CIO View

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China's Journey to Expand EV Exports

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- While China has been very active in expanding its capacity in the EV sector and related value chain, hoping that these could be the new export growth drivers for the country, the export outlook is becoming uncertain after the U.S. and the EU increased their tariffs on Chinese EV imports.
- The U.S. and EU have expressed concerns about China exporting excess EV capacity to the rest of the world with the help of government subsidies. However, some believe that Chinese EV makers are more competitive in terms of quality and efficiency.
- The EV sector is facing significant overcapacity globally driven by China supply, leading to a price war. Market consolidation is widely expected, and the competition among automakers is likely to extend beyond the price and quality of the EVs to their balance sheet strength.

The rapid expansion of China's electric vehicle (EV) production capacity has created a new challenge for domestic automakers: excess supply. As EV penetration in China surpassed 40% in 2023 and purchase subsidies were phased out, the world's largest EV market experienced a slowdown in domestic growth. Consequently, many Chinese automakers have turned to exports as a core expansion strategy, which is reflected in the spectacular growth of China EV export over the last 5 years (Table 1 & 2).

Table 1: EV Share of Total Exports in China

	EV Share of Total Exports	"New Three" ¹ Share of Total Exports
2018	0.0%	0.6%
2019	0.1%	0.8%
2020	0.1%	1.5%
2021	0.3%	2.0%
2022	0.7%	3.4%
2023	1.2%	4.5%

Table 2: Growth of China "The New Three" Exports Value

In USD Billion	Electric Vehicle	Lithium Battery	Solar Battery	Total Export	
2018	0.5	N/A	13.6	2486.7	
2019	1.4	N/A	19.2	2499.5	
2020	3.2	15.9	19.8	2590.0	
2021	10.9	28.4	28.5	3357.1	
2022	24.1	50.9	46.4	3544.4	
2023	41.8	64.9	43.8	3379.7	
3Y Growth (%)	135%	60%	30%	9%	

Source: General Administration of Customs of the People's Republic of China, as of March 31, 2024.

However, recent tariff hikes by the U.S. and EU have complicated the export outlook. The U.S. decision to raise tariffs on China-made EVs to 100% and the EU's move to impose additional duties of up to 38.1% on top of the existing 10% levy have erected formidable barriers to accessing these key overseas markets.

Yet, the decision to expand overseas is not a simple yes-no question for Chinese automakers. The fierce competition and pressurized profitability in the Chinese market have made the export route an attractive proposition, even with the EU tariffs

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¹ "New Three" refers to Electric Vehicles, Lithium Batteries and Solar Batteries.

in place. Citi analysis estimates that net profit margin of the largest China EV maker in Europe could still reach 8.6% with the 27.4% tariffs, assuming 50% of the tariff is borne by end customers. This would set its EV prices on par with its European counterparts, while still offering better profitability than the Chinese market.

Furthermore, the average export prices of Chinese lithium-ion batteries and EVs have increased over the past four years, indicating that the excess supply within China is being absorbed by offshore demand (Chart 1). This trend is exemplified by the pricing of the Atto 3 model (known as Yuan Plus in China), which is priced at $\le 38,000$ in Germany, comparable to the Model Y ($\le 45,000$) and ID.4 ($\le 44,000$), but significantly higher than the $\le 18,700$ price tag in China.

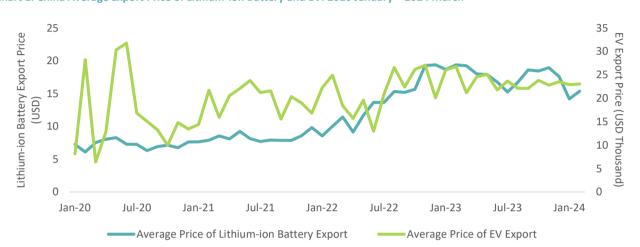


Chart 1: China Average Export Price of Lithium-ion Battery and EV: 2020 January – 2024 March

Source: General Administration of Customs of the People's Republic of China, as of March 2024.

However, if the challenges of entering foreign markets intensify, policymakers may need to recalibrate their efforts by stimulating domestic EV sales or fostering competition among industry players. Discussions about ongoing progress on auto trade-in plans and supportive measures like the People's Bank of China's initiatives to encourage vehicle trade-ins and the introduction of "zero interest" and "zero downpayment" campaigns by Original Equipment Manufacturers (OEMs) have emerged. Yet, these measures may not be sufficient to significantly invigorate the market, and stakeholders remain hopeful for a nationwide program that stimulates vehicle trade-ins.

Consequently, in order to gain more market share, we are observing price reductions in the electric vehicle (EV) market, even among industry leaders. This trend of lowering prices has extended beyond China. For example, the price of the Model Y series has been reduced by 4-9% in Europe since January 2024. As a result, EV and battery manufacturers that have not yet achieved economies of scale or reached the breakeven point may experience significant margin erosion due to the ongoing price war.

In the face of these challenges, the ongoing dialogue between Chinese and EU officials regarding the tariff dispute is a positive step, signaling a willingness to find a mutually acceptable solution. By working collaboratively, these economic powerhouses can help shape a future where the free flow of EV technology and products benefits consumers, automakers, and the environment alike.

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