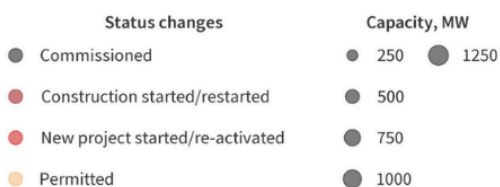
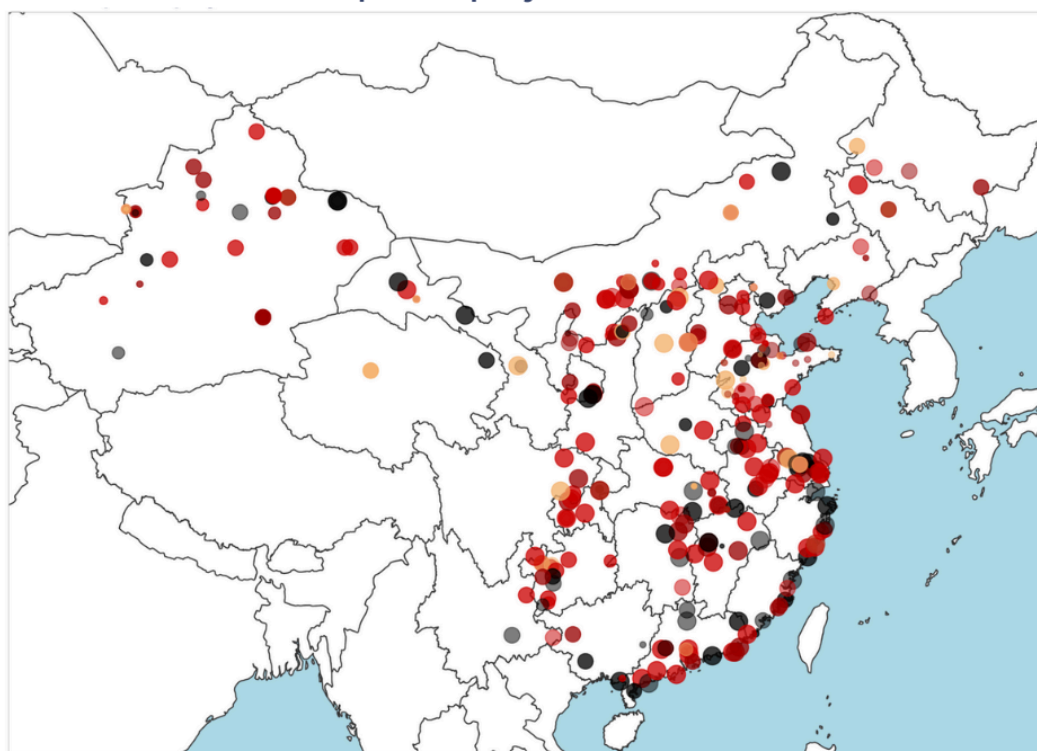


# Built to peak: Coal power expansion runs out of room in China

2/2026

New coal power projects in China in 2025



**CREA**

Centre for Research on Energy and Clean Air



**Global  
Energy  
Monitor**

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## **Built to peak: Coal power expansion runs out of room in China**

**February 2026**

### **Authors**

Qi Qin, CREA; Christine Shearer, GEM; Belinda Schaepe, CREA

### **Data scientists**

Xing Zhang, GEM; Danny Hartono, CREA; Lauri Myllyvirta, CREA

### **Designer**

Wendi Wu

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The Centre for Research on Energy and Clean Air (CREA) is an independent research organisation focused on revealing the trends, causes, and health impacts, as well as the solutions to air pollution. CREA uses scientific data, research, and evidence to support the efforts of governments, companies, and campaigning organisations worldwide in their efforts to move towards clean energy and clean air, believing that effective research and communication are the keys to successful policies, investment decisions, and advocacy efforts. CREA was founded in Helsinki and has staff in several Asian and European countries.

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## Key findings

- 2025 saw China's current coal power build-out cycle reach a new high. **Coal power capacity additions reached their highest level in a decade, even as coal power generation declined**, and clean energy met all net growth in power demand. Rapid growth in energy storage further eased system constraints. The rising overcapacity amid falling utilisation exposes the widening gap between investment decisions and power system realities.
- **New and reactivated coal power project proposals surged to a record high.** If built, the projects proposed in just this one year would commit China to years of coal expansion beyond power demand growth and climate requirements, reflecting a rush by the coal industry stakeholders to advance projects ahead of tighter policy constraints.
- With a large pipeline of projects still under construction and permitted, **rapid growth of coal power capacity risks extending into the early years of the 15th Five-Year Plan (FYP) period**, while coal power retirements remain low. Falling utilisation has not led to an orderly exit, but instead growing reliance on compensation mechanisms and life-extension measures for ageing units.
- **Meeting China's 2030 Nationally Determined Contribution (NDC) target implies a shift away from baseload coal power and a decline in operating hours.** Yet coal capacity commissioned in 2025, and much of the remaining pipeline, remains dominated by large units designed for high-utilisation, reflecting incentives that favour energy and capacity over flexibility.
- **The 15th FYP will be decisive in redefining coal power's role.** Without a clear end to net coal power capacity growth and a decisive shift away from baseload operation, China risks locking in a structural barrier to energy transition and decarbonisation.

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## Key data points for 2025

### **78 GW newly commissioned coal power capacity**

In one year alone, China commissioned more than India's net coal power capacity increase over the ten-year period from 2015 to 2024, despite India operating the world's second-largest coal fleet.

### **161 GW newly proposed or reactivated**

The highest number on record and 13% of the current operational capacity.

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### **45 GW permitted**

Coal power permitting fell to a four-year low, indicating that approval pathways may be narrowing.

### **83 GW started construction**

Reinforcing a large project pipeline and raising the risk that coal power capacity's rapid growth will spill into the early 15th FYP period.

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### **52 ultra-large units**

52 coal power units of 1 GW or more entered operation, highlighting a continued bias toward large-scale coal units designed for high and stable utilisation rather than flexible operation.

### **291 GW in the pipeline**

Equal to 23% of today's operational capacity, if completed without meaningful retirements, putting strong downward pressure on future utilisation.

## A closing window: Legacy build-out and surge in proposals

China commissioned a total of 78 GW of coal power capacity in 2025, the highest annual total in a decade. The amount brought online in this single year was comparable to India's net coal power capacity increase over the ten-year period from 2015 to 2024<sup>1</sup>, despite India operating the world's second-largest coal power fleet.

This surge was the outcome of legacy approvals granted during the 2022-2023 permitting boom, when a large pipeline of coal power projects was approved in response to heightened concerns following the power shortages of 2021-2022. At the time, policy responses were shaped by fears over supply adequacy, and new coal power projects were advanced on the assumption that additional capacity was required to meet the peak demand. Yet CREA and GEM's previous analysis<sup>2</sup> has shown that these shortages were driven primarily by insufficient system flexibility, rather than an absolute lack of generation capacity. Nevertheless, once approvals were granted, coal power projects moved into the construction pipeline, reinforced by the coal industry's investment incentives and local governments' administrative commitments, making reversal difficult.

By the time many of these projects reached completion in 2025, the system context had shifted markedly. Accelerated wind and solar deployment absorbed 94% of the net growth in power demand in 2025, without requiring additional power generation from coal. Coal power output fell by 1% year-on-year in 2025, alongside a decline in coal consumption in the power sector<sup>3</sup>. The coincidence of record-high commissioning with falling generation marks a clear break from previous coal power expansion cycles. At the same time, China

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<sup>1</sup> Global Energy Monitor (2025). Global Coal Plant Tracker. <https://globalenergymonitor.org/projects/global-coal-plant-tracker/dashboard/> Data.

<sup>2</sup> CREA and GEM (2023). China's new coal power spree continues as more provinces jump on the bandwagon. <https://energyandcleanair.org/publication/chinas-new-coal-power-sprees-continues-as-more-provinces-jump-on-the-bandwagon/> Analysis.

<sup>3</sup> CREA. (January 2026), China energy and emission trends <https://energyandcleanair.org/china-energy-and-emissions-trends-january-2026-snapshot/> Analysis

added roughly 74 GW of energy storage capacity, including 66.4 GW of battery storage<sup>4</sup> and 7.3 GW of pumped hydro<sup>5</sup>, a scale broadly comparable to the 78 GW of coal power commissioned in the same year. The storage expansion not only highlights how system needs are increasingly expected to be met through flexibility, but also directly constrains the operating and investment space available for coal power to reposition itself as a balancing resource.

Coal power construction in 2025 remains robust, with 83 GW starting construction. In the absence of explicit restrictions on projects already under construction, 2026 could see another year of high-level coal power commissioning, extending the effects of the 2022-2023 approval surge into the 15th Five-Year Plan(FYP) period.

More concerning for the medium term is what is still preventable. In 2025, proposals for new and re-activated coal power projects reached a record high of 161 GW, as developers rushed to secure projects ahead of expected constraints under the 15th FYP and China's 2030 carbon-peaking target. At the same time, coal permitting fell to a four-year low of 45 GW, indicating that approval pathways may be narrowing. However, without formalised and sustained permitting constraints, today's surge in proposals risks becoming tomorrow's project pipeline, adding capacity that the power system does not need. With wind and solar already meeting the bulk of demand growth, additional coal power capacity would face structurally low utilisation, increasing the likelihood of stranded assets and compensation pressures.

While capacity continues to enter the system, coal power exit has struggled to keep pace in effective terms. During the 14th FYP period, coal power capacity taken offline has come close to the National Energy Administration's 30 GW target<sup>6</sup>, remaining small relative to the capacity commissioned or proposed in 2025 alone. However, a significant share of this capacity has been taken offline through 'retire but not dismantle' arrangements<sup>7</sup>, with

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<sup>4</sup> STCN (January 2026). 2030年中国新型储能累计装机有望达到3.7亿千瓦 未来储能收益结构将显著转型 <https://www.stcn.com/article/detail/3607452.html> News.

<sup>5</sup> Xinhua News Agency (June 2025). 装机容量连续9年居世界首位——我国抽水蓄能发展步入快车道. <https://www.news.cn/fortune/20250603/db3fb7a9217e432ba6a955111c877e50/c.html> News.

<sup>6</sup> Coal power capacity retirement during 14th FYP may ultimately exceed National Energy Administration (NEA)'s 30 GW target, depending on the definitions and late provincial announcement.

<sup>7</sup> Bjx News. (March, 2025) 8台机组！河南2024年淘汰机组及应急备用电源认定名单公示 <https://news.bjx.com.cn/html/20250331/1434601.shtml> News.

units retained as emergency backup rather than permanently removed. In a power system where coal generation has limited room to expand, this mode of exit has done little to alleviate overcapacity pressures created by continued commissioning.

### Progress of new coal power projects and retirements in China

Changes in project status, annual

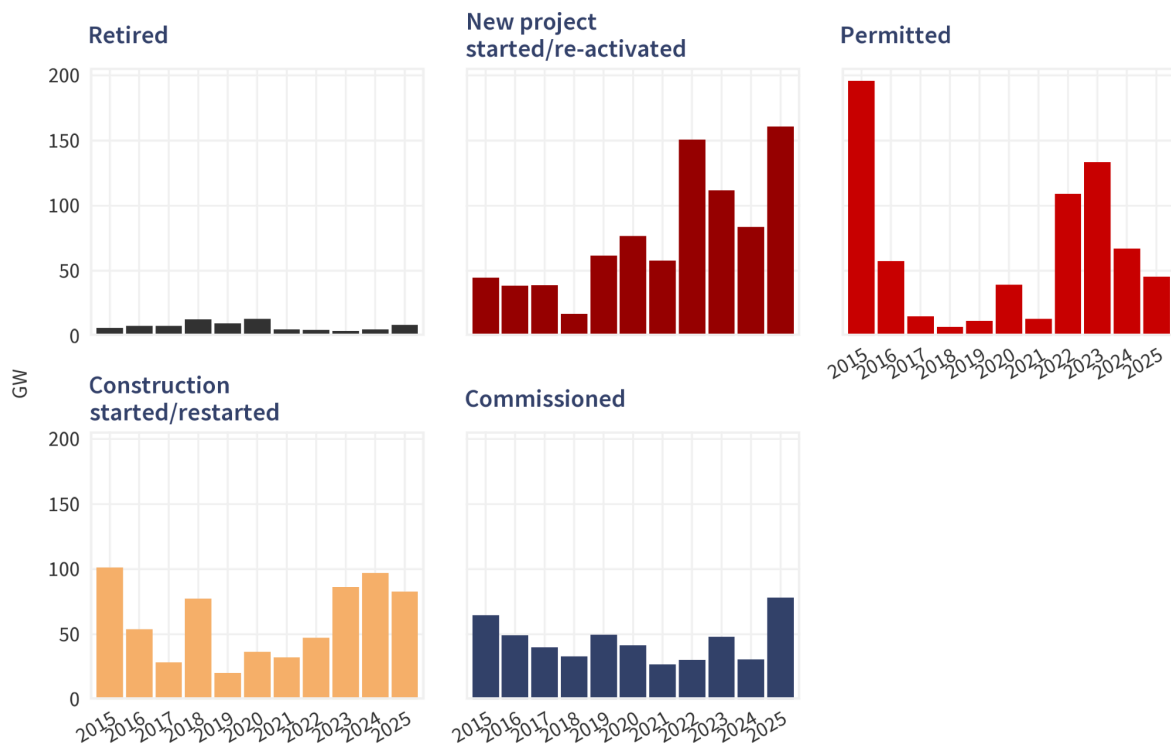


Figure 1 — Progress of new coal power projects and retirements in China 2015-2025

## Capacity growth with generation decline

China’s coal power system is entering a phase in which installed capacity continues to rise while generation no longer does. In 2025, coal power generation declined for the first time despite continued growth in overall power demand, marking a structural break from earlier periods when coal output and power demand largely moved in tandem. Under the current policy trajectories, national coal power consumption is expected to peak around

2027<sup>8</sup> and coal consumption in the power sector already started declining in 2025, even as the annual power demand growth remains at 5%<sup>9</sup>.

The result is a growing divergence between installed coal power capacity and actual utilisation. As new units come online while coal power generation plateaus and then falls, average operating hours across the fleet must decline, driven by changes on the supply side rather than weakness in demand.

Wind and solar's share in the power mix is expected to reach around 30% by 2030<sup>10</sup> under the current government planning assumptions, rising from 22% in 2025<sup>11</sup>, with actual deployment likely to exceed this level. Both the draft recommendations for the 15th Five-Year Plan and the provincial 15th FYPs released to date consistently highlight the need to further raise the share of wind and solar in energy supply, while advancing the safe and orderly replacement of fossil fuels<sup>12</sup>. In this context, coal power can no longer be treated as the marginal source of new electricity supply. Instead, it is expected to be progressively displaced under normal operating conditions and to play a residual, supporting role during periods of peak demand and system stress. This shift is already reflected in emerging dispatch practices in Beijing<sup>13</sup> and some parts of Liaoning<sup>14</sup>, where priority dispatch and guaranteed grid access for wind and solar have been explicitly introduced.

Climate constraints further narrow coal's operating space. China's 2030 Nationally Determined Contribution (NDC) target — to reduce carbon intensity by more than 65%

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<sup>8</sup> Xinhua News Agency. (November 2025). How China will peak coal, oil use in its climate push <https://english.news.cn/20251124/4a0c42582818473b880e9d9d1d654169/c.html> Explainer.

<sup>9</sup> Xinhua News Agency. (January 2026). 年用电量首破10万亿度 彰显中国经济“新”动能 <https://www.xinhuanet.com/fortune/20260119/814aa031852041e98b279fac8af5e448/c.html> News.

<sup>10</sup> National Development and Reform Commission. (December 2025). 关于促进电网高质量发展的指导意见 [https://www.ndrc.gov.cn/xxgk/zcfb/tz/202512/t20251231\\_1402949.html](https://www.ndrc.gov.cn/xxgk/zcfb/tz/202512/t20251231_1402949.html) Policy.

<sup>11</sup> CREA. (January 2026), China energy and emission trends <https://energyandcleanair.org/china-energy-and-emissions-trends-january-2026-snapshot/> Analysis

<sup>12</sup> Bxj News. (December 2025) 8省份‘十五五’规划建议出炉！能源电力有何重点？ <https://m.bjx.com.cn/mnews/20251226/1476855.shtml> News.

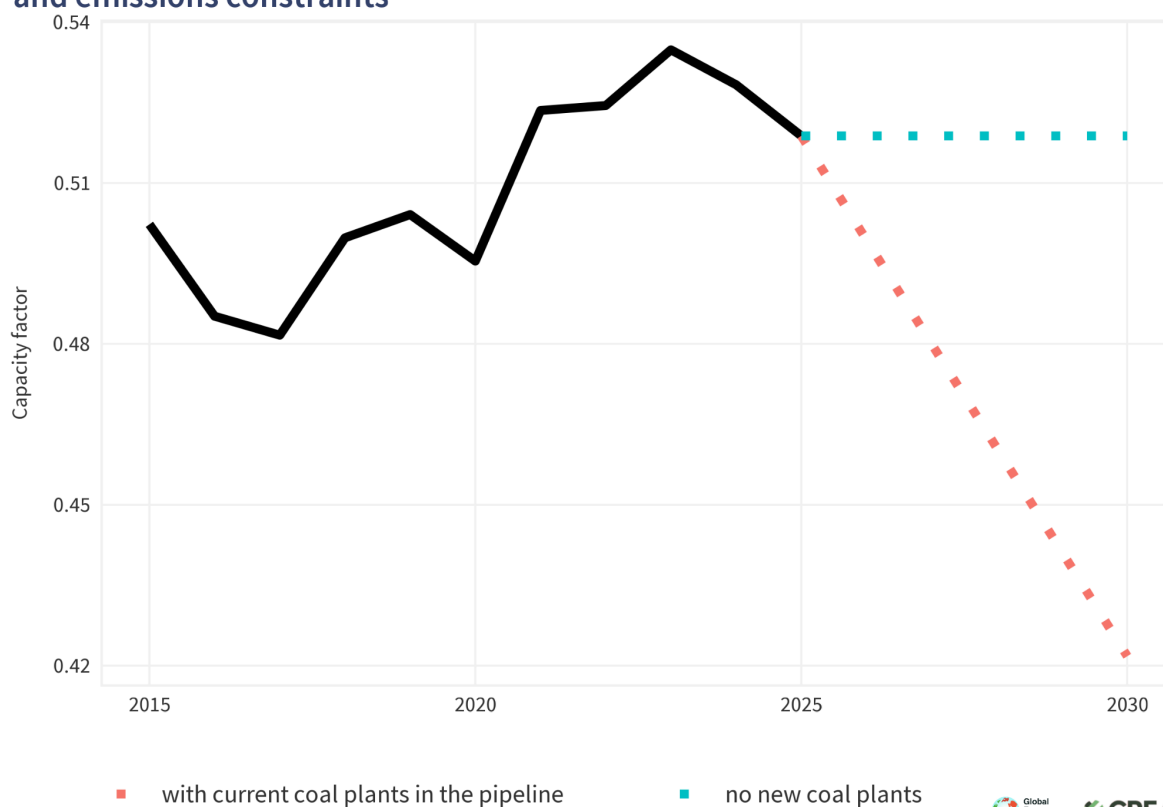
<sup>13</sup> Beijing Municipal Government. (March 2025) 北京市可再生能源开发利用条例. [https://www.beijing.gov.cn/zhengce/dfxfg/202503/t20250328\\_4047543.html](https://www.beijing.gov.cn/zhengce/dfxfg/202503/t20250328_4047543.html) Policy.

<sup>14</sup> Century New Energy Network (July 2025) 辽宁铁岭市：优先接纳、调度新能源发电项目上网电量 <https://www.ne21.com/news/show-215255.html> News.

from 2005 levels — is incompatible with sustained growth in power sector emissions during the second half of the decade<sup>15</sup>. With electricity demand growth increasingly met by wind and solar, coal generation has little remaining room to expand. Under these conditions, new coal capacity can only be accommodated through lower utilisation, not increased generation.

Yet recent coal power approvals continue to reflect expectations of high operating hours. Among newly approved non-CHP (combined heat and power) coal power projects, average planned annual utilisation exceeds 4,800 hours<sup>16</sup>, suggesting that project developers still anticipated base load style operation. This assumption sits uneasily with system realities.

### Coal power capacity factor pathways under different capacity and emissions constraints



<sup>15</sup> Carbon Brief. (December 2025) Q&A: Five key climate questions for China’s next ‘five-year plan’ <https://www.carbonbrief.org/qa-five-key-climate-questions-for-chinas-next-five-year-plan/> Analysis.

<sup>16</sup> Greenpeace. (November 2025). 迈向“十五五”：中国电力低碳转型 新常态与新机遇. <https://www.greenpeace.org.cn/2025/11/25/low-carbon-power-transtion-in-the-15th-five-year-plan-period/> Analysis.

## Figure 2 — China’s coal power capacity factor pathways under different capacity and emissions constraints

Note: Holding coal power generation flat is a deliberately conservative assumption. Under China’s 2030 carbon-intensity target, coal power-related emissions would likely decline, implying even lower coal utilisation than shown here.

In the past decade, coal power in China operated at an average utilisation rate of around 51%, equivalent to roughly 4,500 hours per year<sup>17</sup>. If power sector emissions are constrained in line with China’s 2030 NDC, coal power generation has no room to expand. Under a no-growth assumption for coal generation, expanding coal power capacity from the current operating fleet of 1,267 GW to around 1,558 GW — including 291 GW of plants currently under construction and permitted — would imply average utilisation of around 42%, or roughly 3,695 hours per year. This would mean that a large share of the coal power fleet operates for much of the year well below designed assumptions, cycling more frequently or remaining idle for extended periods.

The utilisation pressure is reinforced by the evolving structure of China’s power mix. Even under adverse conditions, the scope for coal power to regain a dominant share of power generation is increasingly limited by the structure of the power mix itself. While hydropower output varies with water availability, annual generation shares have typically remained in the low-to mid-teens in recent years. At the same time, policy targets point to wind and solar accounting for around 30% of generation by 2030, alongside a further expansion of nuclear power into the high single digits<sup>18</sup>. Taken together, these structural features imply that coal power is increasingly constrained to operate within a shrinking share of the generation mix, even before accounting for the growing role of demand-side flexibility and energy storage in balancing the system. As a result, coal power’s central challenge is no longer how much electricity it can supply, but how it operates within an increasingly constrained role in the power system.

## Misaligned incentives

Coal power’s behaviour today is shaped less by system needs than by how it is paid. Misaligned incentives continue to reward energy output and installed capacity, even as the system requires flexibility and reserve.

<sup>17</sup> Utilisation hours are calculated as the utilisation rate (also referred to as the capacity factor) multiplied by 8,760, the total number of hours in a year.

<sup>18</sup> China Atomic Energy Authority. (December 2023). 核能发展“三步走”后劲十足 <https://www.caea.gov.cn/n6760340/n6760355/c10427001/content.html> News.

With wind and solar power absorbing almost all the net growth in electricity demand, providing incremental energy is no longer economically viable for coal power. Falling utilisation is therefore not a short-term fluctuation, but a structural outcome of the changing power mix. Yet the way coal power is paid has not kept pace with this shift. Revenues remain overwhelmingly tied to electricity output, leaving coal power plants financially dependent on selling electricity rather than providing system services.

In 2024, capacity-related revenue accounted for only around 5% of total coal power income, leaving plant profitability overwhelmingly dependent on energy sales. Even after planned reforms take effect in 2026 — raising the share of fixed-cost recovery to no less than 50%<sup>19</sup> — capacity income is expected to increase to only around 8% of total revenue<sup>20</sup>. This shift is too small to materially change operating incentives: coal plants will still need high and sustained utilisation across the fleet to remain financially viable.

In principle, capacity charges paid by consumers are meant to reflect the cost of maintaining system reliability and flexibility. However, in practice, capacity costs are largely driven by the scale of installed coal capacity, rather than by the actual flexibility services provided. This can be seen by comparing provinces such as Henan and Qinghai, where coal power capacity payments are implemented under the same tariff of RMB 165 per kilowatt per year<sup>21</sup>. In Qinghai, where wind and solar account for a high share of generation and coal units are fewer but more intensively used for balancing the system, the capacity charge passed on to consumers is around 0.5 RMB cent per kWh. In contrast, in Henan, where coal capacity is much larger, and the share of wind and solar remains below 50%, consumers pay a capacity charge of around 3.6 RMB cent per kWh, more than seven times higher, despite coal units playing a less pronounced balancing role. The contrast highlights a misalignment in incentives: capacity pricing outcomes reflect the amount of coal capacity in the system, rather than the flexibility and reliability services that consumers are intended to pay for.

These incentives help explain the composition of new coal capacity coming online. In 2025, the majority of newly commissioned coal power capacity came from large-scale

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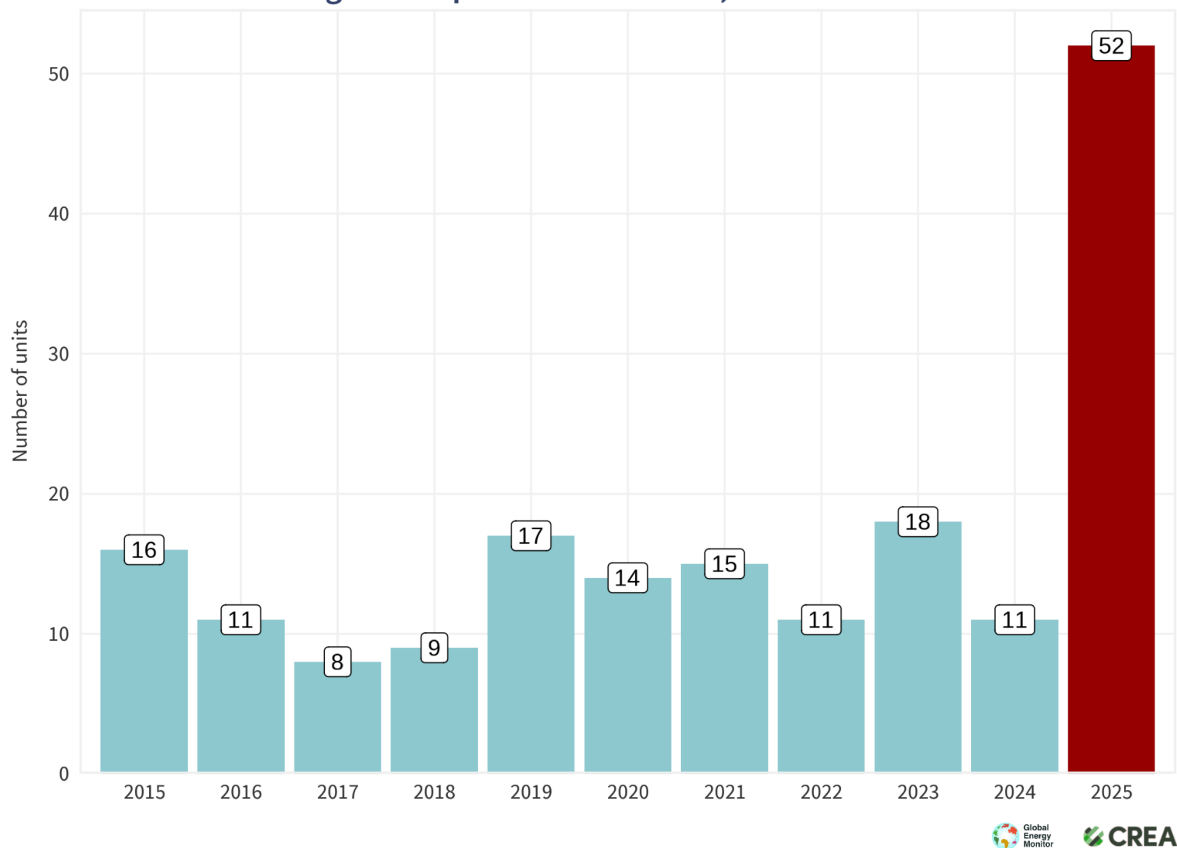
<sup>19</sup> National Development and Reform Commission. (November 2023). 关于建立煤电容量电价机制的通知 [https://www.ndrc.gov.cn/xgk/zcfb/tz/202311/t20231110\\_1361897.html](https://www.ndrc.gov.cn/xgk/zcfb/tz/202311/t20231110_1361897.html) Policy.

<sup>20</sup> Rocky Mountain Institute. (May 2025). 2025电力市场化改革与电价体系洞察：面向市场参与者的十大趋势 <https://rmi.org.cn/insights/2025powermarketreviewandoutlook/> Analysis.

<sup>21</sup> People's Daily. (November 2023). 煤电容量电价机制要来了. [https://paper.people.com.cn/rmrbhwb/html/2023-11/28/content\\_26029147.htm](https://paper.people.com.cn/rmrbhwb/html/2023-11/28/content_26029147.htm) News.

units of 1 GW or more, with 52 such units entering operation. Large coal units are designed for high efficiency and stable, continuous operation, not for frequent cycling or deep load-following. Compared with smaller units, they typically have higher minimum stable output levels, slower ramping capability, and higher wear-and-tear costs under flexible operation. As a result, they are poorly suited to the type of flexibility increasingly required in a power system dominated by wind and solar.

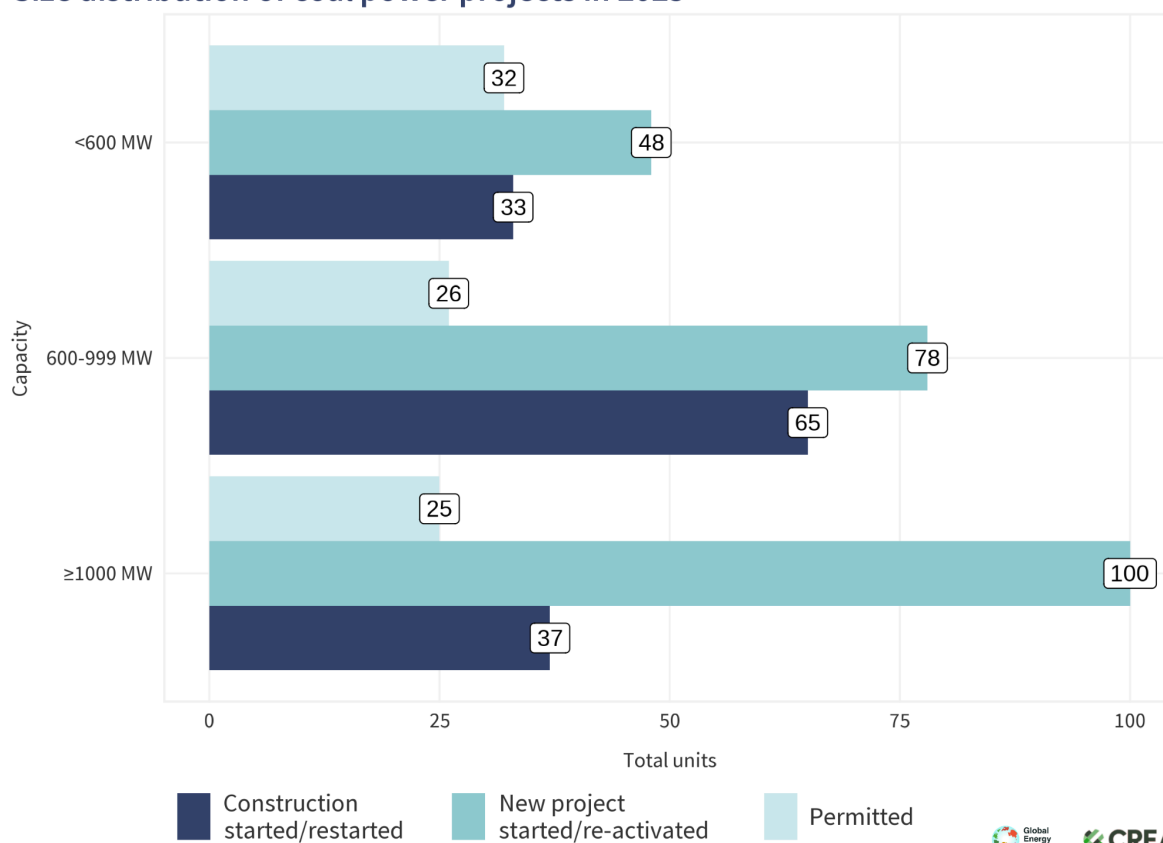
### Annual commissioning of coal power units $\geq 1$ GW, 2015–2025



**Figure 3 — China’s annual commissioning of coal power units  $\geq 1$  GW, 2015–2025**

At the same time, these large units are particularly well positioned to benefit from capacity payment mechanisms, which allocate compensation on a per-kilowatt basis without differentiating between baseload operation and actual flexibility performance. This creates a structural incentive to build ever-larger coal power units to maximise capacity-related revenues, even as the system’s need for coal power shifts away from energy production and toward flexible support.

### Size distribution of coal power projects in 2025



**Figure 4 – Size distribution of coal power projects in the 2025 pipeline**

Note: In this report, ‘large coal power units’ refer to units with a capacity of 600 MW or above, consistent with common industry classifications. Where relevant, particular attention is given to ultra-large units of 1 GW or more, which dominate recent additions and are typically designed for high-load, baseload operation.

If these incentive structures remain unchanged, coal power is likely to continue expanding in ways that maximise revenue rather than system value.

## Built faster than retired

China's coal power sector is accelerating on entry while standing still on exit. While new capacity continues to move through the pipeline, there is still no clear or coordinated framework for managing exit as utilisation declines. Policy and regulatory efforts have instead focused on extending the operating lives of existing units, including ageing plants<sup>22</sup>.

With coal power generation no longer growing, delayed retirement directly translates into persistent overcapacity and rising inefficiency, as more plants compete for a shrinking share of operating hours. Financial pressure has therefore not functioned as a mechanism for orderly exit. Instead, it has increasingly resulted in calls for compensation, policy support, or life-extension measures.

During the 15th FYP period, close to 100 GW of coal power capacity is expected to reach or exceed 30 years of operation<sup>23</sup>. In domestic debates, this milestone is often used to justify extending the operating lives of aged units, citing economic efficiency, financial risk concerns, or comparisons with coal power plants in the United States and Europe that have operated for more than three decades<sup>24</sup>. Such arguments overlook a critical system constraint. In China, new coal power capacity continues to enter the system, unlike in the US or Europe, where life extensions occurred alongside strict limits on new additions and rapid declines in coal power generation. Once a coal power plant can no longer recover costs under prevailing system conditions, continued operation represents an artificial extension rather than an efficient outcome. If life extensions for ageing units are pursued in parallel with ongoing new commissioning, the result is to lock in excess coal power capacity and directly erode the feasibility of China's dual carbon targets.

Stricter air quality requirements add a further imperative for accelerated retirement. China is in the process of revising its national ambient air quality standards, with tighter limits

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<sup>22</sup> People's Daily. (April 2025). 下好老旧煤电改造延寿这盘棋.

[https://paper.people.com.cn/zgnyb/pc/content/202504/28/content\\_30071490.html](https://paper.people.com.cn/zgnyb/pc/content/202504/28/content_30071490.html) Analysis.

<sup>23</sup> Nationalee. (July 2025). “十五五”近亿千瓦煤机“到期” 老旧机组如何焕新？

<https://www.nationalee.com/newsinfo/8523686.html> News.

<sup>24</sup> China Power (August 2025). 2024火电碳强度逆升，煤电调峰困局与低碳突围

<https://www.chinapower.org.cn/detail/449038.html> Analysis.

proposed for PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, and NO<sub>2</sub> in line with long-term public health<sup>25</sup>. Meeting these standards during the 15th FYP period will require deeper emissions reductions across the power sector. For older and inefficient coal units, compliance would entail costly retrofits that are increasingly difficult to justify in a context of declining utilisation. Enhanced air pollution control standards, therefore, provide a concrete and complementary pathway to phase out outdated coal power capacity, reinforcing the case for earlier retirement rather than prolonged operation.

## The 15th FYP: Redefine coal power's role

Coal power expansion in 2025 already stretches the limits of what can be justified on system grounds. Even so, a substantial volume of coal power capacity remains in the project pipeline. Policy now needs to draw a clear line: net coal power capacity growth should end from this point forward, even if some previously approved projects continue to come online in the short term.

The 15th FYP period, therefore, marks a necessary shift in coal power's role. Policy direction has already made clear that wind and solar are set to become the primary sources of incremental electricity supply during 2025-2030. Under these conditions, the long-emphasised principle of 'establishing before dismantling' has reached its limits. Clean energy is now capable of meeting new demand, and continued coal capacity expansion without parallel phase-down will increasingly crowd out wind and solar, constraining their ability to scale.

Wind and solar are not only central to China's decarbonisation pathway, but also to its broader agenda of 'high-quality development'. Draft recommendations for the 15th FYP explicitly call for accelerating renewable deployment, raising the share of non-fossil energy in supply, and promoting the orderly substitution of fossil fuels. This shift carries clear economic and strategic benefits. By expanding clean electricity and electrification, China can reduce exposure to fossil fuel price volatility, lower import risks, and ease long-term cost pressures on the power system. The experience of 2021, when surging coal

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<sup>25</sup> Ministry of Ecology and Environment. (December 2025). 环境空气质量标准(征求意见稿) [https://www.mee.gov.cn/xxgk/xxgk06/202512/t20251215\\_1137858.html](https://www.mee.gov.cn/xxgk/xxgk06/202512/t20251215_1137858.html) Policy.

and gas prices placed significant strain on power markets and supply security, underscored the vulnerability inherent in a fuel-dependent system, and the stabilising role that domestically sourced renewables can play<sup>26</sup>.

At the same time, the 15th FYP will need to confront growing tensions between local investment incentives and national climate, energy, and system objectives. In several regions, coal power investment decisions continue to be driven by local considerations of supply security, industrial support, or fiscal interests<sup>27</sup>, even as national priorities shift toward limiting coal consumption and improving system efficiency. Addressing this divergence will require stronger national coordination and further power market reform, particularly to enhance dispatch flexibility, align price signals with system needs, and ensure that investment decisions reflect system-wide needs rather than local interests.

Ultimately, the success of building a clean, low-carbon and efficient energy system highlighted in the 15th FYP will hinge on whether coal power can transit from a baseload energy source to a flexible, supporting and residual role within a renewable-dominated power system. This transition is essential for ensuring that China's carbon peaking target is met on schedule and that progress toward carbon neutrality can proceed in an orderly manner. It will not be an easy process. Redefining coal power's role implies large-scale structural adjustment, including the managed decline of parts of the coal value chain, workforce transitions, and the resolution of the entrenched operational rigidities, such as heat-determined power generation in northern heating systems.

Allowing coal power expansion, delayed retirement, and misaligned incentives to persist would harden structural risks and complicate every subsequent step of the energy transition. Against this backdrop, the 15th FYP represents not merely another planning cycle but a decisive opportunity to reset coal power's role in line with China's long-term economic, climate, and energy security objectives.

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<sup>26</sup> People's Daily. (February 2023). 也谈“双碳”时代的“立”与“破”  
[https://paper.people.com.cn/zgnyb/html/2023-02/27/content\\_25968829.htm](https://paper.people.com.cn/zgnyb/html/2023-02/27/content_25968829.htm) Analysis.

<sup>27</sup> Chinese Wind Energy Equipment Association. (May 2017) 风电煤电开始互相挤出 在地方政府眼中到底差在哪? <https://www.cweea.com.cn/xwdt/html/7651.html> Analysis.

## Policy recommendations

- **Set an explicit power-sector emissions peaking target within the 15th Five-Year Plan**, ensuring that power-sector emissions do not increase during 2025–2030 and providing a binding constraint against further coal power expansion.
- **End net growth in coal power capacity at the beginning of the 15th FYP period**, by halting approvals for new and re-activated coal power projects and tightening permitting standards for projects still in the pipeline.
- **Introduce a binding cap on coal consumption in the power sector**, with a declining trajectory toward 2030, translating China’s carbon-intensity target into an operational constraint on coal power generation.
- **Accelerate the retirement of coal power units that are ageing, inefficient or persistently underutilised**, prioritising plants with high emissions intensity, poor flexibility performance, or declining load factors. Retirement pathways should be explicitly linked to tighter air quality standards and system-level needs, rather than assumptions about the natural lifetime of coal power plants.
- **Reconfigure coal power operation at the fleet level to support system flexibility**. Move away from keeping most coal power units continuously online at low output, and instead hold part of the fleet offline as reserve, while allowing remaining units to operate at relatively higher and more stable load levels. This increases both upward and downward regulation space, improves system flexibility and reduces emissions and costs while increasing renewable energy utilisation.
- **Reform capacity payment mechanisms to reward flexibility and system value**, rather than installed capacity alone, ensuring that compensation reflects availability, responsiveness and performance during periods of system stress.
- **Adjust long-term power contracts and market rules to accommodate declining coal utilisation**, reducing guaranteed energy volumes for coal power and preventing long-term contracts from crowding out wind and solar generation.
- **Strengthen national coordination over coal power planning and investment**, limiting local incentives to expand coal capacity and ensuring that investment decisions reflect system-level needs rather than provincial interests.

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## About the data

The changes in coal power project status analysed for this briefing are based on the January 2026 update of Global Energy Monitor's [Global Coal Plant Tracker](#) (GCPT) and the historical 2014–2025 information available upon request. The GCPT is an online database that identifies and maps every known coal-fired generating unit and every new unit proposed since 1 January 2010 (30 MW and larger). The tracker uses footnoted wiki pages to document each plant and is updated biannually.