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China Energy Updates

Statistics

In September in China,

- **Raw coal production reached 410 million tonnes**, up 4.4% year-on-year (YoY) and 2.5% month-on-month (MoM). Coal imports totalled 47.59 million tonnes, rising by 13% YoY and 3.8% MoM.
- **Crude oil production reached 17.07 million tonnes**, up 1.1% YoY but down 4.3% MoM. Crude oil imports stood at 45.49 million tonnes, down by 0.5% YoY and 7.4% MoM.
- **Natural gas production stood at 19.3 billion cubic metres**, an increase of **6.8%** YoY but down 3.5% MoM. Natural gas imports amounted to 11.99 million tonnes, up by **19 %** YoY and 2% MoM.

Headline developments

- China held the **Third Belt and Road Energy Ministerial Conference.**
- NDRC issued the **Opinions on Strengthening the Clean and Efficient Use of Coal.**
- **Natural gas pipeline Power of Siberia** 1 to reach its designed capacity ahead of schedule.
- China's **inter-provincial power spot market** entered official operation.
- Both Chinese PV and wind turbine makers agreed to end their respective **price wars.**

Regulatory and policy updates

At the **Third Belt and Road Energy Ministerial Conference** in Qingdao in October, China released the **Belt and Road Green Energy Cooperation Action Plan (2024-29), containing the following key proposals**:

- Formulate a more ambitious green energy development plan, and improve the reliability and resilience of green energy supply.
- Strengthen green energy policy and system innovation, and publish no fewer than 30 think tank reports over the next five years focusing on clean energy policy exchanges, energy regulatory mechanism innovation, power market construction, and mutual recognition and application of green certificates and green electricity.
- Strengthen cooperation in green energy technology innovation, and carry out no fewer than five joint R&D projects around key cutting-edge technologies such as hydrogen energy, new energy storage, etc. and no fewer than five cooperation projects relating to clean and smart technologies and equipment; promote international mutual recognition of no fewer than ten standards among member countries.
- Strengthen capacity building in the field of green energy.
- Promote exchanges and cooperation among young energy talents.
- Strengthen green energy financial services.
- Create a favourable environment for energy development.

At the conference, **Iran became the 34th** country to join the Belt and Road Energy Partnership.

Coal updates

The National Development and Reform Commission and a further five ministries jointly issued the **Opinions on Strengthening the Clean and Efficient Use of Coal,** aiming to reduce pollution and carbon emissions and improve energy efficiency through innovative technology and management, and improved policies and standards.

The Opinions stipulate that **by 2030**, the industry should:

- significantly enhance green and smart coal mining.
- gradually reduce energy consumption in the coal production process.
- optimise storage and transport infrastructure.
- improve the quality of commercial coal.
- improve the efficiency and cleanliness of coal use in key industries.
- set up a clean and efficient coal use system that is in line with ecological priority, resource conservation, and green and low-carbon development.

Weak domestic demand and record-high coal imports resulted in a 20% drop in profits YoY between January and August 2024. Profits stood at above CNY 410 billion, according to data released by the National Bureau of Statistics on 27 September 2024.

Oil and gas updates

By end-2024, **Power of Siberia 1**[1] will reach its designed capacity of 38 bcm, ahead of schedule. As of August 2024, it has transmitted 20.8 bcm of natural gas, according to Bloomberg. The pipeline became operational in 2019, and is delivering natural gas from Russia to China in line with a 30-year contract between the two countries.

In October, NEA held a meeting to discuss **natural gas maintenance and supply during the 2024-25 heating season**, at which multiple measures were agreed to ensure the safe operation and stable supply of natural gas:

- Strengthen production, supply, storage and sale.
- Ensure the total natural gas supply and maintain capacity during peak use.
- Strengthen market operation supervision.
- Refine emergency actions for extreme situations.
- Enhance pipeline protection.

The meeting was attended by the administrator and deputy administrator of NEA, as well as senior officials from CNPC, Sinopec, CNOOC and PipeChina.

From November 2024 to March 2025, China will require between **203 and 208 bcm** of natural gas. Supplies are expected to reach **213.5 bcm**, according to Sinopec.

Electricity updates

China's inter-provincial power spot market became officially operational on 15 October after a 1 000 day trial, marking a further step towards development of a unified power market. China launched the inter-provincial power spot market in **January 2022**.

[1] A Gazprom-operated pipeline in Eastern Siberia that transports natural gas that enters China at Heihe in northeastern Heilongjiang province from Blagoveshchensk.

So far, inter-provincial power spot trading is operational in the State Grid operating area[2] and in western Inner Mongolia, and includes more than **6 000** market participants representing multiple types of power generation. Their cumulative trading power exceeds 88 billion KWh, of which clean energy power accounts for more than 44%.

While 87.12% wind energy and solar energy resources are in the China's 'Three Northern' region[3], 70% of energy demand is in the developed east side. The inter-provincial market is intended to improve the efficiency of resource allocation and promote the consumption of new energy. The next step is to extend the range of the inter-provincial spot power market to **the Southern Grid[4].**

Clean energy updates

China Photovoltaic Industry Association (CPIA) has called on Chinese solar companies to end a vicious price war that has been plaguing the photovoltaic manufacturing industry: prices of mainstream products have fallen significantly below production costs, and the entire industry is beset by competitive practices that are damaging its financial viability. Industry representatives attended a meeting on 12 October to discuss these issues,as well as measures to resolve the imbalance between supply and demand and to phase out excessive production capacity. According to the CPIA, **CNY 0.68 per watt** is the lowest viable cost for producing N-type double-sided double-glass monocrystalline silicon photovoltaic module by top Chinese PV companies while ensuring product quality. Nevertheless, the price war is causing the bid price to fall: it now ranges between CNY 0.5308 and CNY 0.7255, recently averaging CNY 0.64 per watt.

Twelve leading Chinese wind turbine makers have signed a 'self-discipline' pact in a bid to end the industry's price war, following a similar announcement by China's solar-panel industry. 'The price war is eroding the foundation of wind power industry development,' commented Qin Haiyan, head of the China Wind Turbine Association. 'The bidding prices for wind turbines in some projects are even lower than the direct material costs,' he added.

The pact urges market participants to:

- abide by the law, steer clear of price collusion, promote self-discipline in pricing.
- use legal measures to strengthen the binding force of self-regulatory agreements.
- formulate rules to ensure operability to avoid leaving them as empty slogans.
- enterprises are urged to join the convention and abide by the agreement.

CNOOC and Air Liquide have completed the world's longest shipment of liquid hydrogen, from Rotterdam to Yantian, Shenzhen, travelling ten thousand nautical miles, with the liquid hydrogen being carried in cold-insulated tank containers. The International Renewable Energy Agency predicts that by 2050, more than 30% of hydrogen production will be traded internationally. China is the world's largest hydrogen-producing country, with annual production of around 40 million tonnes.

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[2] The State Grid Corporation of China (SGCC) operates in 26 provinces, autonomous regions, and municipalities across China, covering 88% of the country's land area: Northern China, Northeastern China, Eastern China, Central China, and Northwestern China.

[3] These are the western part of northeastern China, northern China and most of the northwestern region (Includes the provinces of Beijing, Tianjin, Hebei, Shanxi, Inner Mongolia, Liaoning, Jilin, Heilongjiang, and Eastern Inner Mongolia)

[4] China Southern Power Grid operates power grids in Guangdong, Guangxi, Yunnan, Guizhou and Hainan, Hong Kong and Macao SARs and South-East Asian countries. Its 1 million square kilometre power supply area serves 272 million people..

EU Energy Updates

Regulatory and policy updates

On 27 September, the European Commission launched a **four-week call for feedback** on the draft delegated act clarifying the **methodology for evaluating emission savings of low-carbon hydrogen and fuels**. This act complements **Directive 2024/1788**, which established the common rules for the internal markets for renewable gas, natural gas and hydrogen. The Directive requires **Member States to transpose its provisions into national law by 5 August 2026**.

On 14 October, the European Commission published a **draft delegated regulation to update the Union Database on Biofuels (UDB)** and opened a **four-week call for feedback**. The draft regulation extends the scope of the data to include the point of production/collection of the raw materials used to produce biofuels, and **all stages of the supply chain**.

EU Member States have given their support to the European Commission's proposal to impose tariffs on Chinese battery-powered electric vehicles (BEVs). A Commission Implementing Regulation detailing the definitive findings has been published in the Official Journal.

The EU has adopted amendments to the EU Emissions Trading System (ETS) Monitoring and Reporting Regulation, including **zero-rating emissions** from **certain low-carbon fuels**, such as **renewable fuels of non-biological origin and synthetic low-carbon fuels**. The revisions also improve rules for the **transfer of CO_2 and CO_2 emissions** considered to be permanently chemically bound in a product. Additionally, the new measures include monitoring and reporting requirements for **non-CO_2 effects** from the aviation sector, which will come into effect from **2025**.

The EU Commission has adopted a delegated act to clarify the inclusion of greenhouse gas emissions from offshore vessels in the Monitoring, Reporting & Verification (MRV) Regulation for maritime transport as of 2025. The revised MRV Regulation, part of the **'Fit for 55'** package, will cover emissions from **ships designed or certified to perform service activities offshore**, including **offshore support vessels** and **wind turbine installation vessels**. The delegated act also ensures that companies do not need to surrender allowances under the **EU Emissions Trading System (ETS)** for emissions from synthetic low-carbon fuels. The act has been submitted to the **European Parliament and Council** for scrutiny and is expected to enter into force by **the end of 2024**.

Clean energy updates

In 2023, the EU imported EUR 19.7 billion worth of solar panels, EUR 3.9 billion of liquid biofuels, and EUR 0.3 billion of wind turbines. Wind turbine imports dropped 68% over this period. In the meantime, the EU exported **EUR 0.9 billion worth of solar panels**, **EUR 2.2 billion in liquid biofuels**, and **EUR 2.0 billion in wind turbines**. Exports of wind turbines exceeded imports, with a **49%** increase in value. China was the main supplier of solar panels and liquid biofuels, accounting for **98%** and **36%** of imports, respectively.

Renewables have overtaken heat and oil in EU services sector for first time. Eurostat reports that renewables and biofuels accounted for **8% of final energy consumption** in the EU services sector in **2022**, overtaking **heat (7.6%)** and **oil and petroleum products (6.3%)**. Electricity and natural gas continued to dominate, making up **50.6%** and **26.9%** of final consumption, respectively.

The European Commission has announced the **terms and conditions for its second renewable hydrogen auction**, offering up to **EUR 1.2 billion** in support for hydrogen projects, with a dedicated budget of **EUR 200 million** for the maritime sector. The auction will open on 3 December 2024, with successful bidders to receive a fixed premium over ten years. The first hydrogen auction saw projects across Spain, Portugal, Finland, and Norway secure **EUR 694.5 million** in funding from the Innovation Fund. The six projects are intended to produce up to **1.52 million tonnes** of renewable hydrogen over ten years.

The EU Commission's Joint Research Centre (JRC) has launched the Innovation Centre for Industrial Transformation and Emissions (INCITE) information platform. The platform is designed to collect data on all industrial sectors covered under the **Industrial Emissions Directive (IED)**, with an initial focus on **energy-intensive industries**, e.g. **iron, steel, cement, or chemicals production**. Technology providers can submit information about their **clean technologies** to the platform, where it will be showcased and promoted for consultation and adoption by industrial practitioners..

Plans for large-scale production of hydrogen in the EU received a boost in September, with the announcement of the new TopSOEC (Solid Oxide Electrolysis Cell) project, which aims to revolutionise European renewable hydrogen production with energy-efficient electrolyser components. The TopSOEC project, supported by a **EUR 94 million** grant from the **Innovation Fund**, is set to build **Europe's first industrial-scale SOEC electrolyser component factory**. The factory, located in Herning, Denmark, will initially produce **500 megawatts (MW)** of SOEC electrolysers and is projected to reach an annual production of **1.4 gigawatts (GW)** after **2031**.

Oil and gas updates

EU imports of energy products dropped sharply in the second quarter of 2024. On 23 September, Eurostat reported a **10.7%** decrease in the value and a **9.7%** decrease in the net mass of energy product imports to the EU in Q2 2024 compared to Q2 2023. The value of imported petroleum oils rose **5.6%**, though volumes fell **2.2%**. Natural gas imports saw a **31.4%** drop in value and a **9.5%** decline in volume, while LNG imports decreased by **41.2%** in value and **20.2%** in volume. Norway and the United States remain key suppliers of oil and natural gas to the EU.

The European Network for Transmission System Operators for Gas (ENTSOG) has confirmed the EU's readiness for winter 2024-25, reporting **high gas storage levels (94% or 1,083 TWh on 1 October)**. Even if Russian gas pipeline supplies stop entirely, the EU could still have **30% minimum stock levels** by the end of winter.

The EU's Joint Research Centre (JRC) has launched the Security of EU Gas Supply dashboard, which provides comprehensive weekly data on **gas flows**, **storage levels**, and **consumption**. The dashboard consolidates information from **four public data platforms**, ENTSOG Transparency Platform for gas transport indicators, AGSI+ for gas storage information, ALSI for LNG facility data and EUROSTAT.

Energy infrastructure updates

On 1 October, a 15-year project came to fruition with publication of the VERLIFE Guidelines by JRC. These guidelines, developed by 68 experts from nine countries, provide standards to assess the **integrity and lifetime** of components and piping contained in **water-water energy reactor (WWER) nuclear power plants**. The guidelines cover aspects such as reactor piping integrity, inspection qualifications, and reactor vessel internals evaluation. They will be used in safety reviews and licensing, **pending national regulatory approval**.
The Europe Investment Bank (EIB) and Intesa Sanpaolo (Italy's largest banking group) have agreed a EUR 500 million counter-guarantee to unlock up to EUR 8 billion in investment for the European wind

industry. This initiative is part of the **EIB's EUR 5 billion wind power package**. The agreement is expected to support the production of **32 GW** of wind capacity, crucial for the EU's goal of generating **45%** of its energy from renewables by **2030**.

The EIB has approved EUR 5.8 billion in fresh financing for the upgrading of major energy and transport connectivity projects in Europe and beyond, including **clean energy in Poland**. The financing includes **EUR 2.2 billion for energy and water projects**.

Portuguese and Polish State Aid[5] schemes are to accelerate the transition to a net-zero economy. A **EUR 1 billion Portuguese State Aid scheme**, approved on 27 September, will incentivise investments in key green technologies like batteries, solar panels, and carbon capture. Meanwhile, a **EUR 1.2 billion Polish State Aid scheme** was approved in October that will support the installation of **5.4 GWh** of new electricity storage facilities to enhance grid stability and integrate renewable energy sources.

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[5] State aid is a form of aid granted by EU Member States. 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.

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