China's Carbon Market System

Latest Development

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China Carbon Market System

- Launched in 2021
- Covers power, cement, iron and steel, aluminum smelter sectors
- 8 billion tonnes (60% of China's emissions)
- Allows offsets by CCERs (up to 5%)

National Voluntary Market

- Launched in 2024
- 6 methodologies
- Issued 9.48 million tonnes of CCERs

Expansion of China's National ETS

Sectors: $1 \rightarrow 4$

Power generation + Cement, Iron and Steel, Aluminum Smelter

Emissions Covered

5 billion \rightarrow 8 billion

No. of Entities:

 $2100 \rightarrow 3600$

Overview of China's National ETS

Coverage

8 billion tonne

Cap Setting

Allocation

Intensity-based target, no absolute cap

Output-based benchmarking, free allocation

CO2

Compliance

Once a year (Previously once every 2 years)

Offset

Use of CCERs for up to 5%

MRV

4 Covered sectors + other 4 high-emitting sectors

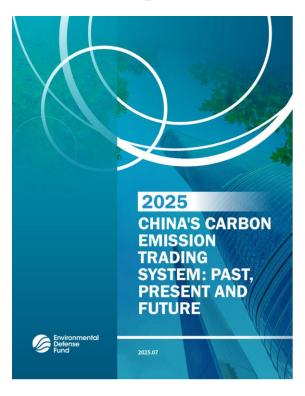
China's National ETS

	Previous	Latest		
Legal foundation	Measures for the Administration of National Carbon Emissions Trading (Trial) by Ministry of Ecology and Environment	Interim Regulations for the Management of Carbon Emission Trading by State Council since 2024		
Coverage	Power sector since 2019 (5 billion tonnes per year)	Included cement, iron and steel, aluminum from compliance year of 2024 (additional 3 billion tonnes)		
•	Scope 1+2	Scope 1		
Сар	Intensity-based target, no absolute cap			
Allocation	Output-based benchmarking, free allocation			
Monitoring, Reporting, and Verification (MRV)	4 Covered sectors + other 4 high-emitting sectors should conduct MRV			
Trading	Spot market			
Offsets	Use of CCERs for up to 5%			
Compliance	Once every 2 years	Once every 2 years Once a year		



Commission of Civilia	Trading volume (million tonne)	Transaction value (million USD)	Composite price for market closing	
Compliance Cycle			(yuan/tonne)	(USD/tonne)
First compliance cycle (by end of 2021)	178,78	1,052.14	54.22 (2021.12.31)	7.45 (2021.12.31)
Second compliance cycle (by end of 2023)	262.83	2,370.09	79.42 (2023.12.29)	10.91 (2023.12.29)
Third compliance cycle (by end of 2024)	188.65	2,487.60	97.49 (2024.12.31)	13.39 (2024.12.31)
2025.1.1-2025.7.31	50.29	522.23	72.48 (2025.7.31)	10.09 (2025.7.31)
Cumulative (by 2025.7.31)	680.56	6,513.02	42.61 – 105.65	5.93 – 14.71

Decoding China's ETS



What You Will Find in the Report

- Why China's National ETS chose intensity-based approach?
- What are the considerations in designing the allocation method for power generation sector?
- How does China's National ETS improve its MRV system?
- How does China's National ETS provide flexibilities in compliance to avoid imposing excessive burdens on companies?
- How has China's National Voluntary Market (CCER program) evolved and what's the latest progress?



China's National Voluntary Carbon Market: Launched in 2024

Methodologies

6 in total, including afforestation carbon sink, grid-connected solar thermal power generation, grid-connected offshore wind power generation, mangrove vegetation creation, utilization of low-concentration coalbed methane and ventilation air methane, and energy saving of highway tunnel lighting.

Registration

Project owners, and validation and verification bodies should publicly disclose relevant documents before registration, and are committed to and responsible for the authenticity and compliance



Competent Department

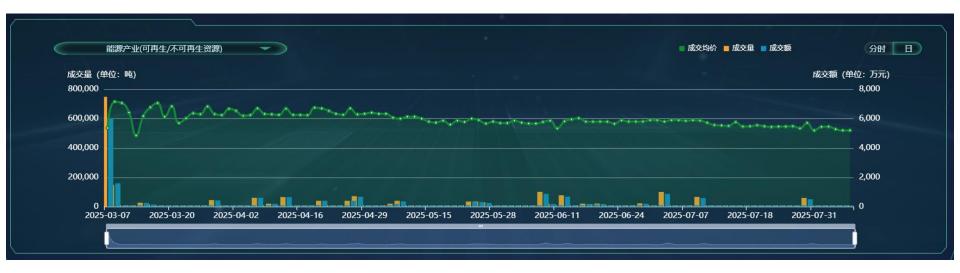
Methodologies are released by the MEE. Validation and verification bodies are approved jointly by the MEE and the State Administration for Market Regulation (SAMR)

Issuance

Issued 9.48 million tonnes of CO₂e

China's National Voluntary Carbon Market

	Previous CCER Program	New CCER Program
Timeline	Suspended in 2017	Launched in 2024
Methodologies	200 methodologies	MEE released 2 batches: (1) Afforestation carbon sink, (2) Grid-connected solar thermal power generation, (3) Grid-connected offshore wind power generation, (4) Mangrove vegetation creation, (5) Utilization of low-concentration coalbed methane and ventilation air methane, (6) Energy saving of highway tunnel lighting systems.
Registration	Competent authorities are responsible for registration	Project owners, and validation and verification bodies should publicly disclose relevant documents before registration, and are committed to and responsible for the authenticity and compliance
Registered Projects	1315 projects by August 2022	26 projects as of July 3, 2025
Issued Emission Reductions	About 77 million tonnes CO2e	About 9.48 million tonnes CO2e
Offset Requirement	Cannot be used in the National ETS from January 1, 2025.	≤5%



	Trading volume (million tonne)	Transaction value (million yuan)	Transaction value (million USD)	Average price (yuan/tonne)	Average price (USD/tonne)
Cumulative	2.46	207.79	28.93	84.46	11.76
(by 2025.7.31)	2.40	201.19	20.93	04.40	11.70

- Average price for July 31: 78.00 yuan/tonne (10.86 USD/tonne)
- Highest daily average price: 107.36 yuan/tonne (14.98 USD/tonne, March 10)
- Lowest daily average price: 72.81 yuan/tonne (10.16 USD/tonne, March 13)

Thank you!



