Revisiting Belt and Road Initiative in Indonesia: Progress, Challenges, and Prospects

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This version: 8 July 2022

Introduction

The Belt and Road Initiative (BRI) announced by Chinese President Xi Jinping in 2013 has, over the years, gradually taken shape and developed into the centrepiece of China’s drive to become a global power. The initiative is aimed to support infrastructure development and economic integration between China and the partnering countries, especially developing countries.² The latter lack economic resources to promote growth and employment. Meanwhile, China has the financial resources, technologies, human resources, and most importantly, the political will and strategic vision to support infrastructure development in developing countries. Nevertheless, some BRI projects have encountered practical and implementation challenges, e.g. Hambantota port in Sri Lanka, the East Coast Rail Link (ECRL) in Malaysia, and the Jakarta-Bandung High-speed rail in Indonesia. Those projects have been used to criticise China’s BRI as debt-trap diplomacy and thus, causing adverse reactions and pushback in both countries (Jones and Hameiri 2020).

This narrative is not accurate. Given its size and scope, it is not easy to measure the exact value of BRI projects to date. Part of the problem is that the range of China’s BRI projects is very diverse, ranging from hard infrastructure to people to people mobility, from maritime to digital sectors. It is therefore difficult to objectively gauge its overall progress and implications.

While there is no official list of the BRI projects agreed upon between China and Indonesia, we have observed increased Chinese overseas investments since its first announcement. This rising Chinese outward investment also coincided with the growing number of BRI projects. Southeast Asia is one of the primary beneficiaries of China’s investment, including the BRI projects. Singapore is the largest recipient of Chinese outward investment in the region, while Indonesia is the second-largest recipient of Chinese investment (Figure 1). Singapore is an investment hub in the region, so there is a likelihood that some portion of Chinese investment that goes into the city-state later flows into other third countries, including Indonesia. As a comparison, between 2014 and 2020, Indonesia received about 14 per cent of Chinese overseas investments to ASEAN, while Singapore received around 45 per cent in the same period.

Most of China’s investment, including BRI projects, in Indonesia went to transportation, storage, communication, mining, and manufacturing, particularly steel industry. Also, since its launch in 2013, Indonesia has signed several Engineering, Procurement and Construction

¹ The author thanks Rajat Nag, Tham Siew Yean, Jayant Menon, and Peh Ko Hsu for their useful comments and suggestions. The usual caveat applies.
contracts (EPC) with China to build several power plants. This is in line with Indonesia’s effort to boost the electricity supply to sustain its growing economy. As one of the biggest coal producers, Indonesia relies on coal-fired power plants to supply electricity to the nation. It makes up about 66% of the country’s energy mix.³ In 2020, Indonesia exported around 32% of its coal production to China.⁴

**Figure 1: Distribution of Outgoing Chinese overseas investments to ASEAN countries (%) in 2014-2020**

![Distribution of Outgoing Chinese overseas investments to ASEAN countries (%) in 2014-2020](image)

Source: China MOFCOM

China has financed and helped build several coal-fired power plants across the archipelago for years. One case in point is the Celukan Bawang power plant (PLTU) in Bali, which is worth US$ 700 million and funded by China Development Bank.⁵ This 380 megawatts (MW) power plant began its construction in 2013 by China Huadian Engineering Co. Ltd (CHEC) and was completed in 2015. It is a good example of how economic consideration trumps the environmental and societal costs of the project. The project is deemed economically vital for Bali in anticipation of future surges in electricity consumption as the island expects rapid tourism sector growth. Yet, the use of coal-fired power is invariably controversial, as its impact on the environment is severe. There are reports on the power plant's adverse health, environmental, and social effects.⁶

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During the second BRI summit in 2019, China expressed its commitment to improving the quality of BRI investment. The commitment is arguably driven by criticism from several non-BRI countries, led by the United States (US), which sees the BRI as risky economic cooperation since it spreads Beijing’s opaque, authoritarian model of governance (Dezenski 2020), and adds to countries’ debt burdens, locks countries into carbon-intensive futures, tilts the playing field in major markets toward Chinese companies, and draws countries into tighter economic and political relationships with Beijing (Dezenski 2020, CFR 2021, pp. 3-4). The popular narrative is that China’s BRI traps borrowing countries in unrepayable debts to gain political leverage. In response to that criticism, China’s President, Xi Jinping, pledged to reform the BRI in two significant ways.

First, he said that China will “multilateralise” the BRI. Mr Xi vowed to work more closely with other multilateral development banks in the host countries. He also said that BRI would adopt multilateral rules and international best practices on project development from the tendering process until its operation.

Second, China will make the BRI more sustainable, financially and environmentally. In the area of finance, a BRI Debt Sustainability Framework, one similar to that of the International Monetary Fund and World Bank, was released to help in decision-making by partner countries. In the area of the environment, China would launch green infrastructure projects and provide green financing.

Against this backdrop, this paper provides an update on the BRI projects in Indonesia. It discusses the progress and challenges of China’s outbound investment and infrastructure projects under the initiative. It also discusses how perceptions about the BRI have evolved in Indonesia since the 2019 BRI Forum. Based on selected project case studies, the chapter will shed light on the issues and problems associated with BRI implementation and discuss the readjustment of the BRI at this crossroads and its prospects to contribute to the environmental goals and targets of the United Nation’s Sustainable Development Goals.

**China-Indonesia economic relations**

To better understand how Indonesia perceives China’s BRI, it is important to examine the dynamic of bilateral economic relations over time. Diplomatic relations were normalised in 1999 after it was frozen in 1967. Since then, economic relations between China and Indonesia have intensified. Bilateral trade and investment increased as both countries gradually opened up their economies.

Since the start of the new millennium, China’s rapid economic growth has boosted demand for Indonesia’s export products, especially commodities such as coal, rubber, and palm oil. In 2005, China and Indonesia signed a strategic partnership, including further cooperation in trade and investment areas. Since then, trade with China has proliferated and surged to overtake Japan, Singapore, and the United States. In 2005, trade with China was still only around 8.7 per cent of Indonesia’s total trade value (Figure 2). This share increased rapidly to 26 per cent by 2021 (Figure 1).

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Initially, the trade balance leaned towards China, given its strong manufacturing export competitiveness. China enjoyed a growing trade surplus from around US$ 1 billion in 2005 to US$ 18 billion in 2018. Later, the trade surplus gradually declined to US$ 2 billion by 2021 (Figure 2). There are several reasons for this trend. First, exports of manufactured goods to China have increased quite significantly during the pandemic year, driven by several products such as iron and steel (HS 72) increased by 134.3%; swiftlet nests (HS 0410) increased by 88.1%; paper and paper products (HS 48) up 133.3%; footwear (HS 64) increased by 19.8%; tin and its derivative products (HS 80) rose 544.1%; and aluminium and its derivative products (HS 76) increased by 2,031.5%. Second, imports from China have declined due to the supply chain issue caused by pandemic disruptions (Figure 3).

Source: Central Bureau of Statistics

In line with the surge in bilateral trade, investment from China has also increased. Indonesia has been actively promoting foreign direct investment (FDI) to support economic growth and create jobs for millions of its labour force. Under President Joko “Jokowi” Widodo administration, the Investment Coordinating Board (BKPM) has established a special task force to facilitate Chinese investment. The special desk provides consultation, facilitation, and information service in the Chinese language. Moreover, BKPM has actively conducted investment promotions in China in partnership with Chinese banks and business associations.

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Due to active investment promotion and facilitation, Chinese outward FDI to Indonesia has increased dramatically in the last few years (Figure 4). China’s ranking as a source of Indonesian inward FDI moved from 10th in 2008 to 2nd in 2019.\textsuperscript{12} Based on BKPM data, the realisation of Chinese FDI has increased drastically from $174 million in 2010 to $4.8 billion in 2020, but then dropped to US$ 3.1 billion later due to the Covid-19 pandemic in 2021 (Figure 4). It is important to note that some FDI from China may go through other entities such as Hong Kong or Singapore before flowing to Indonesia. This may underestimate the actual value of China’s FDI in Indonesia.

\textbf{Figure 5: Percentage of FDI from China and Hong Kong to total FDI (%)}

Source: Indonesia Investment Coordinating Board

Figure 5 shows that FDI from China has increased significantly since 2016, reaching 17 per cent of total FDI in 2019 and 2020. It then fell to 10 per cent in 2021 due to the Covid-19 pandemic, which caused some investment delays. Interestingly, FDI from Hong Kong has increased during the pandemic, reaching 15 per cent of total FDI in 2021.13

Figure 8: Chinese FDI by main sectors (US$ million)

Source: Indonesia Investment Coordinating Board

Figure 6 shows that most Chinese investments are concentrated in three sectors, the base metal & metal goods industry; electricity (power plants); and transport, warehouse, and telecommunication. Most of the mineral metal industry is located outside Java, concentrated in mineral-rich provinces such as Central Sulawesi, Southeast Sulawesi, and North Maluku.

Beyond trade and investment, China has also provided loan financing for infrastructure and manufacturing projects. Chinese loans have increased from US$ 11 billion in 2008 to US$ 254 billion in 2021 (Figure 7). According to Bank Indonesia data, China’s share of total outstanding foreign debt has increased over the last two years. In terms of percentage, loans from China have increased from around one per cent in 2008 to five per cent of Indonesia’s total outstanding foreign debt in 2021, still relatively small compared to those from Singapore (15%) and Japan (9%) (Figure 7). Yet, according to a study by Malik et al. (2021), Indonesia owes “hidden debt” to China, which is more than four times what is reported as sovereign debt. This is because almost 90 per cent of China’s overseas lending is directed to state-owned companies and private-sector institutions. Therefore, the debts do not appear on government balance sheets for the most part.14 In response, the Indonesian government argued that those are not hidden debts but investments by Chinese companies.

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13 Hong Kong is an investment hub, like Singapore, in which many companies have based themselves. Therefore, any investments from there would seem to be from Hong Kong by source although the actual investing company may be from a third country.
From the government’s viewpoint, as long as the loan arrangement is made by the business entities (B-to-B), the state has no responsibility to bail out if the projects become insolvent. It is, however, unclear what the state’s liability is if a project becomes bankrupt. This is because the type of the deals, i.e., who will cover the losses, the borrower vs the lender, is not made open to the public. Yet, Malik et al (2021) claim that Indonesia has $17.28 billion in hidden debt to China, or approximately two per cent of its GDP, which is somewhat misleading. Even though it may not show up on the government’s balance sheet, it should still show up in the financial account as a liability being incurred on the country’s balance of payments.  

Nevertheless, as Guild (2021) argues, this so-called ‘hidden’ debt is neither new nor unique to Chinese development financing. Many other countries, including the United States, have taken the same approach by providing infrastructure financing with deals that disguise the specific responsibility of the state for guaranteeing loans. Also, governments tend to obfuscate the precise role of the state and its responsibility for guaranteeing loans and de-risking investments for political reasons.

Current investments and BRI projects in Indonesia

Arguably the most well-known BRI project in Indonesia is the Jakarta-Bandung high-speed railway. In 2015, a Chinese consortium won the contract to build a 142.3 km high-speed rail from Jakarta to Bandung after beating Japan’s proposal. Initially, the project was scheduled to be completed within three years, i.e., in 2018, with four main stations in Halim, Karawang, Walini, and Tegalluar. Six years since the project’s groundbreaking in January 2016, the high-speed railway is still under construction. 

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16 Ibid.
speed rail has not been completed. One of the problems hindering the project construction is the difficulty in acquiring the land along the proposed route.

Moreover, the cost of the project has escalated to US$8 billion from an initial US$5.5 billion. In response to the cost overrun, the contractor then decided to cancel the development of a new station in Walini but move it to Padalarang, an old station. The cost overrun has also forced the government to provide capital injection to the consortium of state-owned companies responsible for managing the project. This state capital injection contradicts the initial agreement that the project would not receive the state’s budget financing. However, this policy decision seems unavoidable to save the project. The two-year COVID-19 pandemic has also disrupted work on the project. The officials later said that the project would be completed in 2022 (which means four years behind the initial schedule).

Another BRI project that has been in the spotlight is the 2,000-hectare Morowali Industrial Park (IMIP) on the island of Sulawesi. The park is a joint venture between China’s Tsingshan Group and local company Bintangdelapan Group and focuses on nickel-content stainless steel production in Bahodopi, Morowali district, Central Sulawesi Province. If the Jakarta-Bandung high-speed rail project seems to face an uphill battle to operate, Morowali Park has progressed very well. The park received strong political support from both Chinese and Indonesian leaders (Damuri et al 2019, Yean & Negara 2020). The project does not have a government guarantee and uses a business-to-business model, which Indonesia considers the ideal model for BRI cooperation (Negara and Suryadinata 2018).

The idea to develop the industrial park was announced at a 2013 summit between President Xi Jinping and President Susilo Bambang Yudhoyono. That year, both leaders agreed to upgrade the bilateral relations under a comprehensive strategic partnership agreement, which covered cooperation in many areas, including economy, trade, finance, fishery, space, and tourism.

In 2015, the park started its operation, producing nickel pig iron (NPI) and stainless steel for exports. To date, it has three industrial clusters, i.e., nickel-based stainless steel cluster, carbon steel cluster, and electric vehicle (EV) battery components cluster, which is currently under construction. The latter is part of the national development goal to promote clean and renewable energy programs.

The park's operation has significantly changed the structure of the local economy (Yean & Negara 2020). In 2013, the manufacturing industry's share in the region’s GDP was only around 11 per cent. By 2020, it has increased to 70 per cent (Figure 8). By 2020, it has contributed

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more than US$1.2 billion to government tax revenues. It is reported that Morowali Industrial Park directly employs around 44,000 workers, including 5,000 foreign workers. 

Figure 8: Morowali’s GDP by main sectors, (Rp billion)

Beyond creating economic benefits, however, there are also massive environmental costs of the park’s rapid development. The industrial park operation relies on a 3,200 MW coal-fired power plant. It needs 9 million metric tons of coal annually to run its power plant. Recently, it started to develop a 150 MW solar power plant to reduce its dependency on coal. This move comes from the pressure of Chinese shareholders, who are getting serious about paying attention to environmental issues.

The scale of this project, particularly the size of Chinese workers employed, has stimulated a backlash against an “invasion” of Chinese workers stealing local jobs. During the pandemic time, some videos went viral depicting thousands of Chinese workers demonstrating at the park during the social mobility restriction due to the Covid-19 pandemic. The provocative caption of the video said “this regime allows foreign workers do whatever they want while its people need jobs”. Later, the authority verified that the video was a hoax to attack the government. Previously, other videos depicted some Indonesian workers charged that Chinese nationals

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blocked them from reciting their Friday Muslim prayers. The authorities have responded quickly to such a report and found some misunderstandings between the Indonesian and Chinese workers due to language and cultural differences.

Finally, China’s BRI supports Indonesia’s development agenda in promoting some special economic zones (SEZ). One case in point is the Galang Batang SEZ in Bintan island, the Riau Islands province. The SEZ is built as an industrial hub for bauxite processing into aluminium. The SEZ was first proposed in August 2017 by PT Bintan Alumina Indonesia (PT BAI), a local mining company in Bintan. Previously, in 2014, PT BAI set up a US$2.6 billion joint venture with China’s Nanshan Group, to develop an alumina refinery complex with a total production capacity of around 2 million tons per year. Nanshan Group is based in China’s Guangdong Province and is a private company active in the infrastructure development and mining sectors (Hidayat and Negara 2020).

In October 2017, Jakarta approved the proposal and granted Galang Batang an SEZ status with PT BAI as both the developer and administrator. Investment in the SEZ is projected to reach Rp 36.3 trillion (US$2.5 billion) and create employment for at least 23,200 people by 2027. The project covers 2,334 hectares of land, of which the project developer has already acquired 75 per cent of it. The key construction projects in the SEZ consist of a seaport, a 6x25 MW coal-fired power plant, an alumina refinery plant and a smelting plant.

From Indonesia’s perspective, China’s investment in the Galang Batang project aligns with its ambition to promote downstream mining activities, i.e., the aluminium refinery industry. In addition to creating jobs for local people, the SEZ development will also improve connectivity by developing docking and port services. This, in turn, will create a multiplier effect in the region.

Nevertheless, the project developer has been facing several challenges. One is the supply of skilled workers. The company currently hires many Chinese workers because their technical skills and work ethos are superior to those of local workers (Hidayat and Negara 2020). Like in the Morowali case, the use of Chinese workers has become a sensitive issue since the local community perceives that Chinese workers are being favoured at their expense. The company employed about 800 Chinese workers and 3,000 local workers. During the pandemic, it was reported that the SEZ continued importing Chinese workers to build its (coal-fired) power plant and bauxite smelter.

In response to the need for skilled workers, both Morowali Industrial Park and Galang Batang SEZ have invested in training programs for the local workers. The former, jointly with the

Industry Ministry, has built a local polytechnic and provided an internship program and training centre for the Indonesian students. Meanwhile, the Galang Batang SEZ administrator collaborated with a training provider in China. It has sent some Indonesian workers to an engineering training programme in Nanshan, China. However, the number is relatively small compared to the number of skilled workers needed for the industry.

Another challenge is that some social and environmental impacts of the industrial park and SEZ’s development are often not fully considered by various stakeholders. The large investments on the islands have attracted people from across the country to migrate for job opportunities. As a result, economic disparities and cultural diversity pose a significant social challenge to local community cohesion. Also because of the fast-growing population and increased economic activities, the islands’ natural environment has come under considerable pressure. The intensive coal-fired power plant operations to support the industrial park and SEZ have also exacerbated the latter.

China is also reported to support the development of Indonesia’s future capital city, Nusantara, to be a green and smart city after Japan’s SoftBank pulled out from the steering committee for the project. This is in addition to China’s plan to invest in a green industrial estate project on the island of Borneo, which is close to the future capital. In December 2021, President Joko Widodo (Jokowi) called the start of the construction of Indonesia’s green industrial area in Tanah Kuning, Bulungan, North Kalimantan. He said the project is meant as a "leapfrog" for Indonesia’s economic transformation towards a green economy. The investment cost for the green industrial area is approximately US$ 132 billion for all stages of construction and commercialisation in the next eight years. The first phase of the construction project is targeted for completion in 2024 and operating in stages from 2025 to 2029. Chinese investors are reportedly building five dams to generate 9,000 MW of electricity.

The Chinese projects discussed show that it is incorrect to generalise Chinese BRI projects into specific narratives, such as China's “debt-trap diplomacy”. As of 2021, the official data shows China’s loan remains relatively low, around five per cent of Indonesia’s total external debt or about 0.02 per cent of GDP. The Indonesian government determines all the projects discussed in this paper following its development agenda. Instead of political or security, economic factors are the primary driver of the current BRI projects. In some cases, China’s development financing system is not too transparent and poorly coordinated to pursue detailed strategic objectives. Nevertheless, how Chinese capital flows are being intermediated in each project makes all the difference. Some are being channelled into productive investment, such as Nickel and Bauxite smelters for export purposes.

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33 https://www.indonesiana.id/read/150329/komitmen-pt-imip-dalam-perkuat-sdm-di-morowali

NON-SENSITIVE
On the contrary, despite its low economic viability, the high-speed rail project is designed to build better transport infrastructure and develop the area along the rail route. This goal is part of the Indonesian government's development priority, not the Chinese. Will this project put Indonesia at higher debt risk? The answer to the question remains to be seen, depending on the growth of urban agglomeration along the rail route. Will all the BRI projects put more pressure on the environment and community? The answer to this question is undoubted yes. But the net effect will depend on how China and Indonesia can work jointly to address those spillover impacts of the projects.

**Indonesian Perspective on BRI**

Indonesian perceptions of the BRI vary according to different stakeholders. The government generally regards China as a strategic partner for its development agenda (Herlijanto 2017, Negara & Suryadinata 2018, Damuri et al. 2019). They welcome BRI as an opportunity to tap Chinese capital and technology to support Indonesia’s infrastructure development goals. The Indonesian private sector, however, has quite a mixed view. For large businesses, especially those with connections with Chinese businesses, BRI is seen as an opportunity to promote commercial relations. On the contrary, small- and medium-scale Indonesian businesses regarded BRI as a potential threat and would bring more harm than benefit them. These SMEs have faced fierce competition with cheap Chinese products, and many have been shut down over the past decade (Yuniarto 2019).

For the laypeople, Chinese business models are alien to them, and this can create mistrust and friction. Most if not all Chinese projects utilise labour and materials sourced from mainland China. The use of Chinese migrant workers, particularly, has triggered negative sentiment towards Chinese investment, including BRI (Negara & Suryadinata 2018, Damuri et al. 2019, Suryadinata 2020). Although highly-skilled Chinese workers, such as technicians and managers, are welcomed, most people oppose the coming of workers with low skills, for they are considered to threaten the local job markets (Fossati et al, 2017).

China issues remain politically sensitive in Indonesia. The anti-China or anti-Chinese (with implications for Chinese Indonesians) sentiment has been deeply rooted in society (Herlijanto 2017, Negara & Suryadinata 2018, Damuri et al. 2019). There are continuous suspicions against China and the Chinese, whom some parts of Indonesian communities consider as 'alien' and a 'threat' to their livelihood. During Jokowi’s time, several anti-Chinese demonstrations were fuelled by a growing number of mainland Chinese workers working on various Chinese projects. The public perception drives this negative sentiment that mainland Chinese workers have stolen the local jobs (Damuri et al. 2019, Suryadinata 2020). Although the number of mainland Chinese workers is below 40 thousand, there are still around 9-10 million unemployed.

Growing economic relations with, especially investment and loans from, China have been seen as rising Indonesia’s dependency on China. A recent survey conducted by Lowy Institute found

that only 30% of Indonesians say they favour a company, bank or investment fund from China buying a controlling stake in a major Indonesian company. Plausibly, China’s economic dominance leads to concern among the general public that the BRI cooperation will benefit China more than Indonesia (Negara & Suryadinata 2018, Damuri et al. 2019, Yuniarto 2019). And these perceptions might change depending on the domestic political-economy situation. For instance, under the Jokowi’s administration, China’s migrant workers’ issue has been used to attack the policy of the President that gives the red carpet to Chinese investment (Suryadinata 2020). Moreover, the Natuna sea issue, where China’s maritime territorial claim intersects with Indonesia’s maritime exclusive economic zone, might also influence Indonesia-China relations. So far, both governments prefer to resolve any issue regarding Natuna peaceably to maintain good bilateral relations. One case in point is the incident involving a Chinese coast guard vessel and the Indonesian Navy in 2016, in which the former intervened to free a Chinese fishing boat arrested by the latter in the Natuna sea. This encroachment into Indonesian waters by the Chinese had been dealt with quietly as both governments prioritised stability in their diplomatic relations (Suryadinata 2016).

Financing Challenges to achieving low carbon ecosystem

To improve the quality of future BRI projects, both China and the partnering countries must play their respective part. Given that most of the BRI projects are driven by host countries’ development needs instead of China’s policy direction per se, understanding host countries’ development plans in greater detail is important as they will continue to drive future investments.

For instance, while China promised to reduce the financing for coal-fired power plants, a feasible alternative is not readily available for countries like Indonesia. Currently, Indonesia remains highly dependent on fossil fuels, especially coal. Will China’s BRI stop financing Indonesia’s coal-fired power plants? The answer is not necessarily. There will be various considerations taken to continue funding such projects.

Based on the government’s projection, to meet Indonesia’s climate target of reducing 29% carbon emissions by 2030, the country will need an investment of at least USD365 billion, approximately more than a third of its 2020 GDP (Table 1). The financing capacity to achieve the 29% carbon emission reduction target is still insufficient. Public and private funds can only cover about 60% of the total financing need. If available, the rest must be filled from another financing source, including BRI. For a more ambitious target, i.e., 41% carbon emissions reduction by 2030, the financing gap reaches 55% of the total financing need.

Table 1: Financing needs to reach Indonesia’s carbon emissions targets by 2030

(Rp trillion)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Public</th>
<th>Private</th>
<th>Gap</th>
<th>Share of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>29% target</td>
<td>365</td>
<td>97</td>
<td>120</td>
<td>148</td>
<td>34%</td>
</tr>
<tr>
<td>41% target</td>
<td>479</td>
<td>97</td>
<td>120</td>
<td>262</td>
<td>45%</td>
</tr>
</tbody>
</table>

Note: Indonesia’s GDP in 2020 is $1,058 billion

Source: Ministry of Finance (2021)

Key to the carbon emissions reduction is a smooth energy transition from fossil fuel to renewable energy. However, the financing needs to transition the energy and transportation sector into a low-carbon level is enormous. According to the Roadmap Nationally Determined Contributions (NDCs) mitigation report, Indonesia needs Rp 3,500 trillion (approx. US$245 billion) to meet its emissions reduction target in 2030 (Table 2).

Table 2: Financing needs by sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>Financing needs (Rp trillion)</th>
<th>Emissions reduction targets (Mton CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forestry</td>
<td>78</td>
<td>93</td>
</tr>
<tr>
<td>Energy &amp; transportation</td>
<td>3,307</td>
<td>3,500</td>
</tr>
<tr>
<td>Industry &amp; consumer</td>
<td>41</td>
<td>1</td>
</tr>
<tr>
<td>Waste</td>
<td>30</td>
<td>181</td>
</tr>
<tr>
<td>Agriculture</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>3,461</td>
<td>3,779</td>
</tr>
</tbody>
</table>


The question is will BRI be available to fill this financing need. It remains to be seen if both countries can agree on any green and clean BRI projects to be undertaken. China will not easily

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42 Nationally determined contributions (NDCs) are critical part of the Paris Agreement. They signify efforts by each country to reduce national emissions and adapt to the impacts of climate change. The Paris Agreement (Article 4, paragraph 2) requires each Party to prepare, communicate and maintain successive nationally determined contributions (NDCs) that it intends to achieve.
grant any green project proposal from the Indonesian side. Learning from the Jakarta-Bandung high-speed railway project, China will carefully select the type of projects that will likely be quickly implemented and economically viable.

Moreover, for Indonesia, there is a more pressing issue than just transition toward green energy, i.e., addressing energy poverty in various parts of the archipelago. Many of its citizens in rural and remote areas still have no access to electricity. So providing affordable electricity, which is not necessarily green or clean, for its population remains high on the political agenda. And investment and financing from China will likely continue to be sought after for that purpose.

**Implementation challenges**

While both China and Indonesia have committed to conform to the environmental goals and achieve the targets of the United Nation’s Sustainable Development Goals, they face an uphill task of preparing concrete policy frameworks and even more to enforce them. As discussed above, the existing poverty and inequality among the population and the lack of sustainable finance for climate change and energy transition initiatives may complicate the implementation of any green and clean industries.

One case in point is related to the transition to low-carbon development. This transition depends on the progress of phasing out coal-fired power plants. Yet, this will not be easy for Indonesia, where coal is the country’s most significant energy source (Figure 9). The combined installed capacity of Indonesia’s coal plants is 37 gigawatts (GW), nearly half the installed capacity of all power plants in the country.43

**Figure 9: Energy production in Indonesia (million terajoules/TJ)**

![Energy production in Indonesia](https://databoks.katadata.co.id/datapublish/2022/01/26/kapasitas-pembangkitan-listrik-indonesia-capal-7374-gw-pada-2021-pltu-mendominasi.png)

Source: Statistics Indonesia

Moreover, the existing government energy plan, “Long-Term Strategy for Low Carbon and Climate Resilience 2050”, shows that coal still constitutes significant energy production in the long run. And currently, due to political and economic considerations, the government is

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Given the above condition, can Indonesia attract more Chinese BRI investment in the green and clean energy sector? The answer depends on the political commitment of China and Indonesia and the capacity of the host country to enforce the regulations. The Indonesian government cannot expect China to do due diligence on their behalf. As the former decide on the projects to be funded under BRI, it must take greater responsibility for ensuring that projects are viable and financially sustainable.

In fact, Indonesia has set its own terms such that investors must: adhere to standards for environmentally friendly practices; use local labour on the projects; and facilitate technology transfer to local partners.\footnote{https://money.kompas.com/read/2021/01/13/195028326/mengupaskerja-sama-investasi-chinadi-indonesia. Accessed 27 May 2022.} Overall, the projects must benefit Indonesia economically, which seems natural from the host country’s perspective. Some of the terms may be difficult for China to accept. For instance, the use of local human resources and local products. Typically, BRI projects utilise labour, equipment and materials sourced from China. But many of such inputs are perceived to have lesser standards of environmental and social regulations (Damuri et al 2019, Yuniarto 2019). Specifically, from Indonesia’s perspective, Chinese labour in BRI projects has been a contentious issue and a source of anti-Chinese sentiment in the country. Therefore, the government will be cautious in involving China's investment and financing resources in some strategic projects, including the green-clean infrastructure projects. The Coordinating Maritime Affairs Minister, Luhut Pandjaitan, said that the government offered China to invest in priority projects such as ports, ore smelters, industrial estates, power plants, and tourist sites in North Sumatra, North Kalimantan, North Sulawesi, and Bali.\footnote{https://maritim.go.id/menko-luhut-indonesia-alokasikan-empat-koridor-pada-proyek-bri/. Accessed 27 May 2022.} These four locations, home to Jokowi’s voters, indicate a way to avoid opposition from the conservative groups. At the same time, the government said the four provinces are also offered to other countries, indicating there is no exclusivity.

While renegotiating the terms with China may not be Indonesia’s preferred approach, it may become a case of necessity. For Indonesia, procuring more investment for infrastructure projects is vital for its long-term economic growth, and it is currently falling short of the investment required. Therefore despite the risk, partnerships that involve Chinese companies and technology cannot be avoided if the government wants to see progress in this area. It is part of the authority's responsibility to ensure the projects given to any investors will benefit the community. They also need to anticipate and respond to economic-social impact due to the influx of foreign (not only Chinese) investments into the area. As such, Indonesia must bolster its domestic regulations and inspection and enforcement capacities to ensure that projects do not inflict social and environmental harms.
Concluding Thoughts

Despite the apparent benefits the China-led BRI can bring to the country, Indonesia maintains a cautious attitude toward the initiative. Following the global trends, China and Indonesia will emphasise improving the quality of BRI investment and, more importantly, contributing to the long-term sustainable development goals and climate change.

Based on the BKPM’s data, most Chinese investment in Indonesia went into the base metal and metal goods industry, transport, and electricity sectors. We expect this investment pattern will continue even after the green BRI is launched. Specifically, the financing for coal-fired power plants will continue given the political economy consideration in the host country, i.e., Indonesia. If China seriously stops financing such power plants, we will expect fewer BRI projects in the electricity sector. China's investors, who are primarily driven to make profit, will only come after weighing the risks and viability of such ‘green and clean’ investment.

We show that while those Chinese projects have contributed to local economic growth, they also generated some fears about adverse environmental and social impacts. The government is aware of this concern and is expected to be more cautious about granting Chinese contractors or workers licenses. This will also affect the size and composition of future BRI projects.

Finally, future BRI projects need to be designed to better understand the two countries’ national interests, culture, history, and social realities. Indonesia, at the moment, is more interested in seeking the economic benefit of joining BRI rather than strategic gains. This is because China has become Indonesia's key economic partner. Nevertheless, scepticism among the lay public on China and the BRI and the negative perceptions of the initiative will continue to afflict the implementation of future projects under this initiative.

References


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