

Facts & Stats

2021 Global Coal Exit List: Interesting Facts & Statistics

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Only 4 countries - China, India, Indonesia and Vietnam - account for 75% of new coal power capacity in the pipeline. Another 4 countries — India, China, Australia and Russia —account for 77% of new thermal coal mining capacity in the pipeline. Here is a glimpse into the "coal dynamics" of each of these countries.

China

China has long been an important force in financing new coal projects around the world, but in his recent UN general assembly speech, China's President Xi Jinping pledged that China will no longer "build new coal-fired power projects" abroad". While everyone agrees this is very good news, it remains to be seen what the pledge means for the participation of Chinese companies or financiers in around 60 GW of overseas coal power projects which are already in the pipeline. What Xi's statement does not do is deal with the 250 GW of new coalfired capacity that is under construction or development inside of China. In a reasonably designed energy market, most of these plants would not be built as China's current coal plant fleet only runs at around 50% capacity. China's energy distribution system, however, uses Soviet-style quotas under which coal plants receive a designated number of operating hours each year at a generous price. While China is also the top global producer and consumer of wind turbines and solar panels, the country's coal surge leaves less room on the grid for renew-able energy. As Li Shuo, a senior policy advisor for Greenpeace in Beijing warns: "Our energy policy needs a serious overhaul – a surgery – because the growth in renewables has hit a glass ceiling."1

The first Chinese company to react to Xi Jinping's pledge was the **Hong Kong** based power plant operator CLP. Just 2 days after the President's speech, CLP

¹ https://www.straitstimes.com/asia/east-asia/two-headed-beast-chinas-coal-addiction-erodes-climate-goals

announced that it will phase coal out of its Asian operations by 2040. CLP currently owns 12 GW of coal-fired capacity, including 2 coal power stations in Australia: the 1.4 GW lignite-fired Yallourn coal plant, which is due to close in 2028 and the 1.4 GW Mount Piper coal plant, which is expected to run until 2040. CLP's CEO Richard Lancaster, says: "We are already working to see how we can bring the timing forward as much as we can." It is not yet known, how much of CLP's coal portfolio will be replaced with renewables, but the company's plans unfortunately indicate that fossil gas will also play a major role.

<u>India</u>

The giant of Indian coal power is the **National Thermal Power Corporation** (NTPC), which operates the world's 5th largest coal plant fleet totaling over 54 GW. In September 2020, it seemed a hopeful sign when NTPC's chairman announced that the company will aggressively pursue renewable projects and has decided "not to acquire any further land for greenfield thermal projects." As one of NTPC's executives, however, explained to the media: "We still have plenty of projects across the country where we can do brownfield expansion." NTPC thus aims to still add 14 GW of new coal plants to its portfolio, in spite of the fact that up to 85% of India's coal plants will be uncompetitive by 2025.4

India's largest coal plant developer, however, is the **Power Finance Corporation** (PFC). Under the control of the Ministry of Power, PFC sets up shell companies to finance, plan and facilitate new power projects. As a 2020 study showed, almost 54% of PFC's loan books were dedicated to coal assets⁵ and PFC still plans to develop an additional 16 GW of new coal-fired capacity, which the study calls "an expensive herd of new white elephants."

The country's coal mining behemoth is **Coal India**, which produced 556 million tons of thermal coal last year, making it the world's largest producer. The company is also the world's biggest coal mine developer and plans to increase its thermal coal mining capacity by 389 million tons per year. Many of Coal India's planned open-pit mining projects are located in areas of rich

² https://asia.nikkei.com/Business/Energy/Asian-power-company-CLP-vows-to-drop-coal-by-2040-in-faster-transition

³ https://www.livemint.com/industry/energy/ntpc-says-no-to-greenfield-coal-fuelled-power-projects-11600959893677.html

⁴ https://www.ctvnews.ca/business/un-chief-urges-india-to-quickly-move-to-clean-solar-power-1.5082995

⁵ https://ieefa.org/ieefa-report-indias-pfc-financing-a-herd-of-white-elephants/

biodiversity and on the lands of indigenous populations. Affected communities and environment NGOs, however, have little chance of stopping these projects in the courts as the Modi government has completely dismantled environmental safeguards in the country's mining laws.⁶

<u>Indonesia</u>

With around 30 GW of new coal power plants under construction or development, Indonesia has the world's 3rd largest coal plant pipeline. A central player is **PLN**, Indonesia's state-owned power utility, which has a monopoly on the national grid. PLN is not only one of the world's largest coal plant operators, it currently has over 8 GW of new coal-fired capacity in the pipeline, making it the 9th largest coal plant developer worldwide. PLN is also responsible for negotiating numerous power purchase agreements for further coal plants being built mainly by companies from Japan, South Korea and China.

In May 2021, the president of PLN, Zulkifi Zaini, announced a roadmap for gradually retiring coal power plants in order to achieve carbon neutrality by 2060. Closer examination of the roadmap, however, shows that it is just a rebranding of business as usual. According to a study by IEEFA, the first coal plants to be decommissioned are not early retirements, but have been operating for 50 years, and should have been shut down long ago. However, what is even more worrying is that Indonesia still aims to bring its enormous pipeline of new coal power plants online. As coal plants typically operate for 35 to 40 years, it is likely that Indonesia would still have a large fleet of coal plants running in 2060, according to Andri Prasetiyo, a researcher at Trend Asia. During a recent online forum, Zaini himself floated the prospect that PLN could keep operating coal plants beyond 2050 by embracing carbon capture and storage (CCS). "If at that time, for example in 2050, carbon capture technology is very cheap, then let's just operate coal power plants," he said.9

Why is the Indonesian government still set on building so many new coal plants? An important part of the answer lies in the country's coal mines.

⁶ https://www.newsclick.in/modi-govt-talks-clean-energy-boosts-coal-mining-dilutes-mining-laws

⁷ https://ieefa.org/ieefa-indonesias-state-owned-utility-plns-2060-net-zero-ambition-not-without-flaws-and-gaps/

⁸ https://trendasia.org/en/indonesia-to-retire-coal-fired-power-plants-while-also-adding-more/

⁹ https://www.thejakartapost.com/news/2021/07/16/lets-just-operate-coal-plants-pln-says-banking-on-carbon-capture.html

Indonesia is the world's 4th largest producer of coal and reached an output of 616 million tons in 2019.¹⁰ Around ³/₄ of its production is exported, but with the rise of renewable energy and increasing commitments to reduce CO₂ emissions, Indonesia's coal mining industry does not have a rosy future. Building an increased domestic demand through new coal plants serves the entrenched and powerful interests behind the country's coal mining industry.

<u>Vietnam</u>

Vietnam's coal plant fleet has grown faster than the fleet of almost any other country - roughly $\frac{3}{4}$ of its 20 GW fleet was built in the past six years. At the same time, Vietnam has seen a surge of renewables, with around 17 GW built in recent years. However, the new draft of Vietnam's 8th Power Development Plan puts the country firmly on a coal development path: It sets a target of 40 GW of coal-fired capacity by 2030 and 50 GW by 2035. To make room for this pivot back to coal, the country's renewable targets were reduced by 20%.

Currently, 25 GW of new coal power plants are already under development, making Vietnam the country with the 4th biggest coal plant pipeline globally. These massive additions of coal power would not be possible without participation of overseas companies. Foreign companies from 8 countries are responsible for 64% of Vietnam's coal plant pipeline. The biggest developer is South Korea's **KEPCO** with 2.5 GW under construction. In 2020, KEPCO announced it will stop developing further coal projects abroad, but still intends to build the controversial Nghi Son 2 and Vung Ang 2 coal plants together with its Japanese partners.

Vietnam's growing coal plant fleet has sparked many local protests as well as opposition by provincial authorities against new plants. However, the central government remains undeterred and in June 2021 arrested Dang Dinh Bach, Director of the non-profit Law & Policy of Sustainable Development, after he signed a letter to South Korea's president urging him to stop financing of international coal projects.¹²

¹⁰ https://www.iea.org/reports/coal-2020/supply

¹¹ https://ieefa.org/ieefa-defying-global-financial-trends-vietnam-pivots-back-to-coal-power/

¹² https://endcoal.org/2021/07/coalwire-376-july-8-2021/

Australia:

With 300 million tons per annum of new thermal coal mining capacity in the pipeline, Australia is the world's third biggest coal mine developer. Up to now, Australia's hard coal supply chain is concentrated in the Bowen Basin in Queensland and the Hunter Valley in New South Wales. The hotbed of new coal mines is, however, the Galilee Basin in Queensland, where the **Adani** Group's subsidiary **Bravus Mining** is developing the huge Carmichael mine. Carmichael also serves as an 'ice breaker' for other mega coal projects in the Galilee, planned by companies such as **GVK** or **Waratah Coal**, which will profit from the 189 km railway and port infrastructure built by Bravus Mining.

With an estimated future production of 60 million tons of coal per year, Carmichael is the world's largest proposed coal mine and the target of protests from all over the globe. As a result, over 100 major international companies, including many banks and insurers, have ruled out support for Adani. However, Adani is not alone on its way to becoming a pariah. The peak lobby group for Queensland's coal industry complained to a national parliamentary inquiry in July 2021 about the "worsening finance and insurance drought" and stated that "44% of the companies surveyed said that if banking costs stayed at these levels for the next 5 years, they would be unlikely to continue operating."

The Australian government, however, remains a staunch backer of the country's dirtiest export industry. When UN Special Advisor on Climate Change, Selwin Hart, warned that "if the world does not rapidly phase out coal, climate change will wreak havoc across the Australian economy," 15 the reply of Australia's Prime Minister Scott Morrison was: "We will keep mining." 16

Russia

Russia produced 300 million tons of thermal coal in 2020, out of which 50% was exported.¹⁷ It has the world's 4th largest pipeline of coal mining projects, amounting to a capacity increase of over 200 million tons per annum. Coal is

¹³ https://www.marketforces.org.au/info/key-issues/theadanilist/

¹⁴ QRC Submission: Inquiry into the prudential regulation of investment in Australia's export industries, April 30th 2021

¹⁵ https://www.anu.edu.au/news/all-news/choosing-bold-climate-action

¹⁶ https://www.smh.com.au/politics/federal/we-ll-keep-mining-australia-resists-climate-policy-pressure-20210909-p58qa3.html

¹⁷ Jahresbericht Verein der Kohlenimporteure, 2021

the only sector of Russia's energy industry that is completely in the hands of private companies. The industry's giant is **SUEK**, which produced 101 million tons of coal in 2020 and is also Russia's largest coal plant operator. SUEK's mine expansion plans would add another 28 million tons of coal to its annual production and the company is already building new coal terminals to account for the increase of shipping volumes. As for all of Russia's coal companies, the expansion of coal mining operations is meant to increase export volumes in the pacific market.

Russia's energy plans are a blueprint for growing CO₂ emissions. The government's 2020 energy strategy envisages a 50% increase of the country's coal production by 2035. Renewable energy is only expected to grow from its current level of 1% to 10% of the country's electricity mix by 2040, even though Russia has enormous renewable potential.¹⁸

70% of Russian coal is produced in the Kuzbass region in Siberia and the curse of mining takes a heavy toll on local residents. Communities are still being forced off their land for new mines, including indigenous groups such as the Shores and Teleutes. 'Black sky' events, and black snow, are becoming more frequent every year. The region shows high rates of cancer and leads the nation in respiratory diseases. "People in Kuzbass are paying the price for Russian coal companies' dirty and outdated business model, but protests are met with repression by the government," says Vladimir Slivyak, speaker of the Russian NGO Ecodefense and winner of the 2021 Right Livelihood Award.

The 2021 GCEL can be downloaded at www.coalexit.org.

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¹⁸ https://ecodefense.ru/2021/07/07/russia-shifts-from-coal/