# China Green Trade Report 2023

Jing Zhang and Christoph Nedopil

#### About this publication

This report is produced by the Griffith Asia Institute (GAI) at Griffith University, Brisbane, Australia. The brief aims to provide a vehicle for publishing preliminary results on topics related to China's exports in "New Three" industries to encourage discussion and debate. The findings, interpretations, and conclusions expressed in this paper are entirely those of the author(s) and should not be attributed in any manner to Griffith University, its affiliated organisations, or members of its Board of Executive Directors.

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Cover image: The "BYD Explorer No. 1" car carrier is being loaded with new energy vehicles for export at the port of Yantai, Shandong Province, China, on January 10, 2024. (Photo by Costfoto/NurPhoto via Getty Images)

#### Contact:

For inquiries, please contact the Griffith Asia Institute at gai@griffith.edu.au.

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# Acronyms and abbreviations

## **Key findings**

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About the data:	

### China's exports of 'New Three'

China's exports of the 'New Three'—solar photovoltaic (PV), lithium-ion batteries and electricity vehicles (EVs)—surged from under USD 20 billion in 2017 to over USD 150 billion in 2023—a growth of 650 per cent (Figure 2). During that time, EVs exports soared from USD

312 million to

# Regional trends of "New Three" export

Chinese exports of solar panels and lithium batteries reach about 220 countries, while the export destinations of electric vehicles have expanded to 175 countries by 2023, up from 105 in 2017.

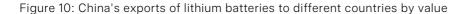
Europe has become the major destination of

Europe was the main destination for Chinese solar modules in terms of both export value and capacity, but the region's share of Chinese solar exports dropped to 48.56 per cent in 2023 from 55 per cent in 2022 by value. The Netherlands was the main port of entry for China's solar modules for the second consecutive year in 2023, importing 47.2 gigawatts valued at USD 9 billion. Judging from the country's installation of 4.82 GW of new solar capacity in 2023<sup>5</sup>, approximately 90 per cent of these imports can be estimated as being re-exported to other countries or stored for later use. 6 Southern European nations demonstrated solid year-on-year gains in 2023: Turkey's imports grew by 219 per cent, North Macedonia's by 192 per cent, Slovenia's by 141 per cent, and Croatia's by 100 per cent. Other EU

Figure 7: Growth/decline of China's solar panel exports by region

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#### Electric vehicles<sup>17</sup>

In 2023, China saw a surge in electric vehicle exports, reaching 1,545,832 units, marking a 64 per cent increase from 2022 (941,922 units). This amounted to USD 34 billion, reflecting a 70 per cent rise compared to 2022 (USD 20 billion).

The export of electric vehicles to European countries witnessed a 1500-fold (150,000 per cent) increase in absolute export values, from USD 12.55 million in 2017 to USD 19.20 billion in 2023. Within Europe, EU economies received about USD 7.4 billion in EV imports from China in 2023—with the rest going to non-EU European countries. Europe's share peaked at 80.89 per cent in 2020 befo



Figure 11: EVs exports focus on Europe and Southeast Asia

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### Outlook for China's New Three export

Understanding China's New Three manufacturing and trade is crucial to address global green transition goals. Yet navigating the sector fax property for the pro

#### About the authors

Dr Jing ZHANG is a Research Fellow working jointly at the Griffith Asia Institute and the University of Queensland. She is an economist with a diverse range of expertise encompassing agricultural systems, natural resource management, government policy and the international trade. She has developed advanced skills in statistical, market and policy analysis, coupled with extensive experience and valuable connections within the Asia-Pacific. In her current role at Griffith Asia Institute, she is focused on acquiring expertise in green finance.

Dr Christoph NEDOPIL is the Director of the Griffith Asia Institute and a Professor at Griffith University in Brisbane, Australia. He is also a Visiting Professor at FISF Fudan University, Shanghai, Acting Director of the Green Finance & Development Center at FISF Fudan University, and a Visiting Faculty at Singapore Management University (SMU).

Christoph regularly provides advisory to governments, financial institutions, enterprises, and civil society on sustainable development issues. He is the lead author of the UNDP SDG Finance Taxonomy, the Innovative Climate Finance Solutions report for the G20 in Indonesia, and the Green Development Guidance of the BRI Green Development Coalition under the Chinese Ministry of Ecology and Environment. He has authored four books and published articles in Science and other leading journals. Christoph serves as board director in scaling sustainability in businesses and finance.

Christoph is quoted regularly in Financial Times, The Economist, Reuters, Bloomberg, and other major outlets. Before joining Griffith University, he served as Founding Director of the Green Finance & Development Center and Associate Professor at the Fanhai International School of Finance (FISF), Fudan University and previously as Founding Director for the Green BRI Center at the Central University of Economics in Beijing. He worked with the World Bank in over 15 countries and was a Director in the German development agency GIZ. Christoph holds a Master of Engineering and a PhD in Economics from the Technical University Berlin, as well as a Master of Public Administration from Harvard Kennedy School.

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