

# BRIEFING: 12.8 GW of Chinese overseas coal projects cancelled, but 19 GW could still go ahead

#### **Key Finding**

- China's "no new coal overseas" policy has already had a significant impact on coal power construction. Since September 2021, CREA found that approximately 12.8 GW (15 plants) of China-backed overseas coal projects were shelved or cancelled, following revised energy policies in host countries and withdrawals of Chinese firms.
- The newest National Development and Reform Commission (NDRC) Guidelines for the greening of the "Belt and Road Initiative" (BRI) have the potential to stop 37 GW (32 plants) of planned Chinese-backed coal in the pre-construction phase. In addition, projects under construction are recommended to proceed with "caution," which should encourage the reexamination of 30 GW (36 plants) of projects underway.
- The guidelines encourage upgrades to operating coal-fired power plants in line with "international green rules and standards," which should encompass 17 GW (18 plants) of operating coal plants with Chinese equity. Majority of overseas coal plants have followed lax host country standards, emitting levels of pollution far higher than China's domestic allowances.
- 19.2 GW (18 plants) of planned projects fall into a grey area of China's pledge; 11.2 GW have secured financing and permits to go ahead and another 8 GW are captive coal projects linked to major BRI industrial parks in Indonesia, which the Indonesia government considers a priority.
- Captive coal power plants in Indonesia highlight a loophole in the pledge. Two new coal-fired power plants secured construction and purchasing agreements from Chinese firms in 2022. The Chinese government doesn't appear to consider these as "new", since they are linked to China-backed nickel and steel complexes that were approved before the ban on new coal overseas.
- The new guidelines and expected policy revisions to align with climate targets should provide the impetus for Chinese firms, financial institutions and developers, as well as host countries to examine and scrap planned coal, especially as the economics and financing around coal continues to become less favorable.



#### Introduction

Over the last decade, China has been the most prominent supporter of overseas coal-fired power plants globally. Its private and public entities have provided financial capital or equipment, procurement and construction (EPC) services to approximately 124 gigawatts (GW) of coal plants operating today — 12% of the coal generation fleet outside of China.  $^1$ 

President Xi Jinping's announcement to "not build new coal-fired power projects abroad" marked a significant reversal. The original wording of this September 2021 pledge left many questions as to the exact scope of the ban, including whether 'build' covered EPC arrangements and whether 'new' plants excluded closed contracts.

On March 26, China NDRC and three other ministries issued a joint policy paper on the greening of the "Belt and Road Initiative" (BRI).<sup>2</sup> It clarifies that (1) new coal-related projects will be completely stopped, covering projects with financing and/or EPC contracts; (2) projects which are already under construction should proceed with great cautiousness.

The guidelines not only cement the waning future of Chinese-backed coal overseas, continuing a long-running trend of <u>overseas coal project cancellations</u>. They also **provide** the impetus for Chinese and host country financial institutions and developers to reexamine the 86 GW (81 plants) of Chinese-backed overseas coal that are currently in the construction and pre-construction pipeline.

Xi's announcement has already had a significant impact on planned coal. Our analysis of the progress of China-backed coal projects shows that **approximately 12.8 GW (15 plants) of China-backed overseas coal projects were shelved or cancelled since the the UN General Assembly announcement in September 2021.** Many of these cancellations were a result of revised domestic energy plans, which emphasize the importance of host countries' policies and priorities. In Vietnam, 6.6 GW (5 plants) were postponed in the October 2021 draft <a href="Power Development Plant VIII">Pope (PDP8)</a>), making it unlikely that such plants will ever be built as support for coal continues to dry up; its <a href="March 2022">March 2022</a> draft identifies 3 plants that could be converted to gas or renewable energy (RE). In Turkey, the government cancelled the 1,320 megawatt (MW) HEMA Amasra environmental assessment and land-use permit in November 2021, despite Dongfang having signed an EPC in 2016.

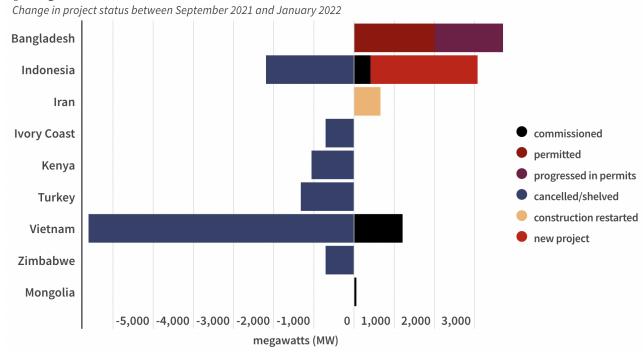
<sup>&</sup>lt;sup>1</sup> 24% of the operating fleet in the host countries included in the CREA database.

<sup>&</sup>lt;sup>2</sup> Ministry of Foreign Affairs(MoFA), the Ministry of Ecology and Environment (MEE) and the Ministry of Commerce (MOFCOM)

<sup>&</sup>lt;sup>3</sup> Nam Dinh-1 Unit 1&2, Song Hau-2 Unit 1&2, and Vinh Tan-3 Unit 1-3.



## Impact of UNGA Pledge on China-backed overseas coal projects



Only 8.6 GW, or 10 projects, made progress onto the next phase of development since September 2021. Approximately 1.7 GW (4 plants) were already commissioned and therefore, not covered by the pledge. However, two new projects in Indonesia were announced, both linked to BRI developments and discussed later in this briefing. Additionally, 3.7 GW (3 plants) in Bangladesh have secured permits, despite not having closed financing at the time of Xi's announcement. The 1.3 GW Patuakhali Ashuganj Power Station was thought to be cancelled by the government yet developments are ongoing. This is concerning as Bangladesh has 4.2 GW (4 plants) of coal linked to Chinese firms already in construction, including the Patuakhali BCPCL which the developer committed to delivering "in a form that fits in with the Bangladesh Government's Energy and Power Sector development ambitions."

The NDRC Guidelines should signal the end of new overseas coal, and bring host countries and developers to the table to renegotiate. It marks another strong signal that the tide has fully turned on coal, and that the losses that could be associated with further developments are likely to outweigh the short-term gains.

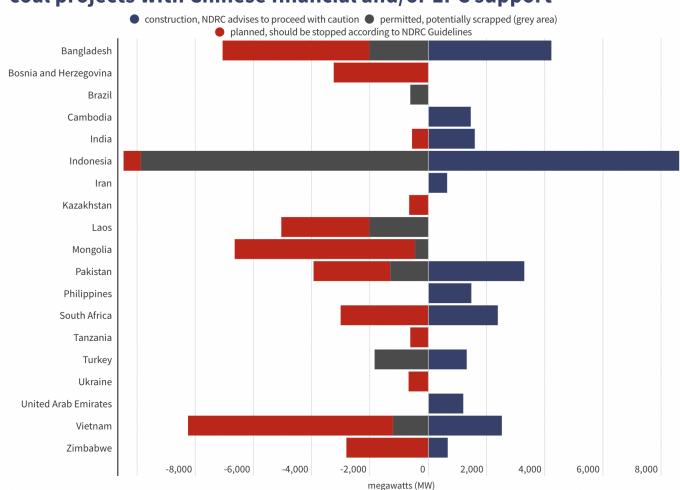


#### **Potential Impact of NDRC Guidelines**

The new NDRC guidelines suggest that **37 GW (32 plants) of Chinese-backed coal projects in the pre-construction phase could be stopped,** scrapping more than a third of coal projects planned outside of China and India. This includes controversial projects such as the Ugljevik coal plant in Bosnia and Herzegovina or the <u>Sengwa</u> plant in Zimbabwe, whose financing appeared not to be forthcoming following Xi's pledge.

A grey area still remains for projects that have already secured both the necessary and permits, or which have been dubbed as priority projects by the government. By our estimates, approximately 19.2 GW (18 plants) of coal power projects fall into this grey area and could potentially move ahead.

## Potential Impact of NDRC Guideliness on the pipeline of overseas coal projects with Chinese financial and/or EPC support



<sup>&</sup>lt;sup>4</sup> Total number of pre-construction projects globally is 122 GW of coal plants, according to GCPT status. Chinese firms are involved via financing or EPCs on 10 GW of announced (29 units) projects, 30.8 GW of pre-permitted (71 units), and 16.3 GW of permitted (30 units) overseas coal plants.



Projects under construction, or 29 GW (36 plants) of overseas coal projects in the pipeline, are recommended to proceed "steadily" and with "caution". This leaves options open for Chinese firms to withdraw if they have sufficient reason and manageable penalties to do so, particularly if projects are in earlier stages of construction.

Finally, the NDRC Guidelines encourage the upgrading of operating coal-fired power plants so they align with international emission standards, regardless of the host country's emissions standards. This is an important recommendation as most overseas coal plants have been built with lax emission standards, allowing them to emit dangerous levels of pollution that are far higher than China's own domestic allowances. CREA found approximately 18 operating plants (16.6 GW) in Cambodia, Indonesia, Pakistan, United Arab Emirates, Vietnam with Chinese equity shares, where Chinese firms would have a say in how the plant's operations and the emissions standards it should thereby meet. The China Export-Import Bank indicated in March that it was willing to discuss financing for upgrades to already constructed coal power plants.

The timeline and strength of implementation of the ban on overseas coal projects have not been defined. Clarity is still urgently needed to avoid sunk costs, time and resources. With the NDRC guidelines, there is a significant window of opportunity for host countries and developers to negotiate and shift investments towards low-carbon alternatives that are in line with China's promise to support and finance a green energy transition.

#### **CAUTION: Projects slip through the cracks**

While proposals for new coal have been at a virtual standstill outside of China, CREA found two power plants in Indonesia with no public records prior to September 2021. These plants have recently won bids to construct or provide essential equipment for the project, which risk crossing the red line to halt 'new' coal 'build' overseas. Both are linked to major BRI industrial developments for nickel and steel in Indonesia.

On <u>14 February 2022</u>, Tianjin Electric Power Construction signed an agreement to construct a 1,520 MW nickel ore-supporting thermal plant on Obi Island. No project technology is confirmed publically, but the Odi Island Industrial Park proposal included a <u>4.2 GW allocation</u> for coal plants to power the complex. The bid was likely submitted and accepted after Xi's announcement, as the timeline from <u>submission to selection of tenders</u> is typically one to two months, not six months.

A second 'red-line' project is another EPC contract for the 3×380 MW expansion of the existing Sulawesi Laborta, tied to steel and nickel processing at the Morawali Industrial Park in Indonesia. Anhui Electric Power Construction First Engineering won an <u>equipment tender</u> for Units 7-9 in December 2021, which will be built on top of the 2,330 MW already in commission or construction in the industrial area.



There lies a potential loophole in the ban: if the loosest interpretation of the pledge and guidelines are applied, construction and equipment contracts on existing BRI projects that have earmarked coal in the past may be viewed as an exemption.

In Indonesia, captive coal projects already pose a challenge to Indonesia's net-zero goals. Over 8 GW (6 plants) of captive coal projects are planned, and likely to move forward due as the government considers them 'electricity supply for business and personal interest'. CREA noted 1.6 GW of coal for industrial off-takers were commissioned last year and 1 GW entered into construction. Additional capacity could slip through, running counter to recommendations that the country 'must stop building new coal plants by 2020' to meet climate targets and avoid additional stranded assets that would come from building more unnecessary coal plants.

While no other projects of similar nature have been found thus far, China had plans to build 50 special economic zones across Asia and Africa with notable developments in Pakistan, Indonesia and South Africa. The new NDRC guidelines "promote the green and low-carbon development of international cooperation in steel and other industries," creating the possibility to ensure low-carbon technologies replace coal developments in this area. For example, South Africa cancelled its environmental approval on a 4.6 GW Chinese-backed coal project in the Musina-Makhado Special Economic Zone in March 2022. There are reports that it will be replaced by a 1 GW solar plant.

### **Capitalizing on Opportunities**

While the new NDRC guidelines function as soft law, they send a clear signal both within the country and to host countries of the Ministry of Commerce's (MOFCOM) direction, setting expectations that stricter measures will follow. China's pledge to increase support for renewables in developing countries has also been reiterated by the NDRC.

Further transparency on the implementation of the guidelines, together with plans from host countries on how to proceed are vital in assessing the depth of not only China's ambition on promoting green and sustainable development, but also host countries' commitment to transitioning their domestic power mix to net-zero by 2050. Policies from host countries to end coal power expansion in their respective energy mixes are key in smoothening out the potential renegotiation and transition process on planned coal.

Key building blocks are already available for host countries and developers to move forward and link with other climate targets:

**Doubling down on Environmental Policies to aid in decision-making.** The NDRC policy paper, as well as the 2021 "Green development guidelines for overseas investment and cooperation" encourage Chinese businesses to integrate green development throughout their overseas investment process for both existing and



proposed plants. Where local standards are insufficient, they also suggest companies "follow international green rules and standards" rather than the often lax standards of host countries. Requiring more stringent standards could be a significant tool for host countries to ensure that only highly-efficient and least polluting coal plants remain on the grid as they transition the energy mix.

## Ensure that national energy plans do not risk the transfer of finances to other polluting fossil fuel-based generation sources — the default must be coal to clean.

There are approximately 50 GW of proposed gas-fired power stations in Vietnam; Bangladesh has 20 GW of fossil gas and liquified natural gas (LNG) power projects proposed — twice the capacity of coal that is currently in their pipeline. Indonesia have plans for coal gasification and biomass co-firing, which could fall into another grey area in relation to China's ban on new coal. Two gasification projects in Indonesia entered feasibility studies in late 2021, including a US\$560 million coal-to-methanol plant with China National Chemical Engineering Corporation. The exact scope of Chinese involvement on other fossil fuel projects overseas requires further research and tracking.

However, historically, China's investments overseas expand strong domestic industries. While activity in secondary coal industries abroad have been minimal, the growing prominence of coal-to-chemical and fossil gas in host countries' energy plants are concerning. China's domestic renewable energy industry remains one of its fastest-growing sectors with costs still falling at record rates globally; renewables should be prioritized.

Policy focus should shift to enabling a just transition. Mechanisms such as early retirements and shifts in financial support to renewables will be necessary to meet country and global climate goals. Host countries should proactively push for the greening of existing and proposed overseas investor infrastructure, as well as the cancellation of new fossil fuel projects so funds can be redirected towards low-carbon technologies. This is note limited to Chinese banks and entities but with China's know-how and interest in developing RE abroad, its support for overseas RE developments will be a key opportunity.

The Asian Development Banks' Energy Transition Mechanism (ETM) or South Africa's Just Energy Transition <u>declaration</u> could accelerate the process of shifting investments from coal and fossil fuels to renewables, particularly if development actors in Asia and the West couple support with the improvement of necessary infrastructure, including but not limited to upgrades and expansion of transmission and distribution, energy efficiency, and storage. RE expansion and investments should be a required condition under such infrastructure programs and transition mechanisms.