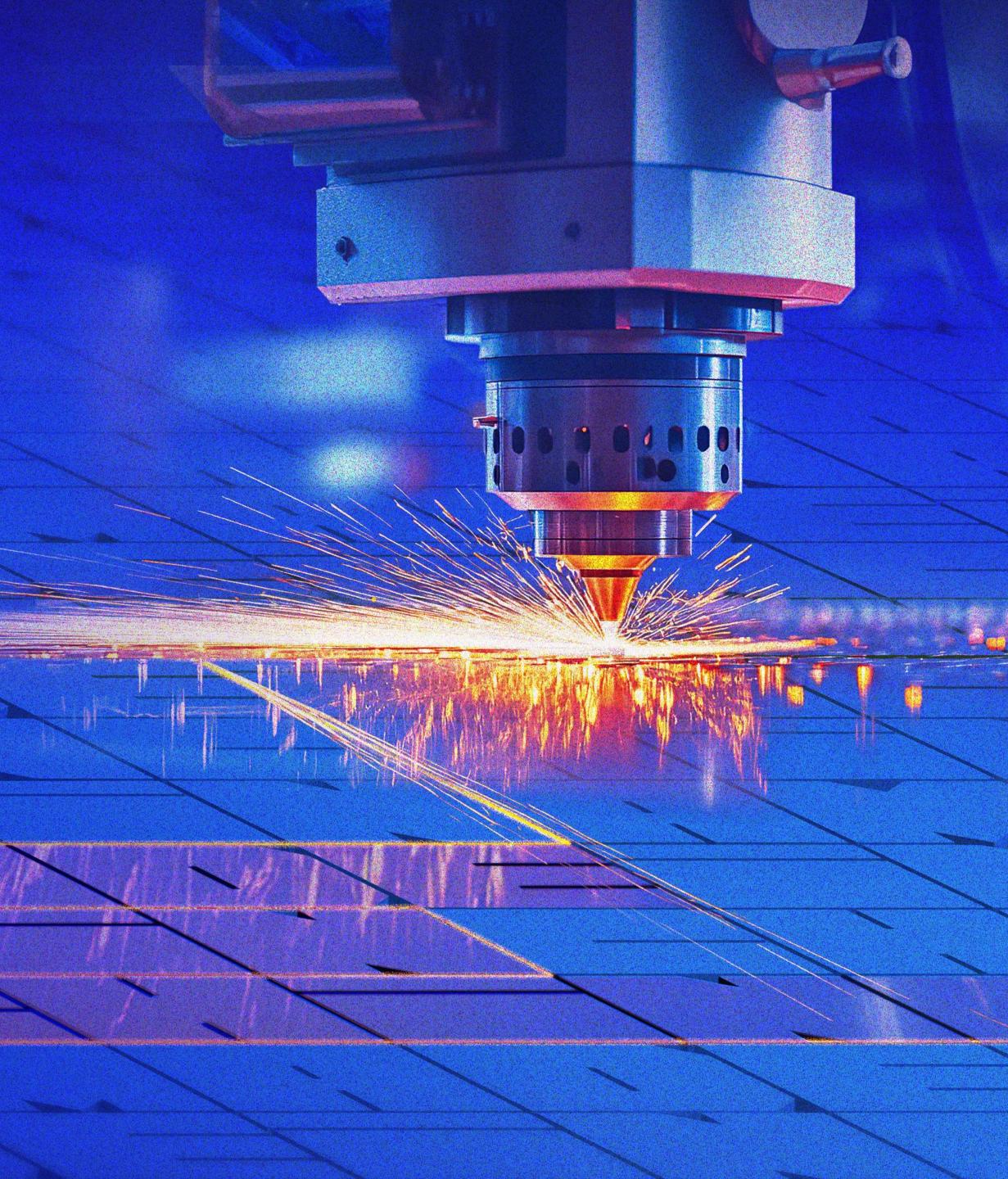




MADE IN CHINA 2025

The Cost of Technological Leadership

2nd September



Building a Strong Manufacturing Country





"To build a strong manufacturing country, we must:

- tightly grasp the rare and strategic opportunity of the present,
- respond positively to challenges,
- strengthen overall planning,
- highlight innovation as a driving force,
- formulate special policies,
- take full advantage of the system,
- mobilise the whole of society to spare no effort,
- depend more on Chinese equipment and rely more on Chinese brands,
- achieve the transition from 'made in China' to 'created in China',
- transition from 'China speed' to 'China quality',
- transition from 'Chinese products' to 'Chinese brands',
- complete the strategic transition of China's manufacturing sector from scale to strength."*

- Circular of the State Council on the Issuance of Made in China 2025 $8^{\text{th}}\ \text{May 2015}$

10 Years, 10 Strategic Sectors





- Next generation IT
- High-end numerically controlled machinery and robots
- Aerospace and aviation equipment
- Maritime engineering equipment and high-tech maritime vessel manufacturing
- Advanced rail equipment
- Energy saving vehicles and NEVs
- Electrical power equipment
- Agricultural machinery and equipment
- New materials
- Biopharmaceuticals and high-performance medical devices

MIC2025 and the US-China Trade War





"High-end goods made by advanced manufacturing were the very products that America was supposed to make more of due to our competitive advantages in talent and capital. Instead, these products are increasingly being captured by China. The "Made in China 2025" industrial plan announced in 2015 by the Chinese government makes their goal clear. China aims to become the global leader in innovation and manufacturing.

This would be an unacceptable outcome for American workers."

Foreword to *Made in China 2025 and the Future of American Industry*Marco Rubio, Chairman
United States Senate Committee on Small Business and Entrepreneurship
February 2019

Chinese industrial policy: moving towards technological leadership and self-sufficiency in strategic sectors







National Medium- and Long-term Programme for Science and Technology Development:

"indigenous innovation" and 30% reduction of dependence on foreign technology

2006

Made in China 2025 (MIC2025):

identified specific market share targets in 10 strategic sectors

2015

New productive forces:

MIC2025 principles applied to wider range of industries

2023

2010

2021

2024

Strategic Emerging Industries Initiative:

Supported hand-picked national champions in strategic industries

The 14th Five-Year Plan:

self-reliance through dual circulation The Third Plenum:

Call for "selfsufficiency in scientific and technological infrastructure" 10 years since its launch, MIC2025-style industrial policy has been tweaked, expanded and repurposed to fit a wider range of industries.

MIC2025 10 years on: a mixed bag for China, a challenge for globalisation





- Most overarching MIC2025 targets have been achieved, but sectoral-level targets are a mixed bag
- Meeting targets did not translate into healthy industries
- Externalisation of market distortions
- Loss of market share for some European companies in China
- MIC2025-style policies appear to be here to stay under 'new productive forces'
- Continued use of MIC2025-style policy may create further tension at a time when globalisation is being challenged

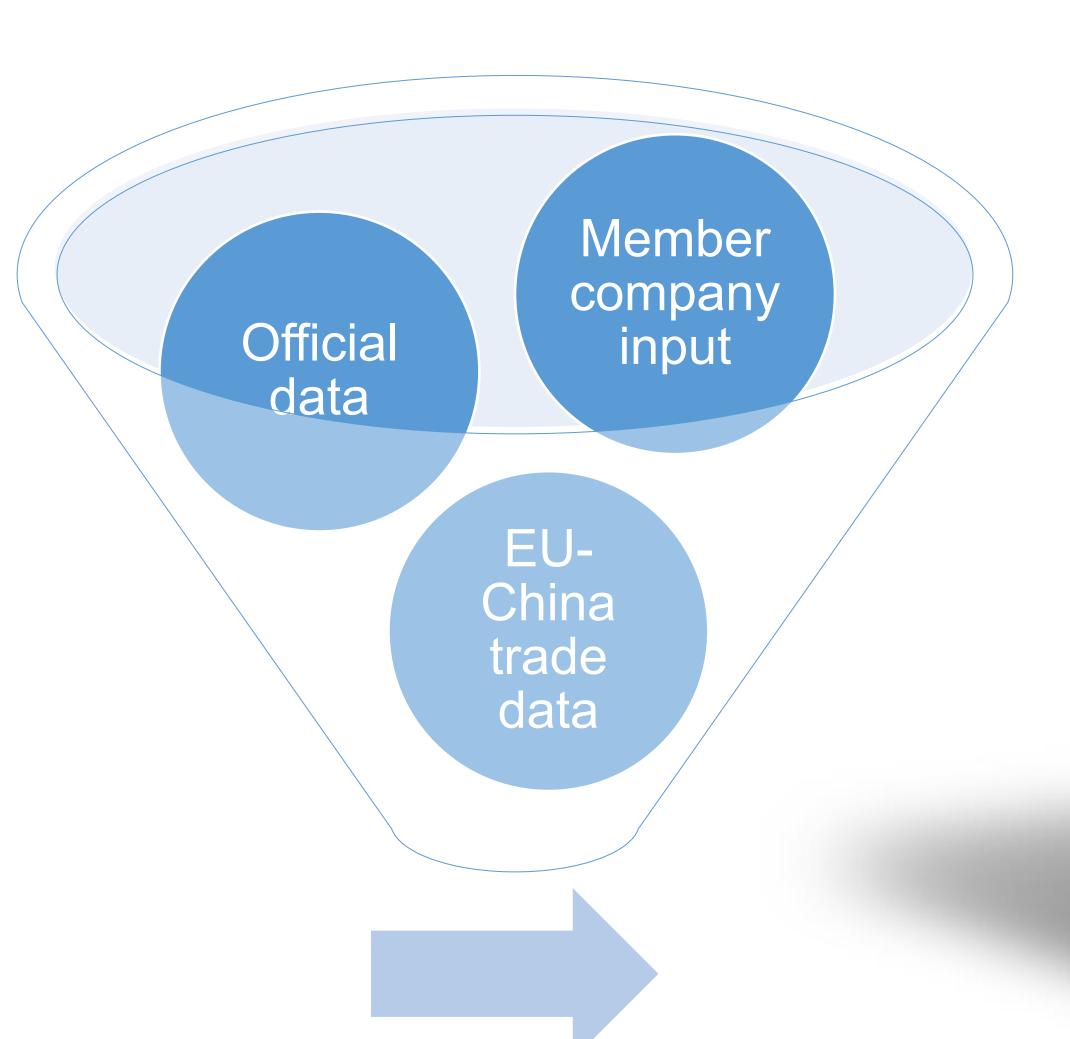


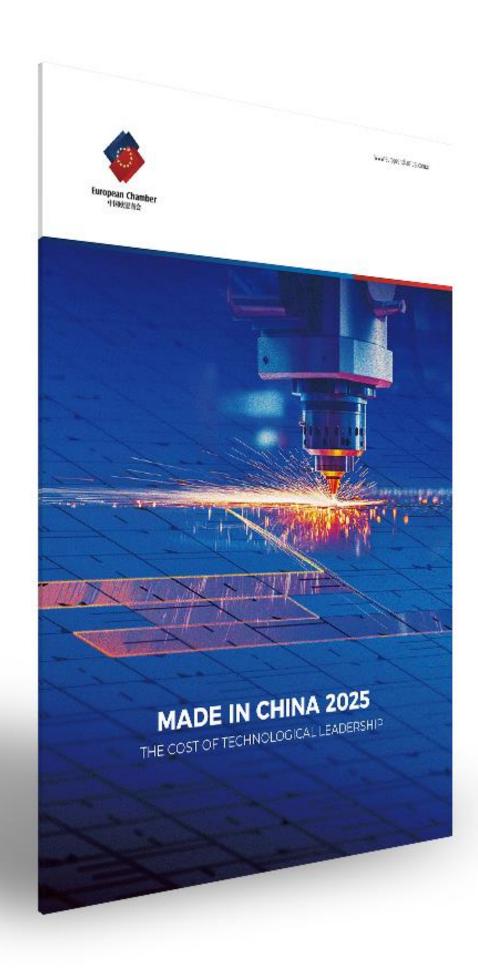
Members drive our reports





- Business ConfidenceSurvey 2025
- EU-China trade data
- State media and government sources
- Member interviews







Key targets only one side of the story





Key targets*	MIC2025 target (set in 2015)	Latest indicator
Manufacturing R&D spending as a percentage of operating revenue	1.68%	1.71% (2023)
Quality competitiveness index	85.5	85.6 (2024)
Growth rate of manufacturing value- added	11%	6.1% (2024)
Penetration rate of numerically controlled machines in key production processes	64%	64.9% (2024)

China's advanced manufacturing capabilities have in no doubt advanced, but behind the targets is a much more complex story.

Meeting targets does not imply smooth sailing







Aviation and aerospace

2025 target	Result
10% domestic market share for commercial passenger jets	Not achieved
Deliver widebody airliner by 2025	Not achieved

Market overview

The C919's reliance on EU and US key components highlights the importance of maintaining globalised value chains.

High-end numerically controlled machinery and robots

2025 target	Result
70% domestic market share for industrial robots	Not achieved (48.4% in 2024)
80% domestic market share for high-end numerically controlled machinery	Not achieved (31.9% in 2022)

Market overview

Despite an abundance of domestic technology, Chinese companies have struggled to break into the high-end segment of the market.

Energy saving vehicles and new energy vehicles

2025 target	Result
20% domestic automotive market share met by NEVs	Achieved (40% in 2024)
80% domestic NEV market share controlled by domestic brands	Achieved (90% in 2024)

Market overview

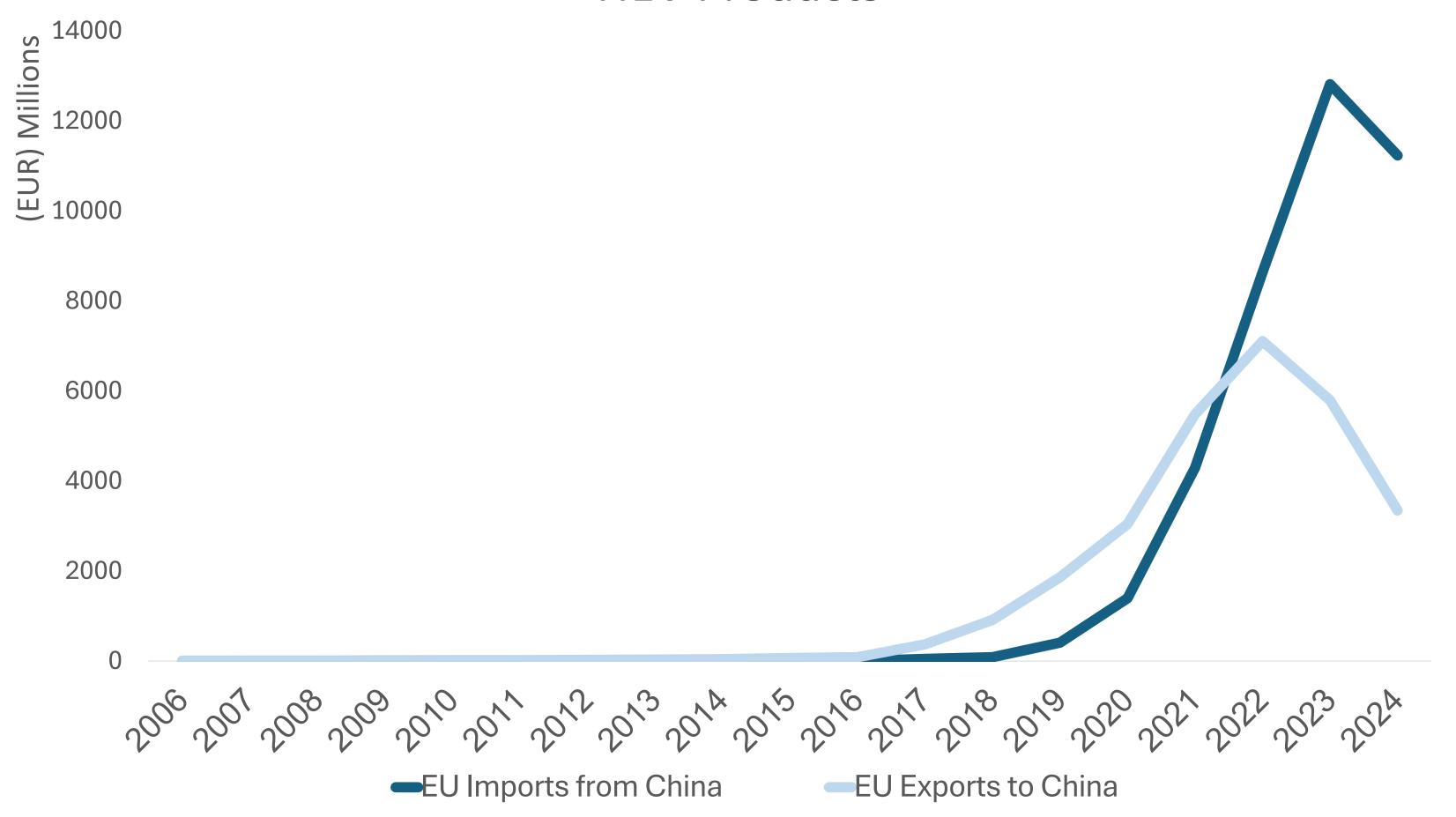
The sub-optimal use of resources has led to overcrowding and a price war.

Exporting MIC2025's market distortions has had consequences





EU-China Trade in Selected Energy-saving Vehicle and NEV Products



- In the EV sector, overcapacity in China has led to companies relying on exports, which has resulted in trade defence actions being taken by some markets.
- The US has gone even further, banning most Chinese vehicles.

EU trade defence in many of MIC2025's most successful sectors





Product	EU Action
Battery electric vehicles	Anti-subsidy investigation resulting in tariffs
Rail equipment	EU's first use of the Foreign Subsidy Regulation
Solar photovoltaic equipment	Two investigations under the Foreign Subsidy Regulation
Bulb flats (used in maritime manufacturing)	Anti-dumping investigation resulting in tariffs
Telecommunications network equipment	Anti-dumping investigation resulting in tariffs

The EU has demonstrated a willingness to respond with trade defence actions and there is no indication that this will stop unless China changes course.



FIEs are a useful bridge





Domestic technology

outlook for

Market

Early stages

- FIEs help China get ahead.
- FIEs experience a high degree of market access.
- Example: aviation

Developed

- Chinese competitors produce comparable but not equivalent products.
- Market access barriers increase.
- FIEs begin to lose market share.
- Examples: biopharmaceuticals, medical devices, numerically controlled machinery and robots, new materials

Advanced

- Chinese competitors produce near equivalent, equivalent or superior products.
- As FIEs become less competitive, market access barriers are removed.
- FIEs experience significant or total loss of market access and market share.
- Examples: rail, NEVs, maritime manufacturing

EU companies in strategic sectors must stay ahead of the curve to survive





Recommendations to European companies in strategic sectors:

- Develop long-term mitigation plans based on the scenario that certain product categories become less viable for FIEs, especially in sectors dependent on public and government procurement.
- Take a balanced approach when planning future investments that accounts for potential incentives for FIEs, such as promises to provide those that produce locally with national treatment in government procurement.
- Communicate clearly the long-term market access concerns in China's strategic sectors to EU and Chinese authorities, as well as headquarters.
- Focus on the big picture and overall direction of travel, rather than improvements at the margins.
- Invest in innovation to compete with Chinese companies that develop comparable or superior technology.



China still has a choice to make





- MIC2025's unintended outcomes justify a rethink about future industrial policies.
- Reaching MIC2025 targets was a contributing factor to involution.
- As the world reacts to China's increasing dominance in strategic industries, it may lose the ability to export the very technologies that it is prioritising.
- Controlling the most advanced technology in strategic sectors today does not guarantee success tomorrow, as Europe and other markets know.
- Unprecedented disruption of global trading norms presents an opportunity for China.