

China Energy Updates

General overview

In August in China,

- **Raw coal production reached 400 million tonnes**, up 2.8% year-on-year (YoY) and 2.6% month-on-month (MoM). Coal imports totalled 45.84 million tonnes, rising by 3.4% YoY but down 0.8% MoM.
- **Crude oil production reached 17.83 million tonnes**, up 2.1% YoY but down 0.4% MoM. Crude oil imports stood at 49.10 million tonnes, down by 7% YoY but up 16% MoM.
- **Natural gas production hit 20 billion cubic metres**, an increase of 9.4% YoY, unchanged MoM. Natural gas imports amounted to 11.76 million tonnes, up by 9.1 % YoY and 8.3% MoM.

Headline developments

- China calls for another round of public opinions on its first ever **Energy Law**.
- China new coal output capacity could increase by **1.28 billion tonnes/yr**.
- China's renewable energy capacity is set to grow by more than **100 million KW/yr before 2030**.

Regulatory and policy updates

China has called for a second round of public consultations on its first ever **Energy Law**, between 13 September and 12 October. When compared to initial version in April 2024 (see Energy Monitor, April 2024), the version published in September includes the following revisions:

- Additional provisions for the development and use of new energy sources:
 - **wind and solar**: adhere to both centralised and distributed development; accelerate the construction of wind and photovoltaic power generation bases; support distributed wind and photovoltaic power projects to supply nearby users; develop offshore wind power in a reasonable and orderly manner; actively develop solar thermal power generation.
 - **biomass**: development of biomass energy in power generation, clean heating and biogas within the limitations of local conditions.
 - **ocean and geothermal energy**: promote the large-scale development and use of ocean energy and develop geothermal energy within the limitations of local conditions.
 - **hydrogen**: promote the development and use of hydrogen energy and the associated hydrogen industry.
- China will accelerate the construction of a **new power system** and strengthen the coordinated construction of power sources and grids etc. to improve the power grids' ability to accept, allocate and regulate clean energy.
- **Renewable energy green power certificates will be promoted** to boost green energy consumption.

Coal updates

Approximately 1280 mtpa (million tonnes per annum) of coal capacity is under development across 14 provinces, equalling nearly half of global proposed capacity, according to a report published by **Global Energy Monitor (GEM)**. **Shanxi and Inner Mongolia together produce more than the rest of China combined**. The authors report that **35%** of China's proposed coal projects are already under construction, signalling a surge in production within three to five years.

As of April 2024, GEM's **Global Coal Mine Tracker** has identified around 1 800 active coal mines in China with a minimum approved annual capacity of 0.6 million tonnes, collectively accounting for nearly 4 390 million tonnes of annual coal capacity. In 2023, China produced **4.66 billion tonnes**, up 2.9% YoY.

In September, **China's first integrated PV and clean coal power project commenced operation**. The Datang Xinyu Phase II high-efficiency coal power project (Unit 1) in Jiangxi Province has successfully completed a 168-

hour trial operation and is now officially in service. The project is grid-connected and consists of a 250 000 kW PV power station, complemented by two 1 GW coal-fired power units. This configuration not only addresses the issue of night-time power generation limitations for the PV plant but also allows steam to be recycled for a second round of power generation. This innovative approach significantly enhances the utilisation of steam energy, reduces coal consumption, and boosts overall power generation efficiency. Annual electricity output is projected to reach approximately 9.5 billion kWh.

Oil and gas updates

Power of Siberia 2 natural gas pipeline is absent from Mongolia's Four-Year National Action Programme (2024-28). A 950 km section of this proposed **3 550 km pipeline** had been scheduled to transit Mongolia. The new pipeline is intended to deliver up to 50 bcm/yr of Russian gas to China, in addition to the existing **38 bcm/yr capacity in Power of Siberia 1**.

Electricity updates

The National Energy Administration (NEA) has issued **guidelines for green electricity trading**, clarifying specific matters relating to division of responsibilities, account management, green certificate issuance, green certificate transactions and transfers, green certificate write-offs, information management and supervision, etc. According to the Guidelines, one green certificate, which can only be issued by the NEA's Electric Power Business Qualification Management Centre, will represent 1 000 kWh of renewable electricity. The price will be determined by the market, and its full life cycle will be traceable.

In August, **314 million green certificates** were traded across the country (of which 164 million were green electricity certificates). In total, 1.841 billion green certificates have been issued nationwide during 2024, apportioned between energy sources as follows:

- wind: 682 million, accounting for 37.05%.
- solar: 413 million accounting for 22.45%.
- conventional hydropower: 629 million, accounting for 34.13%.
- biomass: 116 million, accounting for 6.3%.
- other renewable energy: 1.28 million, accounting for 0.07%.

On 10 September, the National Development and Reform Commission (NDRC), NEA and other departments issued the '**Notice on promoting the pilot work on the large-scale application of vehicle-to-grid (V2G) interaction**'. This notice proposes the establishment of pilot projects across the country which will include no fewer than five cities with appropriate criteria, supportive policies, and significant vehicle usage, as well as at least 50 V2G pilot projects. The candidates of pilot projects should be submitted to NEA before 31 October 2024.

Regions participating in the pilots are required to implement a **peak-valley electricity tariff** and aim to ensure that more than **60%** of electricity used at car charging stations is concentrated during off-peak periods, while more than **80%** of the electricity used at private EV charging stations should be during off-peak periods. In principle, the total discharging power of participating V2G projects should be no **less than 500 KW**, while the annual discharge capacity should be no less than **0.1 million kWh**, though some flexibility is allowed in the country's western regions.

Clean energy updates

China's renewable energy capacity will continue to grow by over **100 million kW/yr** before 2030, according to a recent article by the NEA's Party Group '**Supporting Chinese Modernisation with Energy Transition Development**' carried in *People's Daily*. **Before 2030, China aims for 70% of new energy consumption to be supplied by non-fossil energy, while the proportion of non-fossil energy consumption will rise by 1 percentage point each year.**

Shanghai-based **Envision Energy is to invest USD 1 billion in an integrated green hydrogen net zero industrial plant in Spain**. The project includes a hydrogen energy equipment factory, a green hydrogen industry chain and a zero-carbon hydrogen industrial park, to achieve 100% green electricity hydrogen production. Envision will also conduct comprehensive cooperation with Spain in the fields of synthetic biology, green methanol, and

sustainable bio-jet fuel to create a new ecology of the green hydrogen industry and support Spain's zero-carbon transition development in industry, aviation, navigation and other fields with cost-competitive products.

EU Energy Updates

Regulatory and policy updates

EU Member States receive guidance on renewable energy and efficiency directives. On 2 September, EU adopted guidance for Member States on implementing the revised directives on renewable energy and on energy efficiency. The European Commission's guidance aims to provide clarity on complex elements of the new legislation and support national administrations in transposing these directives into national law. It covers four areas: **heating and cooling, energy system integration, and renewable fuels of non-biological origin (RFNBOs)**.

Industrial carbon management (ICM) can play an important role in achieving EU's carbon neutrality. Based on the [impact assessment on the EU climate target for 2040](#), the EU will need to be ready to capture **at least 50 million tonnes** of CO₂ per year **by 2030**, scaling up to **280 Mt by 2040** and **450 Mt by 2050**. The ICM Strategy, adopted in February 2024, supports this goal by addressing all parts of the CO₂ value chain. The EU also funds ICM projects through programmes such as the Innovation Fund, which has allocated EUR 3.3 billion since 2020.

Airlines must monitor vapour trails under new EU climate rules. On 30 August, the European Commission agreed on new rules requiring airlines operating from European airports to **report the climate impact of vapour trails from jet engines**, as well as **annual CO₂ emissions**. The legislation follows a recent reform of Europe's emissions trading system (EU ETS).

Clean energy updates

CINEA launches 4th call for cross-border renewable energy projects. On 2 September, the European Climate, Infrastructure and Environment Executive Agency (CINEA) has opened the 4th call for **cross-border renewable energy projects** (CB RES) to obtain the CB RES status, a mandatory requirement for CEF funding. The CB RES programme, extended in 2021, supports renewable energy projects involving cross-border cooperation between EU member states and non-EU countries. Since its inception, the programme has awarded over [EUR 90 million to 14 projects](#).

Mallorca Island launches Spain's first hydrogen pipeline on Sep 17. The initiative, as part of the 'Green Hysland' project, aims to achieve zero emissions by 2050 and promote the hydrogen economy. The 3.2 km pipeline will transport green hydrogen, benefiting over 115,000 households and reducing CO₂ emissions.

Energy security updates

EU launches consultation on energy security architecture fitness check. On 3 September, the European Commission initiated a **fitness check** to evaluate the effectiveness of EU regulations relating to **energy security**, inviting input from a wide range of stakeholders before 26 November. The consultation aims to assess the performance of key regulations such as the Gas Security of Supply Regulation and the Electricity Risk Preparedness Regulation, which have been in force since 2017 and 2019 respectively. The evaluation will include the impact of emergency measures under REPowerEU and lessons from the recent COVID-19 and energy crises.

Energy infrastructure updates

EU opens call for energy infrastructure projects seeking to obtain Project of Common Interest (PCI) or Project of Mutual Interest (PMI) status. The call for applications in the **electricity, hydrogen & electrolyser** categories opened on 18 September and must be submitted by 18 November 2024, while **smart electricity grids, smart gas grids, CO₂ projects**, and those under **Article 24 derogation** must be submitted by 18



December 2024. To be eligible, the project must be included in the 2024 Ten Year Network Development Plans developed by ENTSO-E or ENTSOG.

European Commission approves EUR 1.2 billion Polish state aid scheme to support investments in a net-zero economy¹. Polish state aid is open to companies involved in the production of **batteries, solar panels, wind turbines, heat pumps, electrolysers**, carbon capture utilisation and storage devices, as well as designs and key components primarily used for the production of these devices or related **critical raw materials**.

The European Investment Bank (EIB) has agreed a EUR 166 million green loan to IPP BNZ to establish renewable energy plants in Spain, Italy and Portugal. The loan, announced on 18 September, is the first tranche of a EUR 500 million loan approved by the EIB to support BNZ's roll-out of 1.7 GW of solar photovoltaic power in Southern Europe by the end of 2026. It will support the deployment of 17 new PV plants, generating green energy equivalent to the annual consumption of over 390 000 households.

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¹ 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://eurlex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:12008E107&from=EN>.

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