

APRIL 2024

CHINA ENERGY POLICY

NEWSLETTER

China Energy Transformation Programme

1. China energy transition updates

NEA interprets the characteristics of a new-type energy system

In October 2022, the Chinese government proposed for the first time "accelerating the planning and construction of a new-type energy system" in the *Report* of the 20th National Congress of the CPC. In February 2024, the National Energy Administration (NEA) interpreted that the new-type energy system has five distinctive characteristics. 1) New energy mix, non-fossil energy gradually replaces fossil energy as the primary energy source; 2) New system form, with the accelerated emergence of a new-type power system, hydrogen energy "production, storage, transportation and utilization" system, low-carbon and zero-carbon utilization of fossil energy; 3) New industrial system that uses high-level independent technology to accelerate the formation of new high-quality productivity in the energy field; 4) Flexible and resilient supply chain that effectively secures energy use under various conditions such as extreme weather; 5) New governance system with flexible and efficient allocation of various matters and resources.¹

The main starting points for the reduction of energy intensity in 2024

As of the end of 2023, the target of China's 14th Five-Year Plan (2021-2025) energy consumption per unit of GDP (i.e. energy intensity) needs to catch up. In March 2024, the 2024 State Council Government Work Report (CHN: 2024年政府工作报告) proposed the expected goal of reducing energy intensity by 2.5% in 2024.² Notably, the incremental use of renewable energy and nuclear energy compared to the previous year are exempted from the energy consumption accounting during the 14th Five-Year-Plan period. Therefore, the Important measures to achieve this goal include accelerating clean and renewable energy supply. The Report calls for accelerating the construction of large-scale wind and solar bases, hydro-wind-solar integration projects, and coastal nuclear power projects while promoting the construction of supporting infrastructure such as flexible power sources, power transmission lines and charging facilities.³ However, at present, long-term energy

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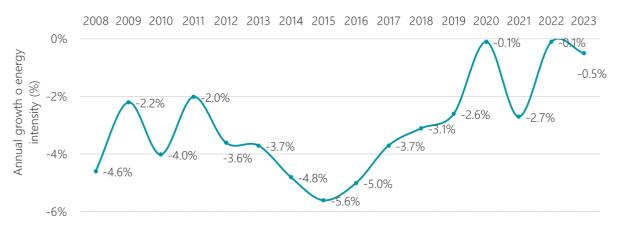
¹ "人民日报:如何加快建设新型能源体系," People's Daily, 3 February 2024, accessed at https://mp.weixin.qq.com/s/sV6lvrLLPE59_8rNX8b_Pw.

² "2024年《政府工作报告》全文来了!," State Council, 15 March 2024, accessed at http://www.chenghai.gov.cn/stchtyjrj/gkmlpt/content/2/2314/post_2314499.html#4369.

³ " 2024年经济社会发展总体要求、主要目标和政策取向,一图读懂," Beijing Daily, 7 March 2024, accessed at

storage faces technical bottlenecks that ask for further technical research as well as exploration of newer forms of energy storage; the power grid needs to transform into a two-way interactive system through intelligent retrofit to meet the needs of large-scale connection of distributed power sources and electric vehicles.⁴ In addition, the government requires energy price regulation and public price reforms for electricity, heat, and gas to form support at the institutional level.

2008-2023 Decline in energy consumption per unit of GDP in China



Source: National Bureau of Statistics (NBS), accessed in March 2024

NEA clarifies the main tasks in the energy field in 2024

In March 2024, the NEA issued the *Guiding Opinions on Energy Work in 2024* (CHN: 2024年能源工作指导意见), which clarifies three critical tasks for the energy sector development in 2024. First, continue to enhance the energy supply capabilities, maintain stable and increased production of coal, crude oil, and natural gas, as well as increase installed capacity, power generation and "West-to-East" power transmission capabilities. Second, continue to optimise the energy structure and increase the proportion of non-fossil energy and electricity consumption. Third, to steadily improve energy efficiency and quality, including continuing to carry out energy-saving, heating, and flexibility retrofit of coal power units, maintaining a reasonable level of inter-provincial power transmission full load hours, and promoting clean heating in the northern region. See the table below for specific goals.

Comparison of key development goals in the energy sector in 2024 and the actual situation in 2023

	2024 Goal	Actual Situation 2023
Total primary energy production	~4.99 Btce (+3.3% y-o-y)	4.83 Btce
The proportion of non-fossil energy in total primary energy consumption	18.9% (+1 pct)	17.9%
Total installed power generation capacity	3,170 GW (+250 GW, +8.6% y-o-y)	2,920 GW
The proportion of non-fossil energy in total installed power generation capacity	55% (+1.1 pct)	53.9%
Total power generation	9,960 TWh (+5.3% y-o-y)	9,456 TWh
The proportion of wind and solar PV in total power generation	17% (+1.5 pct)	15.5%

Source: National Energy Administration (NEA), March 2024

^{4 &}quot;第一观察 | 中央政治局集体学习释放加快能源结构转型积极信号," Xinhua News Agency, 2 March 2024, accessed at http://www.xinhuanet.com/20240302/014b24df67bb4bb8a09ac9e23cf1a089/c.html.











https://baijiahao.baidu.com/s?id=1792867620947755279&wfr=spider&for=pc.

In policy formulation, the government will speed up the revision of the *Renewable Energy Law* (CHN: 可再生能源法), *Electric Power Law* (CHN: 电力法), and *Coal Law* (CHN: 煤炭法), and promote the revision and approval of the *Energy Law* (CHN: 能源法) at the Standing Committee of the National People's Congress at the same time. Specifically, the government will formulate three main rules for power market system construction: *Basic Rules for the Electric Power Ancillary Services Market* (CHN: 电力辅助服务市场基本规则), *Basic Rules for Information Disclosure of the Power Market* (CHN: 电力市场信息披露基本规则), and *Basic Rules for Power Market Access Registration* (CHN: 电力市场准入注册基本规则). ⁵

A further connection of green certificate with energy consumption dual-control

To promote the low-carbon energy transition and renewable energy consumption, the government stipulates that during the 14th Five-Year Plan period, the new renewable energy consumption each year compared with the previous year will be deducted from the assessment of total energy consumption and energy intensity of the country and each province, with the green certificate as the basic certificate for the recognition of renewable energy consumption. In February 2024, the National Development and Reform Commission (NDRC), the National Bureau of Statistics (NBS), and the NEA jointly issued a document to further deduct non-fossil energy consumption, such as nuclear energy, from the total energy consumption and energy intensity assessments. It aims to promote the completion of the binding indicator of energy intensity reduction of the 14th Five-Year Plan period.

The document also clarifies the calculation of deductions for inter-provincial renewable power consumption through green certificates. At present, there are two forms of inter-provincial green power transactions in China: 1) inter-provincial medium- and long-term contracts in the green power market, that is, green certificates are sold together with electricity (i.e. physical electricity transactions); 2) inter-provincial medium- and long-term contracts in the general power market, green certificates can be sold separately from electricity (i.e. physical electricity transactions and green certificate transactions). In the energy consumption assessment of each province, the government stipulates that renewable energy consumption deductions should be primarily based on physical electricity transactions, supplemented by inter-provincial green certificate transactions, aiming to promote the actual consumption of green electricity. However, whether it is a physical electricity transaction or a green certificate transaction, the corresponding electricity and green certificates are included in the renewable energy consumption of the receiving province, and the part of the green certificate transaction must not exceed 50% of the total energy consumption deduction of the province in principle. The issuance of this policy will strengthen the connection between green certificates and the energy consumption dual-control mechanism and stimulate the potential demand for green certificates.

Green power market achieves nationwide coverage

China has three major power grid enterprises (TSOs): State Grid, China Southern Power Grid, and West Inner Mongolia Power Grid. In July 2021, the State Grid and China Southern Power Grid each launched a green power market pilot. This independent renewable energy power trading market focuses on medium- and long-term contracts.⁸ In 2021, 2022, and 2023, the green power trading volume reached 0.63 TWh, 22.78 TWh, and 53.77 TWh, respectively. The transaction volume has multiplied every year, and its share in the national market-oriented electricity transaction reached 0.95% in 2023.⁹ In February 2024, the NDRC and the NEA jointly approved the green power market pilot in western Inner Mongolia¹⁰, which

¹⁰ "国家发展改革委批复我区电力市场绿色电力交易试点方案," Development and Reform Commission of Inner Mongolia Autonomous Region, 2 February 2024, accessed at http://fgw.nmg.gov.cn/xxgk/zxzx/fgdt/202402/t20240222_2470412.html.









⁵ 国家能源局关于印发《2024年能源工作指导意见》的通知, 国能发规划(2024)22号," National Energy Administration, 18 March 2024, accessed at http://zfxxgk.nea.gov.cn/2024-03/18/c_1310768578.htm.

^{6 &}quot;国家发展改革委 国家统计局 国家能源局 关于进一步做好新增可再生能源消费不纳入能源消费总量控制有关工作的通知, 发改运行〔2022〕1258号," National Development and Reform Commission, National Bureau of Statistics, National Energy Administration, 16 November 2022, accessed at https://www.ndrc.gov.cn/xwdt/tzgg/202211/t20221116_1341324_ext.html.

⁷ "国家发展改革委 国家统计局 国家能源局关于加强绿色电力证书与节能降碳政策衔接大力促进非化石能源消费的通知, 发改环资〔2024〕113号," National Development and Reform Commission, National Bureau of Statistics, National Energy Administration, 2 February 2024, accessed at https://www.ndrc.gov.cn/xwdt/tzgg/202402/t20240202_1363857_ext.html.

^{8 &}quot;今天:全国绿色电力交易试点正式开市 上海成功摘得首单," Chinanews, National Development and Reform Commission, 7 September 2021, accessed at https://news.bjx.com.cn/html/20210907/1175412.shtml.

⁹ "中国电力市场全貌——《2023年售电行业年度报告》重磅发布!," shoudian.bjx.com.cn, 18 March 2024, accessed at https://news.bjx.com.cn/html/20240318/1366667.shtml.

means that green power trading will achieve full grid coverage. Inner Mongolia ranks first in terms of non-hydro renewable power installed capacity, power generation, and electricity export. However, its consumption of renewable energy faces significant challenges in the long term. For instance, the wind curtailment rates of west Inner Mongolia in 2022 and 2023 are both higher than the binding target of 5%. Establishing a green power market pilot will effectively promote the export of green electricity from Inner Mongolia and promote renewable energy consumption.

NDRC renews the renewable power guaranteed acquisition supervision policy

To promote the development of the renewable energy industry, the former State Electric Power Regulatory Commission stipulated in 2007 that power grid enterprises should purchase the full amount of grid-connected renewable energy electricity. As the development of renewable energy matures, in 2021, the NEA proposed to implement a "guaranteed acquisition + market transaction" mechanism for new wind power and solar PV projects, that is, grid enterprises need to purchase a certain number of hours of grid-connected wind power and solar PV electricity to support each province in completing its annual renewable power consumption binding targets, and the surplus power generation will participate in power market transactions. In March 2024, the NDRC and the NEA further clarified that starting from April 1, all grid-connected renewable energy electricity will implement the "guaranteed acquisition + market transaction" mechanism, of which the guaranteed acquisition part will be fully borne by all customers of the power market instead of the power grid enterprises only. This will help to expand renewable power market transactions and promote market-oriented price formation.

Distribution grid development needs to serve distributed entities better

In recent years, distributed new energy projects have entered the stage of large-scale grid connection. In particular, the total installed capacity of distributed solar PV has exceeded 250 GW, accounting for more than 40% of the total installed solar PV capacity in 2023, of which distributed industrial and commercial PV and household PV each account for half. The carrying capacity of the power grid in some areas has reached its limit. In the future, with the access of more emerging entities such as distributed power sources, new-type energy storage, and electric vehicles, the distribution grid will need to improve its access capacity and flexibility further. The government proposes that by 2025, the distribution grid should have the ability to access 500 GW of distributed new energy sources (doubled distributed solar PV capacity in 2023) and 12 million charging piles (8 million in 2023); the flexibility of the distribution grid has to be significantly improved, transforming from a single power distribution service to a resource allocation platform of source-grid-load-storage to achieve coordinated operation of the distribution grid with power source connected and backbone power grids. By 2030, the distribution grid will have basically completed its flexible, intelligent, and digital retrofit and can better meet the development needs of new business formats. The storage of the storage of the storage of the distribution grid will have basically completed its flexible, intelligent, and digital retrofit and can better meet the development needs of new business formats.

NDRC further regulates ancillary services pricing mechanism

The NDRC and the NEA jointly issued a document on *Improving the Market Pricing Mechanism for Ancillary Services* (CHN: 关于建立健全电力辅助服务市场价格机制的通知), which unifies and optimizes the current price formation mechanism for ancillary services, including the scientific identification of ancillary services, the rational setting of products, the formulation of pricing rules, and the design of cost transfer mechanism. This document, together with the *Basic Rules of the Spot Power Market* (CHN: 电力现货市场基本规则) and the *Capacity Pricing Mechanisms* (CHN: 容量电价机制) have initially formed an electricity commodity pricing system of "electric energy price + ancillary services price + capacity price".

^{15 &}quot;国家发展改革委 国家能源局关于新形势下配电网高质量发展的指导意见, 发改能源〔2024〕187号," National Development and Reform Commission, National Energy Administration, 6 February 2024, accessed at https://www.gov.cn/zhengce/zhengceku/202403/content_6935790.htm; "《关于新形势下配电网高质量发展的指导意见》政策解读," National Development and Reform Commission, 3 March 2024, accessed at https://www.gov.cn/zhengce/202403/content_6935777.htm.









^{11 &}quot;电网企业全额收购可再生能源电量监管办法," former State Electric Power Regulatory Commission, 25 July 2007, accessed at https://www.gov.cn/zhengce/2007-07/25/content_5713184.htm.

¹² "国家能源局关于2021年风电、光伏发电开发建设有关事项的通知, 国能发新能(2021)25号," National Energy Administration, 11 May 2021, accessed at https://www.gov.cn/zhengce/zhengceku/2021-05/27/content_5612874.htm.

¹³ "中华人民共和国国家发展和改革委员会令第15号," National Development and Reform Commission, 8 February 2024, accessed at https://www.ndrc.gov.cn/xxgk/zcfb/fzggwl/202403/t20240315_1364966.html.

^{14 &}quot;2023年光伏发电建设情况," National Energy Administration, 28 February 2024, accessed at https://www.nea.gov.cn/2024-02/28/c_1310765696.htm.

Peak-load regulation, frequency regulation, and reserves are the three primary ancillary services in China's power markets. The document stipulates that for peak-load regulation prices, in areas where the spot power market has achieved continuous operation, intra-provincial and inter-provincial peak-load regulation prices should be determined by electric energy transactions; in principle, the upper limit of peak-load regulation prices in other areas should not exceed local renewable energy feed-in tariff prices. The frequency regulation price adopts a single price mechanism, which is determined based on the design parameters of the local coal power unit with the best performance. The reserve price also adopts a single price mechanism. The unit can participate in electric energy transactions or become reserve capacity. Then, the reserve price is determined by referring to the opportunity cost of not participating in electric energy transactions. Generally speaking, the price formation of ancillary service products is gradually connected with the electric energy transactions (i.e. spot power markets) and is truly determined through market-based methods. The document also clarifies that after the price of ancillary service products is determined, it cannot be adjusted afterwards, emphasizing the contractual spirit of market operation.¹⁶

CCER trading market officially launched

Since 2012, in China's carbon market pilots, complying enterprises can use China Certified Emission Reduction (CCER) to offset up to 5% of their annual carbon emission allowances. However, the chronic oversupply of CCER led the government to suspend the policy implementation in 2017. With the national carbon market launch, the demand for CCER has been increasing. In June 2023, the Ministry of Ecology and Environment (MEE) announced it would consider restarting the CCER market. In the second half of 2023, the MEE successively released CCER calculation methodology, CCER trading platform, and CCER management methods, clearly including offshore wind power and CSP, mangrove restoration, and afforestation carbon sinks into CCER. The release of these three documents laid the foundation for the launch of the CCER market. In January 2024, the CCER market was officially relaunched.¹⁷

The State Council issues the first special regulation on carbon market transactions

China launched local carbon market pilots and a national carbon market in 2011 and 2017, respectively, covering an average annual carbon dioxide emission of more than 5 billion tons, accounting for more than 40% of the country's total emissions. Despite this, China has yet to issue laws and regulations for the management of carbon emissions trading before. The operation and management of the carbon market are mainly based on relevant rules and policy documents, which need more authority. In February 2024, the State Council officially issued the *Interim Regulations on Carbon Emissions Trading Management* (CHN: 碳排放权交易管理暂行条例), China's first administrative regulation on the carbon emissions trading system. First, the *Regulations* clarify the roles and responsibilities of the State Council's ecological environment departments, local government ecological environment departments, and other relevant departments. Second, the *Regulations* clarify the coverage of carbon emissions trading and the trading products, trading entities, and trading methods, including emission units, allowance allocation plans, and annual report preparation. Third, the *Regulations* provide specific prevention and punishment provisions for data fraud. In addition, after the *Regulations* take effect on May 1, 2024, China will no longer build new local carbon markets. ¹⁸

¹⁸ "中华人民共和国国务院令第775号," State Council, 25 January 2024, accessed at https://www.gov.cn/zhengce/content/202402/content_6930137.htm; "李强签署国务院令 公布《碳排放权交易管理暂行条例》," Xinhua News Agency, 4 February 2024, accessed at https://www.gov.cn/yaowen/liebiao/202402/content_6930177.htm.









¹⁶ "国家发展改革委 国家能源局关于建立健全电力辅助服务市场价格机制的通知, 发改价格(2024)196号," National Development and Reform Commission, National Energy Administration, 7 February 2024, accessed at

https://www.ndrc.gov.cn/xxgk/zcfb/tz/202402/t20240208_1364053_ext.html; "政策解读 | 辅助服务价格新政将使电价体系市场化更进一步," China Electricity Council, 8 February 2024, accessed at https://mp.weixin.qq.com/s/VQHaqK0RM5_KVwDTyztQsw.

^{17 &}quot;完善我国碳市场体系 CCER时隔七年正式重启," People's Daily, 29 January 2024, accessed at http://paper.people.com.cn/zgnyb/html/2024-01/29/content_26041048.htm.

2. Policy monitoring

2024-03-15

https://www.gov.cn/zheng ce/zhengceku/202403/con tent 6939607.htm

The 2025 carbon reduction plan for the construction sector released

Notice on Issuing the Work Plan for Accelerating Energy Conservation and Carbon Reduction in the Construction Sector, State Council General Office Letter [2024] No.20

The government requires that by 2025, electricity consumption accounts for more than 55% of building energy use, the urban renewable energy substitution rate reaches 8%, and new urban buildings fully implement green building standards. Compared with 2023, the area of ultra-low energy consumption and near-zero energy consumption buildings shall increase by more than 20 million square meters, and the area of completed energy-saving renovation of existing buildings shall be more than 200 million square meters. By 2027, ultra-low energy consumption buildings shall achieve large-scale development, and a batch of low-carbon, high-quality buildings shall be built.

2024-02-24

https://www.gov.cn/zheng ce/zhengceku/202402/con tent 6933519.htm

MIIT requires the establishment of a "dual carbon" standard system in the industrial field

Notice on Issuing Guidelines for the Construction of a Carbon Peaking and Carbon Neutrality Standard System in the Industrial Sector, MIIT General Office Technology [2024] No.7

By 2025, a carbon peaking and carbon neutrality standard system will be initially established in the industrial sector, as well as developing more than 200 urgently needed standards for carbon peaking, focusing on formulating standards in basic general, greenhouse gas accounting, low-carbon technology, and equipment, etc., to provide technical support for carbon emissions assessment and reduction of the industrial sector. By 2030, to form a relatively complete dual-carbon standard system in the industrial field, accelerate the formulation of standards for collaborative carbon reduction, carbon emission management, and low-carbon evaluation, achieve full coverage of standards in key industries and critical areas, and gradually shift the focus of standardization work towards carbon neutrality goals.

2024-02-09

https://www.gov.cn/zheng ce/zhengceku/202402/con tent 6931080.htm

The State Council clarifies the goals of building a waste recycling system

Opinions on Accelerating the Establishment of a Waste Recycling System, State Council Development [2024] No.7

With the continuous advancement of industrialization and urbanization, the amount of industrial and domestic waste has expanded in scale, with complex sources and increasing difficulty in utilization. The State Council requires that by 2025, a waste recycling system covering all fields and sections will be initially established, and the annual output value of the resource recycling industry will reach 5 trillion RMB. The annual utilization of bulk solid waste reaches 4 billion tons; the comprehensive utilization rate of newly added bulk solid waste reaches 60%; the annual utilization of primary renewable resources such as scrap steel and scrap aluminium reach 450 million tons. By 2030, a comprehensive, efficient, and standardized waste recycling system will be established, with further expansions in the proportion of recycled materials in the supply of raw materials.









2024-02-06

https://www.mee.gov.cn/x xgk2018/xxgk/xxgk05/202 402/t20240222 1066647. html

China solicits the fifth batch of key low-carbon technologies for promotion

Notice on the Issuing Implementation Plan for Collection and Promotion of National Key Low-Carbon Technologies, MEE General Office Climate [2024] No.2

The Chinese government will select and promote a batch of demonstrative low-carbon technologies with carbon reduction potential and innovative technologies, as well as promotable low-carbon technologies with significant carbon reduction effects and suitable for large-scale application, which will be released in 2025 through the *Catalogue of Low-carbon Technologies to Be Promoted by the State (Fifth Batch)*. The selection includes five key directions: 1) the development and utilization of renewable energy, advanced energy storage, energy Internet, and hydrogen energy; 2) carbon reduction technology in the industry, construction, and transportation; 3) carbon capture, utilization, and storage (CCUS) technologies and ecological carbon sink improvement and monitoring technologies; 4) digital solutions to improve energy efficiency, intelligent management of greenhouse gas emissions, and carbon reduction technologies for data centres; 5) non-carbon dioxide emission reduction technologies such as methane and hydrofluorocarbons.

2024-02-02

https://www.gov.cn/zheng ce/zhengceku/202403/con tent_6935418.htm

NDRC updates green industry guiding catalog

Notice on the Issuance of the Green and Low-Carbon Transition Industry Guidance Catalog (2024 Edition), NDRC Environment and Resource [2024] No.165

The Chinese government upgraded the *Green Industry Guidance Catalog (2019)* to the *Green and Low-Carbon Transition Industry Guidance Catalog (2024)*, expanding the covered industries from "green" to "green and low-carbon transition". The 2024 version involves seven categories of catalogs, including energy conservation and carbon reduction, environmental protection, resource recycling, green and low-carbon energy transition, ecological protection, restoration and utilization, infrastructure green upgrade, and green services. This revision provides a basis for optimizing green financial products. The financial authorities have previously defined unified standards for green loans and green securities based on the 2019 version catalog. The 2024 version will help further improve the standards and promote green financial products to support more fields in the transition.

2024-01-31

https://www.gov.cn/zheng ce/zhengceku/202402/con tent 6930748.htm

NEA issues basic rules for power market information disclosure

Notice on Issuing the Basic Rules for Information Disclosure in the Electricity Market, NEA Development Supervision [2024] No.9

This is the NEA's third national-level basic power market rule, following the *Basic Rules for Medium and Long-term Electricity Transactions* and *Basic Rules for Spot Power Markets (Trial)*. The *Rules* aim to establish a unified national power market information disclosure system covering all market types, transaction types, information cycles, and participants. The power market information will be divided into three categories: public information, public information of market members, and public information of specific market members. The power exchange centres will be responsible for implementing information disclosure.









2024-01-29

https://www.gov.cn/zheng ce/zhengceku/202402/con tent 6933649.htm

NDRC expands coverage of energy efficiency standards for energy-consuming equipment

Notice on Issuing the Standards for Energy Efficiency of Advanced Level, Energy-Saving Level, and Accessible Level of Key Energy-consuming Products and Equipment (2024 Edition), NDRC Environment Resource Regulation

There are more than 5 billion energy-consuming equipment in use in China, which annually accounting about 80% of the country's total energy consumption. In 2022, for the first time, the NDRC selected 20 major energy-consuming equipment to speed up product upgrades by determining energy efficiency levels, promoting energy-saving equipment, and eliminating outdated equipment. This time, the NDRC issued a document expanding the product range to 43 types, adding industrial boilers, data centres, servers, charging piles, communication base stations, solar PV modules, etc. The government divides the energy efficiency level of products into three levels: advanced, energy-saving, and accessible, and accessible is the minimum threshold for market access. The government encourages equipment to reach energy-saving levels after retrofit and strives to reach the advanced level. It also encourages local governments to provide appropriate subsidies for equipment that achieves energy-saving and advanced energy efficiency levels.

2024-01-27

https://www.gov.cn/zheng ce/zhengceku/202402/con tent 6934708.htm

Government clarifies five-year development goals for power system flexibility

Guiding Opinions on Strengthening the Construction of Peak-shaving and Energy Storage and Intelligent Dispatching Capabilities of the Power Grid

With the increasing variable renewable energy power output, China's power system has problems such as insufficient power supply capacity during peak-load periods and insufficient consumption capacity during valley-load periods. The government will coordinate and optimize the deployment of various flexible resources to achieve a power system regulatory capability that supports the share of new energy power generation to reach 20% by 2027. By then, the installed capacity of pumped storage in operation reaches 80 GW; the demand response capability reaches more than 5% of the peak load; the policy system to ensure the market-oriented development of new-type energy storage will be basically established; and an intelligent dispatching system adapted to the new-type power system will gradually be formed. To achieve these, important starting points include increasing peak-load regulation and energy storage capacity, promoting the development of intelligent dispatch, and strengthening the market, price, and management system.





