BUSINESS at OECD | Business and Industry Advisory Committee to the OECD

Made in China: 10 Years On (and Beyond)

Past Achievements, Current Ambitions, Future Implications

Presentation to the OECD IRG China

6 October 2026



China's Industrial Policy

Overview

From *Made in China 2025* to *New (Quality) Productive Forces*

China's Industrial Policy

2015



A comprehensive upgrading of Chinese manufacturing

- Move towards **higher value-added manufacturing**
- Strengthen **R&D and technological capabilities**
- Accelerate **smart, digital and green manufacturing**
- Increase **domestic capabilities** and reduce reliance on foreign suppliers
- Focus on **10 key industries**

2020s



From sectoral priorities to an integrated industrial ecosystem

- **Significant progress** across the original priority sectors
- Greater focus on **technological self-reliance**
- Expansion into **additional strategic sectors and value chains**
- Stronger domestic industrial and innovation capabilities
- Increasingly **integrated industrial-policy approach**

2023 and beyond



A broader development paradigm centred on technological transformation

- **Strategic emerging and future industries** as new growth engines
- Breakthroughs in **disruptive and cutting-edge technologies**
- New technologies to **transform and upgrade traditional sectors**
- Promote **high-end, intelligent and green industries**

Over the past decade, *MiC2025* has evolved from a sector-focused manufacturing strategy into a broader, integrated approach to technological, industrial and supply-chain development.

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From Industrial Policy to Global Market Effects

China's Industrial Policy

The evolution of China's industrial policy has significant implications for global markets, competition and investment.

POLICY SUPPORT

- Non-Market Policies and Practices (NMPPs)

MARKET IMBALANCES

- Capacity expansion
- Overcapacity due to lack internal consumption
- Export pressure

GLOBAL IMPACTS

- Industries abroad: competitive and investment pressure
- Foreign investors in China: uneven competitive conditions and uncertainty

Persistent imbalances can have wider effects on global trade and competition and create uneven conditions for foreign firms investing and operating in China.

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The Business Operating Environment

China's Industrial Policy

The evolving industrial-policy and geopolitical environment is changing the conditions under which foreign companies operate in China and across global value chains.

MARKET ACCESS	Opportunities remain, but access to strategic sectors has been increasingly shaped by domestic industrial priorities.
TECHNOLOGY & IP	Greater participation in China's industrial ecosystem can raise sensitivities around technology, IP and technology transfer, R&D constraints.
COMPETITIVE CONDITIONS	Foreign companies face competition from firms benefiting from Non-Market Policies and Practices (NMPPs).
BUSINESS DETERRENCE & GEOPOLITICS	China is strengthening its legal and policy toolkit to protect Chinese companies and supply chains abroad and respond to measures it considers harmful to its interests.

Business needs predictable, transparent and non-discriminatory conditions to invest, innovate and operate across global value chains.

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Global Reactions and Counter-Reactions

China's Industrial Policy

LIKE-MINDED ECONOMIES

Examples of measures:

- **EU:** Foreign Subsidies Regulation, Anti-Coercion Instrument, Industrial Accelerator Act, Public Procurement Act
- **USA:** Section 301, Outbound investment, Export controls, Critical-material measures

CHINESE RESPONSE

Strengthening of China's legal and policy toolkit

- Countermeasures
- Stronger legal and regulatory tools
- Measures affecting foreign companies and market access

Examples: Decrees 834, 835, 837; CRM retailation

BUSINESS IMPACT

- Greater regulatory and market complexity
- Higher compliance costs
- Investment and supply-chain risks
- Investment diversion

DIALOGUE
Sectoral dialogue where friction is limited

TRANSPARENCY
Greater transparency on subsidies & state support

OPEN MARKETS
Rules-based mechanisms, avoid escalation

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Digital & AI

Sector Snapshot

Digital & AI

Sector Snapshot

01 Situation

- Rapid rise of Chinese AI industry, based on novel approaches (models).
- Bypassing of Western technology core competences.
- Mounting pressure from export control regimes (both ways).

02 Challenge

How to calibrate the future role of OECD economies vis-à-vis China?

03 Way Forward

- Build-up competitiveness.
- Expert control regimes – avoid reverse effects.
- Industrial policies with a view on structural export rebalancing.
- Preserve global sourcing benefits. Avoiding critical dependencies.



A predictable, stable and realistic framework is the foundation for action.

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Digital & AI

Sector Snapshot

2015 **“Made in China 2025”**

2017 **New Generation AI Development Plan**

2026 **Fifteenth Five-Year-Plan**

- Technology self-reliance, leading to an industrial base including AI, robotics („Digital China“)
- Encouragement to localize
- Innovation ecosystems in advanced manufacturing, life sciences, healthcare etc.



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Digital & AI

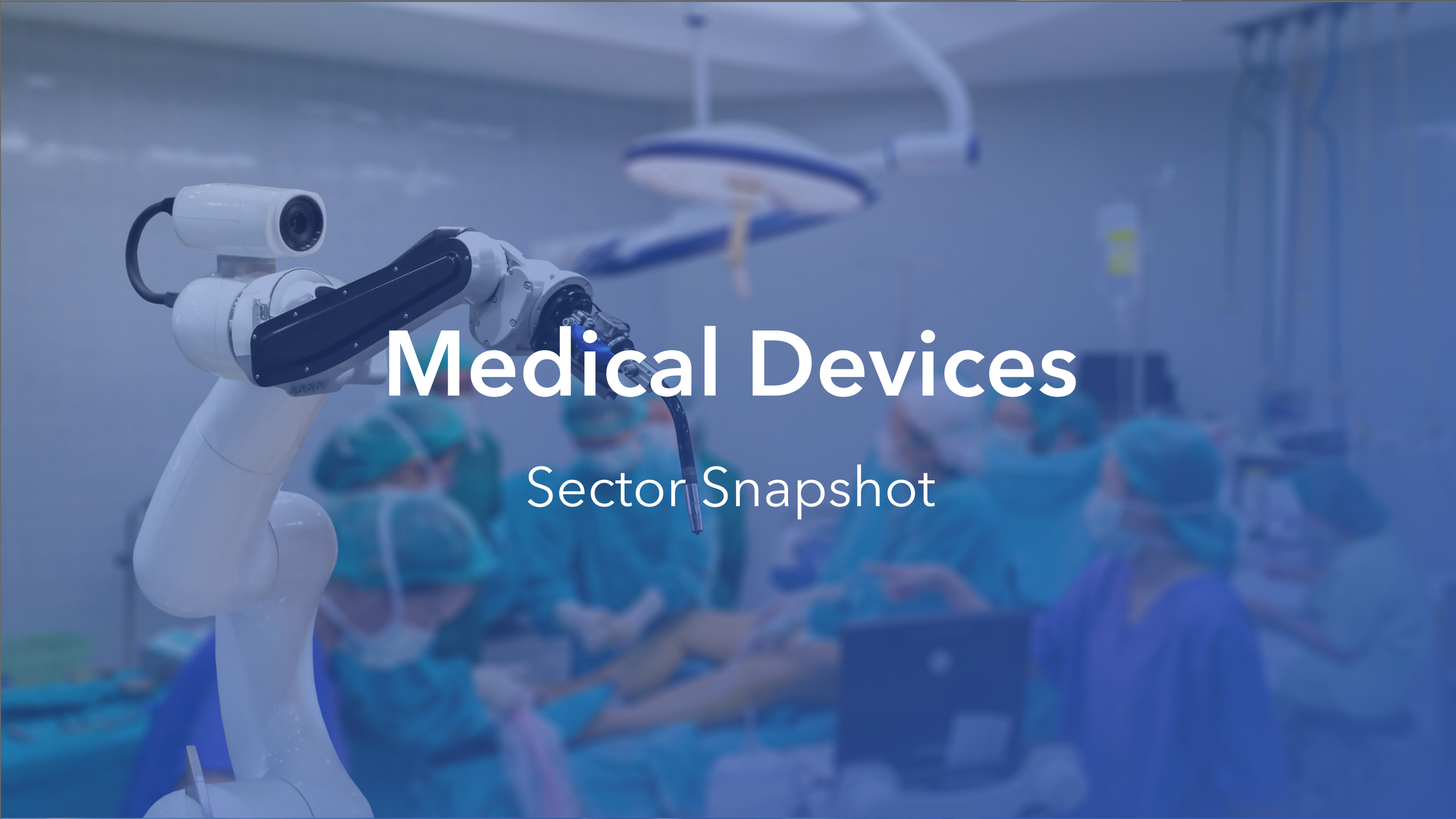
Sector Snapshot

Beneath the surface: Strengths & constraints coexist in the same operating environment.

01	**Domestic demand as an ongoing challenge; exports limited by regulations?** Scale and market depth
02	**Capital allocation** Efficiency and strategic direction
03	**Debt levels** including provincial levels

01	**Tech confidence** Bullishness in manufacturing
02	**9-9-6 mentality** High pressure work model
03	**Fast catch-up** Accelerating capability and capacity

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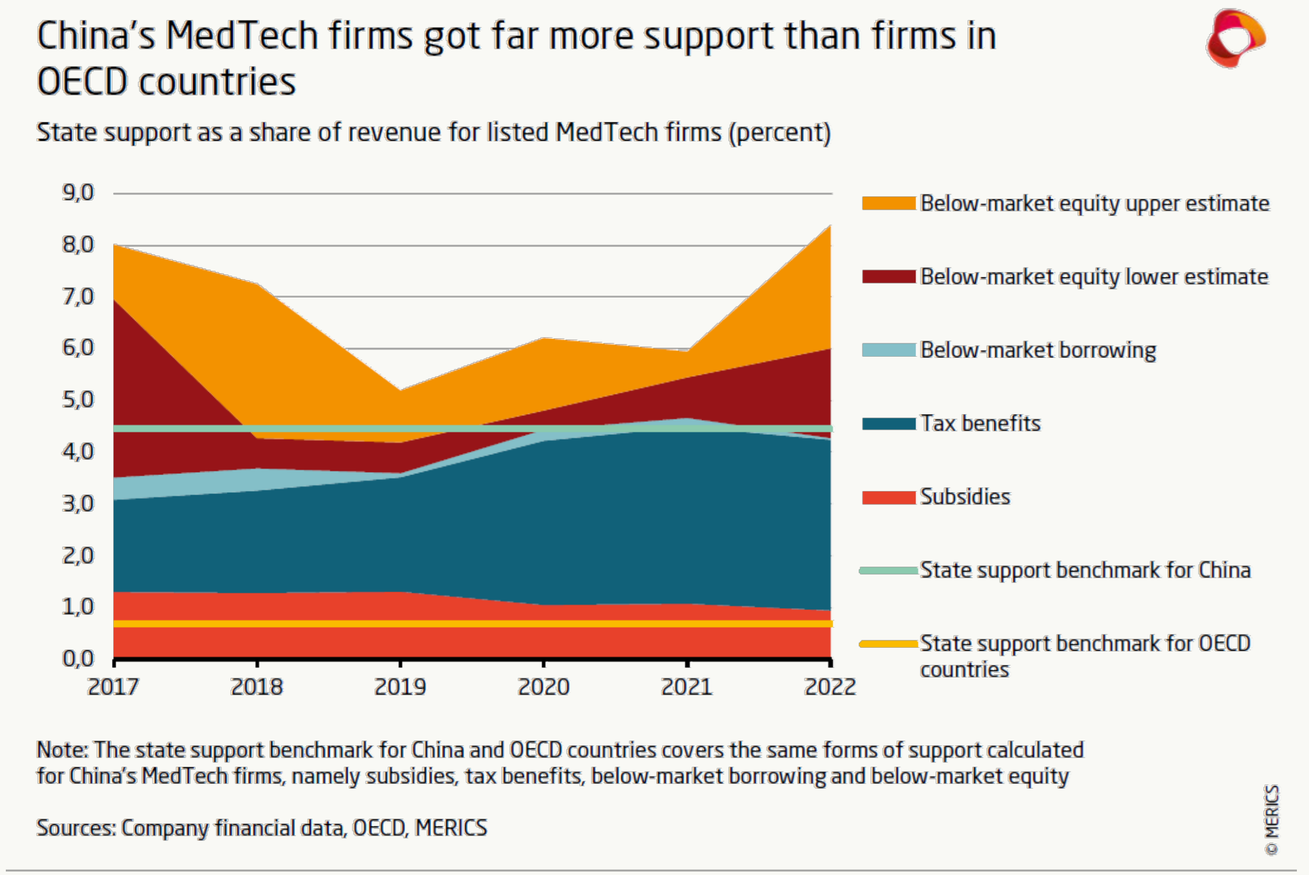


Medical Devices

Sector Snapshot

Medical Devices

Sector Snapshot

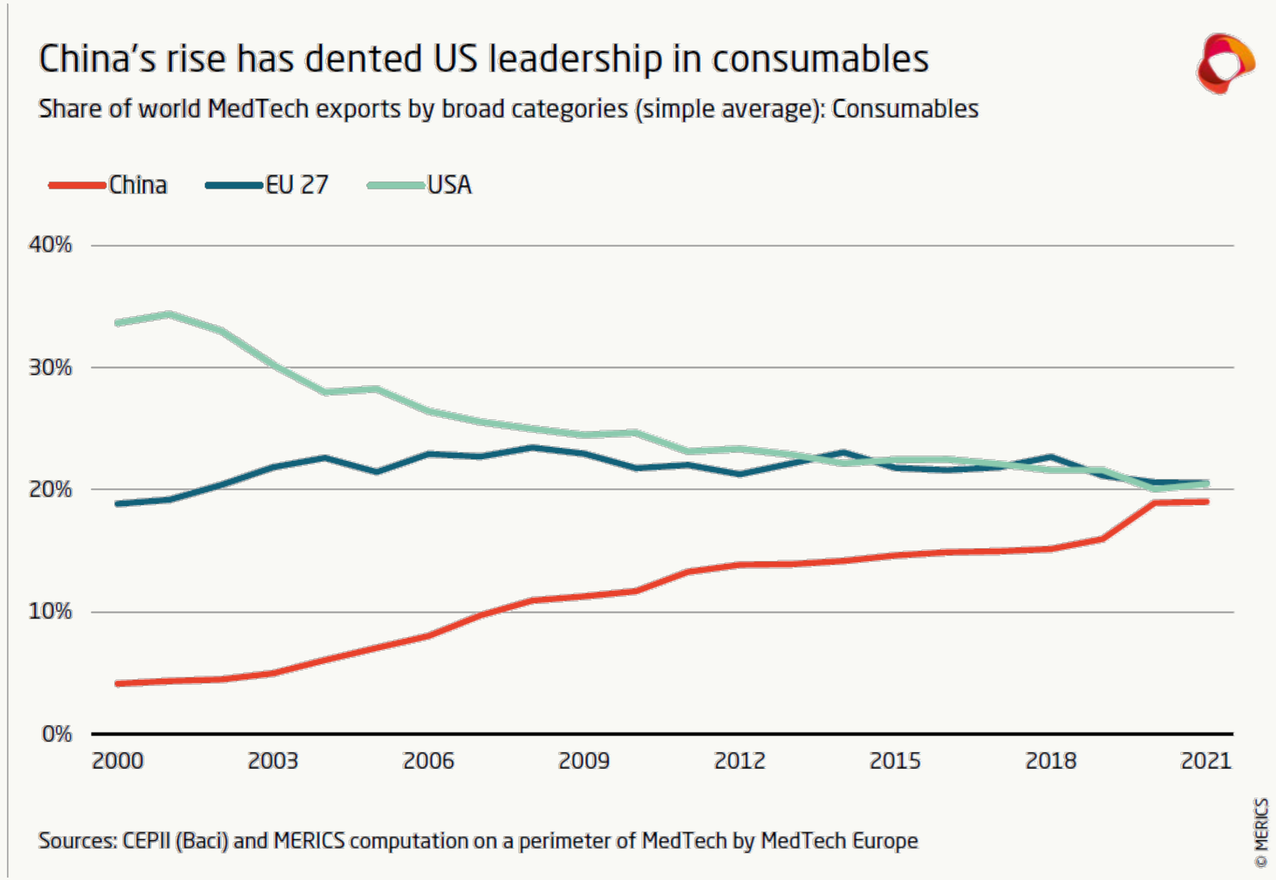


Source: Mercator Institute for China Studies (MERICS)

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Medical Devices

Sector Snapshot



Source: Mercator Institute for China Studies (MERICS)

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Medical Devices

Sector Snapshot

Sector Trends

- Medical device sector a priority area of Chinese industrial policy.
- Focus on localization, limiting dependencies and cultivation of domestic medtech sector.
- Chinese medtech firms have moved up the value chain, some have emerged as multinationals.

Policy Considerations

- **Industrial Policy:** Tools such as subsidies, “Buy Local” measures and changes to structure of government hospital procurement.
- **Critical Inputs:** Global production, servicing and deployment of medical technology depends on many types of inputs, some with high supply concentration in China (i.e. metals, rare earths).
- **Limited Flexibility:** Medical device supply chains are complex/cross-border, subject to regulatory constraints that limit ability to respond quickly to rapid trade policy changes.
- **Heterogeneity:** Trade measures should be calibrated to account for diversity in medtech sector products, business models and supply chains, as well as downstream impact on patients.

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Pharmaceuticals

Sector Snapshot

Pharmaceuticals

Sector Snapshot

MIC 2025 – China Is Becoming an Increasingly Competitive Innovative Pharma Ecosystem on the Global Stage, Transforming From "Made In China" To "Created In China".

2015

MIC 2025 Objectives - Biomedicines / Pharmaceuticals

1. Innovative Drug Development
(Develop new drugs for 10 major disease areas; 20-30 innovative drugs in commercial production by 2025)

2. International Regulatory Success
(Chinese regulatory framework with global standards; FDA / EMA appproval of 5-10 drugs with indigenous IP)

3. Self - sufficiency / import substitution
(Reduce import dependence on foreign innovative drugs and APIs)

4. Quality & Export Orientation
(Over 100 firms with US/EU/JP/WHO GMP ceritification, strong exports)

5. Global Competitivenss
(Build globally competitive Chinese pharma brands and firms, becoming technological leader)

2025

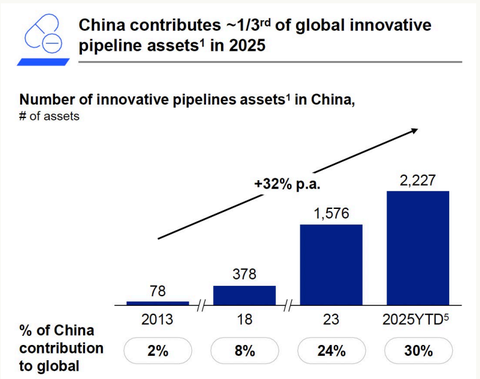
1/3
of global trials for the most innovative drugs (5% in 2016)

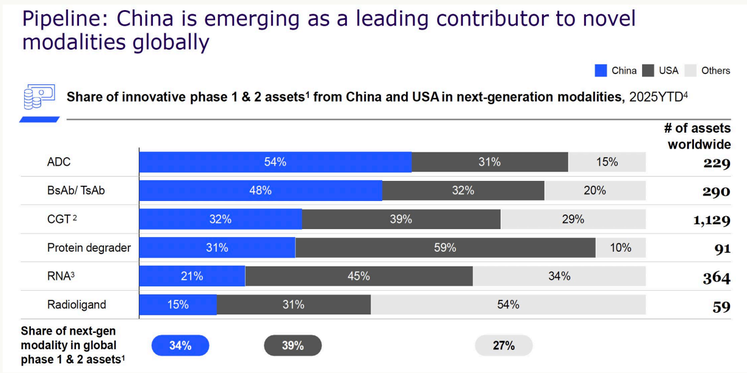
+470%
83 new active substances (NAS) approval in 2024 (15 in 2015)

#1
+70,000 patient application filed in 2024, overtook both US (57,840) & EU (54,040)

+70%
global fermentation capacity.

45%
global API production in 2024
esp dominant in bulk, mature, and fermentation-based APIs





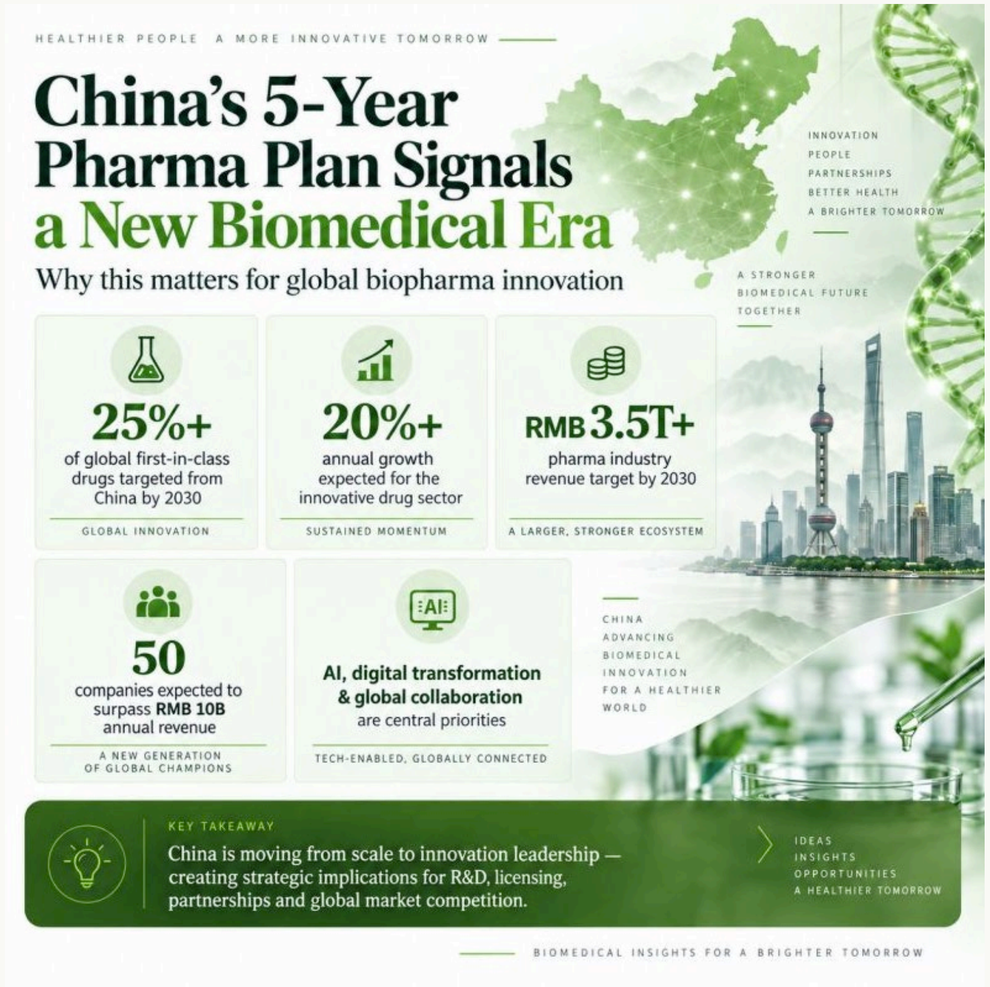
Source: Consolidated analysis based on existing publications

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Pharmaceuticals

Sector Snapshot

By 2030: Share of China-Origin First-In-Class (FIC) Innovative Medicines To Achieve +25% of Total Global FIC Innovative Medicines (15th Five-Year-Plan).



15th Five-Year-Plan - Pharma Chapter,
With joint-up supports across 10 Ministries

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Pharmaceuticals

Sector Snapshot

By 2030: Share of China-Origin First-In-Class (FIC) Innovative Medicines To Achieve +25% of Total Global FIC Innovative Medicines (15th Five-Year-Plan)

	Indicator	2030 Goal	Annual Average /Cumulative
1	Operating revenue of pharmaceutical industrial enterprises above designated size (RMB trillion)	≥3.5	-
2	Average R&D intensity of listed pharmaceutical companies (%)	-	≥10
3	Number of investigational new-drug pipelines entering clinical trials for the first time	Among world leaders	-
4	Share of first-in-class (FIC) innovative drugs in the global total (%)	≥25	-
5	Number of innovative drugs approved for marketing	Among world leaders	-
6	Number of innovative medical devices approved for marketing	-	[≥200]
7	Growth rate of innovative-drug industry scale (%)	-	≥20
8	Number of pharmaceutical industrial enterprises with annual revenue above RMB 10 billion	50	-
9	Number of pharmaceutical industrial parks with output above RMB 100 billion	20	-
10	Number of products with global annual sales above USD 1 billion	≥5	-

1. Lead the industry toward New and Better Development and Forge a New Innovation-Driven Engine
2. Strengthen Foundations and Build on Advantages to Create a Resilient and Secure New System
3. Continuously Improve Quality and Efficiency through Empowerment and Establish New Benchmarks for Digital-Intelligent Transformation
4. Respond to Technological Evolution and Cultivate a New Paradigm of Precision Diagnosis and Treatment
5. Unlock the Potential of the Factor Ecosystem and Achieve New Breakthroughs in Efficiency
6. Promote Coordinated Growth in Quantity and Quality and Expand New Space for Value Creation
7. Optimise Production and Supply Assurance and Build a New Foundation for Inclusive Health
8. Deepen International Industrial Cooperation and Shape a New Pattern of Open and Win-Win Development

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Pharmaceuticals

Sector Snapshot

The Path to Innovation: Average 10-15 Years, ~10% Success Rate
→ Act NOW to Remain Competitive!

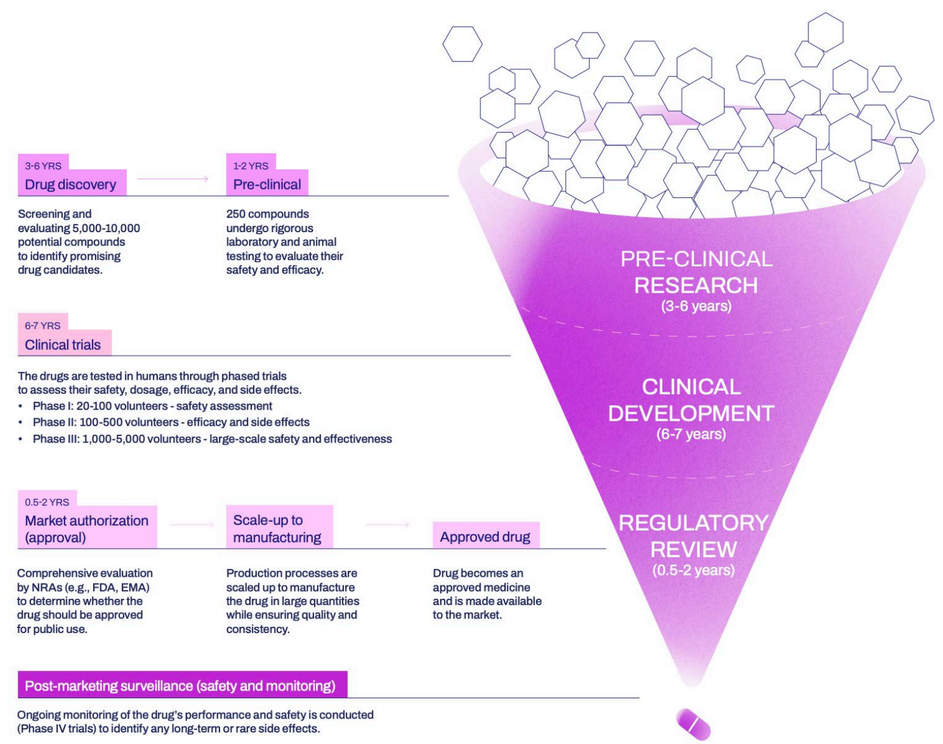


Figure 3: The R&D process

Source: IFPMA[3], Pugatch Consilium[14]

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Pharmaceuticals

Sector Snapshot

Key Success Factors for A Competitive Biopharma Sector: Innovation is Key to Competitiveness

01

L-T Policy Planning

Long-term, consistent, and holistic govt policy planning, with clear KPIs and follow-ups.

(1987 first national plan for biopharma to 2026' 15th Five-Yr Plan)

02

Regulatory Streamline

Accelerate approval timelines for clinical trials and marketing authorization of innovative therapies

03

Recognize Innovation

Accelerated / priority review and pricing reimbursement systems to recognize and reward innovation

04

Build Ecosystems

Develop integrated biopharma ecosystems linking R&D + Regulatory + Manufacturing + AI/Data, and Hospitals, to accelerate innovation from bench to bed.

05

Collaborate & Protect

Disease has no border - Foster partnerships with China on innovation R&D, while ensuring strong IP protection and setting level-playing field.

06

Enhance Resilience

Keep open, rule-based trade approach, while building diversified global supply network to ensure non-interrupted supply to patients.

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Chemicals

Sector Snapshot

Chemicals

Sector Snapshot

Impacts of China's Chemicals Buildout

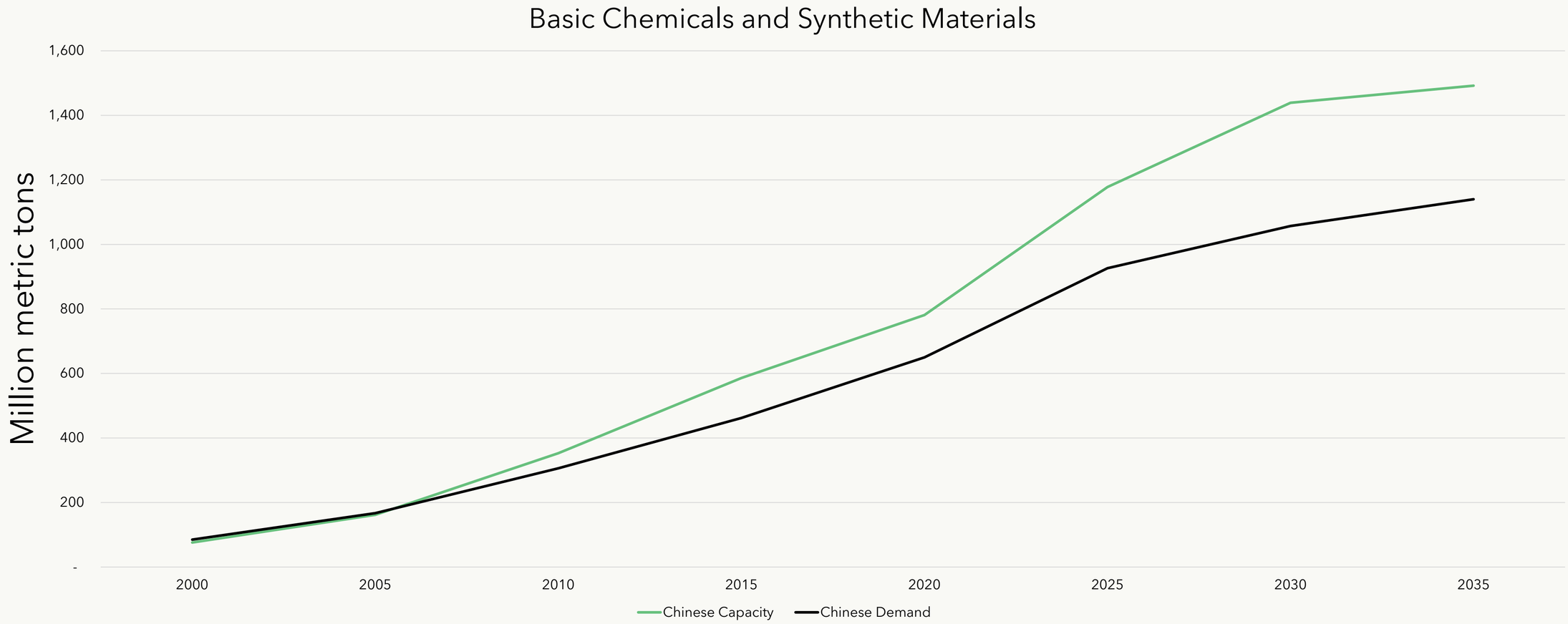
- Rapid production investment in China's chemical sector is having global implications
- Structural excess capacity is expanding and unlikely to self-correct
- Chemical sector feeds into every element of an economy's industrial system
- Actions to address to date are largely national, reactive, and case-by-case with little coordination
- A neutral secretariat and comparable data could let economies reach a shared diagnosis and aligned response before positions become disputes.

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Chemicals

Sector Snapshot

Chinese Capacity Additions in China Far Exceed Demand

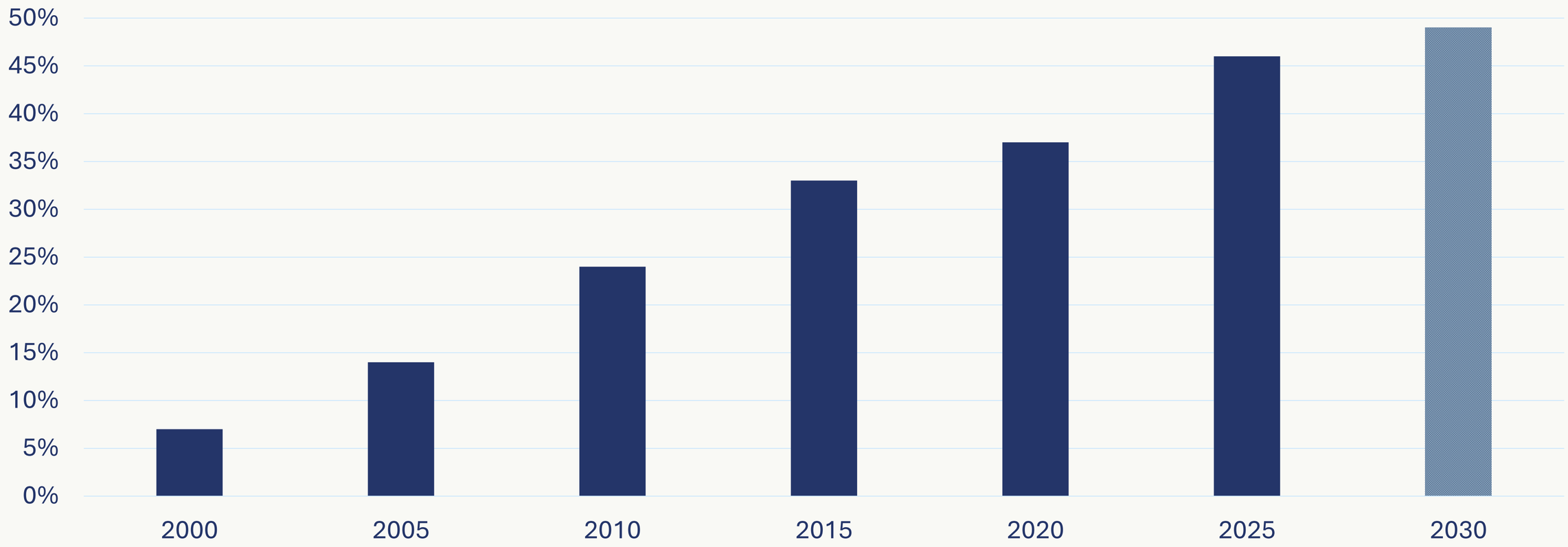


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Chemicals

Sector Snapshot

China’s Share of Global Capacity for Basic Chemicals and Plastic Resins



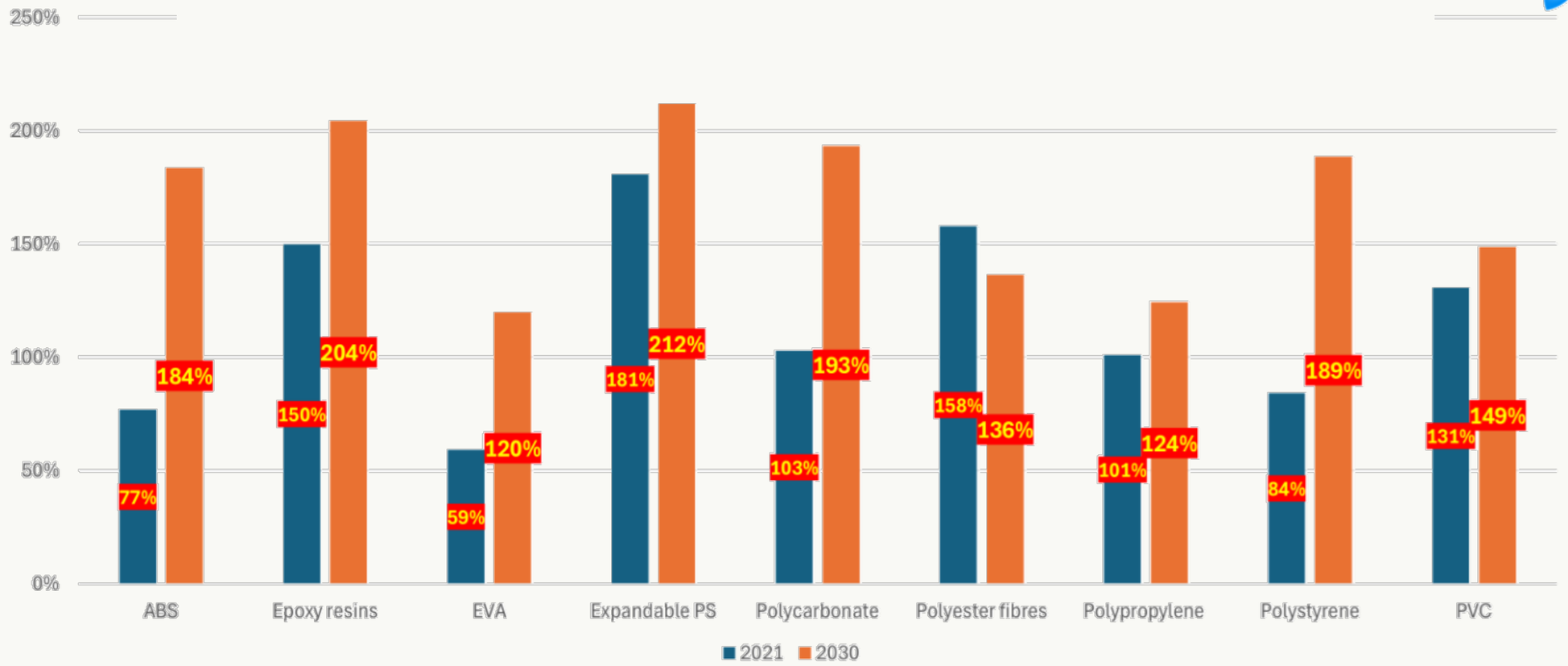
Source: ACC analysis of ICIS Supply & Demand Database

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Chemicals

Sector Snapshot

China’s Percentage Shares of Local Capacity over Local Demand



Source: ICIS Supply & Demand Database

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Non-Ferrous Metals

Sector Snapshot

Non-Ferrous Metals

Sector Snapshot

The NFM sector illustrates how Made in China 2025 is reshaping our approach to industrial ecosystems, investment conditions and the capabilities needed for OECD economies to remain competitive and resilient.

- By prioritising EVs, batteries, renewables and electronics, China has generated **massive additional demand for metals** while simultaneously building domestic processing, refining and technological capabilities.

- **Metals demand is rising**, dependence is widening: Metals are no longer simply commodities or inputs into industrial policy, they have become a **strategic industrial capability**.

- China's rapid **expansion of its metals' capacity** is driven by a combination of state support, direct subsidies and tax incentives, vertical integration, and access to feedstock and overseas investments.

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Non-Ferrous Metals

Sector Snapshot

China has employed a range of policy tools to build and support its current CRM position

Direct financial support	**State funding** Funding support for domestic and foreign mining and processing	**Provincial** Subsidies and land access	**State-level** Tax incentives and subsidies for CRM production and processing
Vertical integration	**Domestic** Vertical integration enabled by and further enabling cross-subsidization	**International** Overseas supply chain investments, incl. by state-owned enterprises	**International** Project funding support through the Belt and Road Initiative reaching $32.6B in metals and mining for 2025
Management of markets	**Export controls** Strategic export controls coupled with rare earth product traceability systems	**Consolidation** Consolidation by state-owned enterprises	**Quotas** Quota system covering rare earth mining and smelting, extended to include imported raw materials

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Non-Ferrous Metals

Sector Snapshot

- Since 2015, over 20 **zinc** and 35 **lead** smelters and refineries in OECD countries have been curtailed or closed.

- Between 2005 and 2023, **aluminium** ranked third among sectors receiving the highest subsidies relative to revenue; between 2020 and 2023, it experienced the second-largest subsidy-to-revenue increase, after solar cells (OECD, 2025)

- China currently accounts for approximately 57% of global refined **copper** production and 45% of primary smelting capacity. Since 2000, China's copper smelting and refining capacity has expanded approximately 7.5-fold and 8.0, respectively.

- China accounts for over half of global production or processing for **19 of the 34** the EU considers **critical or strategic**, exceeding 90% for **magnesium, gallium and heavy rare earths**. It also handles 79% of **cobalt** refining and 95% of **manganese** chemical production, despite mining only a small share of the primary ore.

- In 2023, China accounted for **¾ of global battery production**, including over 80% of cathode and 90% of anode materials, with its share of **LFP batteries exceeding 98%**.

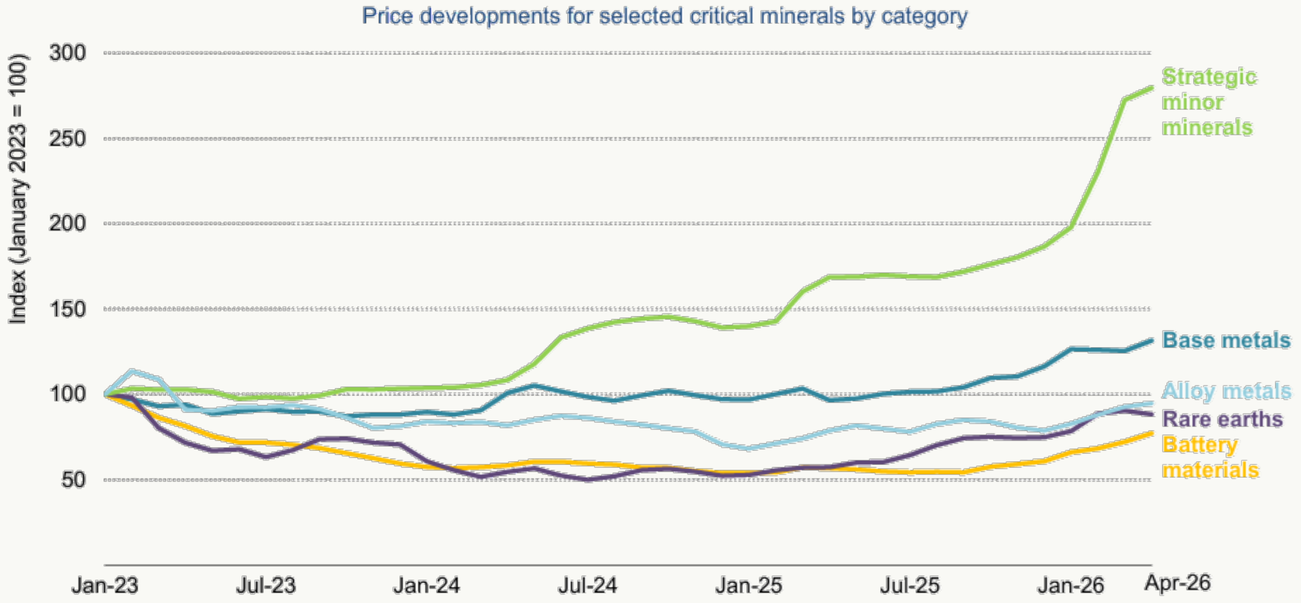
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Non-Ferrous Metals

Sector Snapshot

OECD countries need to ensure reliable access to metals and preserve competitive capacity across mining, refining, processing, recycling and downstream manufacturing.

		By	Market share (2025)
Material	**Aluminium** (Bauxite)	Guinea	34% *share of mining*
	Antimony	China	44% *share of refining*
	Bismuth	China	73%
	Cobalt	DRC	66%
	Gallium	China	99%
	Germanium	China	94%
	Graphite (mined)	Mozambique	4%
	Graphite (refined)	China	94%
	Indium	China	86%
	Lithium	Zimbabwe	10%
	Manganese	Gabon	25%
	Molybdenum	China	41%
	Nickel	Philippines	11%
	Rare Earths	China	91%
	Sulphuric acid	China	34%
	Tellurium	China	73%
	Tungsten	China	76%
Technology	**Rare Earths**	China	91%
	Batteries (LFP)	China	99% *share of cell manufacturing*
	Lithium refining	China	71%



Source: IEA – Global Critical Minerals Outlook 2026; S&P Capital IQ, Bloomberg, KOMIS

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Wind Energy

Sector Snapshot

Wind Energy

Sector Snapshot

1 **SCALE BUILT BEHIND A PROTECTED MARKET**

Protected demand with supported scale-up.

- Grants
- Tax-concessions
- Below-market finance

No meaningful access for European OEMs

2 **STATE-BACKED ADVANTAGE ENTERS OPEN MARKETS**

Overcapacity backed by financial advantage.

- Aggressive prices
- State-backed finance
- Deferred payments

Competing on unequal terms

3 **INDUSTRY IS UNDERMINED ABROAD**

Short-term savings vs its long-term industrial cost.

- Weaker business case
- Lost manufacturing capacity
- Strategic dependency

Industrial and security consequences

WE HAVE SEEN THIS PATTERN BEFORE



SOLAR PV
Manufacturing capacity lost



STEEL
State-backed oversupply pressure



WIND
The next industrial test

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Shipbuilding

Sector Snapshot

Shipbuilding

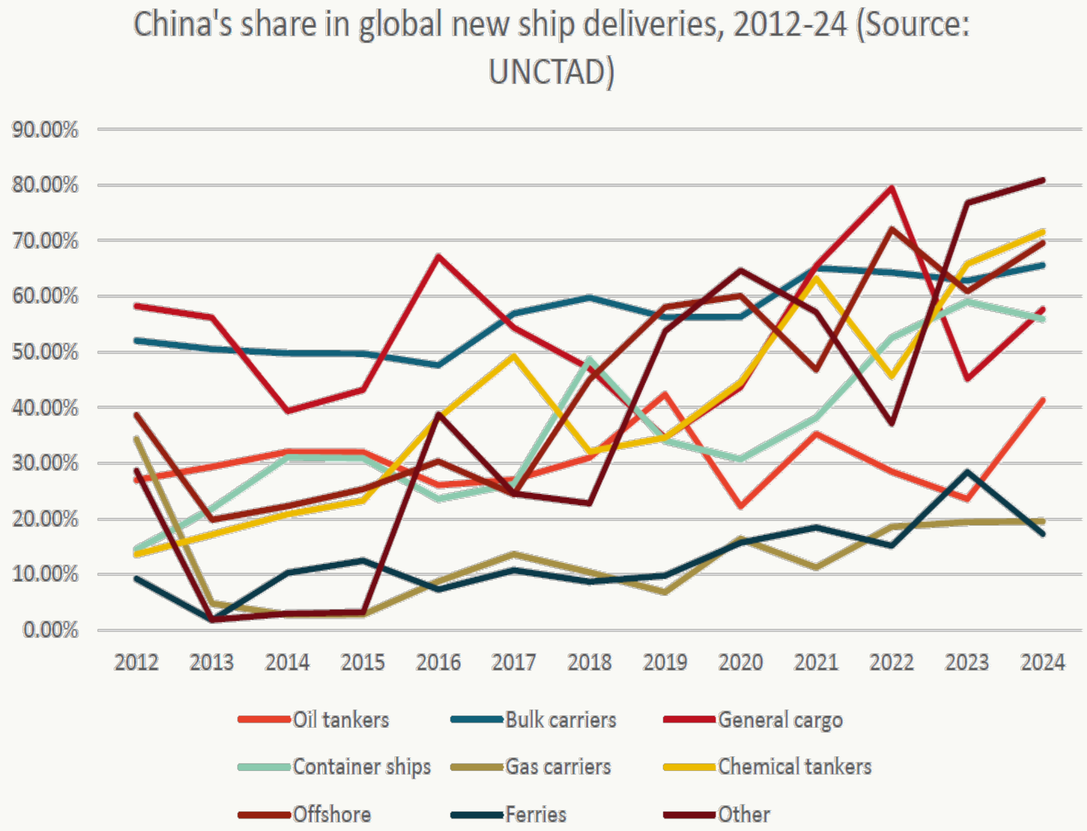
Sector Snapshot

Shipbuilding provides a concrete illustration of how industrial-policy support can translate into major changes in global competitive conditions.

ASPECTS OF CHINESE INDUSTRIAL POLICY

- High **government ownership** across the sector, including public procurement monopoly of public owned enterprises
- Significant, sustained **government support**, including **Non-Market Policies and Practices** (NMPPs), particularly grants and below-market borrowings (BMB)
- **Upstream and downstream support ecosystem**, including state-owned steel producers and shipping companies
- Government support advancing naval-industrial ambitions

Key question: how far have state support and non-market practices contributed to persistent capacity and competitive imbalances?

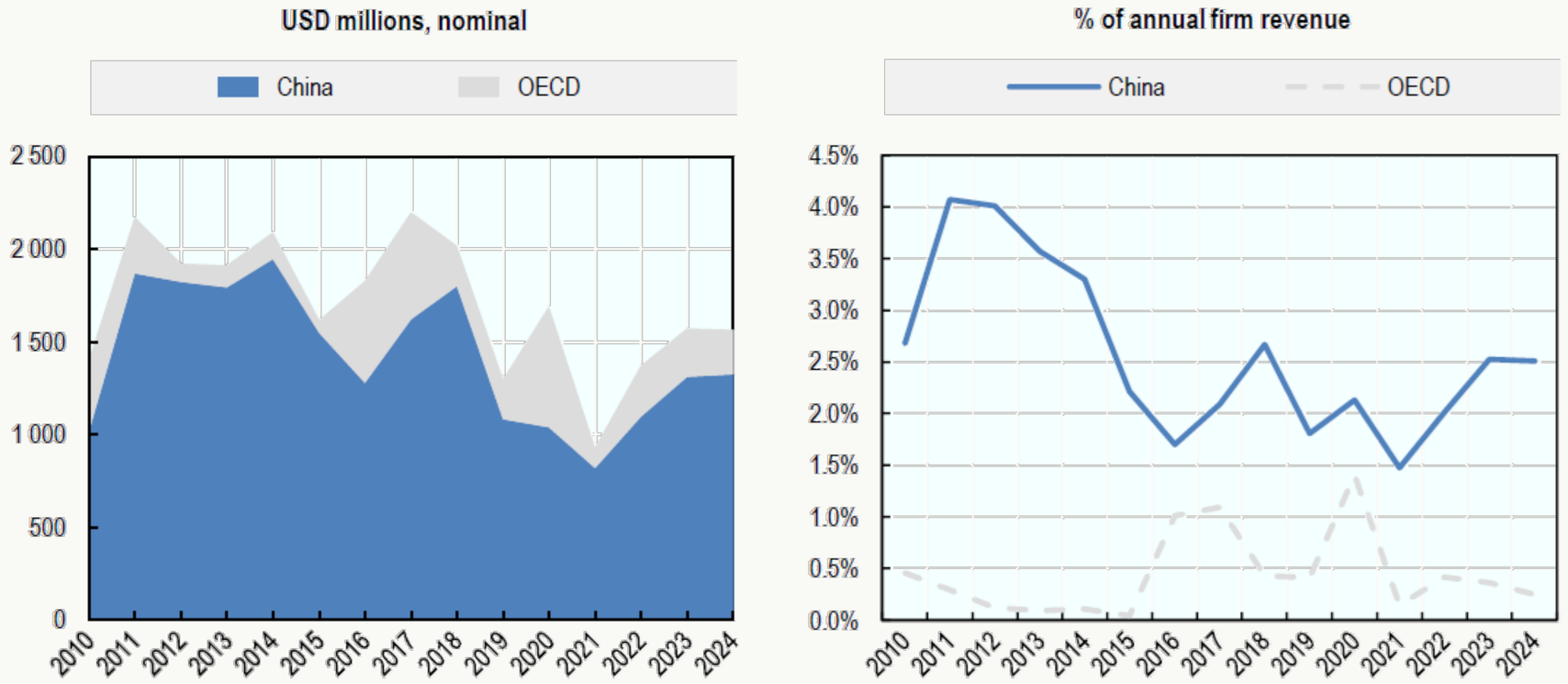


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Shipbuilding

Sector Snapshot

Figure A A.19. Shipbuilding – Subsidies by firms' headquarters location

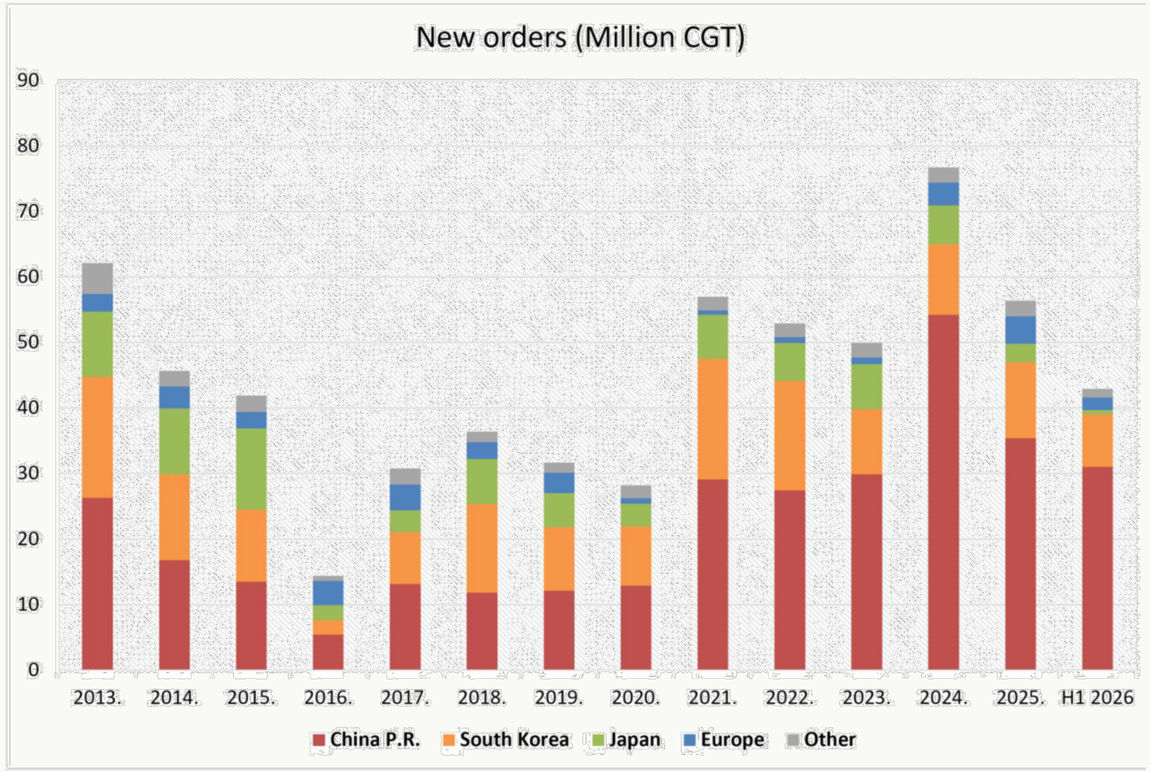


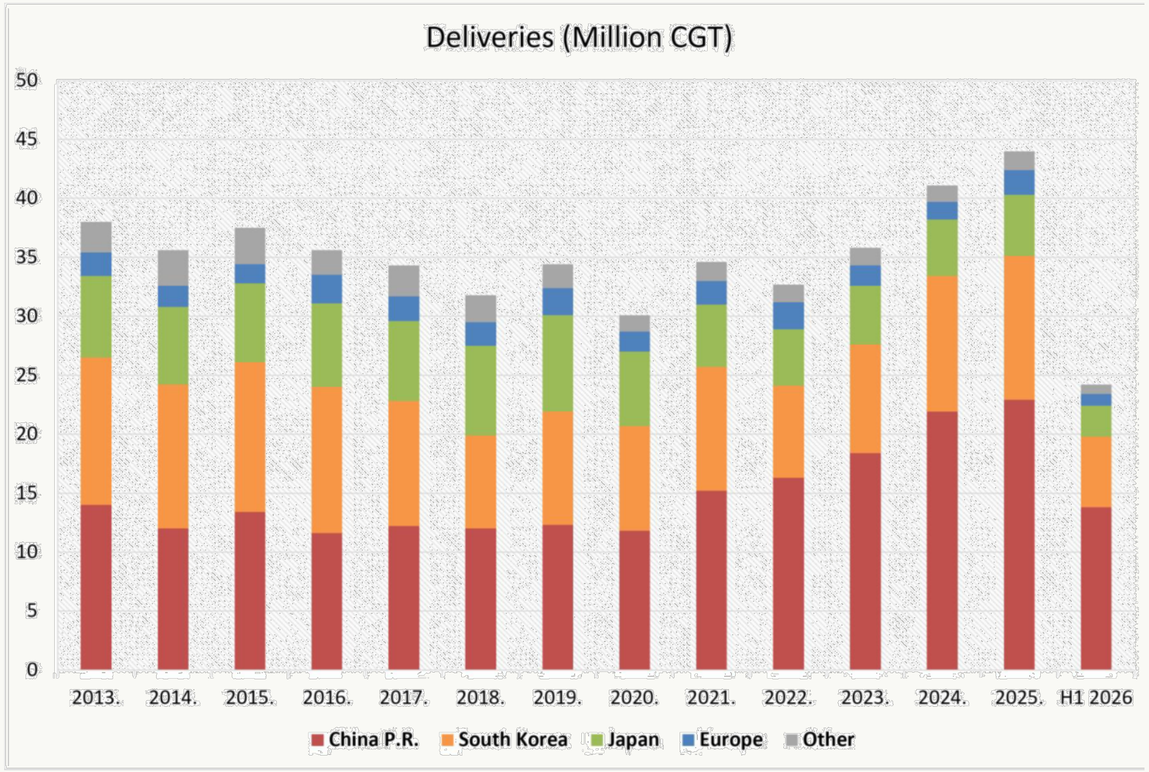
Note: Subsidies comprise government grants, income-tax concessions, and below-market borrowings.
Source: OECD MAGIC database.

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Shipbuilding

Sector Snapshot



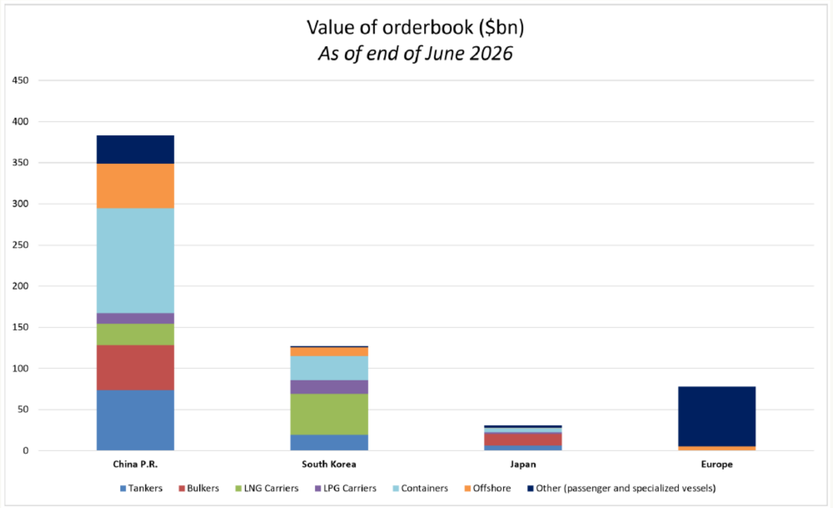


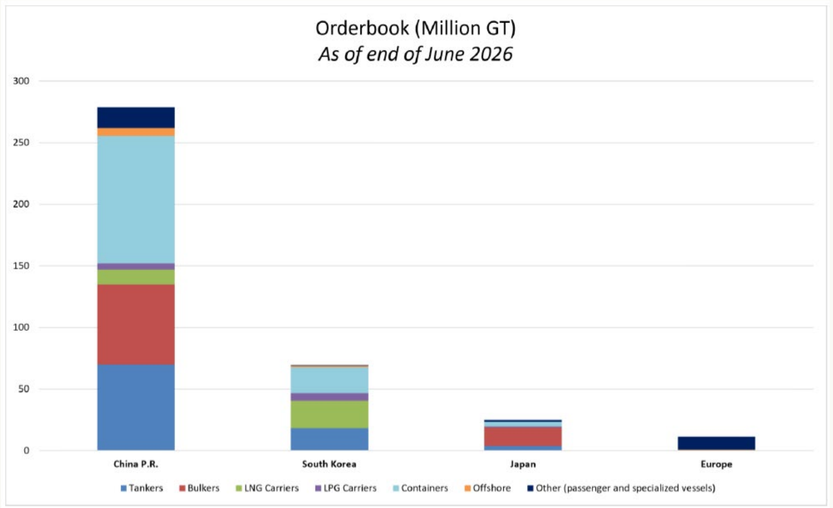
Source: SEA Europe, aggregated shipbuilding statistics N.7 (August 2026)

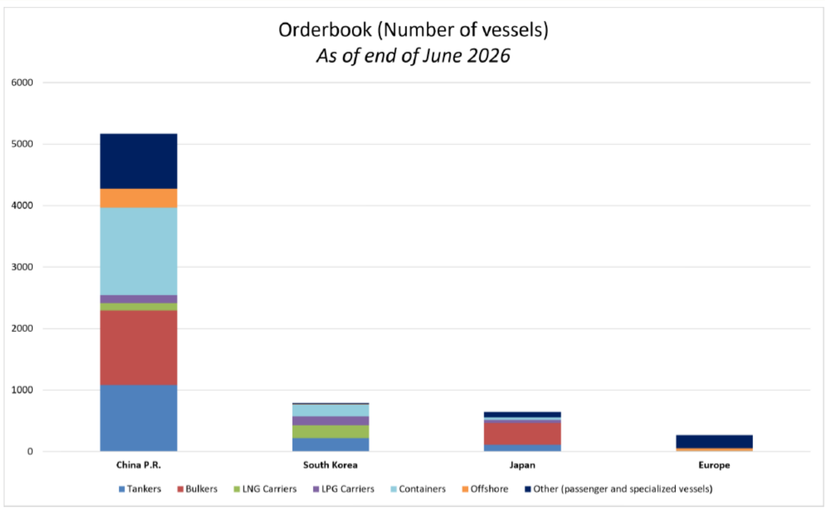
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Shipbuilding

Sector Snapshot







Source: SEA Europe, aggregated shipbuilding statistics N.7 (August 2026)

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Conclusion

Conclusion

Key Recommendation to the OECD

Ensure that China's industrial development contributes to mutually reinforcing industrial and technological development across markets rather than creating persistent distortions, excess capacity and competitive imbalances.



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Conclusion

LEVEL THE PLAYING FIELD

- Increase **transparency** on NMPPs and State-Owned Enterprises (SOEs)
- Address **market-distorting support** and persistent **overcapacity**
- Strengthen **competitive neutrality** and enable **market-based capacity adjustment**

KEEP MARKETS OPEN

- Promote **fair, predictable and rules-based trade**
- Address concerns, as able, through relevant **international frameworks**, including the OECD

LEVERAGE THE OECD

- Build a **shared understanding of the market impacts and spillovers** of industrial policies
- Support **greater policy coordination among market-based economies**
- Strengthen **dialogue between governments and business** on future policy responses

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