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This note is part of a full report providing detailed analysis of the collapse of the global coal pipeline, available at <http://www.e3g.org/NoNewCoal>

CHINA: HOME TO OVER HALF THE WORLD'S COAL PIPELINE

Headlines

- > China accounts for 55% of the world's pre-construction pipeline (163GW), in addition to hosting over half of the world's operating coal fleet.
- > China has, however, seen a **74%** reduction in the scale of its project pipeline, with 484GW of cancellations since Paris.
- > Project cancellations outnumber newly operational capacity by 2.4:1, a much lower figure than in the rest of the world.
- > Coal industry groups have proposed expanding coal capacity by a further 350GW, but recent analysis shows that China can meet its energy security goals with no net new coal, keeping its emissions goals on track.
- > China is isolated as the last major provider of public finance for overseas coal plants, with over 40GW of coal in 20 countries in the pre-construction pipeline.

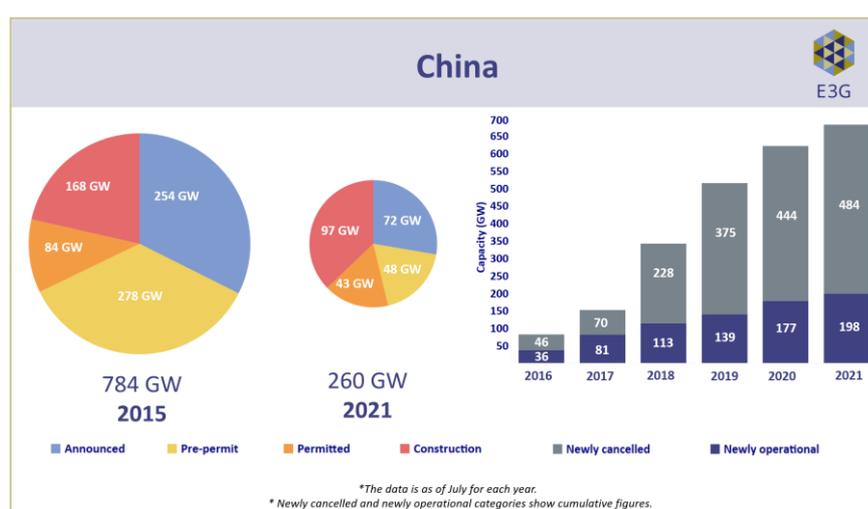


Figure 1: Reduction in size of the coal project pipeline in China (left) and year-on-year tracking of projects that were cancelled or newly operational (right).



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China **continues to dominate** the global coal power landscape. China's operating capacity grew in 2020, with a net increase of 38GW **offsetting retirements** in the OECD & EU.

However, even with its continued pursuit of coal in recent years, China has also seen a 74% reduction in the scale of its project pipeline. **484GW** have been cancelled since Paris, in relation to only **198GW** which became operational (a ratio of **2.4:1**), as shown in Figure 1.

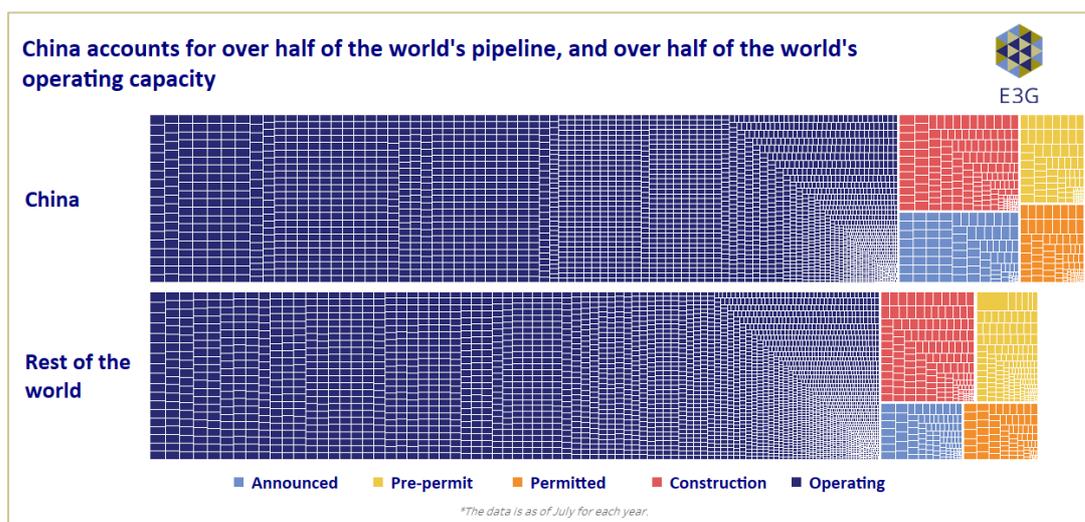


Figure 2: China accounts for over half of the world's pipeline, and over half of the world's operating capacity.

In response to the Covid crisis and its economic impacts, Chinese Provinces have sought to increase industrial activity. 15GW of new coal power capacity started construction in the first half of 2021, while 24GW of new projects were announced or re-activated from previous suspension. China's pre-construction pipeline now surpasses that of the rest of the world combined. China's pipeline now stands at **163GW**, or **55%** of the global pipeline, as shown in Figure 2.

This increase in project development activity is further illustrated in Figure 3 below, showing the post-Covid growth in the pipeline in 2020 and 2021. This growth stands in contrast to President Xi's statement at President Biden's **Leaders' Summit on Climate** in April 2021 that China would "strictly control" coal consumption growth in the 14th Five-Year Plan period (2021-2025). It should be noted, however, that this indicator refers to overall coal consumption (including by industry sectors) and does not refer directly to coal power capacity.



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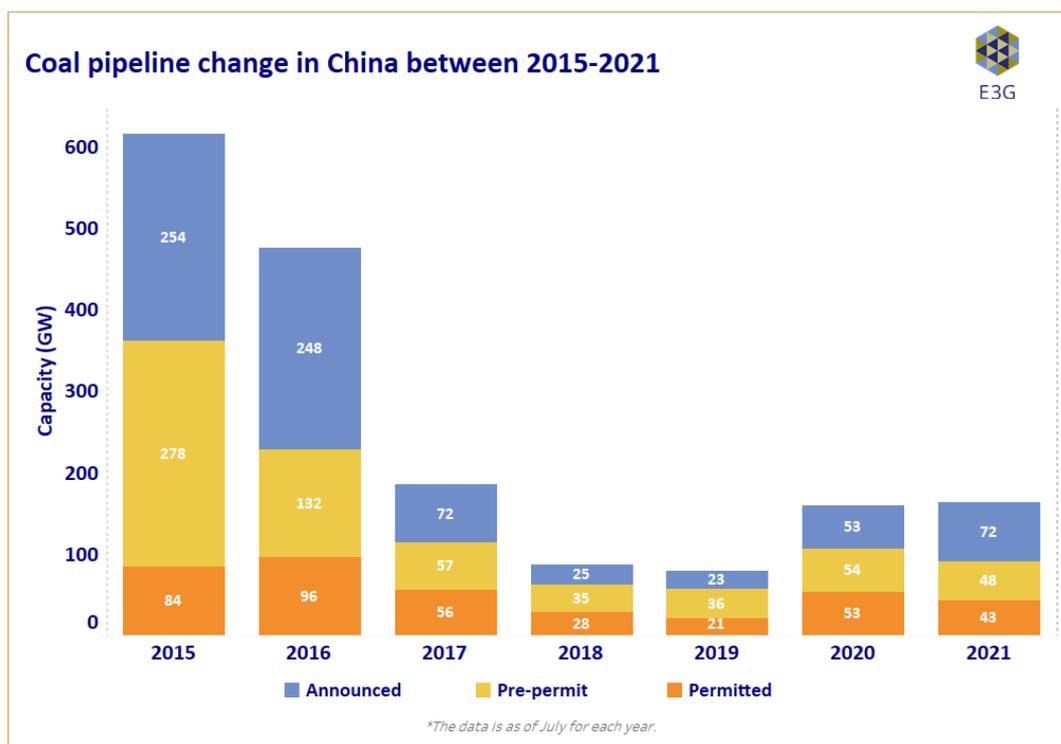


Figure 3: Coal pipeline change in China between 2015-2021.

The continued construction of new coal power capacity would risk exacerbating the already low load factors for operating power plants, which could be further reduced unless there is a parallel effort to retire existing capacity. The IEA has identified that there is a need for electricity market reforms to prioritise efficient dispatch and properly integrate carbon price signals.

Industry groups have pushed for continued growth in coal power capacity. Research institutes affiliated with **State Grid Corp** have argued that a 350GW expansion of coal capacity is necessary to safeguard China’s energy security. Analysis from **NRDC**, however, shows that capping China’s coal capacity at 1,100GW by 2025 (53GW more than currently operating) will allow China to meet its future energy demands. Given that 39GW of coal capacity has started construction or was announced in the first half 2021, China may already be in a position to commit to no (net) new coal power, with any new additions matched with retirements.

There continue to be mixed signals in the relationship between national and sub-national coal dynamics. Since China announced its carbon neutrality target, the central government has increased scrutiny of local government’s performance on energy intensity and consumption targets, with implications for the project pipeline. The government’s official watchdog on environmental policies



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published a scathing review of the National Energy Administration's policies, calling out the agency's failure to square its coal power policy with the country's low-carbon energy strategies. Meanwhile, the National Development and Reform Commission (NDRC) recently announced that it will pause approvals of high-emission projects in nine provinces that failed to meet their energy intensity target in the first half of 2021.

In a recent politburo meeting, President Xi laid out China's economic priorities for 2021 H2 and urged officials to pursue China's peak carbon and carbon neutrality plans in an "orderly" manner. He said that policymakers should avoid "campaign-style" carbon reduction measures. Chinese policy analysts suggest this is a call to put some brakes on "**blanket policies**" by some local bureaucrats in the name of carbon neutrality that have impacted energy security, industrial output and local employment.

Box 2: An end to public finance would accelerate global shift

Since Japan and South Korea committed to end the provision of public overseas finance for new coal, China has become isolated as the **last major provider of public finance** for coal projects. **IEEFA** analysis in July 2021 found that, of the top 10 countries for new coal plants outside China, 56% of the capacity is being supported by China, either financially or through engineering contracts. More broadly, China is supporting coal-fired power projects in **nineteen** non-OECD countries plus Turkey see (*Table 1*) below, across 46 new coal projects.

Pressure is growing for China to follow its East Asian peers and commit to ending overseas coal finance. Given Chinese public finance is often seen as key to de-risking projects for other investors, such a decision would potentially accelerate the cancellation of over 40GW of pipeline projects spread across 20 countries. Four countries (Cambodia, Djibouti, Kenya and Madagascar) have only a single, Chinese-financed plant under consideration, without which they would have no further pipeline.

There are signals that an end to Chinese investment in overseas coal projects may be coming to an end. The Deputy Governor of the People's Bank of China **said** in a recent public event that China would "strictly control new coal power investment overseas", while Industrial and Commercial Bank of China (ICBC), the biggest state-owned bank in China, has **stated** that



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it would raise the share of renewables in its loan book and develop a “roadmap and timeline to phase out coal” in its financing.

Despite this, China has not yet made a formal pledge to end support for coal abroad. A commitment to end international coal finance, for example at the G20 Leaders’ Summit in October 2021, would also lend credibility to China’s status as a global climate leader. It also offers an easier first step for Beijing to signal goodwill on coal before it is ready to make similar pledges on domestic coal.

Country	OECD / EU	Number of coal plants	Capacity (GW)
Bangladesh	No	6	10.31
Bosnia & Herzegovina	No	2	0.70
Botswana	No	1	0.30
Brazil	No	1	0.60
Cambodia	No	2	1.40
Djibouti	No	1	0.15
Indonesia	No	6	3.86
Kenya	No	1	1.05
Laos	No	2	2.40
Madagascar	No	1	0.10
Malawi	No	1	0.30
Mongolia	No	2	0.60
Mozambique	No	2	1.00
Pakistan	No	3	0.96
Serbia	No	2	1.05
South Africa	No	1	3.00
Sri Lanka	No	1	0.30
Turkey	Yes	1	0.50
Viet Nam	No	8	9.23
Zimbabwe	No	3	3.50

Table 1: Countries with coal projects financed by China.