# THE HANSEN REPORT ON AUTOMOTIVE ELECTRONICS

## **Editorial Notes**

#### Dear Reader,

If financial clout were all companies needed to succeed in the blossoming market for electric vehicles, Apple, Alphabet (Waymo) and Tesla would blow everyone else away: Their combined market cap is 4413 billion US dollars. The combined market cap of the world's top ten carmakers by volume, Toyota down to Hyundai, is 747 billion US dollars.

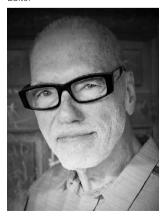
Of course, it takes much more than financial clout to compete effectively for electric car buyers. It also takes software and electronics wherewithal, arguably two of the most crucial means of creating competitive advantage, especially as cars are made more autonomous. Apple, Alphabet and Tesla shine here. As does Sony, yet another formidable entrant into the electric car market. Earlier this year Sony announced that it would form a joint venture with Honda to develop electric cars and manufacture them at a Honda facility. Incumbent carmakers will also contend with Foxconn, the world's top electronics contract manufacture. Foxconn has built three electric vehicle prototypes.

And we can't overlook China, by far the world's largest electric vehicle market. The strongest electric car makers in China will almost certainly do well in foreign markets. China's top electric vehicle producers are BYD, SGMW (SAIC-GM-Wuling), Chery, GAC and Tesla. But these incumbent carmakers will soon be forced to battle with some new players from tech. Three of China's leading smartphone makers, Xiaomi, Oppo and Realme, will launch electric vehicles in the next few years. The Chinese search-engine giant and autonomous vehicle developer, Baidu, will produce robot cars, that it claims will be a generation ahead of Tesla in terms of automation. The ride-hailing company Didi Global is also developing autonomous vehicle technology with plans to launch EVs.

Competition among the world's EV makers will be intense. Only the very best will survive.

Sincerely Yours,

Paul Hansen



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