

MARKET SPOTLIGHT: CHINA



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Tuesday, 21 April 4:00-4:45 PM



Renewable Energy in China's 15th Five Year Plan

April 2026

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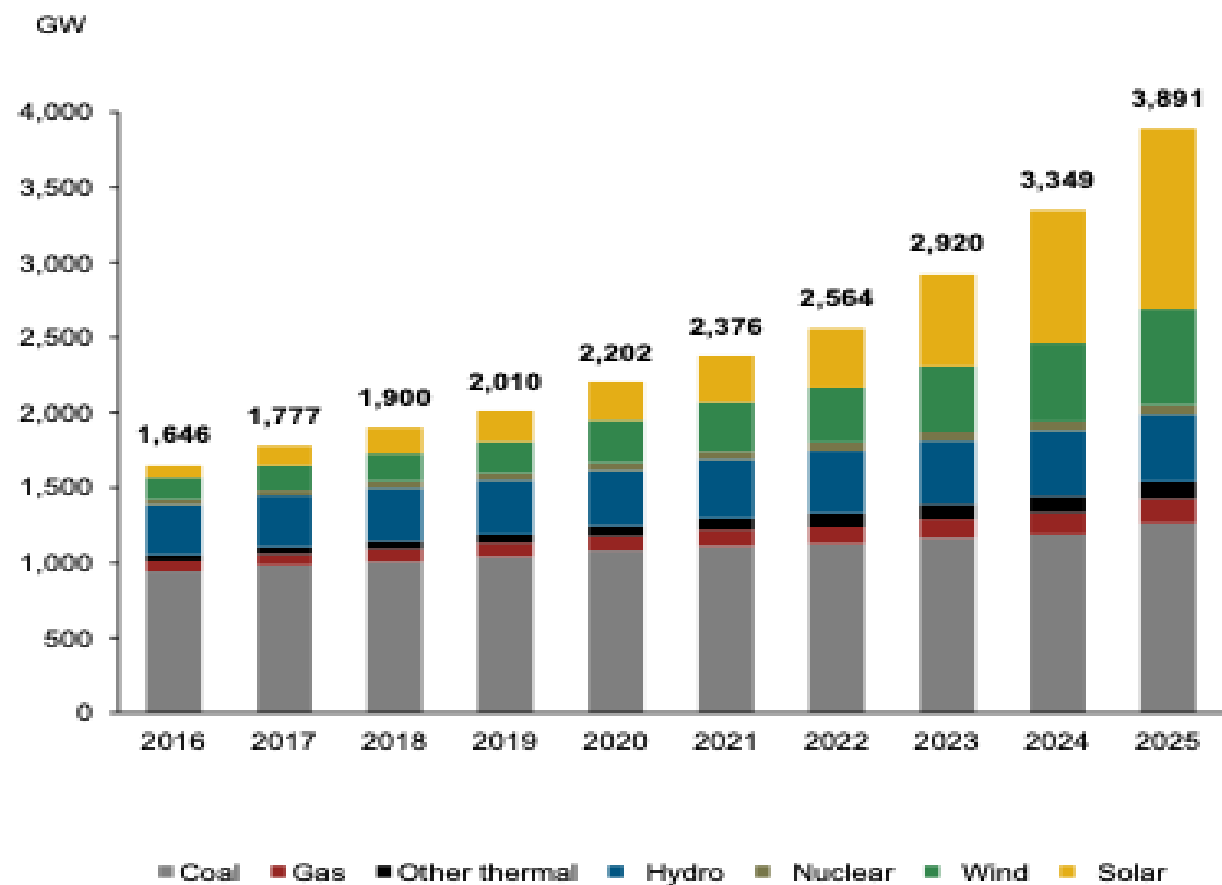
Renewable Energy
Markets Asia



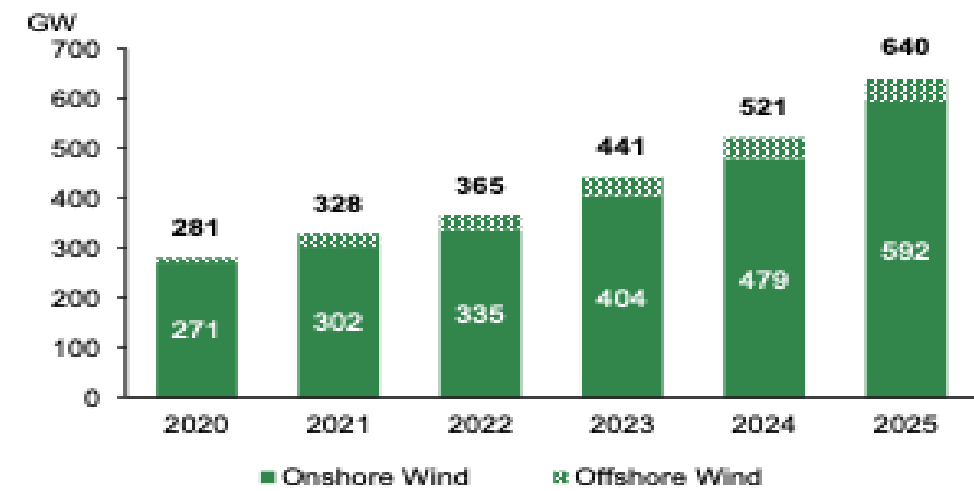
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Taking Stock 1/3: Capacity Growth in 2025

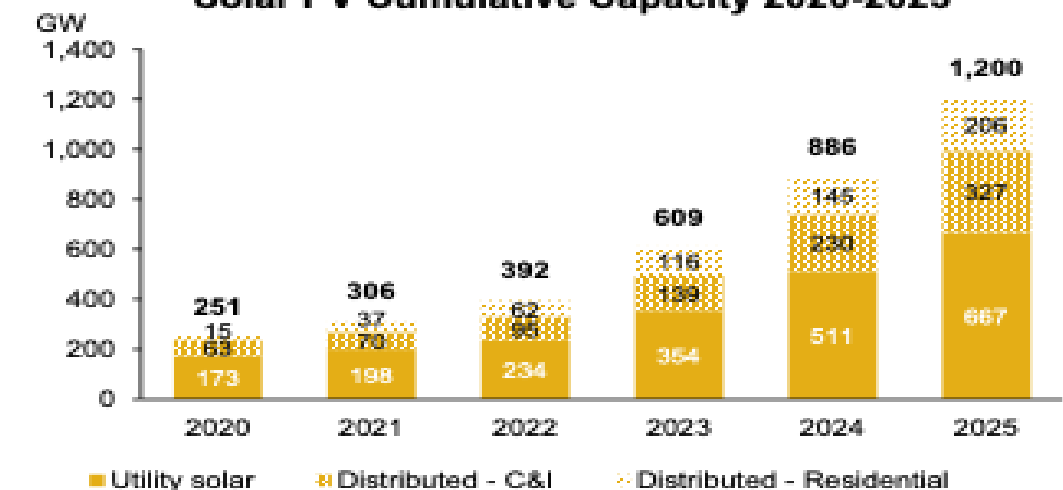
Installed Capacity 2016-2025



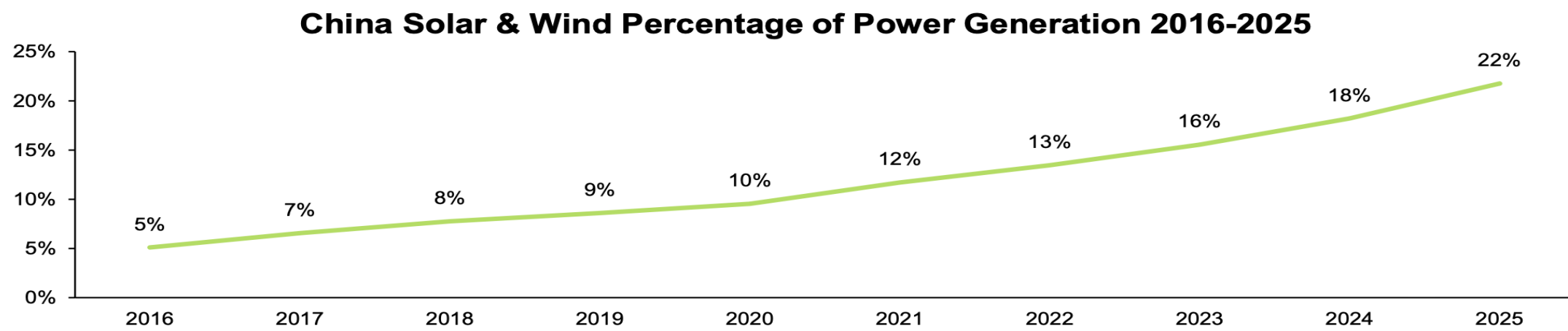
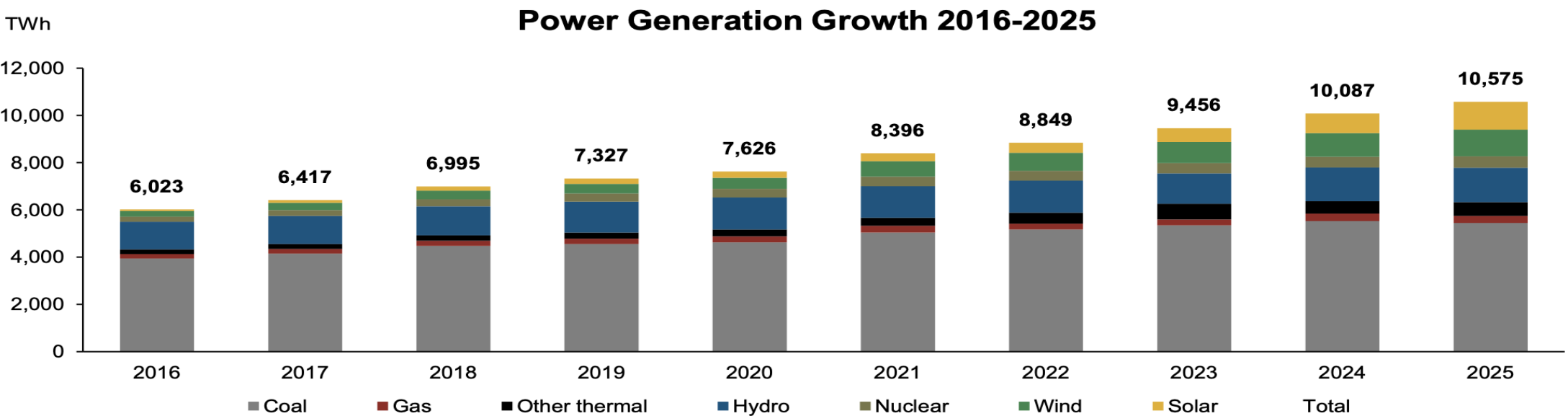
Wind Cumulative Capacity 2020-2025



Solar PV Cumulative Capacity 2020-2025

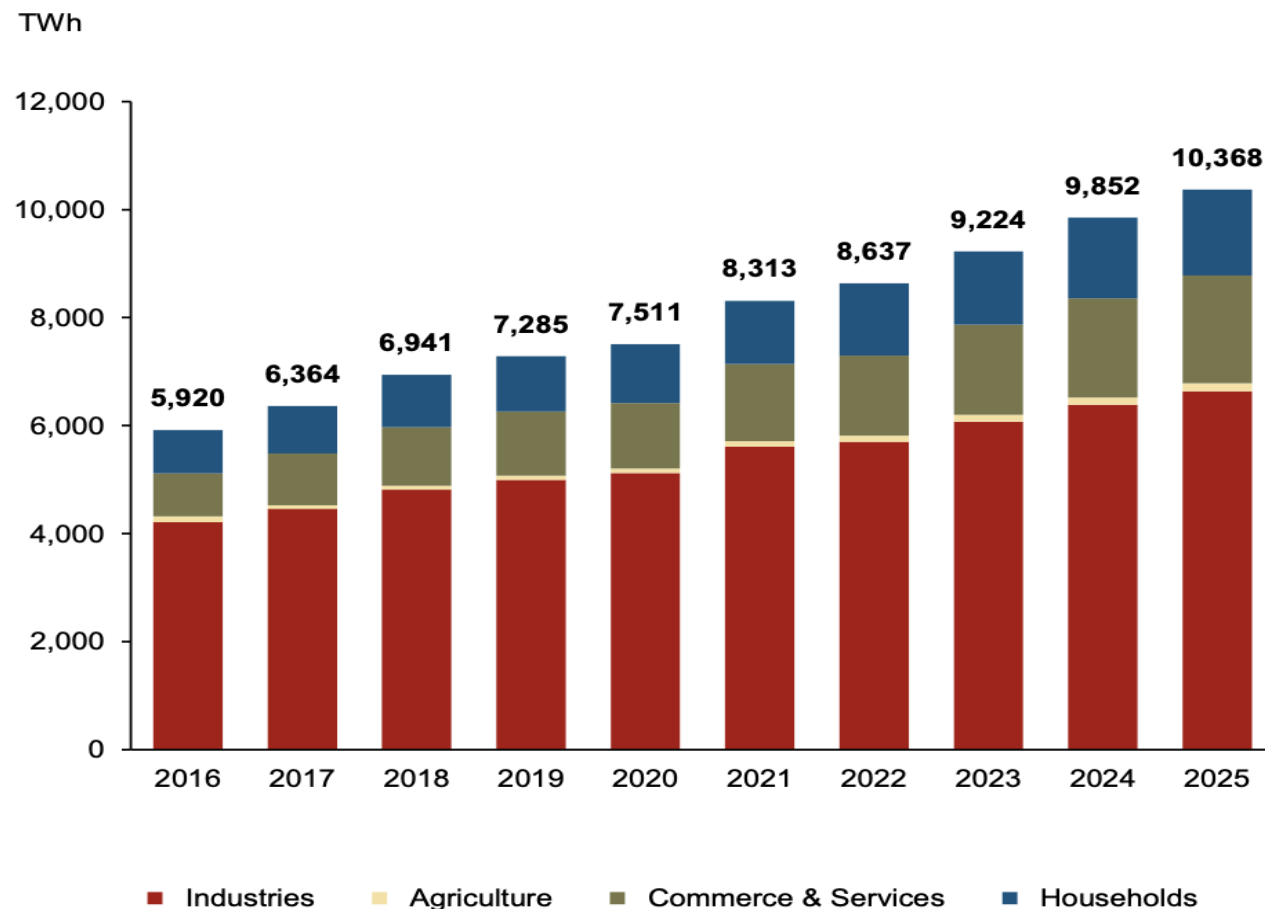


Taking Stock 2/3: Generation Growth in 2025

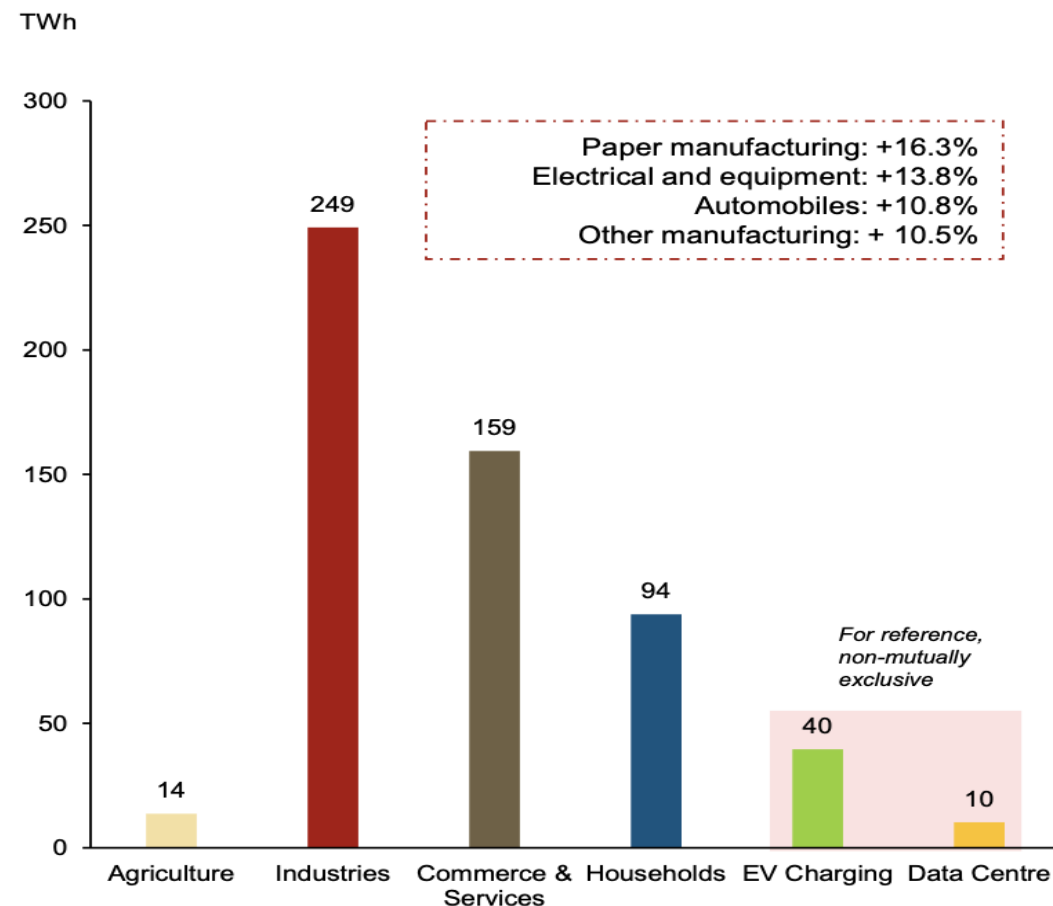


Taking Stock 3/3: Power Consumption in 2025

China Power Consumption by Segment 2016–2025



2025 Power Consumption Segment Drivers



China's 15th FYP: Energy Strategy Features Prominently

On 13 March 2026, China's National Development and Reform Commission (NDRC) released the full draft text of the 15th Five Year Plan (FYP), the master guide for economic activities in China from 2026-2030. The draft text comprises 18 Parts, with a total of 62 Chapters. Most the key energy-related content is concentrated in:

- **Part 1:** *"Major Goals"*
- **Part 2:** *"Building a Modernized Industrial System and Consolidating the Foundation of the Real Economy"*
- **Part 3:** *"Accelerating High-Level Self-Reliance and Strength in Science and Technology to Lead the Development of New Quality Productive Forces"*
- **Part 13:** *"Accelerating the Comprehensive Green Transformation of Economic and Social Development and Building a Beautiful China"*

China 15th FYP Energy and Green Development Top-Level Themes

1 Overarching Energy and Carbon Goals

2 Energy Supply and System Modernisation

3 Energy Demand and Consumption Transformation

4 Enabling Industries and New Technologies

5 Market Mechanisms and Financing

6 International Engagement and Green Trade

Section 1: Overarching Energy and Carbon Goals

How will carbon's role in the energy system evolve?

Category	Item(s)	Contents	FYP Source
Core energy goals	Emissions intensity	Reduce CO ₂ emissions per unit of GDP by 17% versus the 2025 baseline	Part 1, Chapter 3
	Share of non-fossil energy in primary energy mix	Raise the share of non-fossil energy in total energy consumption to 25% by 2030 - from 21.7% in 2025.	
	National energy production	Reach 5.8 billion mt of standard coal equivalent in comprehensive energy production capacity.	
Carbon peaking & carbon management	Carbon peak	Ensure the 2030 carbon peak target is achieved as scheduled. Establish a comprehensive evaluation system for carbon peak and carbon neutrality.	Part 13, Chapter 47
	Carbon dual controls	Implement dual controls of total carbon emissions and carbon intensity across local, sectoral, enterprise, project, and product levels.	
	Capacity Building	Establish national carbon data management system, emission factor databases and carbon metrology laboratories.	
	Emissions trading	Expand the coverage of the national carbon market. Accelerate the construction of the CCER market.	
	Non-CO ₂ GHG reduction	Implement governance projects on non-CO ₂ GHG including methane, N ₂ O and HFCs, achieving a reduction capacity of 30 MtCO ₂ e.	

Section 2: Energy Supply and System Modernisation

What types of energy will be used, and how much of each?

Category	Item(s)	Contents	FYP Source
Non-fossil energy	Non-fossil energy scale	Promote the substitution of fossil energy with non-fossil energy; double non-fossil energy from 2025-2035	Part 2, Chapter 7
	Large-scale energy bases	Continue to build wind and solar PV bases in the Three-North regions, integrated wind-solar-hydro bases in the southwest, coastal nuclear power, and offshore wind bases.	
	Hydrogen, solar thermal, and geothermal	Develop green hydrogen/ammonia/methanol, concentrated solar power (CSP) and geothermal energy.	
	Green computing	Coordinated deployment of green power and computing power (data centres).	Part 4, Chapter 12
Fossil energy	Role of fossil energy	Strengthen the clean and efficient utilisation of fossil energy and promote the renovation and upgrading of coal-fired power.	Part 2, Chapter 7
	‘Scattered’ coal	Phase out ‘scattered’ coal (for residential heating and cooking)	
	Oil and gas national network	Optimise the operation and dispatch mechanism of the One National Network for oil and gas.	
	Clean fuel substitution	Promote the development of clean fuel use in the fossil energy sector (including biomass, green ammonia)	Part 13, Chapter 47
	Oil and gas supply	Increase oil and gas reserves and production, ensure annual crude oil production remains stable at around 200 million tons, and that natural gas production grows steadily	Part 14, Chapter 5
	Coal-to-liquids	Advance the construction of strategic coal-to-oil and gas bases to ensure project reserves and resource reservation guarantees.	Part 14, Chapter 54
New-type power system & grid	Construction of a new power system	Build a new-type power system, enhance the complementary and mutual support capabilities and resilience of the power system.	Part 2, Chapter 7
	Distribution grids	Improve urban and rural distribution networks.	
	Smart grids and storage	Accelerate the construction of smart grids. Deploy pumped storage and vigorously develop new-type energy storage.	

Section 3: Energy Demand and Consumption Transformation

What will change in terms of how energy is used?

Category	Item(s)	Contents	FYP Source
End-use electrification	Electrification of buildings and industry	Raise electrification rate for end-use energy consumption (implying the buildings and industrials segments, as transportation is mentioned elsewhere)	Part 2, Chapter 7
	Electrification of freight and public sectors	Electrification of freight and public sectors; application of green fuels in vehicles and vessels.	Part 13, Chapter 47
	Bulk cargo strategy	More bulk cargo transported by rail and water; NEV transport.	
	Zero-carbon transport corridors	Charging/swapping, hydrogen/ammonia/methanol refueling and solar-storage facilities along freight-intensive corridors.	
Efficient end-use of energy	Industry energy-saving retrofits	150 Mtce energy savings (thermal power, steel, nonferrous, petrochemicals, chemicals, building materials); 5% public building energy intensity reduction.	Part 13, Chapter 47
	IT energy efficiency	Efficiency improvements in computing facilities and 5G base stations; efficiency diagnosis mechanisms and labeling; “Top Runner” program.	
	Economy energy intensity	10% reduction in energy consumption per unit of GDP.	
Green production, circular economy & green lifestyle	Industrial relocation	Promote the transfer of energy-intensive industries that meet requirements to regions rich in renewable energy resources	Part 13, Chapter 47 & 50
	Zero-carbon industrial parks	Green power direct supply ; 100 national zero-carbon industrial parks; corporate green design & manufacturing.	
	Resource efficiency and recycling	High-value utilisation of waste electronics, batteries, wind/PV equipment and vehicles; major resource output rate +16%.	
	Green lifestyle	Water/electricity conservation; anti-waste campaigns (“Clean Plate”); anti-overpackaging and single-use items; bamboo for plastic substitution; green travel; waste sorting.	

Section 4: Enabling Industries and New Technologies

What support technologies must be mobilised to achieve success?

Category	Item(s)	Contents	FYP Source
Strategic emerging industries	New energy, materials, and vehicles	Advance strategic emerging industries, including new-generation IT, new energy, new materials , intelligent connected vehicles, robotics, biomedicine, high-end equipment, aviation and aerospace.	Part 2, Chapter 5
	Solar cells	Encourage key technological innovations in new solar cells	
	Ultra-deepwater O&G development	Develop deep-sea natural gas hydrate extraction and ultra-deepwater oil and gas development	Part 3, Chapter 8
Future Industries	Hydrogen and nuclear fusion	Support quantum technology, biomanufacturing, hydrogen and nuclear fusion energy , brain-computer interfaces, embodied intelligence, and 6 th -generation mobile communications.	Part 2, Chapter 5
	New-type batteries	Accelerate research on key materials such as high-capacity electrode materials, high-conductivity electrolyte materials, and composite current collectors, expand the application of high-safety, high-energy-density batteries in new intelligent terminals, new energy storage, and electric transportation tools.	

Section 5: Market Mechanisms and Financing

How must the 'soft infrastructure' of the energy system evolve?

Category	Item(s)	Contents	FYP Source
Market systems and pricing reform	National unified power market	Complete the construction of a national unified power market.	Part 2, Chapter 7
	Power price mechanisms in the new energy system	Develop sound pricing mechanisms compatible with the new energy system and gradually phase in market-oriented reforms of feed-in tariffs for various power sources.	Part 6, Chapter 20
	Pricing mechanism for refined oil products, natural gas, and coal	Optimise the pricing mechanism for refined oil products, deepen natural gas pricing reform, and refine the policy on interval-based regulation of coal prices.	
Green infrastructure financing	Green finance and institutional assessment	Boost tech finance, green finance, inclusive finance, pension finance, and digital finance.	Part 6, Chapter 20
	REITs for green infrastructure	Facilitate the regular and sustained issuance of infrastructure real estate investment trusts.	Part 6, Chapter 19
	Private sector investment into energy sector	Strengthen the mechanism for private enterprises to participate in sectors such as railways, nuclear power, hydropower, and water supply, while further raising the share of private equity in eligible projects.	Part 5, Chapter 16
	Green financial products and derivatives	Enhance green financial products and services, promote innovation in carbon financial products and derivatives, improve the green finance assessment and evaluation system for financial institutions, encourage an increase in investment in green and low-carbon fields.	Part 13, Chapter 50

Section 6: International Engagement and Green Trade

How does China's energy strategy intersect with the globe?

Category	Item(s)	Contents	FYP Source
Green trade	Digital trade and green trade	Innovate and develop digital and green trade.	Part 7, Chapter 22
International rulemaking & governance	Promotion of Chinese solutions to international rulemaking	Propose Chinese solutions for international rules in emerging areas such as AI, the digital economy, green and low-carbon development, and outer space.	Part 7, Chapter 24
	Global climate governance	Participate in and lead global climate governance, uphold the principles of common but differentiated responsibilities, fully implement the UNFCCC and its Paris Agreement, deepen South-South cooperation on climate change.	
Belt & Road	New areas for cooperation expansion	Expand into new areas of BRI cooperation in green development, AI, the digital economy, health, tourism, agriculture, meteorology, and Beidou applications.	Part 7, Chapter 23
Recognition of standards	International mutual recognition for product standards	Facilitate international mutual recognition of rules and standards for product energy efficiency, water efficiency, and carbon footprints.	Part 7, Chapter 21

Operating in China's Renewable Markets Today: Stakeholder Takeaways

Lessons For Investors and Builders

1. Project viability or risk remains fundamentally determined by specific regional factors – not national targets and guiding policies.
2. The overall system design is increasingly guiding project returns towards market-determined capture prices.
3. Flexibility resources are strongly indicated as a desirable and high-demand asset class, but returns are highly policy-driven.
4. Administrative interventions remain a material - albeit shrinking - downside risk for project returns.

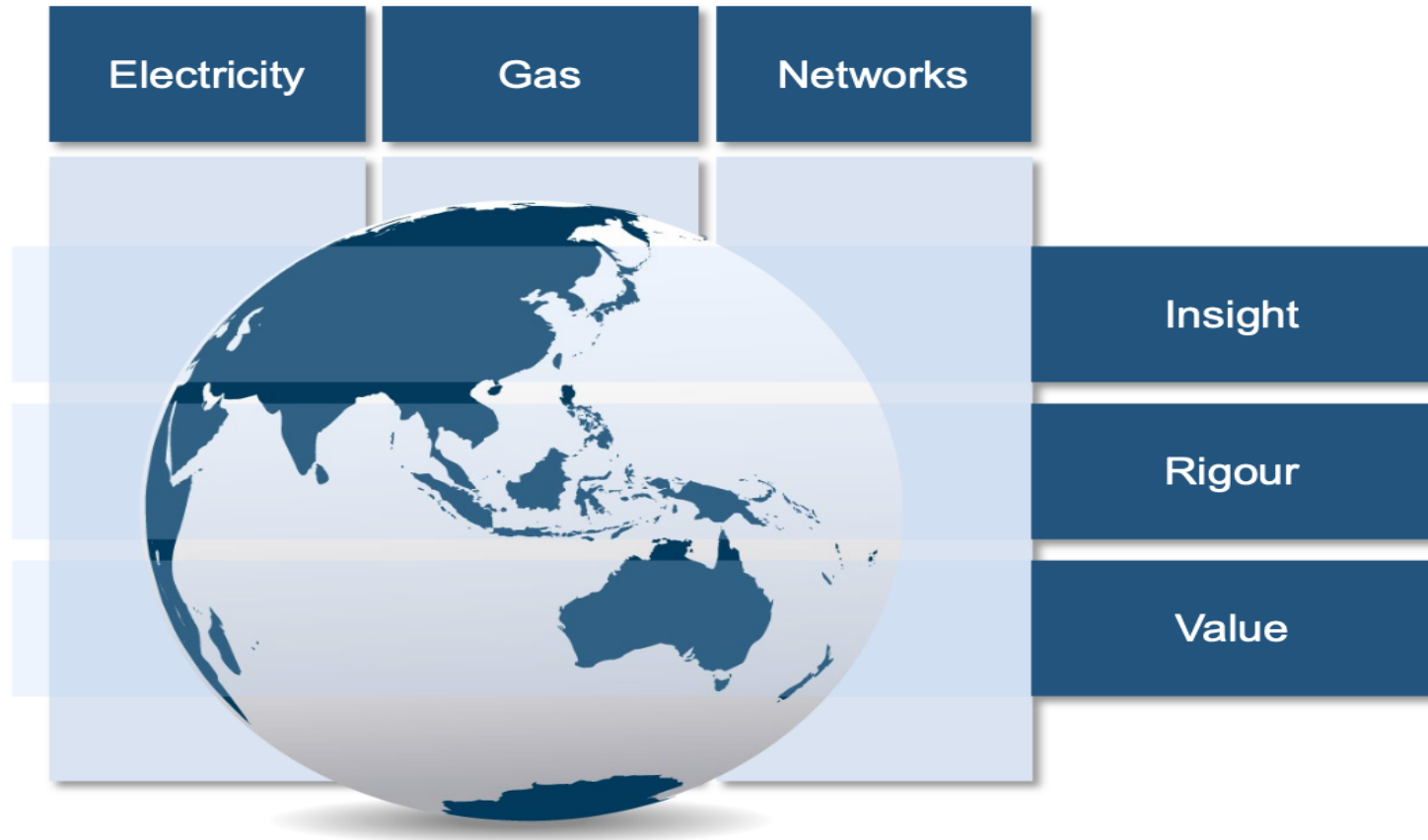
Lessons For Regulators

1. Higher penetration of renewables puts energy-only system design logic under stress.
2. Flexibility assets must be explicitly procured and cannot be assumed.
3. Markets and administrative controls can hybridise and coexist – under the right conditions.
4. Well-designed and executed dispatch policies and market design can drive progress on carbon targets, even without explicit caps.

Lessons For Power Buyers

1. Green claims will continue to face rising scrutiny on robustness and credibility and buyers must adjust accordingly.
2. Contracting economics are increasingly market-exposed with a distinct temporal dimension.
3. Energy security and system stability come with a cost – one that is increasingly socialised to buyers, rather than absorbed elsewhere upstream.
4. Securing progress on electrification and efficiency are national-level priorities for the planning period and will be key KPIs for regional/local officials.

Thank you!



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“能源的饭碗必须端在自己手里”

“China’s ‘energy rice bowl’ must remain firmly in our own hands”

- Xi Jinping, October 2021



China's Green Electricity Market Development

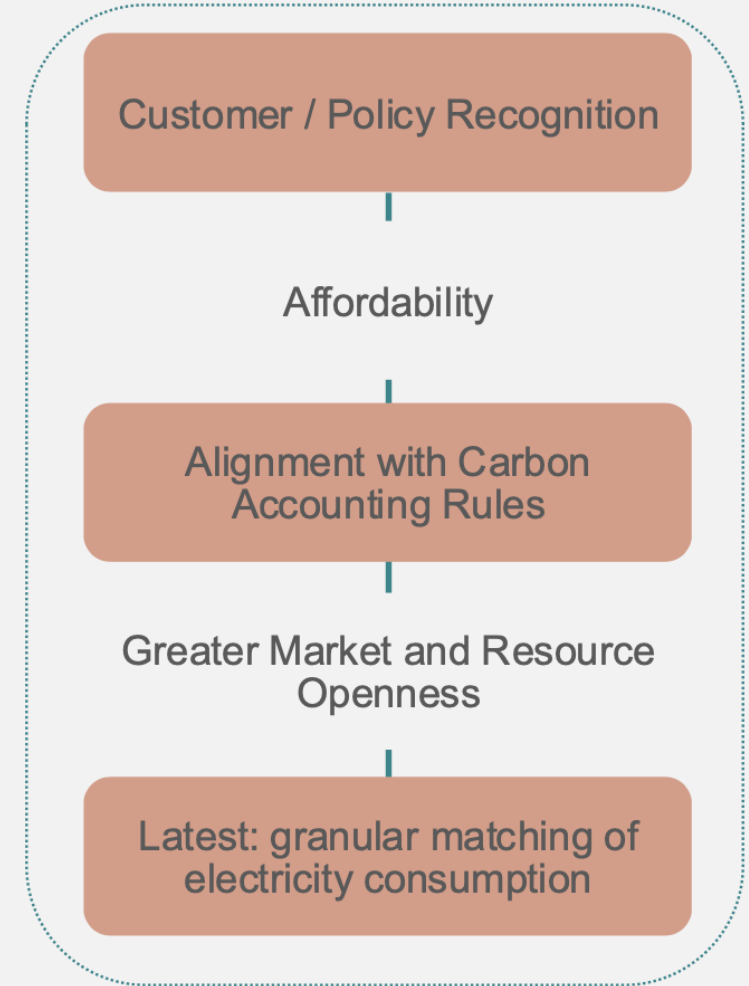
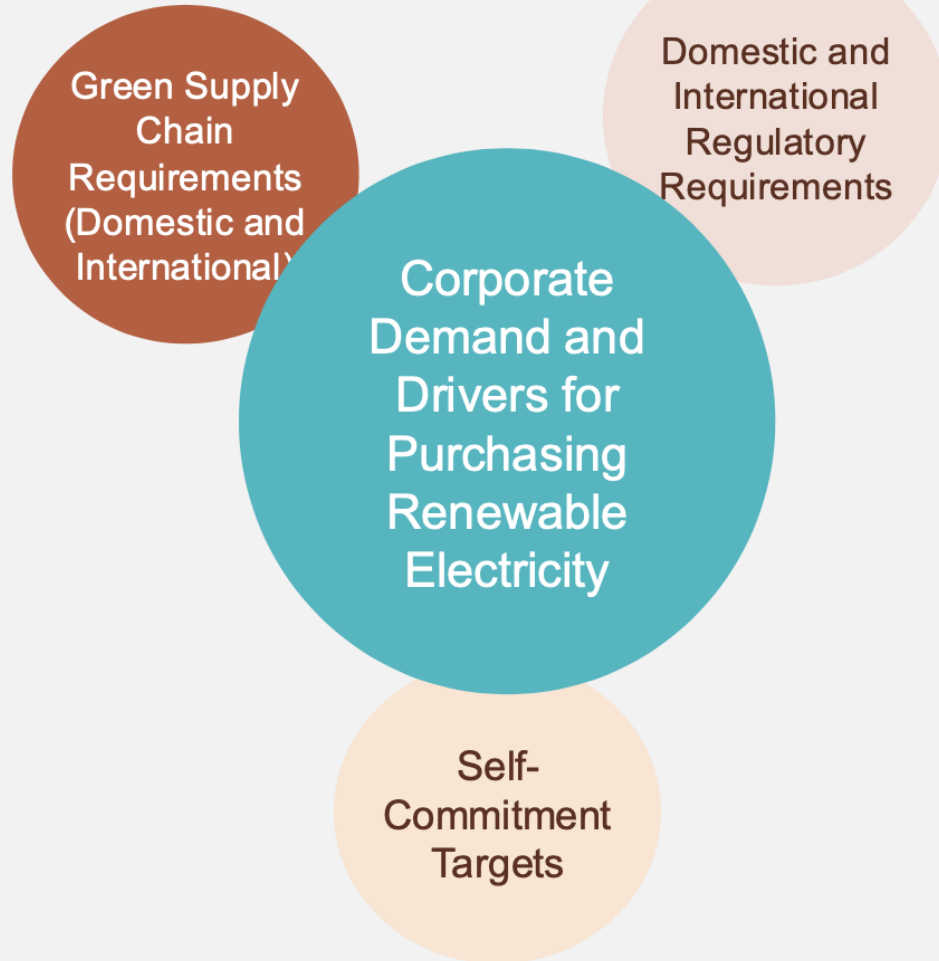
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- Registered Expert, IEC TC8/SC8C
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Corporate Demand in the Chinese Market

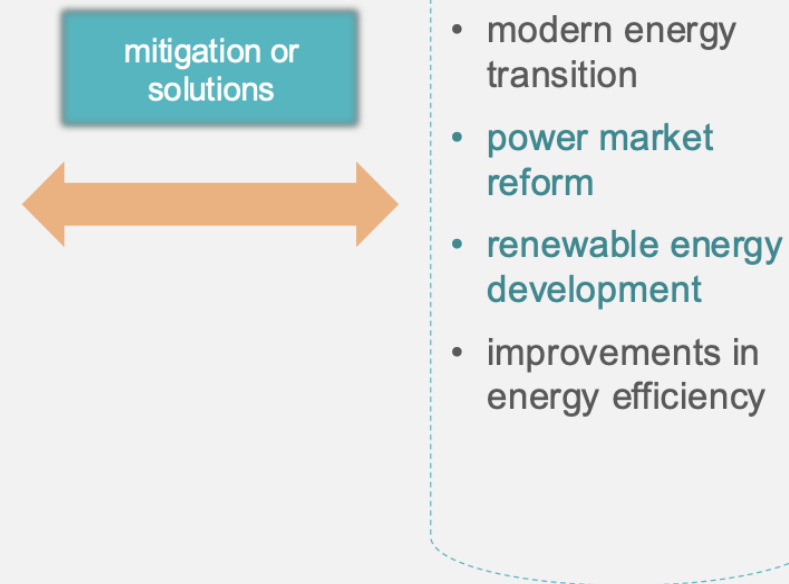
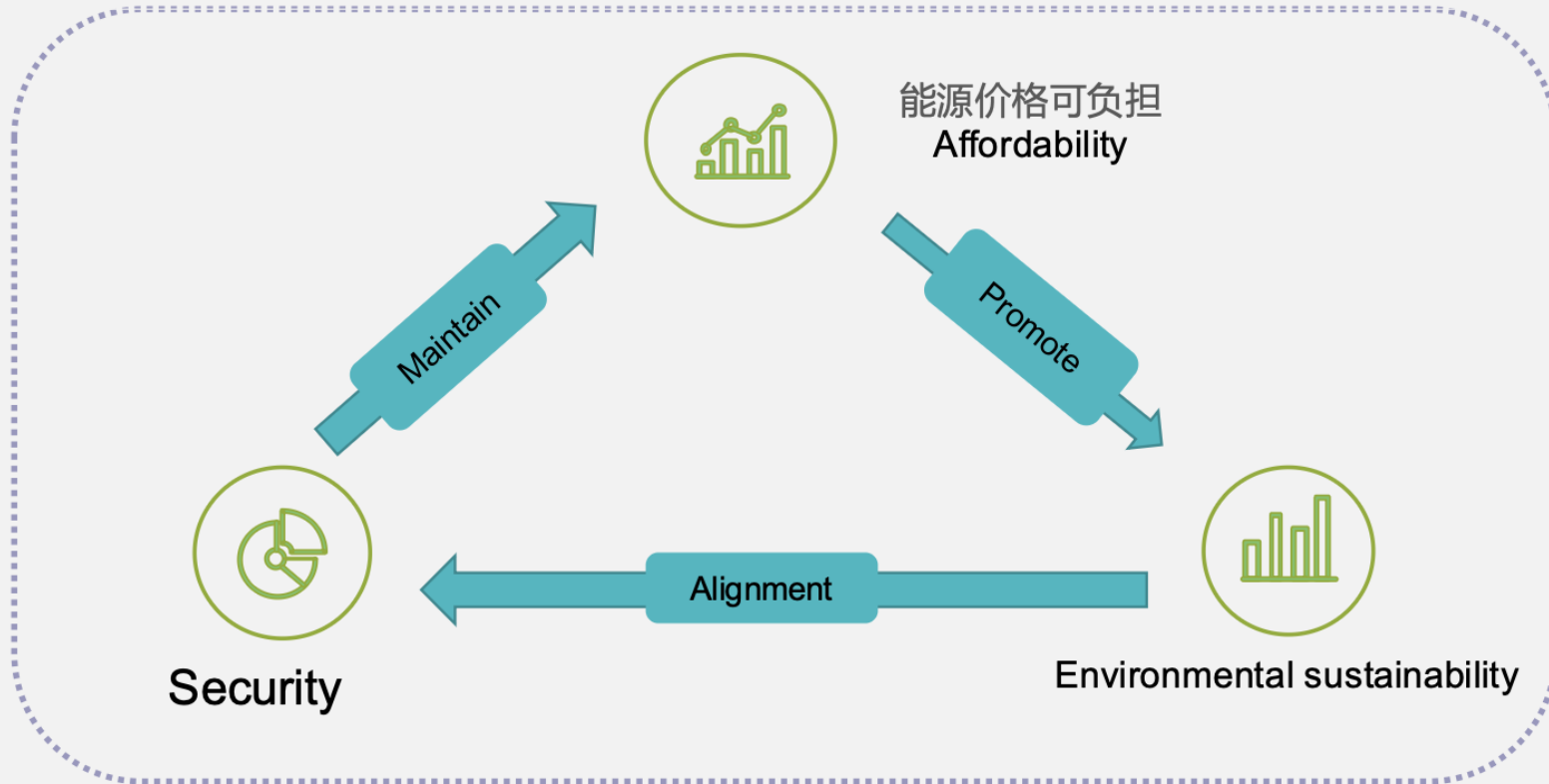
SBTi, RE100, etc.

China's dual carbon control policy, emission trading system, renewable electricity consumption requirements, and export market policies (e.g., EU CBAM).



Energy Trilemma and the Role of Markets

China's green electricity market is entering a new phase—shifting from policy-driven capacity expansion to market-driven consumption and system integration.



- Rapid scale-up of renewable deployment has established the foundation
- Policy focus is now moving toward activating demand-side participation
- Market mechanisms are evolving to align with emerging global requirements

Three Key Dimensions of China's Green Power Market

Five-Year Plan Targets

Energy Law

Renewable
Energy Law

IA/DA



Construction

Green Electricity Direct Connection

Support for Distributed Solar PV Deployment

Integrated Development of Generation, Grid, Load and Storage

...

Market/ Pricing

Green Electricity certificates

Green Power Trading

CfD for Renewables (excluding hydropower)

Capacity Pricing

...

Consumption

Renewable Electricity Consumption Obligation for Provincial Governments

Green Electricity Consumption Requirements for Energy-Intensive Industries

Net-Zero Industrial Park

Provincial Emission Trading Schemes

...

Milestones in China's Green Electricity Market System

National Legislation



China's first Energy Law was adopted by the Standing Committee of the National People's Congress, China's top legislature, and entered into force on 1 January 2025.



Article 34 establishes the legal basis for a green energy consumption promotion mechanism, prioritising the consumption of clean and low-carbon energy, particularly renewable energy.

中华人民共和国能源法

(2024年11月8日第十四届全国人民代表大会常务委员会第十二次会议通过)

第三十四条 国家推动提高能源利用效率，鼓励发展分布式能源和多能互补、多能联供综合能源服务，积极推广合同能源管理等市场化节约能源服务，提高终端能源消费清洁化、低碳化、高效化、智能化水平。

国家通过实施可再生能源绿色电力证书等制度建立绿色能源消费促进机制，鼓励能源用户优先使用可再生能源等清洁低碳能源。

公共机构应当优先采购、使用可再生能源等清洁低碳能源以及节约能源的产品和服务。

https://www.gov.cn/yaowen/liebiao/202411/content_6985761.htm

Milestones in China's Green Electricity Market System

2017

China introduced Green Electricity Certificates (GECs) .

2023.7

Released the "Full GECs Coverage" policy (Document No. 1044), issuing GECs for all electricity generated by all registered renewable energy projects.

2025.5

National Development and Reform Commission (NDRC) and National Energy Administration (NEA) issued the Notice on Promoting the Orderly Development of Green Electricity Direct Connections, stating that one objective of this model is to respond to international rules such as CBAM.

2021.8

Launch pilot green electricity trading, expanding the GEC model from unbundled to bundled transactions

2024.7

Green electricity trading chapter issued: electricity and GEC prices settled separately, with settlement based on the minimum of monthly generation, consumption, and contracted volumes.

2026.2

Jiangxi Province has become the first in China to establish an hourly green electricity trading and traceability system. Jiangsu has since followed by explicitly introducing provisions to pilot hourly green power trading.

Milestones in China's Green Electricity Market System

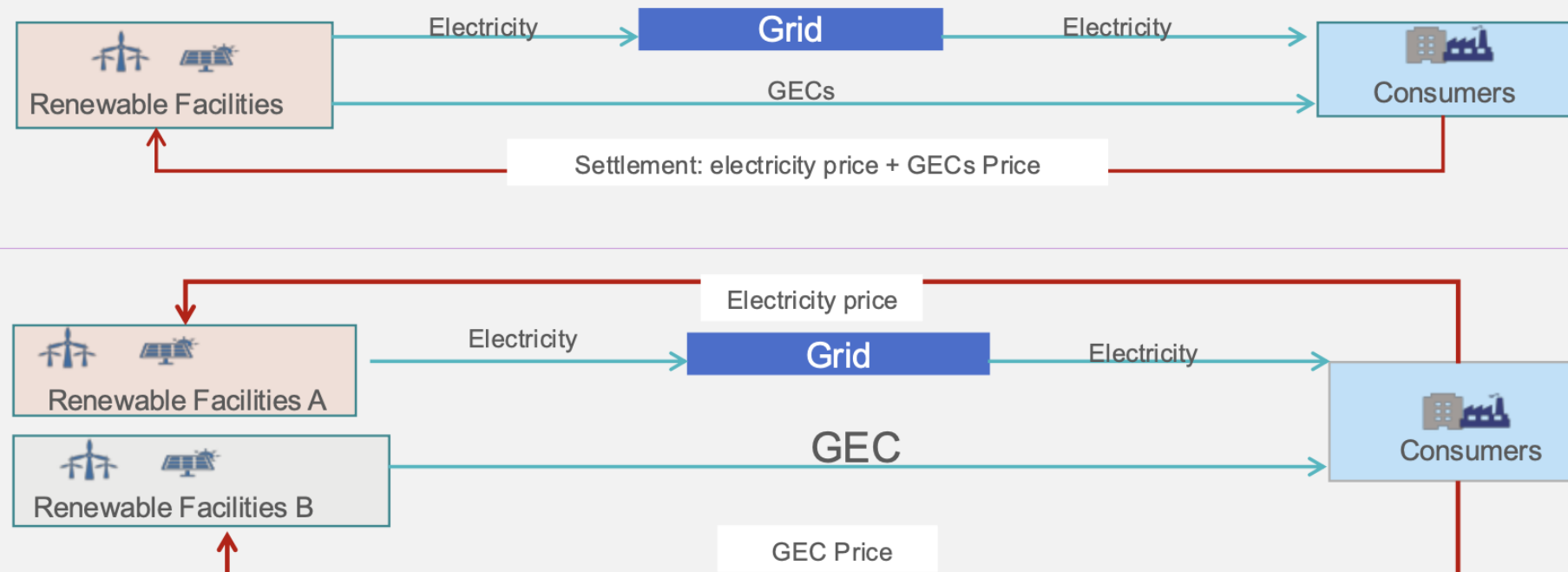


China's green electricity trading system mainly includes GECs trading and green power trading, which collectively reflects the energy value and environmental value of renewable energy



Green power trading: bundled transaction (electricity + GECs from the same project).

GEC trading: unbundled transaction (electricity and GECs can be purchased separately from different projects).



Currently, China's green electricity trading settlement and GEC data are based on monthly matching.

Milestones in China's Green Electricity Market System



绿色电力证书交易凭证信息明细表

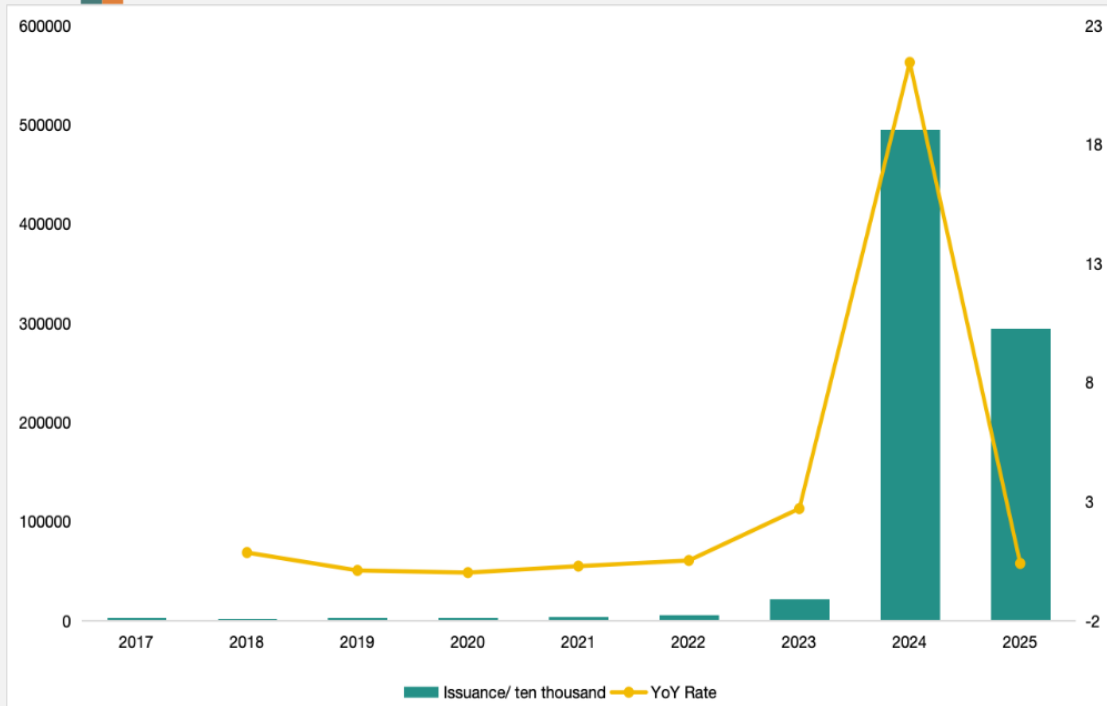
绿证信息明细					
绿证编码	生产电量 (兆瓦时)	生产年月	有效期至	项目业主	统一社会信用代码
项目名称	项目代码	项目所在地		项目类别	补贴/无补贴

注: 1兆瓦时=1000千瓦时

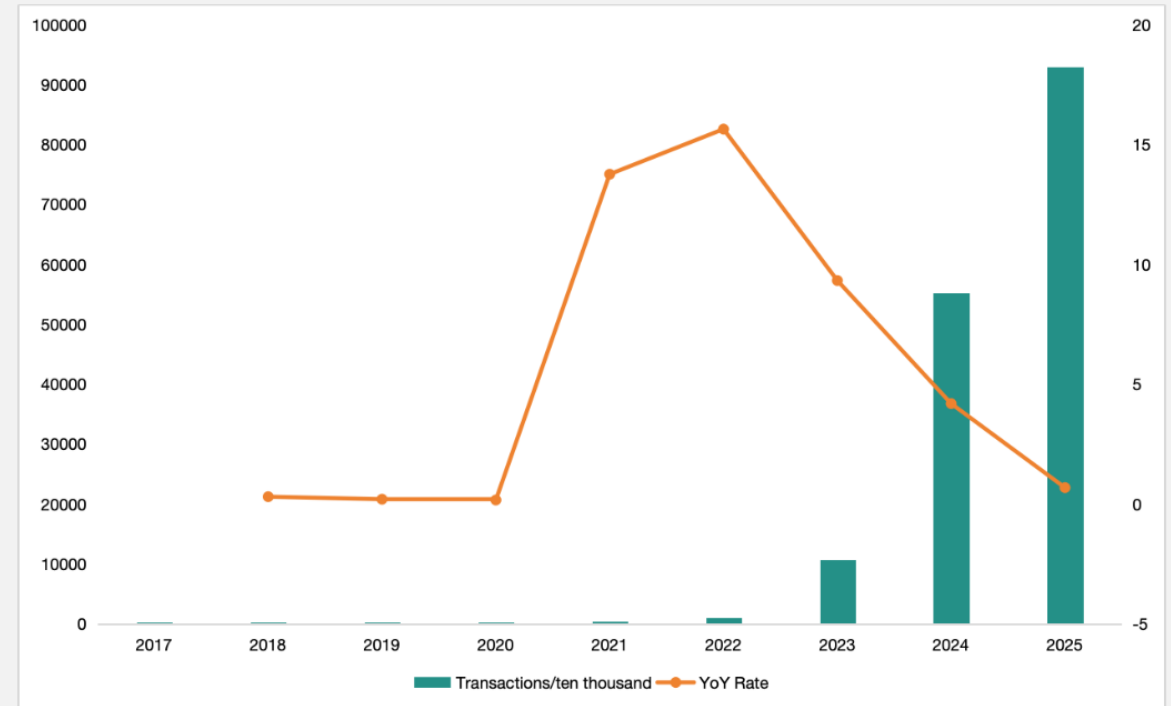
交易信息明细				
单位/个人	交易编码	交易日期	权益所属地区	交易平台

Scan the QR code to view the information of GECs.

Milestones in China's Green Electricity Market System



Cumulative GEC Issuance in China (2017–2025)



Cumulative GEC Trading Volume in China (2017–2025)

2025 GEC Market Highlights (China)

- 930 million GECs traded (+120% YoY), exceeding cumulative historical total
- 111,000 participants (+87.5% YoY); led by energy-intensive, export-oriented, and high-tech firms
- Individual purchases: 7.24 million (6× 2024 level)
- Prices rebounded: avg. RMB 4.14 in H2 (+90% vs. H1)

Milestones in China's Green Electricity Market System



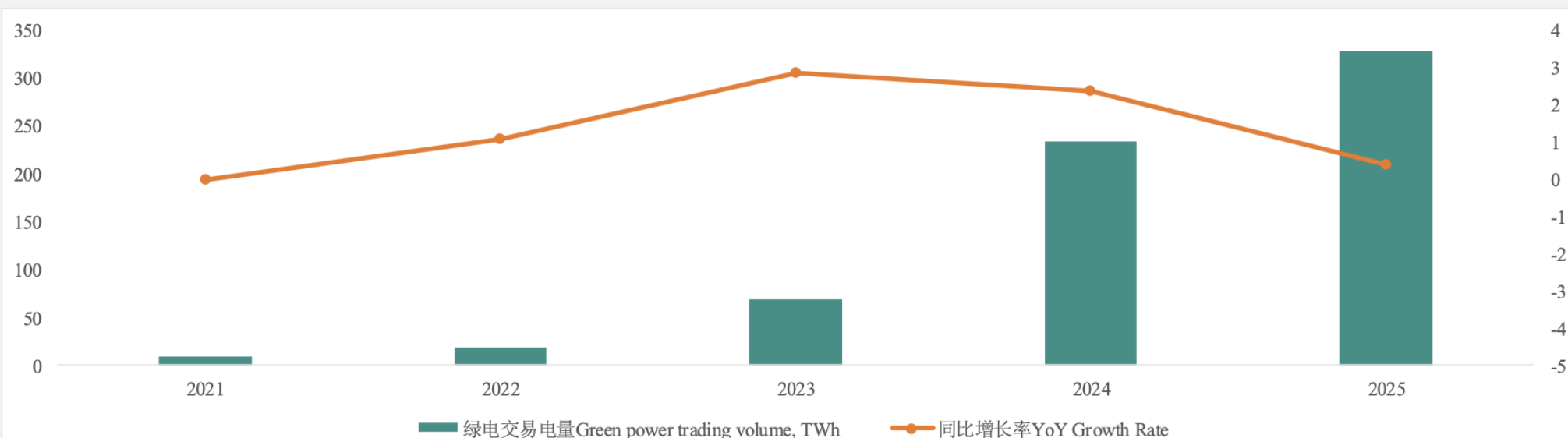
Green power trading is a bundled transaction, where electricity and the corresponding GECs are obtained from the same generation project. Current products include multi-year bilateral contracts, corresponding to long-term PPAs.



2025 electricity market trading volume: 6,639.4 TWh (+7.4% YoY), accounting for 64.0% of total electricity consumption (+1.3 pp). Green electricity trading volume: 328.5 TWh (+38.3% YoY).



China's green electricity trading volume in 2025 was nearly 37 times higher than in 2021.



Current status:
monthly matching

Developing Trends:
transition toward
hourly granularity

Renewable Electricity Consumption Requirements for Energy-Intensive Industries in China

Mandatory Consumption Assessment

- Aluminum Smelting Industry



Industries monitored but not assessed in 2025

- Steel
- Cement
- Polysilicon
- New Data Centers at National Computing Hub Nodes

序号	省（区、市）	2025省级总量消纳责任权重	电解铝	钢铁	多晶硅	水泥	国家枢纽节点新建数据中心
1	北京	30.6%	30.6%	30.6%	30.6%	30.6%	80.0%
2	天津	29.7%	29.7%	29.7%	29.7%	29.7%	80.0%
3	河北	29.2%	29.2%	29.2%	29.2%	29.2%	80.0%
4	山西	29.4%	29.4%	29.4%	29.4%	29.4%	80.0%
5	内蒙古	30.7%	30.7%	30.7%	30.7%	30.7%	80.0%
6	辽宁	28.4%	28.4%	28.4%	28.4%	28.4%	80.0%
7	吉林	39.0%	39.0%	39.0%	39.0%	39.0%	80.0%
8	黑龙江	38.6%	38.6%	38.6%	38.6%	38.6%	80.0%
9	上海	33.1%	33.1%	33.1%	33.1%	33.1%	80.0%
10	江苏	27.5%	27.5%	27.5%	27.5%	27.5%	80.0%
11	浙江	26.1%	26.1%	26.1%	26.1%	26.1%	80.0%
12	安徽	26.5%	26.5%	26.5%	26.5%	26.5%	80.0%
13	福建	24.2%	25.2%	25.2%	25.2%	25.2%	80.0%
14	江西	33.9%	33.9%	33.9%	33.9%	33.9%	80.0%
15	山东	26.2%	26.2%	26.2%	26.2%	26.2%	80.0%
16	河南	36.2%	36.2%	36.2%	36.2%	36.2%	80.0%
17	湖北	42.8%	42.8%	42.8%	42.8%	42.8%	80.0%
18	湖南	50.5%	50.5%	50.5%	50.5%	50.5%	80.0%
19	广东	31.6%	31.6%	31.6%	31.6%	31.6%	80.0%
20	广西	50.8%	50.8%	50.8%	50.8%	50.8%	80.0%
21	海南	27.2%	27.2%	27.2%	27.2%	27.2%	80.0%
22	重庆	34.2%	34.2%	34.2%	34.2%	34.2%	80.0%
23	四川	70.0%	70.0%	70.0%	70.0%	70.0%	80.0%
24	贵州	41.3%	41.3%	41.3%	41.3%	41.3%	80.0%
25	云南	70.0%	70.0%	70.0%	70.0%	70.0%	80.0%
26	陕西	30.1%	30.1%	30.1%	30.1%	30.1%	80.0%
27	甘肃	53.6%	53.6%	53.6%	53.6%	53.6%	80.0%
28	青海	70.0%	70.0%	70.0%	70.0%	70.0%	80.0%
29	宁夏	34.2%	34.2%	34.2%	34.2%	34.2%	80.0%
30	新疆	29.7%	29.7%	29.7%	29.7%	29.7%	80.0%

Future Trends

- Expansion of sector coverage
- China has already imposed mandatory green electricity consumption requirements on selected high energy-intensive industries. As the framework for dual-carbon control is rolled out, these requirements are expected to extend to a wider range of sectors during the 15th Five-Year Plan period.

China's hourly Green Power trading pilots



Overall, bilateral green power trading directly contracted between generators and consumers may correspond to the PPA category under CBAM. However, its eligibility depends on meeting CBAM requirements, including hourly electricity matching and physical deliverability.



Jiangxi Province and Jiangsu Province have started hourly electricity trading pilots, which are expected to expand further in the future.



China's evolving green electricity market may significantly influence global supply chains and carbon accounting practices.

State Grid Jiangxi integrated hourly green electricity products into the province's medium- and long-term power block trading system.

Built on blockchain technology, the framework establishes standardized procedures for hourly green power transactions. Leveraging the immutability of blockchain, the system automatically generates authoritative and tamper-proof records of green electricity consumption.

Since the beginning of 2025, 225 electricity consumers and 36 renewable energy companies in Jiangxi have participated in hourly green power trading. Cumulative transaction volumes have reached nearly 800 million kWh, with more than 470 million kWh settled under the hourly green power mechanism.

江西：小时级绿电可溯源 赋能企业“绿色出海”

2026年02月10日18:48 | 来源：人民网—江西频道

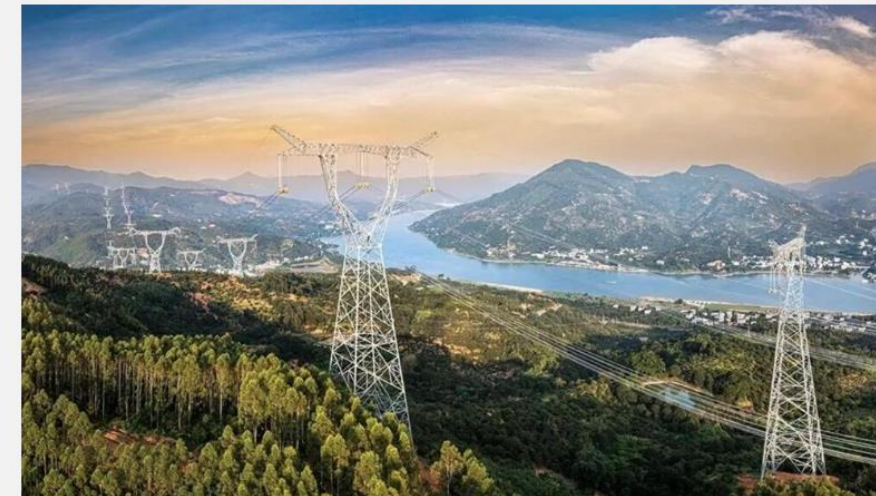
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字号

春节前夕，江西省电力交易中心向省内光伏龙头企业江西晶科能源有限公司提供了小时级绿电消费凭证。这标志着国网江西省电力有限公司自2025年在全国率先构建的绿电“小时级”匹配与溯源体系，已从机制设计走向实际应用，为出口企业应对国际碳管制提供了可追溯、可核验的绿色供应链碳足迹解决方案。

随着欧盟碳边境调节机制等国际规则实施，对产品碳足迹核算提出更高要求。以往以年或月为周期的绿电交易难以精确匹配用电与绿电生产的时间点，导致企业在申请碳关税抵扣时面临证据难题。国网江西电力通过技术创新，以区块链为基础，将小时级绿电融入省内电力中长期交易体系，设计了标准化的小时级绿电交易流程，可为用户提供经区块链认证、不可篡改的绿电消费记录。

2025年以来，江西已有225家电力用户和36家新能源企业参与小时级绿电交易，累计交易绿电量近8亿千瓦时，结算小时级电量超4.7亿千瓦时。用户购买绿电后，可获得一张“小时级绿色消费凭证”，通过扫码即可追溯绿电的生产时间、来源电站及上网电量等全链条信息，实现绿电的精准溯源。



China's hourly Green Power trading pilots

- On February 28, 2026, the Jiangsu Energy Regulatory Office and the Jiangsu Provincial Development and Reform Commission jointly issued the Implementation Rules for the Medium- and Long-Term Electricity Market in Jiangsu Province (2026 Edition), which came into effect on March 1, 2026.

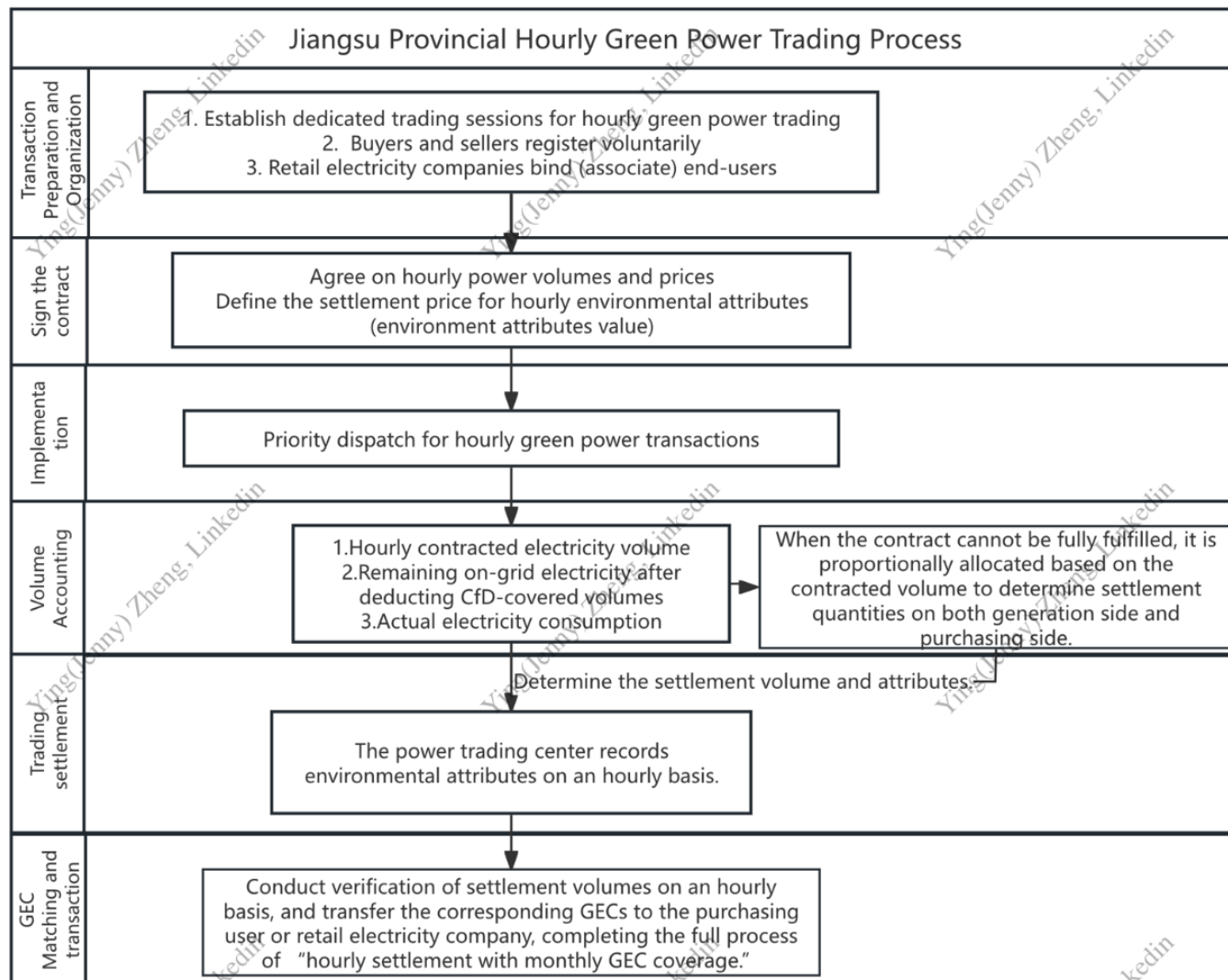
国家能源局江苏监管办公室文件 江苏省发展和改革委员会文件

苏监能市场〔2026〕14号

关于印发《江苏省电力中长期市场实施细则（2026版）》的通知

国网江苏省电力有限公司，江苏电力交易中心有限公司，各有关发电（集团）企业，售电企业，电力用户：

为贯彻落实加快建设全国统一电力市场要求，深化电力中长期市场建设，更好适应江苏电力现货市场运行及新型经营主体发展需要，保证电力市场统一、开放、竞争、有序，根据《中共中央国务院关于进一步深化电力体制改革的若干意见》（中发〔2015〕9号）及其配套文件、《电力市场运行基本规则》（国家发展改革委 2024年第20号令）、《国家发展改革委 国家能源局关于印发〈电力中长期市场基本规则〉的通知》（发改能源规〔2025〕1656号）、《国家发展改革委 国家能源局关于印发



Green Electricity Direct Connection

- 👉 May 30, 2025 – NDRC and NEA issued a policy on green electricity direct connections, aims to promote local renewable energy consumption, meet corporate demand for green power, and provide additional cost-optimization options
- 👉 According to data released by the NEA on 27 February 2026, 84 green electricity direct connection projects have been approved nationwide, with a total installed renewable capacity of 32.59 GW.
- 👉 Such direct connection projects may also be recognized under certain international frameworks(e.g CBAM), provided they meet requirements such as hourly electricity matching and physical deliverability.

China

Green electricity direct connection refers to a model where renewable energy sources (e.g., wind, solar, biomass) supply electricity to a single consumer via dedicated direct lines without passing through the public grid, enabling clear physical traceability of electricity supply. **A direct line is a dedicated transmission line that directly connects the generator and the electricity consumer.**

EU

'direct line' means either an electricity line linking an isolated generation site with an isolated customer or an electricity line linking a producer and an electricity supply undertaking to supply directly their own premises, subsidiaries and customers)

Key Takeaways



Market evolution

China has established a comprehensive policy framework for renewable energy development and is now transitioning toward market-based mechanisms to drive green electricity consumption.



Demand-side activation

Mandatory consumption requirements and corporate participation are becoming key drivers of renewable energy uptake, particularly among energy-intensive and export-oriented sectors.



Granularity shift

The current system is primarily based on monthly matching, but pilot programs in provinces such as Jiangxi and Jiangsu signal a gradual transition toward hourly matching.



International alignment

Emerging global frameworks—such as CBAM and Scope 2 accounting reforms—are accelerating the need for higher temporal granularity and physical traceability.



Strategic implication

China's evolving green electricity market has the potential to play a significant role in shaping global carbon accounting practices and cross-border regulatory alignment.

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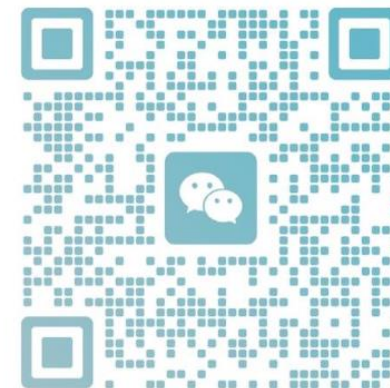


天工智库中心
TIANGONG THINK THANK



Jenny_Zheng

北京 朝阳



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WeChat



Line



清华大学环境创新研究院
RESEARCH INSTITUTE FOR ENVIRONMENTAL INNOVATION (SUIZHOU, TSINGHUA)

Clean Energy Deals in China

- Aggregated renewable energy procurement



WORLD
RESOURCES
INSTITUTE

POLSKY CENTER
FOR THE GLOBAL
ENERGY TRANSITION

- **21 April 2026**
- Wenquan Zhang, WRI China



■ Pros

- Bigger potential compared to roof-top solar
- Accessible in most regions of China
- Recognized internationally, by SBTi, RE100, etc.

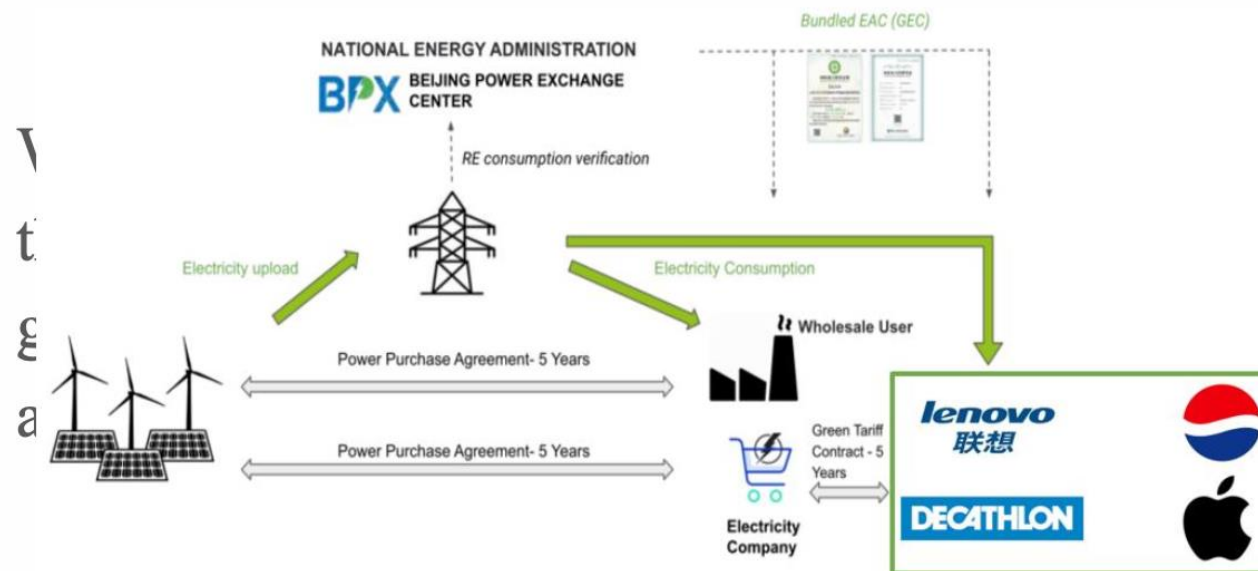
■ Cons

- Higher cost
- Entry barrier for SMEs without certain knowledge/capacity

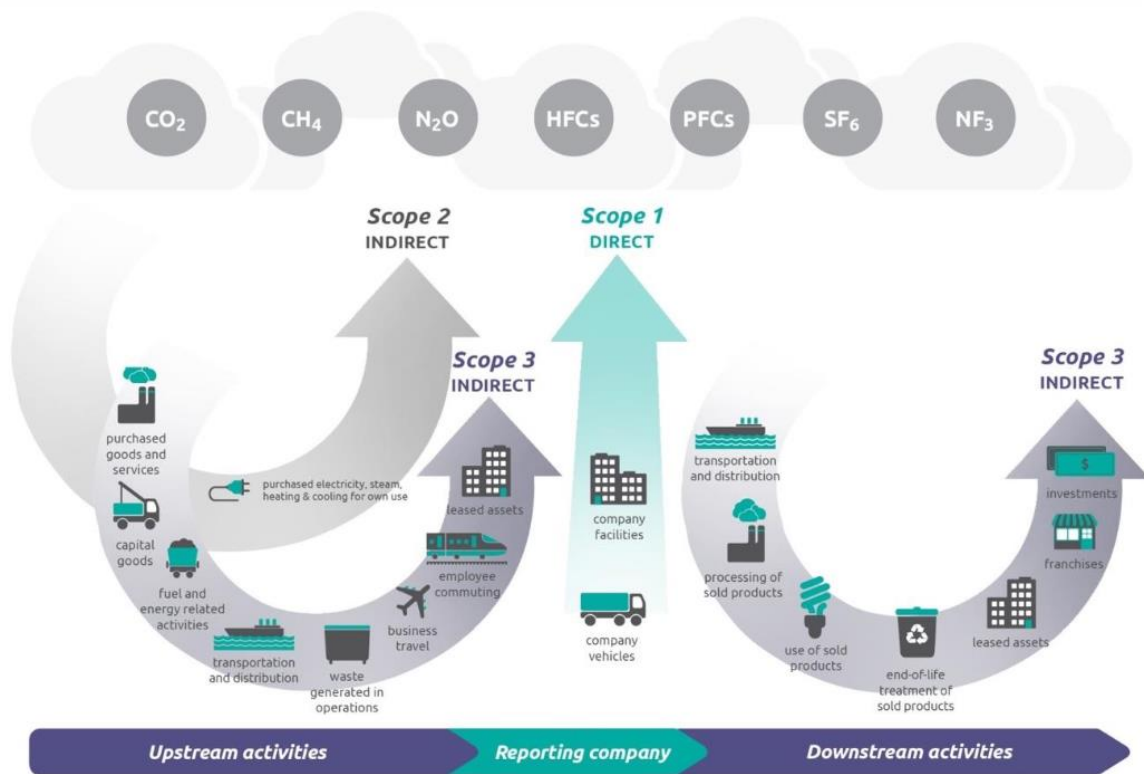
Benefits of Aggregating multiple buyers' load



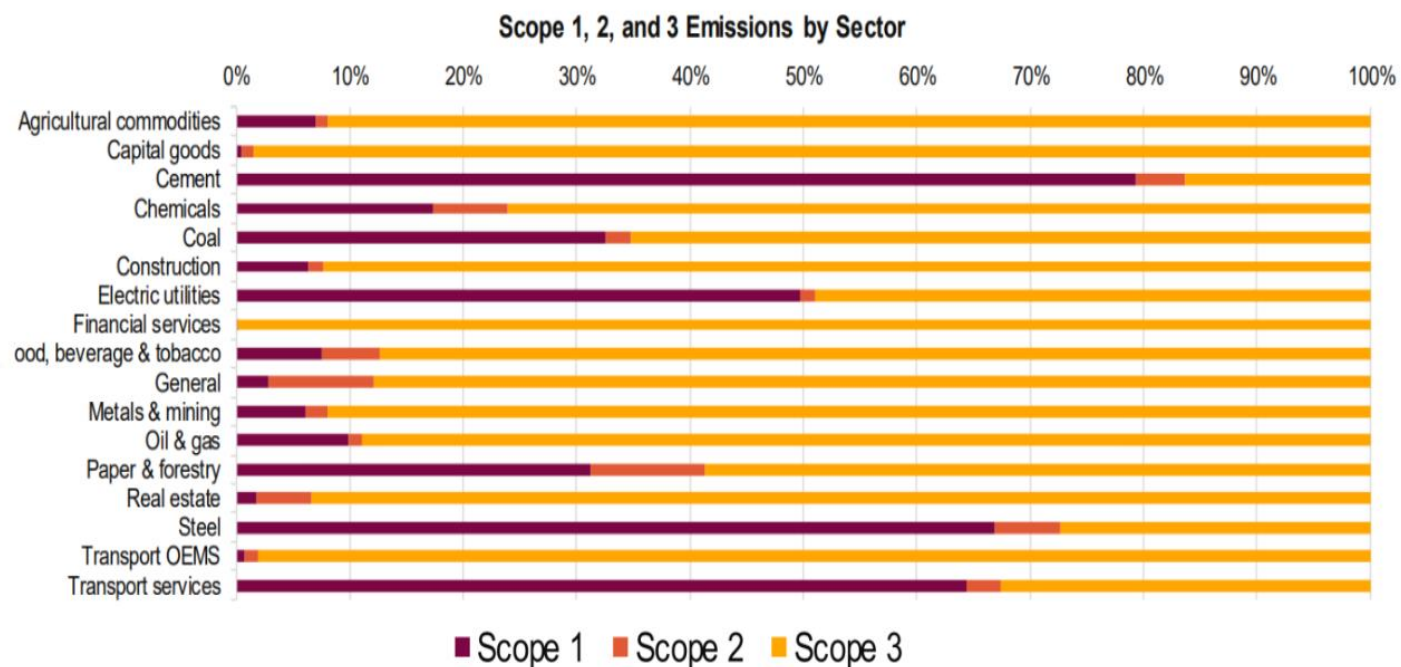
With WRI's support, Decathlon has brought 14 suppliers with China General Nuclear (CGN), in Fujian Province, to sign a renewable energy aggregated PPA in 2023.



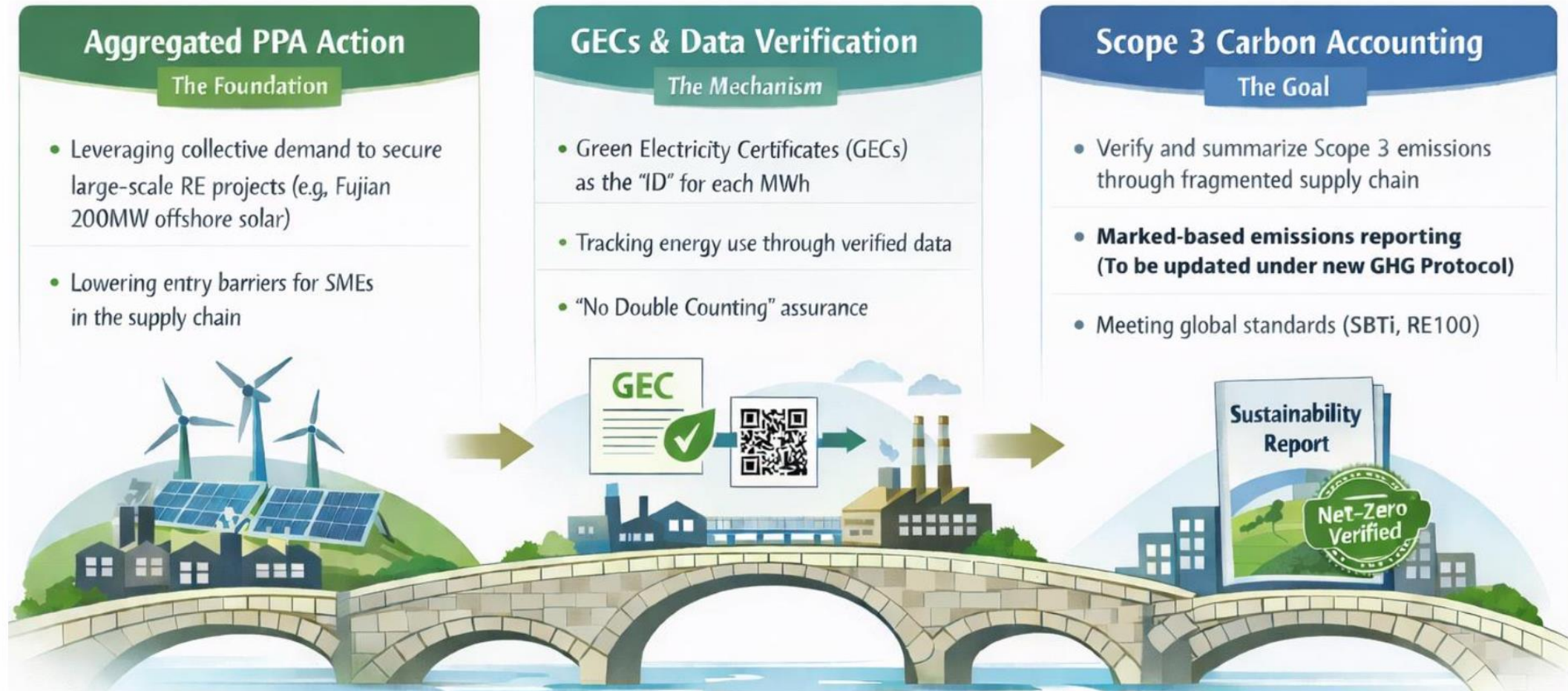
- Since 2024, more multinational corporations have joined the aggregated renewable procurement initiated by WRI and Decathlon.
- A total of **1.6 TWh** of renewable contracts has been signed in more than a dozen provinces of China, meeting supply chain's energy demand for 2025



"...across all sectors **Scope 3 emissions account on average for 75%** of total Scope 1+2+3 emissions..." -CDP



Track and verify RE consumption with market-based mechanism



GHG Protocol's engagement in China



TACKLING SCOPE 3: CHALLENGES, INNOVATION, AND CORPORATE ACTION



Barry Jones
Principal Value Chain Specialist
Lock Two Three



Cihang Yuan
Deputy Director, Corporate Climate
and Renewable Energy
World Wildlife Fund



Wenquan Zhang
Associate, Sustainable Transition Center,
Energy Program
WRI China



Jenna Stauffer
Climate Strategy Lead
Google

Coming
Up
Tomorrow

Wednesday, 22 April 11:00 AM-12:00 PM

- Scope 3 emissions account on average for more than $\frac{3}{4}$ of total corporate emissions
- Supply chain RE procurement is the first and foremost solution for corporate scope 3 emissions reduction
- Aggregated RE procurement brings economic and environmental benefits especially for SMEs
- Tracking RE consumption and accounting supply chain emissions under new GHGP could be a different story



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