about 240 shareholders – each sitting in a Tesla Model 3 in the company parking lot – honked their car horns in approval.

Before the event, Tesla shares closed on Tuesday at \$US424.23, down 5.6 per cent after Musk tweeted late on Monday that the battery improvements to be unveiled at the event would not reach "serious high-volume production" until 2022. Shares bounced up and down in after-hours trade.

As car makers shift from horsepower to kilowatts to comply with stricter environmental regulations, investors are looking for evidence that Tesla can increase its lead in electrification technology over legacy car makers who generate most of their sales and profits from combustion-engine vehicles.

Although average electric vehicle prices have decreased in recent years thanks to changes in battery composition, they are still more expensive than conventional cars, with the battery estimated to make up a quarter to a third of an electric vehicle's cost.



RELATED

Cannon-Brookes and Musk keen for big battery number two

Some researchers estimate that price parity, or the point at which electric vehicles are equal in value to internal combustion cars, is reached when battery packs cost \$US100 (\$140) per kilowatt hour (kWh).

Tesla's battery packs cost \$US156 per kWh last year, according to electric vehicle consulting firm Cairn Energy Research Advisors, which would put the cost of a 90-



Advertisement

Building an affordable electric car "has always been our dream from the beginning of the company", Musk told an online audience of more than 270,000.

However, Musk described a new generation of electric vehicle batteries that will be more powerful and longer lasting than the company's current cells, and half as expensive.

Tesla's new larger cylindrical cells, called 4680, will provide five times more energy, six times more power and 16 per cent greater driving range, Musk said, adding that full production is about three years away.

"We do not have an affordable car. That's something we will have in the future. But we've got to get the cost of batteries down," Musk said.

To help reduce cost, Musk said Tesla planned to recycle battery cells at its Nevada "gigafactory", while reducing cobalt – one of the most expensive battery materials – to virtually zero. It also plans to make its own battery cells at several highly automated factories around the world.

Tesla will produce the new battery cells initially on a new assembly line near its vehicle plant in Fremont, California, with planned output reaching 10 gigawatt-hours a year by the end of next year. Tesla and partner Panasonic now have production capacity of about 35 gWh at the Nevada battery "gigafactory".

Tesla aims to rapidly ramp up battery production over the next few years, to 3 terawatt-hours a year, or 3000 gigawatt-hours – roughly 85 times greater than the capacity of the Nevada plant.

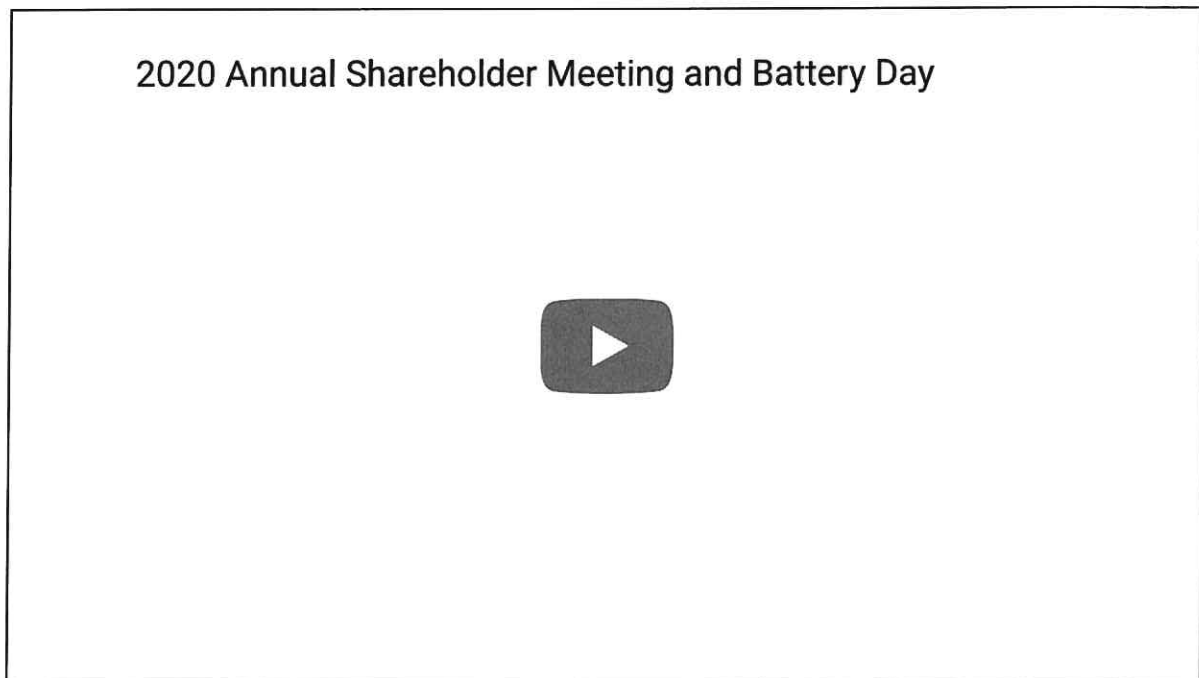
The car maker plans to produce the new cells via a highly automated, continuous-motion assembly process, according to Drew Baglino, Tesla senior vice-president of



Tesla currently produces batteries in partnership with Japan's Panasonic at its \$US5 billion Nevada factory, while South Korea's LG Chem and China's CATL supply cells to its Shanghai factory.

Tesla is also building its own cell manufacturing facility at its new factory in Germany in addition to the new plant in Fremont.

Watch the full event below.



Reuters



READ MORE