



By Michael Herson

CHINA SHIFTS TO ADDITIVES EXPORTS AS DOMESTIC EVS TAKE HOLD

China leads the European Union and the United States in electric vehicle market penetration, having surpassed the landmark 50% point for new car sales in July 2024.

Paradoxically, 2025 and 2026 will witness a significant expansion in Chinese lubricant additives production capacity, although logic suggests that domestic demand should be suppressed by the advance of EVs. To dive into the reasons behind this apparent conundrum, London-based strategy consultancy The Strategy Works has combined Mandarin desk

research sources with interviews with local manufacturers.

As a starting point, TSW analyzed the official export statistics for lubricant additives published monthly by the General Administration of Customs of the People’s Republic of China (GACC). Between 2021 and 2024 China switched from being a net importer of lubricant additives to a net exporter—with exports exceeding imports by 31 metric tons (Figure 1).

This trend accelerated in 2024 (YTD), with a more than 22% in-

crease in average monthly tonnage versus 2023 (Figure 2).

The customs data for 2024 YTD break lubricant additives exports down by destination (Figure 3).

The leading destination of Chinese additives is Singapore, accounting for 26% of China’s exports in the first 11 months of 2024. Singapore has a significant chemicals processing sector, and its extensive network of free trade agreements renders the port a major re-export hub for the region, with its reduced tariffs and simplified trade protocols.

Figure 1. Total China Net Imports vs. Net Exports of Lube Additives, 2021 - 2024 (thousand kilos)

	Imports	Exports	Net Imports	Net Exports
2021	348,825,940	111,616,080	237,209,860	
2022	253,339,653	201,424,017	51,915,636	
2023	202,873,144	207,906,332		5,033,188
2024 YTD*	201,334,570	232,361,067		31,026,497

*YTD = Months 1 - 11 year to date – latest data available

Source: General Administration of Customs of the People’s Republic of China (GACC)

The majority of passenger cars in Singapore are imported, with only 1 million cars registered for its population of 6 million. This contrasts with the 26 million cars registered in South Korea (which receives 15% of China's additives exports) for its population of 51 million. So, the implication is that significant quantities of additives are either reprocessed locally and/or re-exported from Singapore.

UAE is also a strong export destination for China, but direct exports to western markets, as well as Japan and India, are low in comparison.

Planned Capacity Increases in China

Against this backdrop, substantial increases in Chinese lubricant capacity have been announced to come on stream during 2025 and 2026 from three leading manufacturers.

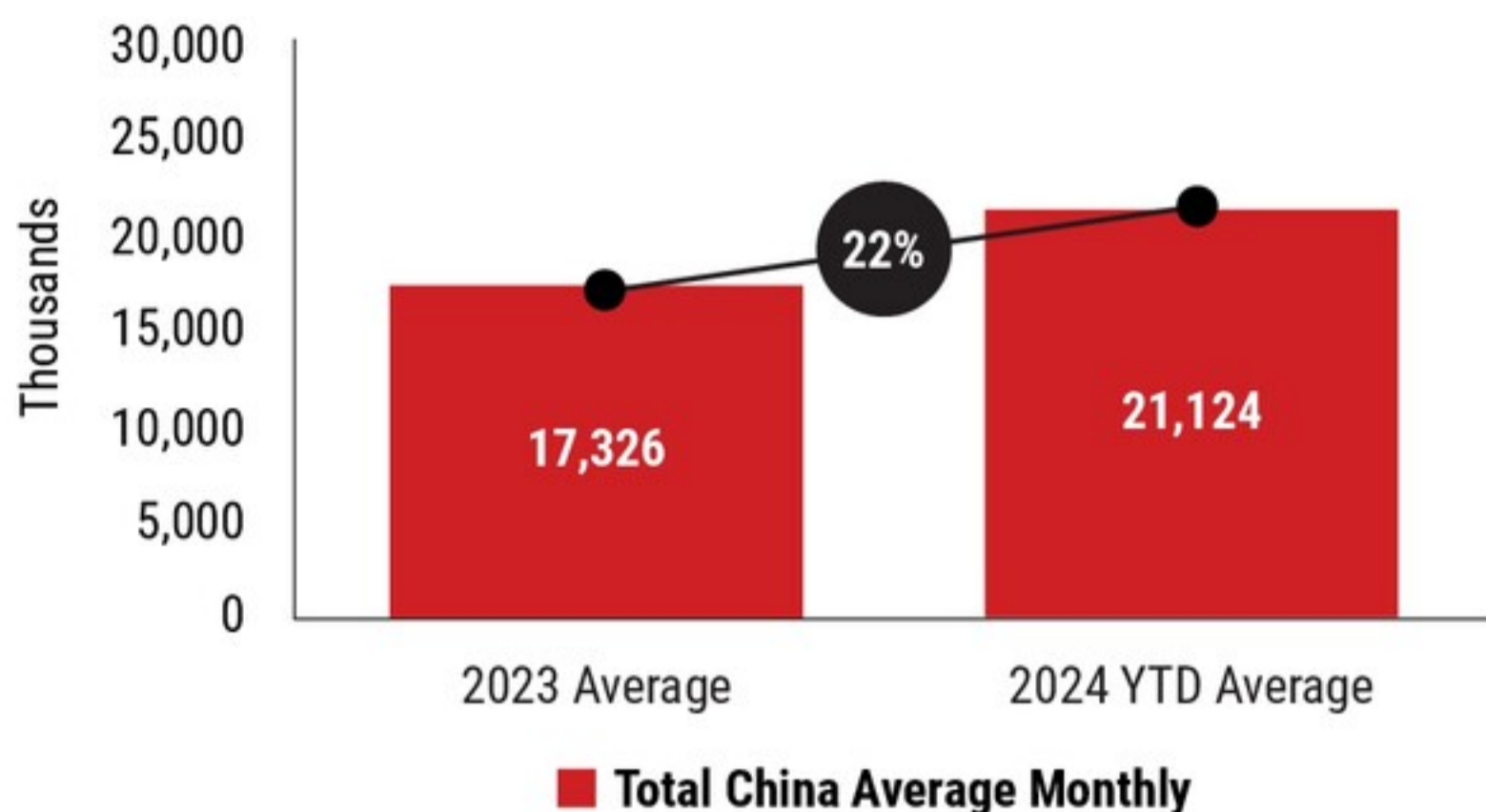
Two multi-national U.S. players have announced plans to increase their Chinese capacity during 2025 and 2026, the first of which is Lubrizol Additives (Zhuhai) Co., Ltd, which is wholly owned by Lubrizol Southeast Asia (Pte.) Ltd, based in Singapore.

The Zhuhai Ecological Environment Bureau in Guangdong Province announced the future expansion for Lubrizol's blending unit at Lubrizol Additives (Zhuhai) Co., Ltd in Oct. 2022. The expansion project plans to increase the production capacity by 63,000 t/y, and the total blending capacity will reach 238,000 t/y.

The construction period was estimated to be 24 months in the "Basic Information of Construction Project" table, intimating a timetable within this year and an investment of 21 million RMB.

Lubrizol's commitment to China's "new energy" vehicles was expressed in an interview with Rebecca Liebert, CEO of The Lubrizol Corporation, published in "China Chemical In-

Figure 2. Total China Additive Production in 2023 and 2024 (thousand kilos)



Source: General Administration of Customs of the People's Republic of China (GACC)

dustry News" in March 2024. Liebert stated that the company has adhered to a "localization strategy" that will change major challenges into development opportunities.

The second U.S. player expanding capacity in China is Chevron Oronite. The company's expansion at its facility in Ningbo, Zhejiang Province, was referenced by the Zhejiang Provincial Environmental Protection Bureau in Dec. 2024. The investment is said to amount to U.S.\$ 55 million and will result in an annual production of 20,000 tons of ZDTP. The expansion aims to replicate the successful production line from Singapore and integrate resources with Phase 1 at Ningbo.

Within the domestic market, Xinxiang Richful Lube Additive Co., Ltd., headquartered in Xinxiang, Henan Province, is also making big investments to up capacity with two projects. The first project is to be completed in two phases. Phase one of the first project, adding 60,000 tons of capacity, is completed and is now part of Richful's current capacity of 200,000 tons, as confirmed in

Richful's half year report disclosed to the Shenzhen Stock Exchange. The second phase of the first project will add 90,000 tons and is due to come online by Dec. 31 this year.

As part of its second project, Richful aims to add an annual 460,000 tons of additives capacity. Within this project, there are 362,200 tons of additive packages specified (78.7%).

These significant planned new volumes have captured the attention of investment analysts in China. This includes Guotai Junan Securities Co., Ltd., which has acknowledged that Richful "is continuously advancing its strategic plan to shift from single-component products to additive packs, and from small and medium-sized clients to larger clients. It has made breakthroughs in accessing core customers, with steady growth in additive pack sales and a gradual enhancement in transformation and upgrading ... and expanding into overseas niche markets."

Additionally, Central China Securities Co., Ltd. has taken note of Richful's hefty ambitions, stating that "the company has mastered the for-

mulation processes for CI-4 and CK-4 diesel engine oil additives, as well as SN and SP grade gasoline engine oil additives. It continuously explores the self-production of core raw materials, such as dodecylphenol, linear long-chain alkylbenzene, and 3,5-methyl ester, which significantly reduces production costs. Leveraging its technological, product, capacity and cost advantages, Richful has become a leading domestic supplier of lubricant additives and is gradually establishing its influence in international markets."

Similar to Central China Securities, Shanghai Shen Yin Wan Guo Securities Research Institute Co., Ltd. believes that Richful's growing size and ability to meet stringent specifications is promising. "Richful currently has a monomer production capacity exceeding 200,000 tons with an additional 550,000 tons under construction, rapidly expanding its scale. In terms of product certification, the company's CI-4, CK-4, SN and SP grade compound additives have passed rigorous third-party bench tests abroad. It has made significant breakthroughs in gaining access to key customers. By capitalizing on opportunities in large oil companies' supply chain restructuring, Richful is rapidly breaking into overseas markets and developing into the fifth comprehensive lubricant additive manufacturer globally outside of the "Big Four" enterprises, with considerable future development potential."

Even if these expansion plans do not fully take shape until 2026, Richful will have a formidable capacity to deploy in developing new export markets.

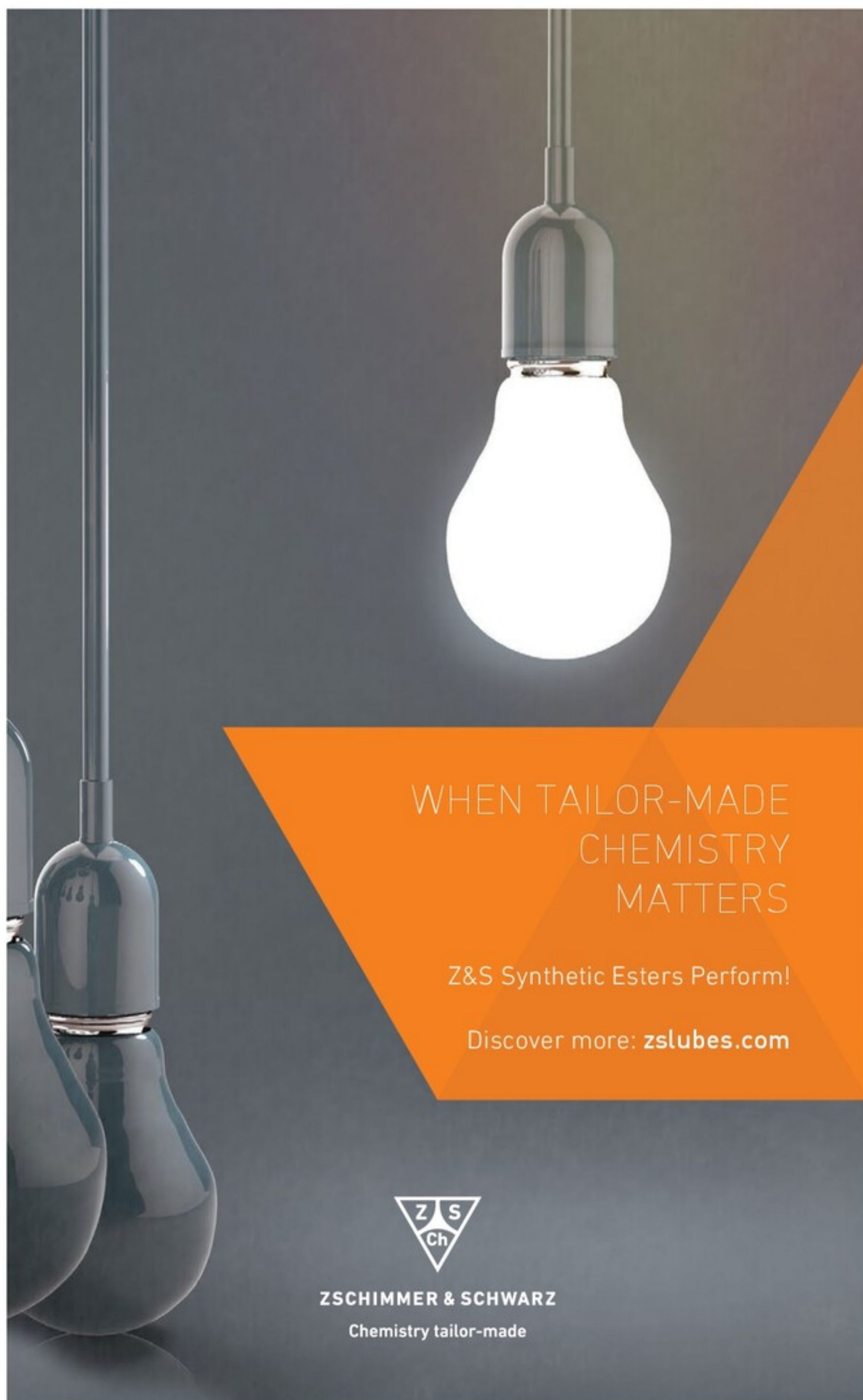
Chinese SMEs Deploy New Products to Expand Exports

Aside from capacity increases, new additive technology is emerging in China, driven by environmental pol-

icies, which will also feature within China's export portfolio. The Strategy Works interviewed four Chinese companies that are at the forefront of such innovation.

Dowpol. Liu Qingcai, chief engineer of Shanghai-based Dowpol, recognizes the domestic pressures

that are driving the search for new export markets. "The impact of environmental policies has led to a rapid growth of electric vehicles in China, which has directly resulted in some reduction in the use of automotive lubricants," Liu said. "Secondly, the prolonged oil change cycle of tradi-



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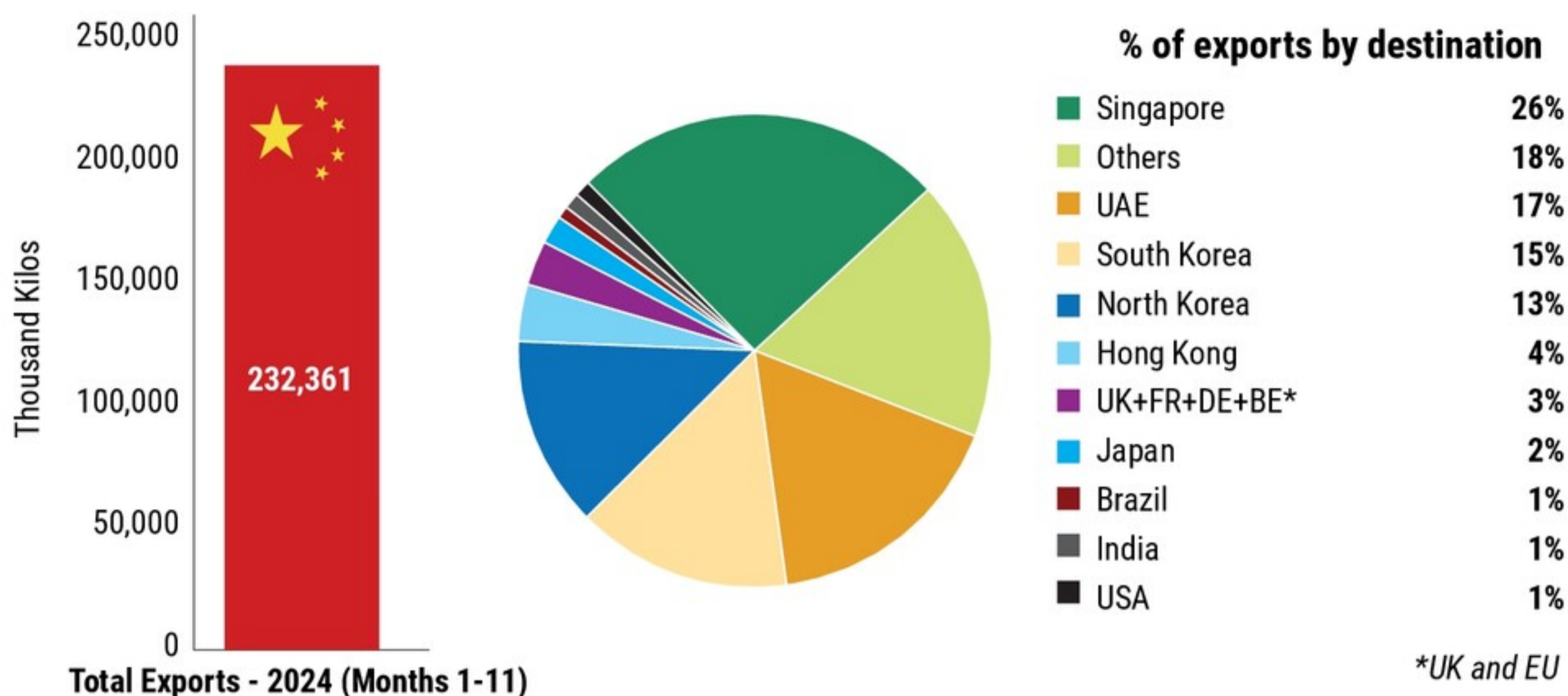

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Figure 3. Total China Lubricant Additives Exports by Destination, 2024



Source: General Administration of Customs of the People's Republic of China (GACC)

tional fuel vehicles has also led to a decline in the consumption of engine oil.”

He continued: “Our current export business mainly focuses on API Group IV; these are mainly traditional high-viscosity polyolefin PAO40 and PAO100, metallocene mPAO65 and mPAO150, and ultra-high viscosity V600 and V1000 products. We launched an ultra-high-viscosity metallocene PAO V2000 in Dec. 2024.”

Liu stated that at present, his company's main export markets are Japan, Europe and the Middle East, and that due to tariffs in North America, the export volume is currently very small in those places.

Dowpol attributes 60%-70% of their sales to exports.

Shanghai Starry Chemical Company (Hongze in China). Ni Tong, responsible for external marketing, confirms international markets are now being developed. “In the past three years, we have seen rapid growth in markets such as Japan, South Korea, Singapore and Indonesia,” she said. “Our Lube Oil Additive section provides niche additives, such as SIB-free, odor-less gear oil packages, sulfurized EP/AW additives non-staining to copper at 150°C, etc. Our MWF Additive section provides niche products, such as a mineral oil-free, soluble oil package with 95% reduction of BOD” and more.

Bettchem. Dongping Cao, technical director of Jinzhou-based Bettchem, explained that exports now represent 70% of Bettchem’s sales. “The popularity of electric vehicles and technical advances in oil change mileage in China have led to a decline in demand for traditional lubricants, but globally, the lubricant market as a whole is still showing growth,” he said. “Therefore, exports remain our focus, and our key markets are concentrated in North America, South America, the Middle East and Southeast Asia. Some of our main export products are internal combustion engine oil compounding agents. We are also committed to the R&D of composite additives for hybrid engine oil.”

Yingkou Xinghuo. Xuyu Gao, senior engineer at Yingkou Xinghuo based in Yingkou City, Liaoning Province, confirmed that environmental forces are driving demand and are increasing capacity accordingly. “Due to dynamic demand for environmental protection and emission reduction worldwide, there is an increasing requirement for efficient lubricants that are environmentally friendly, biodegradable, with a long lifespan,” Gao said. “Yingkou Xinghuo Chemical Co., Ltd has been devoted to devel-

Figure 4. Richful Capacity Summary

Current capacity	200,000 metric tons (includes 60,000 metric tons of Phase 1 capacity already implemented for Project 1)
Phase 2 balance of Project 1 capacity—ends 2025	90,000 metric tons
Project 2 capacity increase—ends 2025	460,000 metric tons
Total capacity available after both projects fully completed	750,000 metric tons

Source: The Strategy Works

oping efficient lubricants and ester base oils for decades. In addition, our new factory will be named Yingkou Xinghuo Advanced Materials Co., Ltd, and its scale is nearly five times that of the old factory, with a designed capacity of 150,000 tons, allowing for numerous new technologies and products to be introduced."

Gao added that the company has introduced new products specifically designed for the new energy field, including EVs and hydrogen fuel cell applications: "We have developed coolant corrosion inhibitors specifically for electric vehicles and fuel cells. Our electric vehicle coolant products have ideal low conductivity, aluminium alloy protection ability and rubber compatibility. This gives us a leading position in the industry and

can be used to produce a high-performance ethylene glycol-type electric vehicle coolant ... Furthermore, the efficient EV coolant is beneficial for promoting high-power charging technology, which alleviates the problem of electric vehicle range anxiety."

Conclusion

A conflation of increased capacities targeted primarily at exports, a 360-degree reversal of net import volumes, and new technologies in response to environmental pressures all suggest that Chinese additive manufacturers fully recognize the threats posed to their core domestic business by EVs. In response, they are repositioning themselves in the global additives market to maintain and secure increased market share. ♦



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