

5.1.6 Do You Know That ? Mini-Cars in China

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Mini-cars, also called unlicensed cars in certain situations, are motorized vehicles with 3 or 4 wheels with a reduced size, weight and cubic capacity compared to vehicles registered in the private car or commercial vehicle category. Their speed performance is also more limited compared to vehicles with a conventional size : usually between 40 and 70 km/h. They are also called low-speed vehicles.

The electric version of these mini-cars is increasingly successful worldwide, especially in China where they seriously compete with electric cars and electric motorized two-wheelers. In its Global EV Outlook 2017 report, the International Energy Agency estimated the fleet of electric mini-cars to be 3 to 4 million vehicles in 2016, thus 3 to 4 times as much as the fleet of electric cars and buses together.

In China, almost 1.5 million electric mini-cars were sold over a single year, last year, thus 50% more than the previous year during which this market had already benefited from a 50% growth. In short, since their first steps in China in 2011, in medium-sized Chinese cities first, that is to say with a few hundred thousand to a few million inhabitants, the market of electric mini-cars has boomed.

As a comparison, note that Chinese electric mini-cars still have a huge growth potential if we consider the market conquered by electric motorized two-wheelers which today represents a fleet of about 200 million vehicles.

The success of electric mini-cars in China is mainly due to the low cost of these vehicles upon purchase but also to the exemption of a driving license.

However, their swift success is becoming a concern. Public authorities are currently regaining control because these electric mini-cars, just like electric motorized two-wheelers in this country, mostly use lead batteries with the known environmental consequences. Also, these mini-cars are not subject to any design standard and therefore have mediocre safety performances.

In the light of their rapid growth, electric mini-cars are also perceived as potential competitors for the industry of electric cars, strongly supported by China.

Electric mini-cars are rapidly expanding in China. It shows the important need for latent motorized mobility at a low cost. However, their development does not fully match sustainable conditions. Public authorities are thus concerned in terms of environment and road safety in particular.

Since 2016, Chinese public authorities have been regaining control over this mobility sector. It might offer nice possibilities regarding electric vehicles with better quality standards compared to current electric mini-cars while remaining low-cost vehicles.