U.S. Gasoline Demand Is Likely to Slide

Electric vehicles could slice fuel's consumption up to 20% in two decades, new report says

Tesla's Model 3 is expected to be available next year for \$35,000. ENLARGE

Tesla's Model 3 is expected to be available next year for \$35,000. PHOTO: JUSTIN PRITCHARD/ASSOCIATED PRESS

By LYNN COOK and ALISON SIDER

Updated June 20, 2016 12:35 a.m. ET

21 COMMENTS

Electric cars are poised to reduce U.S. gasoline demand by 5% over the next two decades—and could cut it by as much as 20%—according to a new report being released Monday by energy consulting firm Wood Mackenzie.

The U.S., which currently uses more than nine million barrels of gasoline a day, could see that demand drop by as much as two million barrels a day if electric cars gain more than 35% market share by 2035, according to the report.

That aggressive case assumes Tesla Motors Inc. and other auto makers begin to deliver lower-cost electric vehicles that can travel longer distances in relatively short order, said the report's author, Prajit Ghosh. A more likely scenario is a 5% drop in U.S. gasoline demand as electric cars build to more than 10% of the U.S. vehicle fleet by 2035, he said.

Even the low end of the forecast by Wood Mackenzie, which provides in-depth analysis for a wide range of clients including large oil companies, utilities and banks, is a more bullish outlook for electric-car adoption than many oil-and-gas companies have espoused.

Spencer Dale, the chief economist of energy company BP PLC, said last week in Houston that while he expects electric cars to start gaining traction, the internal-combustion engine still has significant advantages over electric alternatives and widespread adoption won't happen in the next two decades.

"It will still take some time," Mr. Dale said. "Electric vehicles will happen. It is a sort of when, not if, story."

The electrification of the automobile has evolved more slowly than some expected, in part thanks to low fuel prices and limited battery life that meant drivers had to recharge every 100 miles. But more capable cars are coming to market as tightening air-pollution regulations in places such as Europe and China force auto makers to engineer better electric vehicles.

The U.S. market today remains tiny, with pure electric cars amounting to less than 1% of total sales so far this year. But Tesla's decision to build cars with sizable batteries that can run for more than 200 miles before recharging has led a number of competitors to double down on their own electric-car designs.

Nissan Motor Co., Hyundai Motor Co. and Volkswagen AG are working on their own long-range electric vehicles. Ford Motor Co. has said it would invest \$4.5 billion over the next four years to develop 12 new electric cars and hybrids, and Volvo has set a goal of producing one million electric vehicles by 2025.

Tesla's Model 3, which is scheduled to begin rolling out to customers in 2017 at a price point of roughly \$35,000, has the potential to push electric vehicles into the mainstream in the next decade and cause a significant dent in U.S. fuel demand after 2025, Mr. Ghosh said.

"The Model 3 is planting a flag," he said. "With time, it has the potential to be a disruptive force in the market."

A few new electric vehicles are expected to make their debuts soon with lower price tags, Wood Mackenzie said. The Chevrolet Bolt—which will cost \$30,000 after tax credits—hits the market later this year.

If electric vehicles gain a foothold in the U.S., the impact won't be all bad for fossil-fuel companies, the report concluded.

While petroleum demand would fall, natural-gas demand would likely go up, because utilities would need to generate more electricity and more of it would increasingly come from natural-gas-burning power plants as well as renewable-energy sources, the report said.

—Mike Ramsey contributed to this article.

Write to Lynn Cook at Lynn.Cook@wsj.com and Alison Sider at alison.sider@wsj.com b