EV & HYBRID

Hybrid premiums in China

Third generation Prius


Roewe 750 Hybrid

Mercedes-Benz E400 Hybrid

*– by Mark Andrews, **CBU/CAR** Guest Columnist*

Honda last year was said to be working on hybrid cars for the Chinese market with their joint venture partners Dongfeng Motor Group and Guangzhou Automobile Group. The retail price could be as little as ¥90,000 ($14,750). This news came hot on the heels of Toyota's announcement at the Guangzhou Auto Show that they would localize production of their hybrid system.

Whether there is a market for mass market hybrids though is a question that remains to be answered. Back in 2010 Shanghai rolled out two new types of taxis – the Volkswagen Touran and Buick LaCrosse Hybrid – for the Shanghai Expo to supplement the ubiquitous Volkswagen Santana. Shortly after the end of the Expo the LaCrosse quickly disappeared from the city's streets, indicative of China's lack of love for the hybrid.

Toyota pushed into production the second generation Prius, poster car for the wannabe environmentalist, with Chinese joint venture partner FAW in 2005 only to attract appalling sales rapidly dropping from a high of 2,152 in 2006 to just 1 in 2010 when it was withdrawn from the market.

One glimmer of hope though for hybrids in China comes from an unlikely source – premium manufacturers. In 2013 Lexus sold over 70,000 cars in China of which 28 percent were hybrids with the compact CT200h accounting for around 60 percent of the hybrid total. Toyota on the other hand only managed to sell 513 of the locally produced third generation Prius.

China may be the world's largest car market but for most of those buyers it is their first car. "For these first time buyers they have more to consider like brand, vehicle size, features or safety. In an emerging market like China to spend money on a better brand or larger model is much more reasonable than spending money on better fuel consumption," said Sa Boni, automotive analyst at IHS. Curiously the Prius and Honda Insight do much better in other developing markets such as Cambodia and Sri Lanka.

This is partly explained by price. "All forms of hybrid vehicles have an inherent up-front cost penalty versus conventional internal combustion engine powered vehicles," said Bill Russo, president and CEO of Synergistics Ltd., a Beijing-based automotive consultancy. The second generation Prius cost in China more than a top spec Ford Mondeo. Prices of the new Prius start at around ¥200,000 which whilst cheaper are still firmly in large family car territory.

Chinese purchasers, especially poorer first time buyers, when it comes to commodity products are generally very price sensitive. In the case of the locally developed Roewe 750 Hybrid it commands a ¥12,000 price premium to its base model which might not sound much but would require the purchaser to drive around 100,000 km to recoup the amount in fuel savings.

"Premium carmakers have a higher chance of success in the area of hybrid vehicles, mainly because premium autos are not purchased by price-sensitive consumers," said Russo. Mercedes-Benz has seen some success with selling hybrid versions of the imported S-Class.

The purchasing mentality of these consumers is different. "Customers are buying a Lexus SUV or a Mercedes-Benz S-Class rather than a hybrid vehicle. The inflated cost due to the hybrid could be ignored by those customers," said Sa.

With the premium sector hybrids the positioning is different. Whereas traditionally cars such as the Prius and Camry Hybrid emphasized their environmentally friendly and fuel saving credentials, in the premium sector they are seen as high tech and often top of the range. In the forthcoming Mercedes-Benz E400 Hybrid there will be a boost in power from the reported 27 hp electric engine which should lead to improved acceleration as well as fuel economy over the standard E400. "The hybrid version underlines once more that we are committed to always bring the latest in technology to our Chinese customers," said Senol Bayrak, spokesman for Daimler China.

Mercedes-Benz with the E400L hybrid is the first premium manufacturer to locally produce a hybrid in China. With Infiniti set to produce cars in China from 2014, and Lexus a possibility, others are bound to follow soon.

Slowly it seems as if hybrids are beginning to sell in China and it is the premium sector leading the way. "It is still a small market, but will grow as more automakers slowly introduce more models into the market," said Russo. CBU/CAR

BYD launches e-bus in Rio de Janeiro

– by Katrina Dong

RIO DE JANEIRO, Brazil – BYD launched its e-bus in Rio de Janeiro, Brazil at the end of March, in coordination with Fetranspor and Rio Bus, two public transportation companies for the state and city of Rio, according to a BYD news release.

This is the first pure electric bus launched in Rio, which is running now on line 249. As planned, the e-bus will be tested on a regular line for one month.

Rio is one of the three cities in Brazil to test BYD e-buses. São Paulo and Salvador have done successful tests already.

Companies in Rio have tested some types of buses before, like hybrids, diesel and CNG buses.

"Fetranspor is a great reference for testing new energy buses in public transportation and the segment in Rio de Janeiro is a model for many cities in the country," said Vagner Rigon, sales vice president of BYD do Brasil.

Besides Brazil, BYD e-buses have been tested since 2011 in several cities around the world such as Los Angeles, New York, Bogota, London and Copenhagen. CBU/CAR

China speeds up construction of EV charging facilities

– by Katrina Dong

BEIJING – China's pilot cities for EV promotion are speeding up efforts to build charging facilities, according to a report on *d1ev.com*.

Charging poles are the foundation of wide-scale use of electric vehicles. Large-scale construction of charging poles will facilitate the promotion of EVs.

Many cities are accelerating the establishment of charging stations, battery swap stations and charging poles as local governments suggest building EV charging poles in new communities.

The following table shows plans of some cites on construction of EV charging facilities. CBU/CAR

Some cities' plans on construction of EV charging facilities

City	Charging facilities	Year of completion
Beijing	107 charging (battery swap) stations, 188,000 charging poles	by 2017
Chengdu	16 charging stations, 3,000 AC charging poles	by 2015
Chongqing	5 centralized charging stations, 11 fast charging stations, 275 slow charging poles	by 2015
Dalian	5 charging (battery swap) stations, 3,400 charging poles, 440 DC charging poles	/
Guangzhou	105 charging stations, 9,970 charging poles	/
Haikou	3 charging stations, 3 battery swap stations, 4,100 charging poles	by 2015
Hangzhou	4 centralized charging stations, 38 charging (battery swap) stations, 3,500 charging poles	/
Hefei	6 charging stations, 5,000 AC charging poles	by 2015
Jincheng	5,340 slow charging poles, 12 fast charging stations, 3 bus charging (battery swap) stations	by 2015
Kunming	2 charging (battery swap) stations, 300 charging poles	by 2015
Lanzhou	21 charging stations, 258 DC chargers, 6,650 AC charging poles	by 2015
Nantong	25 charging (battery swap) stations	by the end of 2015
Ningbo	10 charging stations, 2,300 charging poles	by 2015
Qingdao	17 charging (battery swap) stations, 2,800 AC charging poles, 650 DC charging poles	by 2015
Shanghai	6,000 charging poles, 50 charging (battery swap) stations	by 2015
Shenzhen	168 bus charging stations, 50 taxi charging stations, 526 fast charging poles, 39,000 slow charging poles	by 2015
Taiyuan	11 charging (battery swap) stations, 1,750 charging poles	/
Tianjin	66 charging (battery swap) stations, 6,700 charging poles	by the end of 2015
Wuhu	10 charging stations, 6,000 charging poles	by 2015
Xi'an	4 charging towers, 32 charging stations, 480 charging poles	by 2015
Xinxiang	11 charging stations, 80 mobile charging stations, 40 bus charging stations, 2,510 charging poles	by 2015
Yancheng	10 charging stations, 2 battery swap stations, 80 AC charging poles	by 2015
Zhengzhou	14 charging (battery swap) stations	by 2015

*Source: **d1ev.com***