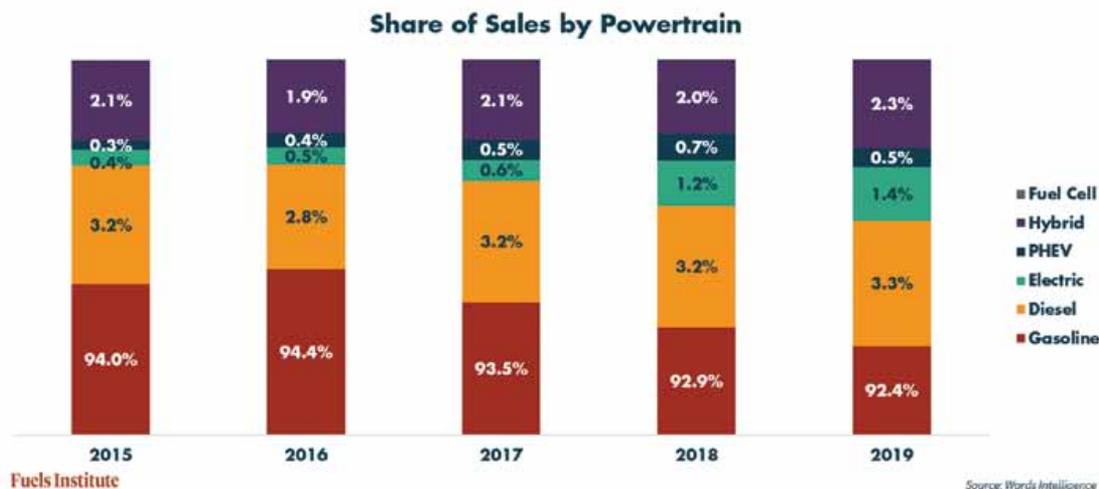


No Sign of Market Revolution in 2019

BY JOHN EICHBERGER, FUELS INSTITUTE

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For all the talk about the coming revolution of the transportation market to an electrified future, the market has not yet demonstrated that it is listening. I am confident that we will witness significant change in the coming years, especially as it relates to the type of new vehicles that will be introduced to the market. But despite the enthusiastic declarations that a revolution is underway, I am not sure the shot heard around the world has been fired just yet...at least not in the United States.

I always go back to the data. When we evaluate the sales of light duty vehicles last year, the one thing that stands out more than others is the apparent lack of change. Plug in electric vehicles did not gain any additional market share and total units sold were actually lower than in 2018. Meanwhile, liquid fuel powered vehicles remained relatively steady and still represented more than 98% of all units sold. There clearly is not a revolution underway – at least not yet.

I would not advise that anyone take 2019 as a sign of what will transpire this decade, but the facts should not be dismissed. In the coming years, we will witness the introduction of more electrified vehicle models, which should support an expansion of sales. Yet despite all of the announcements regarding the number of models that will be electrified by a certain date (I have heard some manufacturers say that half of their lineup will

be electrified by 2025), the details that are not being broadcast relate to how many units will be built and what percentage of overall sales these new vehicles are expected to represent.

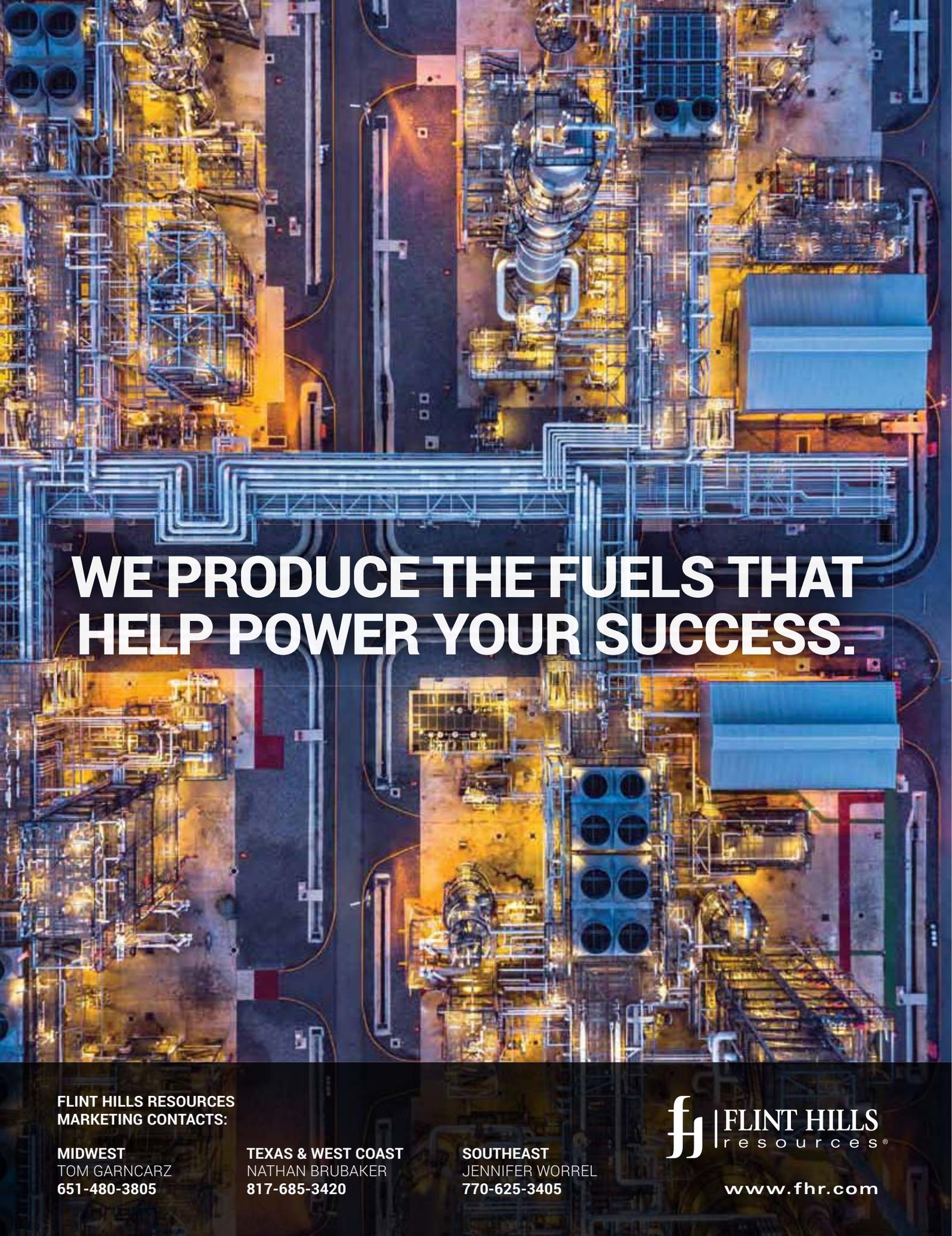
The future will play out in time and these details will become known eventually. For now, it might be helpful to take a look back at last year and better understand the field upon which this revolution is expected to take place.

Liquid Continues to Dominate

The share of vehicles powered by liquid fuels (gasoline, diesel and hybrids) combine to represent 98.0% of all light duty vehicles sold in 2019. This is down slightly from prior years – in 2015 they combined for 99.3% of vehicles sold – but it is still a pretty unassailable market position.

Gasoline Is Still King

Although the number of gasoline-powered vehicles slipped below 16 million units sold for the first time since 2014, the nearly 15.8 million units sold still represented 92.4% of all light duty vehicles sold. This market share has been slipping since 2016 and is down a full 2% since then, but the overwhelming volume of gasoline vehicles sold ensures their presence in the market will continue for decades to come. ►



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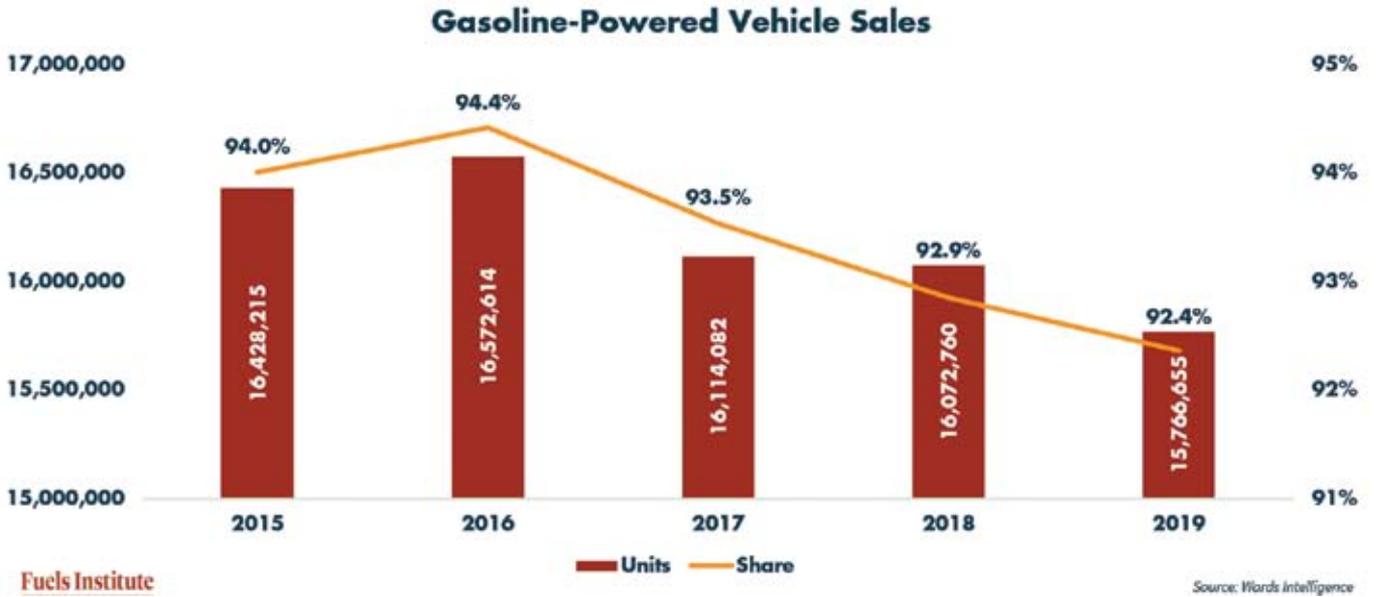
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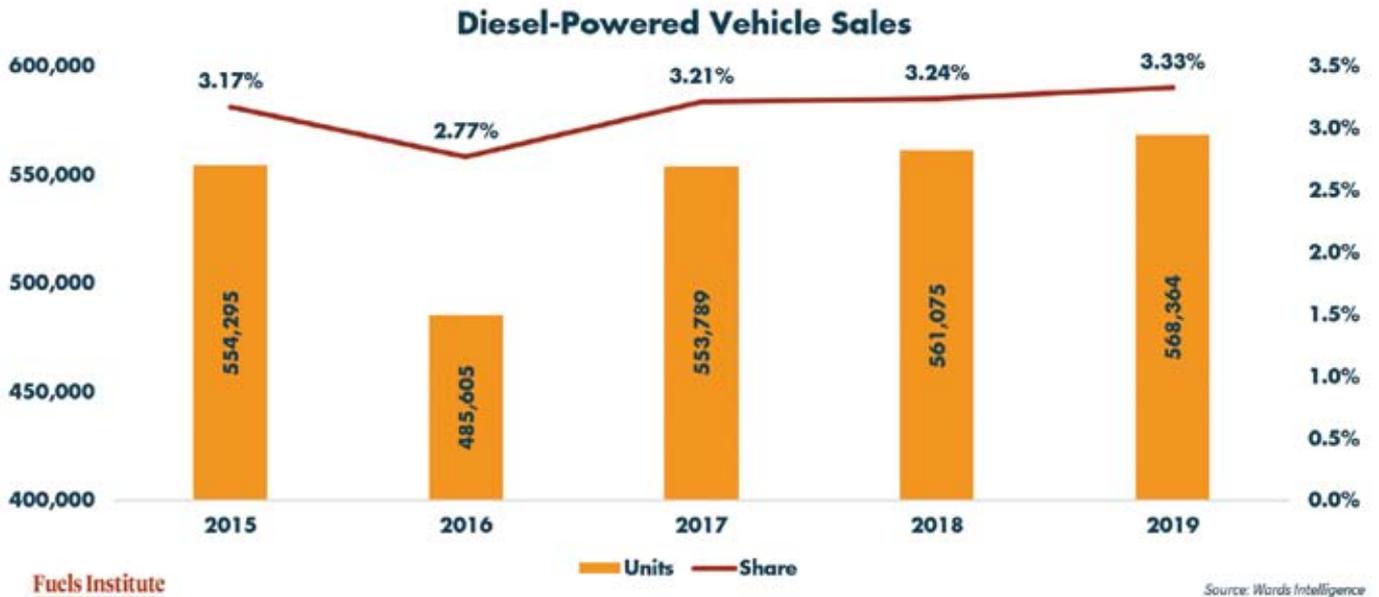
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Diesel Maintains Hold on Its Niche

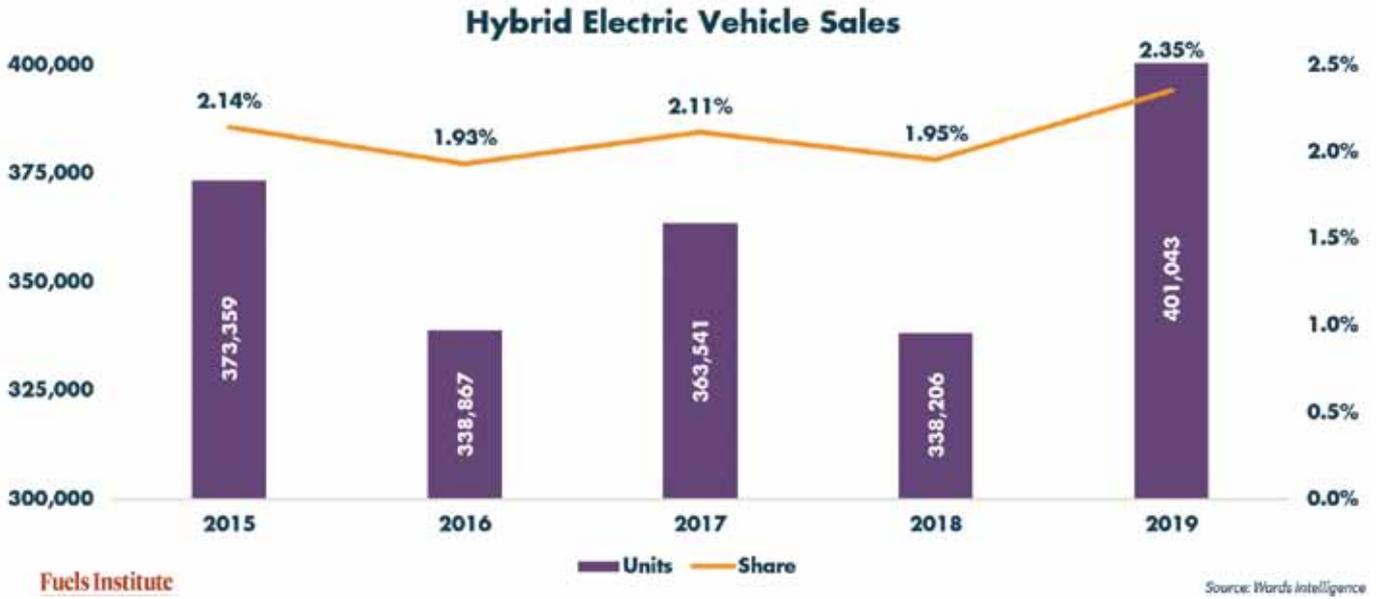
Despite the global backlash against diesel-powered vehicles, light duty vehicles powered by diesel fuel engines have not given way in the United States and have maintained consistent sales volume and market share the past three years. This is largely due to the purpose-built vehicles for which diesel remains a popular powertrain – pick-up trucks. The four best selling diesel-equipped vehicles are classified as large pick-ups and represented 76.2% of diesel sales. The popularity of diesel engines in trucks is further supported by looking at the model count: there were a total of 21 diesel engine-equipped light duty vehicle models sold in 2019, 11 of which were classified as light trucks and 10 of which were classified as cars. Yet light trucks dominated in terms of sales volume. The top selling diesel-powered car was 20th among all diesel vehicles and recorded only 709 units sold.



Hybrids Picked Up Some Steam

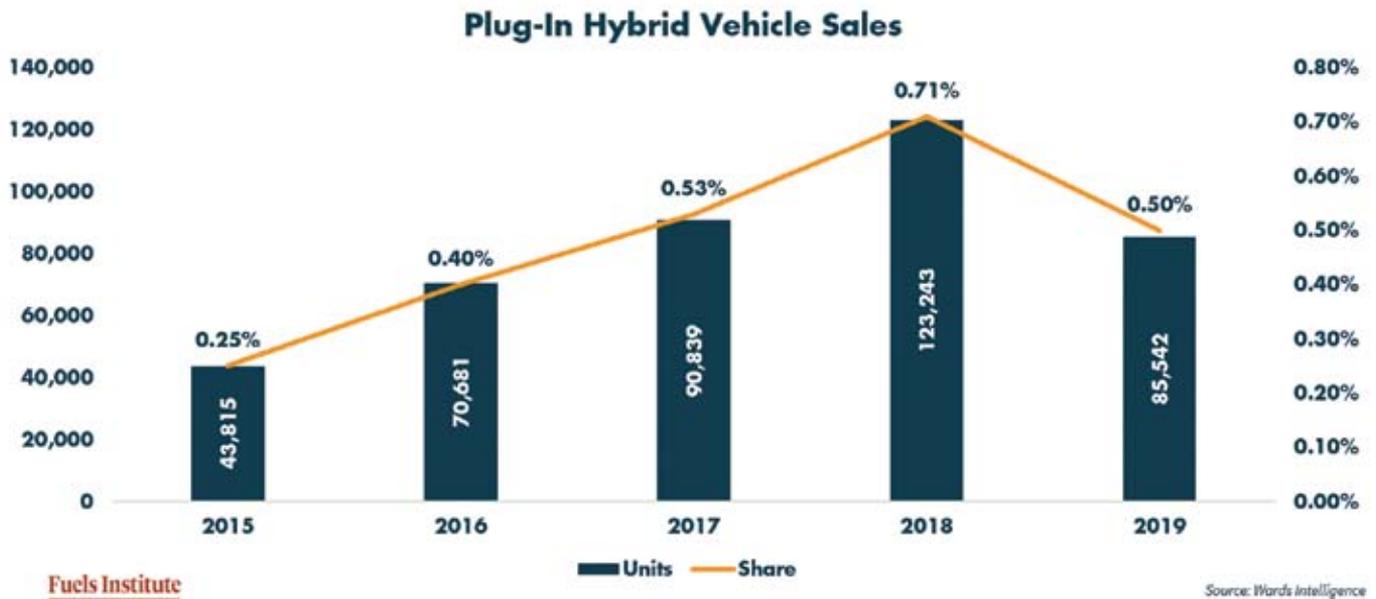
Sales of hybrid electric vehicles (HEVs or hybrids) have fluctuated quite a bit over the years. Yet in 2019, there was an 18.5% increase in sales over 2018. However, hybrids have not yet matched the nearly 500,000 units sold in 2013. Interestingly, in 2013 there were 45 hybrid models sold in the United States, compared with only 35 in 2019. It would appear that the automobile

manufacturers have become more efficient in driving sales of hybrids through fewer models. Thirteen individual models represented 90% of hybrid sales in 2019, and of those, six were classified as light trucks. Car models still dominated with nearly 60% of sales, but the best selling hybrid in 2019 was a crossover, generating nearly 24% of hybrid sales alone.



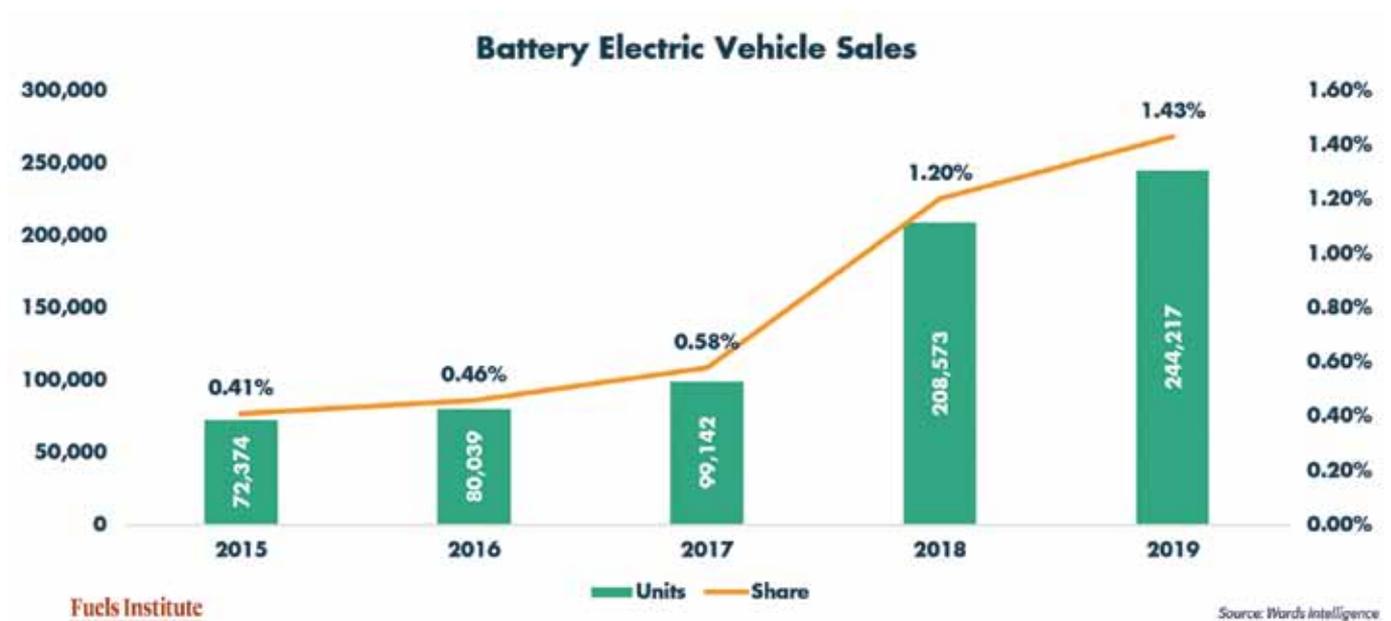
Plug-In Hybrids Yield

The market for plug-in hybrids (PHEVs), those vehicles that operate on pure battery power for 20 to 40 miles and then shift to an internal combustion engine and which have been heralded by some as the ideal transition technology to fully electrified powertrains, suffered a significant drop in sales in 2019 losing nearly 40,000 units sold. This was despite the industry generating sales from 32 models in 2019 compared with just 29 in 2018. There are many theories seeking to explain this development, but I think the most compelling is the emergence of competitive battery electric vehicles that were able to convince PHEV customers to make the full transition.



BEVs Take Share from PHEVs

The market for battery electric vehicles (BEVs) continued to expand in 2019, mostly at the expense of the plug-in hybrids. Combined, these two powertrains represented 1.9% of all vehicles sold – the same market share recorded in 2018. But, BEVs grew from 1.2% to 1.4% while PHEVs lost an equivalent share of the market. The BEV market stole this share despite offering only 18 separate models vs. 32 unique PHEV vehicles. The driving force behind the BEV market was the Tesla Model 3, which independently accounted for 63.5% of industry sales. When the other two Tesla models are factored in, the manufacturer represented 77.7% of all BEVs sold.



Conclusion

End of the year sales data indicates that not much has materially changed in the past 12 months, but to assume this was true would be to ignore the reality of the market. A shift is beginning to occur, even if it is not apparent in the sales data. According to some reports, OEMs plan to introduce as many as 500 BEV models through 2023. As I said before, how many units of these models they plan to produce and what percentage of their sales they will represent remains to be determined, but the sheer volume of models entering the market is an indication that the market is changing. For now, let’s keep our eyes on the trends in both intentions and in reality. ★



John Eichberger is Executive Director of The Fuels Institute, a non-profit, independent think tank founded and managed by NACS, the association for convenience and fuel retailing. Drawing diverse stakeholders from the vehicle and fuels industries, the Institute encourages multi-industry collaboration and produces credible, independent analytical reports to better inform business leaders and policymakers about opportunities and challenges in the vehicles and fuels markets.