

## Global & China Hybrid Electric Vehicle Industry Report, 2007-2008



- Hybrid electric vehicles (HEVs), fuel saving and environment friendly, have stolen the markets as international oil price soared up. It was reported that sales of Toyota Prius series HEVs is out of stock in international market. Grasping the opportunity, Toyota announced that it is developing a new generation of Lithium Iron Phosphate battery for HEVs with PANASONIC, which will be officially put into mass production in 2009, to strengthen its leading position in HEV market. In June 2008, Toyota disclosed that it will invest in Australia to make HEVs, which will be Toyota's third HEV production base abroad after the U.S.A. and China. Toyota will invest in its Melbourne's factory to produce CAMRY HEVs, and it plans to eventually achieve the target of an annual production of 10,000 Vehicles.

Toyota's sales of HEVs were 312,500 units in 2006, increasing by 33% over 2005, and 429,000 units in 2007. The U.S. market is still the largest HEV market, where only Toyota sold 277,750 HEVs in 2007. Toyota's Prius is still the No. 1 in HEV market with its sales reaching nearly 200,000 units in 2007. According to Toyota's original plan, its sales target of HEVs reach one million in several years after 2010, which will surely be achieved ahead of schedule, due to skyrocketing international oil prices. All major auto producers in the world have released their plans to produce HEVs successively.

HEV Plans of Global Key Auto Producers, 2008-2010

Brand	Manufacturer	Release time
Saturn Aura	GM	2008
Saturn Vue	GM	2008
Chevrolet Malibu	GM	2008
Fusion	Ford	2008
Mercury Milan	Mazda	2008
2009 Next Generation Prius	Toyota	2008
A-BAT	Toyota	2008
Chevrolet Silverado 1500	GM	2009
Cadillac Escalade	GM	2009
Chevrolet Tahoe	GM	2009
GMC Yukon	GM	2009
Global	Honda	2009
Mercury Montego	Mazda	2009
Porsche	GM	2010
Chevrolet Volt-plug-in	GM	2010

Source: ResearchInChina

- HEVs are sold well in the world markets. However, it seems that Chinese consumers show no interest in them. Taking Toyota's Prius with the largest sales as an example, its production and sales in China were only 168 units and 80 units separately in the first quarter of 2008, and about 300 units in 2007 according to the statistics of China Association of Automotive Manufacturers. Compared with Prius sales of nearly 200,000 vehicles in the world market, HEVs have seemingly not acclimatized themselves to China. Actually, we believe that price is the most important factor to restrict HEV sales in China. At present, Prius is sold in China at a price of about CNY280,000, but it is only US\$215,000 (less than CNY150,000) in the U.S. Additionally, Prius buyers in the U.S. can enjoy various kinds of allowances valued at over US\$2,000. In May 2008, HEV prices in the U.S. rose successively in tandem with jumps in oil prices and price of Prius, Camry and Lexus increased by US\$400, US\$100 and US\$300 respectively in May. Furthermore, maintenance cost of HEVs is high. The cost of power train of HEVs is over 30% of the total and the follow-up maintenance cost is not low. Although the government advocates the use of HEVs and Toyota promotes the advantage of HEVs, it is also an issue to persuade people to purchase HEVs.

Although the Chinese consumers have showed little interest in purchasing HEVs, China auto manufacturers have also launched their own plans to produce HEVs successively. China HEV market is in the development stage, but if China allows oil prices to be decided by market, and adopts the policy to offer subsidy to HEV producers, which will push down selling prices of HEVs, then China HEV producers will have a harvest.



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