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Automotive Sector: China's Electric Ambitions

A summary of key policies, insights, challenges and opportunities regarding China's burgeoning automotive industry and intent to successfully introduce electric vehicles into the world's largest consumer market and beyond.

Overview

China's home-grown car manufacturers are racing to be among the first to bring all-electric cars to market. Most major Chinese car manufacturers are in various stages of researching and launching hybrid, plug-in hybrid and fully electric vehicles, including Chery, Warren Buffet-backed BYD, Beijing Automotive Group Co., Ltd (BAIC), Brilliance Auto, Shanghai Automotive Industry Corporation (SAIC) and Geely. Mainland car manufacturers are developing their 'green' product pipelines in order to capitalise on generous government purchase subsidies and get ahead of the demand curve in what most analysts expect will be one of the world's largest markets for alternative-energy cars. It is expected that China's annual production of alternative-energy automobiles, including electric vehicles, hybrid energy vehicles, hydrogen fuel cell vehicles and solar vehicles, will increase to 15 million units by 2020. Despite shared challenges, opportunities for foreign direct investment in China's automotive sector are still substantial and compelling.

2001 – 2010: A Decade of Rapid Automotive Industry Expansion

China's annual automobile production capacity first exceeded one million vehicle units in 1992. By 2000, China was producing more than two million gasoline-powered vehicles per year. After China's entry into the World Trade Organization (WTO) in 2001, the development of the domestic gas-powered automobile market further accelerated. Between 2002 and 2007, China's national automobile market grew by an average 21 percent, or one million vehicles, year-on-year.

In 2009, approximately 13.7 million motor vehicles were manufactured in China, ensuring that China surpassed Japan as the largest automobile manufacturer in the world. Over 10 million of the vehicles produced in China were passenger cars (sedans, sport utility vehicles), multi-purpose vehicles and crossovers, and 3.4 million were commercial vehicles (buses, trucks, and tractors). Gasoline consumption by motor vehicle accounts for about one-third of China's total oil demand.

Since September 2011, China has been the largest automotive market in the world. Chinese car manufacturers and brands such as BYD (Build Your

Key issues

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Dreams), Chery, Geely, Hafei, Jianghuai (JAC), Chang'an, Great Wall, and Roewe currently produce approximately 44% of the vehicles in the China market. The remaining 56% are produced and branded via joint venture (JV) arrangements with foreign car manufacturers such as Volkswagen, General Motors, Hyundai, Nissan, Honda and Toyota.

In an effort to raise the international competitiveness of the Chinese automobile industry, the Chinese government has encouraged domestic car companies to consolidate, combining the 14 largest car manufacturers into 10 and weaning them off their dependence on government subsidies and JVs with foreign companies and brands. Chinese car manufacturers have responded with gusto by pursuing full, high-profile acquisitions of several foreign automotive brands and divisions. For example, in March 2010, a consortium led by Geely acquired Sweden's Volvo from Ford Motor Company.

China's Inherent Automotive Sector Advantages and Cultural Factors

Many analysts attribute the rapid rise of China's automotive industry to the country's abundant low-cost manufacturing and labour resources, consistent governmental incentives (e.g. subsidies) and favourable domestic business investment policies, and not least, its strategic and commercial emphasis on engagement and assimilation of imported automotive technologies via foreign direct investment.

Several social factors are also contributing to China's position. Consumer car buyers in China are less accustomed to a tradition of individual car ownership, consumer protection and the power of gasoline-fuelled cars. Most commutes in China's cities are slow because of consistent traffic congestion and a backlog of infrastructure projects. Long distance personal travel is comparatively rare and most people use their cars to make short city trips - vehicles with a 100- or 200-kilometre driving range would not be viewed as limiting.

For these reasons, many consider China to be in the pole position for advancing and incorporating alternative fuel and power technologies for mass market, consumer car application.

The Policy Aspects: Electric Vehicles and the Chinese Automotive Industry Plan

Chinese automotive industry leaders and Chinese policy makers have recognised the opportunity and are actively pursuing a vision of China's success within the Electric Vehicle (EV) category amid growing consumer income and demand, and concerns about environmental impact and climate change, low cost labour sustainability and dependence on foreign oil imports.

- **Target Production Capacity** - In March 2009, the State Council, China's cabinet, released the *Automotive Readjustment and Revitalization Plan* (the Plan) to actively promote the development of the Chinese automotive industry in general, inclusive of hybrid, alternative fuel and wholly electric vehicle technologies, by providing financial subsidies and offering other favourable policies such as government procurement, the promotion of pilot projects and the development of a 'rapid-charge' infrastructure. The Plan sets a goal to have an annual production capacity of 500,000 hybrid or wholly EVs, which would be 5% of the total sales volume of passenger cars, by 2011.
- **Subsidies in Public Service Sector** - In January 2009, as part of the Plan then to be rolled out, the Chinese Ministry of Finance, together with the Ministry of Science and Technology, announced a pilot programme to promote alternative energy vehicles (including hybrids, wholly electric vehicle and fuel cells) to be used in the public service areas (such as those used in public transportation, postal services, the taxi industry, public affairs and environmental hygiene) in 13 major cities: Beijing, Shanghai, Chongqing, Changchun, Dalian, Hangzhou, Jinan, Wuhan, Shenzhen, Hefei, Changsha, Kunming and Nanchang, and this has been further expanded in 2010 to include Tianjin, Haikou, Zhengzhou, Xiamen, Suzhou, Tangshan and Guangzhou. Under this programme, the central government would provide one-time subsidies of up to US$9,000/RMB60,000 to public service sector purchasers of wholly EVs and other alternative energy vehicle types. The amount of the subsidy would be based on a vehicle's fuel-saving capabilities.

- **Subsidies to Private Buyers** – In May 2010, taking the subsidy programme one step further, the Ministry of Finance, the Ministry of Science and Technology, the Ministry of Industry and Information Technology (MIIT) and the National Development and Reform Commission (NDRC) announced a pilot programme to provide subsidies to private customers/consumers in five cities (including Shanghai, Changchun, Shenzhen, Hangzhou and Hefei) of plug-in hybrid and wholly EVs from 2010 to 2012. The subsidies provided for a plug-in hybrid are up to US$7,500/RMB50,000 and the subsidies provided to wholly EVs are up to US$9,000/RMB60,000. Some local governments have also issued or indicated that they have issued local subsidy programmes for private customers/consumers. Manufacturers typically pass on these subsidies to consumers.
- **Further Development Plan, Yet to Come** - As recently disclosed by the China Association of Automobile Manufacturers (CAAM), the draft of the *Development Plan for Energy-Saving and New Energy Vehicles (2011-2020)* (the Development Plan) has been completed and submitted to the State Council for examination and approval. The Development Plan is expected to be promulgated and implemented soon. It is reported that under the Development Plan, the developing goal for the period of 2011 to 2015 will focus on developing the energy-saving and new energy vehicle industry in China. The aim is that by the end of 2015, China would become a leading power in the energy saving and new energy vehicle industry, with its market size being one of the largest in the world.

The Legal Aspects: The Current Climate for Foreign Investment in China's EV Industry

Foreign investors and multi-national businesses with global interests and active involvement or operations in China's automotive sector share similar challenges and concerns. The role that foreign technologies and partnerships play in China has changed as policies have shifted to encourage domestic Chinese car manufacturers, and manage competitive foreign partners and investors carefully while maintaining access to new foreign technologies.

- **Foreign Shareholding Restriction**: The shareholding of a foreign investor in a company engaged in car manufacturing business in China is still restricted to no more than 50%, although there has been debate on the lifting of such restrictions. At the moment, the 50% rule may be exempted with special approval from the relevant authorities on a case-by-case basis. For instance, it is reported that ZAP (a 15-year-old California-based EV company) announced in January 2011 that it has completed the acquisition of 51% of Zhejiang Jonway Automobile Co. Ltd. (a 20-year-old Chinese vehicle manufacturer) as part of a strategy to capitalize on the growing automotive and EV market in China. It is an exception to the 50% foreign shareholding restriction and may be a signal that the Chinese regulator might ease the foreign shareholding restriction, in particular, for investments in privately-owned car manufacturers in China.
- **Restriction on Number of JVs**: In China, one foreign investor may only establish two JVs that engage in manufacturing the same vehicle type (e.g., passenger cars, commercial vehicles or motorcycles). It is worth noting that this 'two JVs' restriction does not apply to acquisitions carried out by a foreign investor together with its Chinese partner. Taking advantage of such an exception, General Motors (GM) has invested in several JVs together with its Chinese partner Shanghai Automotive Industry Corp (SAIC). They include a JV in Shanghai (SGM) where GM holds 49% and SAIC holds 51%; a JV in Guangxi where GM holds 34%, SAIC holds 50.1% and a third shareholder Wuling holds 15.9%; a JV in Yantai where GM holds 25%, SAIC holds 50% and SGM holds 25%; and a JV in Shenyang which has the same shareholding structure as the Yantai JV.
- **Central Approval Required**: The establishment of a car manufacturing JV is subject to verification by the NDRC at the central level. Compared with the local level approval process, verification by central NDRC is generally more complicated, time-consuming, imposes stricter requirements regarding application documents and involves more uncertainty.

- **Anti-Trust**: China's new antitrust and competition regime has imposed stringent compliance requirements on foreign car manufacturers who seek to grow in China via traditional M&A procedures. A foreign investor and its Chinese partner of a proposed Chinese car manufacturing JV project may satisfy the turnover thresholds that trigger a merger control notification to the Ministry of Commerce (MOFCOM). The merger control process increases time, transaction costs and uncertainties of an M&A transaction. MOFCOM must approve the M&A transaction before it can be completed, which it can do subject to conditions. In September 2009, for example, MOFCOM imposed a number of conditions on General Motors in connection with its acquisition of parts of Delphi Corp. The obligations related to the supply of products to domestic car manufacturers under reasonable, non-discriminatory terms, including on a timely basis and for a price and quality consistent with market practice, as well as certain non-disclosure obligations.
- **Intellectual Property**: Foreign investors may make capital contributions to JVs in the form of a licence to use or an assignment of technology, subject to the practice of the relevant approval authorities. In reality, the approval authorities have the discretion to examine and determine the type of technology capital contributions and it is possible that the practice may vary in different regions and levels of the government. In most cases, appraisals on the value of the technology are conducted by asset evaluation institutions which are usually specialised in the evaluation of tangible assets (rather than intangible assets and technology), in the absence of generally agreed or stipulated methodologies or criteria for evaluating technology, and valuation of technology is therefore usually subject to the personal judgment of the appraiser. Licences and transfers of technology may be subject to the *PRC Technology Import and Export Regulations* (Regulations) which require such licences and transfers to be registered or approved. Further, any agreement relating to improvements and modifications to the technology licensed may be subject to the technology export requirements. Care should be taken that these Regulations are complied with to ensure the enforceability of the agreements. Brand, intellectual property and technology protections are weakly enforced in China and are a common source of costly, lengthy disputes which can make capital contributions of technology challenging for foreign investors.
- **Stage Classification**: China has classified the development of new energy vehicles into three stages: Initial Stage, Development Stage and Mature Stage, mainly based on the type of energy storage devices. Until 31 December 2010, the technologies which are classified in the Mature Stage only include nickel-metal hydride battery-based hybrid passenger cars, lead-acid battery-powered hybrid passenger cars, lead-acid battery-powered wholly electric passenger cars and wholly electric commercial vehicles. Other types of new energy vehicles (such as lithium-ion power battery, zinc-air battery, super capacitor, hydraulic/pneumatic energy storage based hybrids or wholly EVs, fuel cell-based vehicles, hydrogen engine cars and DME vehicles) are classified in the Initial Stage or Development Stage. Vehicles categorized in the Initial Stage and Development Stage are subject to more stringent restrictions in terms of market entry approvals, sales areas, sales conditions and after-sale supervision requirements. As of October 2011, no revisions have been made to such stage classification and therefore such stage classification still applies.
- **Qualifications for Government Subsidies**: EVs which qualify for China's generous government subsidies include those models and brands that have been awarded production licences from the government and are assembled in China, irrespective of whether they are manufactured by a domestic player or a JV. However, imported EVs are not included in the subsidy program to date, which gives an advantage to the 'home-grown' EVs. In addition to the other criteria, only vehicles specified in the *Catalogue of Recommended Vehicle Types of Energy Saving and New Energy Vehicle Demonstration and Development Application Projects* (the Catalogue) are eligible to enjoy the subsidies in

the public service sector and subsidies to private customers as discussed above. The Catalogue appears as a section in the *Announcement of Car Manufacturers and Products* currently published and maintained by MIIT. Only those vehicles in the Announcement of *Car Manufacturers and Products* may be manufactured and sold in China as well as registered by customers. The certification of a vehicle to be listed in the *Announcement of Car Manufacturers and Products* normally takes more than three months.

Challenges to China's electric ambitions remain

While government priorities and cultural factors have set the stage for China's EV revolution, significant challenges remain as China pursues leadership in the EV category and increasingly independent development of a mature domestic automotive sector in line with global standards.

- The purchase price of EVs is still comparatively high globally and also in China because of the high research and development costs involved in their production. As China seeks to develop models and markets independently of foreign car manufacturers, its domestic producers will have to assume a large R&D burden that has historically been avoided via formal partnerships and technology transfers from foreign players.
- Lithium-ion (LI) batteries, which are a core component of most EV designs to date, also bring a hefty price tag, as well as safety/quality and counterfeiting issues. A rash of exploding counterfeit LI batteries in mobile phones sold in China have garnered top headlines in the past.
- Lack of electric infrastructure and availability is also an issue. More Chinese citizens live in apartments than in private homes, making it very difficult to set up vehicle recharging stations or facilities. It has been reported that the China Southern Power Grid Corporation is accelerating plans to build EV charging stations, and that it will cooperate with other Chinese energy industry players to create a broad network of EV recharging stations and carry out large-scale research on power grid control technologies.
- Size-to-size gasoline-powered cars provide greater distance range, higher top speeds and better reliability records than EVs. As China's cities grow and the government continues to prioritize westward expansion and investment, the pressure for better EV performance and technical sophistication may increase rapidly.
- There have been a significant number of notable automotive industry trade disputes between China and other nations ranging from the implementation of obligations that were made when China joined the WTO, China's exchange rate policy, trade law enforcement (e.g. Chinese tyre industry, automotive parts), and possibly unfair subsidies to Chinese industrial manufacturers.
- The Chinese central government has announced in summer 2010 the formation of a 16-strong alliance among state-owned car manufacturers, battery makers and manufacturers of recharging points, as well as a US$15 billion investment plan involving energy saving powertrain components and recharging infrastructure. There are doubts, however, as to whether the alliance will be used to give less innovative state-owned car manufacturers an unfair advantage over the more innovative, mainly privately-owned car manufacturers.

Foreign Investors' Actions So Far

Car manufacturers have shown enthusiasm for developing new energy vehicles. At the 2010 Beijing Motor Show, more than 20 EVs were on display, most of which came from domestic Chinese car manufacturers. At least 10 all-electric models have been reported to be on track for volume-production.

Despite shared challenges, opportunities for foreign direct investment and growth in China's automotive sector are still substantial and compelling:

- In 2008, prominent investor, Warren Buffet's US investment firm Berkshire Hathaway, bought a 10% stake in Chinese car manufacturer BYD.
- In April 2009, SAIC announced that it would produce gas-engine hybrid cars using battery technology and parts from two US-based manufacturers, A123 Systems and Delphi.
- In April 2009, Nissan Renault announced a partnership with China's MIIT to promote EVs and to create a battery-charging network.

- In September 2009, Goldman Sachs entered into a subscription agreement with Geely, pursuant to which it would invest approximately US$330 million in convertible bonds and warrants in Geely. In this way, Geely also effectively gained a level of global industry credibility through association with one of Wall Street's most successful investment firms.
- In July 2010, ZAP signed definitive agreements to acquire 51% of Zhejiang Jonway Automobile Co. Ltd. as part of a strategy to capitalize on the growing automotive and EV market in China. In January 2011, this acquisition was completed.
- In November 2010, Siemens announced that it is close to signing a contract to supply a Chinese city with electric vehicle charging infrastructure, and has been talking with Chinese utility companies and cities including Shanghai, Guangzhou and Chongqing about providing charging infrastructure.
- In March 2011, BYD and Daimler AG established 'Shenzhen BYD Daimler New Technology Co. Ltd.', a 50:50 research and technology centre to develop EVs in China.
- In April 2011, JAC Motors announced that it will enter into a strategic cooperation with Foxconn to develop new energy vehicles and R&D on automotive electronic systems from April 2011 to April 2013.

Foreign investors' battle in the world's largest consumer market has already begun.

For additional insight on the legal climate for foreign direct investment into the automotive sector in China, please contact Kelly Gregory, Corporate Partner at Clifford Chance LLP Shanghai, at kelly.gregory@cliffordchance.com or dial +86 21 2320 7234.