

## China Energy Updates

### Statistics

#### In July in China<sup>1</sup>:

- **Raw coal production reached 390 million tonnes**, up 2.8% year-on-year (YoY) but down **4.9%** month-on-month (MoM). Coal imports totalled 46.21 million tonnes, rising by 17.7% YoY and 3.6% MoM.
- **Crude oil production accelerated**, reaching 17.90 million tonnes, up 3.4% YoY but down 0.28% MoM. Crude oil imports stood at 42.34 million tonnes, down by 3.1% YoY and 8.8% MoM.
- **Natural gas production hit 20 billion cubic metres**, an increase of 7.9% YoY but down 0.99% MoM. Natural gas imports amounted to 10.86 million tonnes, up by 5.6% YoY and 4.1% MoM.
- As of the end of June 2024, China's installed power generation capacity was 3.07 billion KW: of this, coal-fired capacity totalled 1.17 billion KW, accounting for 38.1% of the total power generation installed capacity, a 4.3% decrease YoY.

### Headline developments

- China issued its **first national-level 'green transition' document** to drive high-quality growth, with detailed requirements for the energy sector.
- Installed capacity of new energy power generation exceeded that of coal-fired power for the first time, with coal-fired power **accounting for 38.1%** and **wind and solar together accounting for 38.4%** of total installed capacity.
- By the end of 2024, **China will have added more than 4 000 kilometres of new oil and gas pipelines** to its existing 124 000 kilometre pipeline network.
- China has published two policy documents on electric power, including **concrete plans for construction of the new power system**.
- **Five nuclear power projects** have been approved, with a total of 11 units.

### Regulatory and policy updates

China issued its **first national-level document to address the green transition in August 2024**. Key takeaways from '**Opinions on Accelerating the Comprehensive Green Transition of Economic and Social Development**'<sup>2</sup> follow:

- **By 2030**, green production methods and lifestyles will be developed. Pollution and carbon reduction and utilisation efficiency of major resources are to be significantly improved. Policies and standard systems supporting green development will be enhanced, the proportion of non-fossil energy consumption will increase to about 25%, pumped hydro storage will exceed 120 million kilowatts of installed capacity.
- **By 2035**, a green low-carbon circular development economic system will be established. Utilisation efficiency of major resources will reach the international advanced level. Carbon emissions will have peaked, and will start to fall.

Additional commitments include:

- Vigorous development of non-fossil energy: coastal nuclear power .
- Formulation and revision of the following laws and regulations. Ecological Environment Law, the Energy Law, the Energy Conservation Law, the Electric Power Law, the Coal Law, the Renewable Energy Law etc., and laws to address climate change, carbon peaking and carbon neutrality.

<sup>1</sup>These figures relate to enterprises above a designated size (with an annual business revenue of CNY 20 million or more).

<sup>2</sup>Contact us for a machine assisted unofficial English translation.

In August, China's National Development and Reform Commission issued an [Action Plan on Further Strengthening the Construction of the Carbon Peak and Carbon Neutral Standard and Measurement System \(2024-2025\)](#)<sup>3</sup>. Key commitments include:

- **By 2024, introduce 70 national standards** for carbon accounting, carbon footprint, carbon emission reduction, energy efficiency and energy consumption, and carbon capture, utilisation and storage, for enterprises in key industries.
- **By 2025, technical indicators for energy consumption and energy efficiency in key industries and products will effectively reach the international advanced level, and 100 enterprises and peak carbon emission management standardisation pilots will be developed.**
- **By the end of 2025, China will develop 20 measurement standards and reference materials, conduct 25 key measurement technology studies, and formulate 50 national measurement technical specifications in the 'dual carbon' field.**

### Coal updates

**Approvals for new coal-fired power plants in first half of 2024 have slowed significantly.** '[Analysis of China's Low-Carbon Transition Progress in the Electric Power Sector in the First Half of 2024](#)', jointly released by Greenpeace and the Shanghai Institute of International Studies, shows China's total approved coal-fired power installed capacity to be approximately **10.342 million KW, down 79.5% YoY**. Projects of 660 MW and above account for 71.4% of total newly approved coal-fired developments.

In the first half of 2024, the **national installed capacity of new energy power generation exceeded the installed capacity of coal-fired power for the first time.**

### Oil and gas updates

**In early August, refined oil prices experienced the largest drop of the year.** On 8 August, the NDRC announced that the prices of gasoline and diesel will drop to CNY 305 and CNY 290 per tonne respectively. Fuel costs for private car owners and logistics companies will be reduced. The Price Monitoring Centre of the NDRC predicts that oil prices will fluctuate in the short term.

**In 2024, China will add more than 4 000 kilometres of new oil and gas pipelines.** The Turpan to Zhongwei gas pipeline came into operation this year. It forms part of the **West-East Gas Pipeline** in Xinjiang, China's longest natural gas pipeline. The annual gas transmission **capacity of the West-East Gas Pipeline is set to increase by 15 billion cubic meters.** 'During the 14th Five-Year Plan period, 20 000 kilometres of new pipelines will come into operation,' said Yang An, deputy general manager of the marketing department of the National Pipeline Network Group. In 2023, the total length of long-distance natural gas pipelines nationwide was 124 000 kilometres.

### Electricity updates

**China has issued its 'Action Plan to Accelerate the Construction of a New Power System (2024-2027)'**<sup>4</sup> (also referred to as the Action Plan). The NDRC, the National Energy Administration (NEA), and the National Data Administration issued the Action Plan in August, focusing on nine key areas:

1. **Guarantee the stability of the power system.**
2. **Increase the proportion of new energy power in transmission lines.**
3. **High-quality development of the distribution network.**
4. **Build smart dispatching system.**
5. **Construct new energy system-friendly power stations, construct smart microgrid projects.**
6. **Improve and develop a new generation of coal-fired power generation.**

<sup>3</sup> Contact us for a machine assisted unofficial English translation.

<sup>4</sup> Contact us for a machine assisted unofficial English translation.

7. **Optimise power system regulation capabilities.**
  8. **Expand the electric vehicle charging facility network.**
  9. **Improve demand-side collaboration capabilities.**
- 

NEA issued the '**Implementation Plan for High-Quality Development of Distribution Network (2024-2027)**' (also known as 'the Implementation Plan'), one week after publication of the Action Plan. Its key commitment is for construction of a flexible and intelligently integrated power distribution system by 2027. **All local energy authorities are required to submit an implementation plan** for development of the distribution network in their region to the National Energy Administration **before the end of October 2024**, clarifying goals, tasks and measures, project arrangements, funding guarantees. They will be required to give an account of the previous year's implementation progress at the beginning of each year.

### Clean energy updates

---

**China's renewable capacity continues to grow rapidly.** According to the NEA, in the first half of 2024 China's newly installed **renewable energy power generation capacity** reached **134 million KW**, a **YoY increase of 24%**, accounting for **88% of the country's newly installed power capacity**. China has added 4.99 million KW of hydropower, 25.84 million KW of wind power, 102 million KW of solar power, and 1.16 million KW of biomass.

**The total installed capacity of wind power and photovoltaic (1.18 billion KW) has exceeded coal power for the first time (1.17 billion KW).**

---

**Record number of approvals for nuclear projects in 2024 underscores continued nuclear development. Premier Li Qiang has approved five nuclear power projects, representing a total of 11 units, at the State Council executive meeting** on 19 August. These include three units from China National Nuclear Corporation, six units from China General Nuclear Power Corporation, and two units from State Power Investment Corporation. Total investment is expected to exceed CNY 200 billion. Both in 2022 and 2023, **10 new nuclear power units were approved.**

---

**First pumped storage station in China's northwest region becomes operational.** Located in Fukang City, Changji Hui Autonomous Prefecture, Xinjiang, construction on the CNY 8.368 billion power station started in 2017. It consists of four reversible water pump turbine generator units, each with a capacity of 300 000 KW. The total installed capacity is 1.2 million KW, with projected annual power generation of 2.41 billion KWh, and an annual pumping power of 3.213 billion KW.

## EU Energy Updates

### Regulatory and policy updates

**EU President proposes Clean Industrial Deal.** In July, President of the European Commission Ursula von der Leyen announced plans for a new **Clean Industrial Deal** to be launched within 100 days of winning her second mandate. It will boost investment in the greening of the **energy-intensive sectors** and expedite planning processes, and is intended to embed a **90% decarbonisation target** into EU law by 2040. The deal includes a proposed **European Competitiveness Fund** to support innovation and manufacturing within the EU.

### Clean energy updates

**Connecting Europe Facility (CEF) Energy Initiative continues to propel EU's cross-border infrastructure development.**<sup>5</sup> Ten years after its foundation, the CEF for Energy has supported **184 actions** with **EUR 6.9 billion** EU co-funding and triggered **EUR 15.8 billion investments** to bolster strategic cross-border energy infrastructure. The EU energy grid has expanded in that time, with over **21 931 km** of new electricity grids, **7 295 km** of new natural gas pipelines, and **1 348 km** of **CO<sub>2</sub> transport networks** under development which will connect industrial emitters with permanent storage sites.

**Three new projects join EU's renewable energy initiative.** On 24 July, the EU announced that **three additional projects** have been approved to join the **List of Renewable Energy Cross-border Projects (CB RES list)** under the **Connecting Europe Facility for Energy (CEF Energy)**. This brings the total number of projects on the list to eight. The newly added projects include **PONTIS**, which focuses on developing a cross-border renewable hydrogen supply chain; **BEI - Bornholm Energy Island**, which involves two offshore wind farms and interconnectors for electricity trading between Denmark and Germany; and **TMNHSA (BG-RO) Project**, a joint initiative between Romania and Bulgaria to harness the Danube's hydropower potential.

**1.5 million new battery-only electric cars registered in the EU in 2023.** On 2 Aug, **Eurostat** reported that in 2023, **1.5 million** new battery-only electric passenger cars were registered across the EU, significantly increasing the total number to **4.5 million**. This marks a **48.5% rise** from the 3.0 million recorded in 2022. The share of these vehicles in new registrations reached **14.6%**, reflecting a steady surge in electric vehicle ownership. Denmark is leading the way, with 7.1% of all passenger cars being battery-only electric, followed by Sweden, Luxembourg, and the Netherlands.

EV sales in Q1 of 2024 surpassed 537 000, representing a 5% yearly increase and 20% market share.

**EU biomethane capacity surges by 37%.** The latest **European Biomethane Map** reveals a **37% increase** in installed capacity, which now stands at 6.4 billion cubic meters per year, with 81% located within the EU. This growth supports the **REPowerEU plan**, reducing CO<sub>2</sub> emissions by nearly 29 million tons annually and providing energy to five million households. The map, featuring 1 548 plants, shows France and Italy spearheading the expansion, while Germany has paused new construction.

**EU launches second call for renewable energy proposals.** On 30 Jul, the EU initiated a second cross-border tender under the **EU Renewable Energy Financing Mechanism (RENEWFM)**, targeting **solar photovoltaic (PV) projects** in Finland and onshore wind projects in Estonia. This initiative is managed by the **European Climate, Infrastructure and Environment Executive Agency (CINEA)**. The call will remain open until 4 March 2025. Successful projects must be completed within two years for solar PV and three years for onshore wind.

<sup>5</sup> Mapping of EU's cross-border electricity grids, natural gas pipelines and CO<sub>2</sub> transport networks

---

## Oil and gas updates

---

**EU hits 90% gas storage target early.** On 19 Aug, EU filled its **gas storage facilities to 90% capacity**, ten weeks ahead of its 1 November deadline, underscoring the EU's preparedness for the winter season. The **Gas Storage Regulation (EU/2022/1032)**, enacted in June 2022, mandated this 90% target to ensure a steady supply throughout the year, with **current levels standing at 1 025 TWh**, or 90.02% of total capacity.

## Energy market updates

---

**EU energy markets show robust stability and renewables growth.** In **Q1 2024**, the EU's **gas storage levels remained high** while **gas imports declined** by 5% quarter-on-quarter. **Pipeline imports** and **LNG imports** accounted for 59% and 41% respectively. **Norway's share of the EU's gas imports rose** to 54% share, while the **US maintained its 50% share** of EU LNG imports.

**Electricity consumption** in Q1 2024 in the EU **rose slightly (+1%)** compared with Q1 2023. The share of **renewables increased to 46%** in Q1 2024 (from 40% in Q1 2023) with **solar and wind** up 11% in Q1 2024 (an increase of 18 TWh).

**2022 solar energy overtook hard coal in EU electricity generation.** Eurostat reported in August that in 2022 **solar energy** contributed **210 249 GWh** while hard coal lagged behind with **205 693 GWh**. Preliminary monthly data shows that in 2023, EU **coal production** and **consumption** hit record lows, dropping to **274 million tonnes (down 22%)** and **351 million tonnes (down 23%)**, respectively.

## Energy infrastructure updates

---

**Spain in pole position for green hydrogen race as EU approves massive state aid EUR 1.2 billion<sup>6</sup>.** The EU has approved **EUR 1.2 billion** in state aid for **Spain's green hydrogen industry**, supporting plants with **100 MW+ capacity** to develop 'hydrogen valleys'. Spain's goal is to develop **11 GW** of electrolyser capacity by 2030, which will be the highest in Europe.

## Sharp fall in CO<sub>2</sub> emissions

---

**EU has seen a significant drop in greenhouse gas emissions in Q1 2024.** On 16 Aug, Eurostat reported a **4.0% reduction in greenhouse gas emissions**, amounting to **894 million tonnes** of CO<sub>2</sub>-equivalent, down from **931 million tonnes** in the same quarter in 2023. Despite this decrease, the EU's GDP saw a modest increase of 0.3%. Notably, emissions fell by **12.6%** in the electricity and gas supply sector and by **4.4%** in households.

**Commission updates guidance on CO<sub>2</sub> storage technologies and regulatory framework.** On 23 July, the EU has published revised **Guidance Documents (GDs)** to support the implementation of **CCS Directive 2009/31/EC** on the geological storage of CO<sub>2</sub>, focusing on advanced storage technologies in mafic/basalt rocks and depleted hydrocarbon reservoirs. These documents address critical aspects of the **CCS value chain**, including **corrosion and safety issues**, and assist Member States in identifying suitable geological areas for CO<sub>2</sub> storage. However, the documents do not stipulate acceptable CO<sub>2</sub> purity standards, leaving operators to set their own requirements.

---

<sup>6</sup> State aid is a form of aid granted by EU Member States. It is important to note that the EU itself does not provide the funds; rather it is the Member States that do so. The EU's role is to ensure that any state aid request is in compliance with State Aid Rules, preventing distortions of competition and ensuring that such aid does not adversely affect trade between Member States. For details of State Aid Rules, please refer to <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:12008E107&from=EN>.

## References

1. [https://www.stats.gov.cn/sj/zxfb/202408/t20240815\\_1955980.html](https://www.stats.gov.cn/sj/zxfb/202408/t20240815_1955980.html)
2. [https://www.stats.gov.cn/sj/zxfb/202407/t20240715\\_1955612.html](https://www.stats.gov.cn/sj/zxfb/202407/t20240715_1955612.html)
3. [https://www.gov.cn/zhengce/202408/content\\_6967663.htm](https://www.gov.cn/zhengce/202408/content_6967663.htm)
4. [https://www.ndrc.gov.cn/xxgk/zcfb/tz/202408/t20240808\\_1392291.html](https://www.ndrc.gov.cn/xxgk/zcfb/tz/202408/t20240808_1392291.html)
5. <https://mp.weixin.qq.com/s/xwtvxPV7B3AgSWtWWdPjAA>
6. <http://www.xinhuanet.com/finance/20240726/976dd25b6dc34ec1b8f1ccc9815a3578/c.html>
7. <http://www.news.cn/energy/20240809/1705e7d013e54828a530313c759ea2c4/c.html#:~:text=%E5%9B%BD%E5%86%85%E6%B2%B9%E4%BB%B7%E8%BF%8E%E6%9D%A5%E2%80%9C%E4%B8%A4,%E5%85%AD%E8%B7%8C%E4%B8%89%E6%90%81%E6%B5%85%E2%80%9D%E6%A0%BC%E5%B1%80%E3%80%82>
8. <https://www.xhby.net/content/s66aef1d4e4b019ce5659778d.html>
9. <https://www.ndrc.gov.cn/xwdt/tzgg/202408/P020240806534738672970.pdf>
10. [http://zfxgk.nea.gov.cn/2024-08/02/c\\_1310784260.htm](http://zfxgk.nea.gov.cn/2024-08/02/c_1310784260.htm)
11. [http://www.nea.gov.cn/2024-07/31/c\\_1310783380.htm](http://www.nea.gov.cn/2024-07/31/c_1310783380.htm)
12. <https://m.yicai.com/news/102238334.html>
13. [https://www.thepaper.cn/newsDetail\\_forward\\_28465072](https://www.thepaper.cn/newsDetail_forward_28465072)
14. [https://neighbourhood-enlargement.ec.europa.eu/news/statement-european-parliament-plenary-president-ursula-von-der-leyen-candidate-second-mandate-2024-2024-07-18\\_en](https://neighbourhood-enlargement.ec.europa.eu/news/statement-european-parliament-plenary-president-ursula-von-der-leyen-candidate-second-mandate-2024-2024-07-18_en)
15. <https://webgate.ec.europa.eu/cineaportal/apps/storymaps/stories/fd6198a5933040a783c32d9597320465>
16. [https://cinea.ec.europa.eu/news-events/news/cef-energy-three-new-projects-obtain-status-join-cb-res-list-2024-07-24\\_en](https://cinea.ec.europa.eu/news-events/news/cef-energy-three-new-projects-obtain-status-join-cb-res-list-2024-07-24_en)
17. <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20240802-1>
18. <https://www.gie.eu/press/new-edition-of-the-biomethane-map-shows-37-increase-in-biomethane-capacity-in-the-eu-compared-to-the-previous-map/>
19. [https://energy.ec.europa.eu/news/eu-reaches-90-gas-storage-target-10-weeks-ahead-deadline-2024-08-21\\_en](https://energy.ec.europa.eu/news/eu-reaches-90-gas-storage-target-10-weeks-ahead-deadline-2024-08-21_en)
20. [https://energy.ec.europa.eu/document/download/edb2e73e-c0df-4aa1-abdb-fd8eac1d1799\\_en?filename=Quarterly%20Report%20on%20European%20Electricity%20markets%20Q1%202024.pdf](https://energy.ec.europa.eu/document/download/edb2e73e-c0df-4aa1-abdb-fd8eac1d1799_en?filename=Quarterly%20Report%20on%20European%20Electricity%20markets%20Q1%202024.pdf)
21. <https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20240819-1>
22. <https://www.euronews.com/green/2024/07/26/spain-in-pole-position-for-green-hydrogen-race-as-eu-approves-massive-state-aid>
23. <https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20240816-1>
24. [https://www.ccs-europe.eu/european\\_commission\\_updates\\_co2\\_storage\\_guidance](https://www.ccs-europe.eu/european_commission_updates_co2_storage_guidance)
25. [https://climate.ec.europa.eu/document/download/951d14ea-ce0f-4753-92dd-35ba88920888\\_en?filename=gd1\\_en.pdf](https://climate.ec.europa.eu/document/download/951d14ea-ce0f-4753-92dd-35ba88920888_en?filename=gd1_en.pdf)