



China Belt and Road Initiative (BRI) Investment Report H1 2022

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China Belt and Road Initiative (BRI)

Investment Report H1 2022

Key findings

- **BRI finance and investments is steady at low levels** in the first half of 2022 at US\$28.4 billion (compared to US\$29.6 billion in the first half of 2021), 42% through investments;
- Since 2013, **cumulative BRI engagement amounts to US\$932 billion**, about US\$561 billion in construction contracts, and US\$371 billion in non-financial investments;
- **No coal projects** received financing or investments in the first half of 2022;
- **Oil and gas investments constituted about 80% of Chinese overseas energy investments** and 66% of Chinese construction contracts;
- **Green energy total engagement (solar, wind, hydro) in H1 2022 dropped** by 22% compared to H1 2021 to about US\$3 billion (investments increased by US\$1 billion to US\$1.4 billion; construction projects declined by US\$1.8 billion);
- **Average deal size for construction projects is getting smaller**, dropping from US\$558 million in 2021 to US\$325 million in H1 2022 (average deal size for investment projects increased, driven by a single US\$4.6 billion transaction in oil);
- Major recipient of Chinese investments was Saudi Arabia, while various countries saw **no Chinese engagement in H1 2022, including Russia, Sri Lanka, and Egypt**;
- BRI engagement increased particularly in the technology sector (300% growth compared to H1 2021);
- **China's engagement in BRI countries continued to outperform** those in non-BRI countries;
- BRI engagement in H1 2022 was **dominated by state-owned companies (SOEs)**;
- In 2021, **global FDI into emerging economies developed significantly faster growing 40%** (excluding FDI into China) compared to China's BRI investments.
- For the second half of 2022, much uncertainty can be expected with Chinese BRI engagement to stable at lower levels;
- Potential engagement can be found in **five project types**: strategic assets (including ports), trade-enabling infrastructure (including pipelines, roads), ICT (e.g., data centers) resource-backed deals (e.g., mining, oil, gas), high visibility projects (e.g., railway);
- For H2 2022, better opportunities lie in **investing in smaller projects** that are quicker to implement (e.g., solar, wind), while several projects might be mothballed;
- Chinese contractors can increasingly benefit from international and multilateral financing with growing experience and requirements of Chinese regulators in applying international environmental standards (e.g., Equator Principles).



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China's finance and investments in the Belt and Road initiative (BRI)

Chinese engagement through financial investments and contractual cooperation for the first half of 2022 in the 147 countries of the Belt and Road Initiative¹ was about US\$28.4 billion. This is an increase of 47% compared to the originally reported deals of the first half of 2021 – and about equal to the corrected numbers of H1 2021. Of this engagement, about US\$11.8 billion was through investments, and US\$16.5 billion through construction contracts (partly financed by Chinese loans). China's overall engagement shows

a steady development since 2020 from the onset of COVID-19, and compares to Chinese engagement of about US\$48.5 billion for the first 6 months of 2019 (see Figure 1). BRI engagement dropped significantly the second quarter of 2022 compared to the first quarter.

Cumulative BRI engagement since the announcement of the BRI in 2013 is US\$932 billion, about US\$561 in construction contracts, and US\$371 in non-financial investments.

About the data:

On June 28, 2022, the Chinese Ministry of Commerce (MOFCOM) released its data for “China's investments and cooperation in countries along the Belt and Road” covering the period of January to May 2022.²

According to these data, Chinese enterprises invested about US\$89.9 billion in non-financial direct investments in countries “along the Belt and Road” (a year-on-year increase of 10.2%). Furthermore, there were 1,840 newly signed projects with a total contract value of over US\$38 billion (a year-on-year decrease of 18.3%). The MOFCOM data focus on 55 countries that are “along the Belt and Road” – meaning on a corridor from China to Europe including South Asia.³

For this report, the definition of BRI countries includes 147 countries that had signed a cooperation agreement with China to work under the framework of the Belt and Road Initiative by the June 2022. We base our data on the China Global Investment Tracker⁴ and our own data research at the Green Finance & Development Center affiliated with Fudan University, Shanghai.

As with most data, they tend to be imperfect and need regular updating.

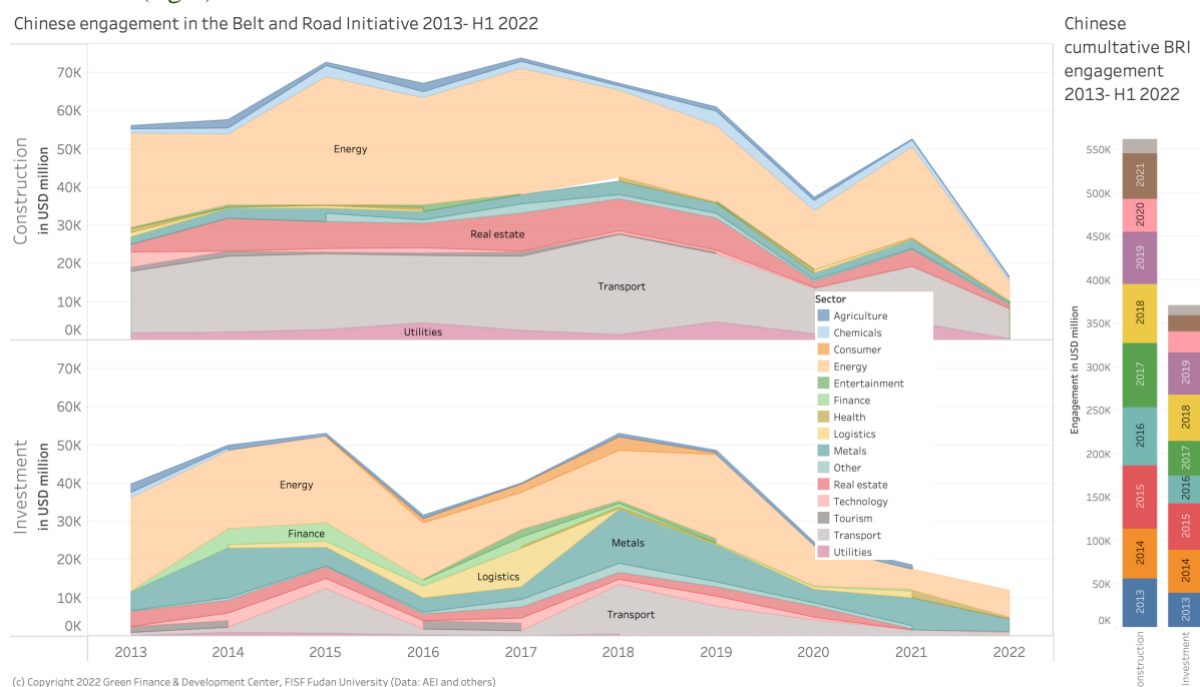
¹ <https://greenfdc.org/countries-of-the-belt-and-road-initiative-bri/>

² <http://www.mofcom.gov.cn/article/tongjiziliao/dgz/202206/20220603322656.shtml>

³ <https://mp.weixin.qq.com/s/jzOoljIBBr3N7LjUYd3bBw>

⁴ Scissors Derek, “China Global Investment Tracker 2021,” China Global Investment Tracker (Washington: American Enterprise Institute (AEI), January 2022), <http://www.aei.org/china-global-investment-tracker/>.

Figure 1: China's BRI construction engagement (top) and investments (bottom) 2013 – H1 2022, cumulative (right)

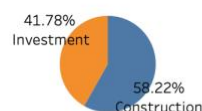


Share of investments in China's BRI engagement higher compared to construction

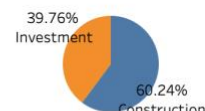
The share of Chinese investment over construction in the BRI has been increasing in the first half of 2022: investments reached about 42% of BRI engagement compared to 26% in 2021. In H1 2022, the share of construction in China's BRI engagement was 58% of total BRI engagement. Many of the construction contracts are financed through loans provided by Chinese financial institutions and/or contractors with the project often receiving guarantees through the host country's government institutions (see Figure 2).

Figure 2: Share of construction and investment engagement in the BRI

Current share in 2022



Average share 2013-2022



Investment deal size is getting larger, construction smaller

The average deal size for investments has increased slightly from about US\$394million in 2021 to US\$456 million in H1 2022. Compared to 2015, the investment deal size in 2014 is 75% smaller.

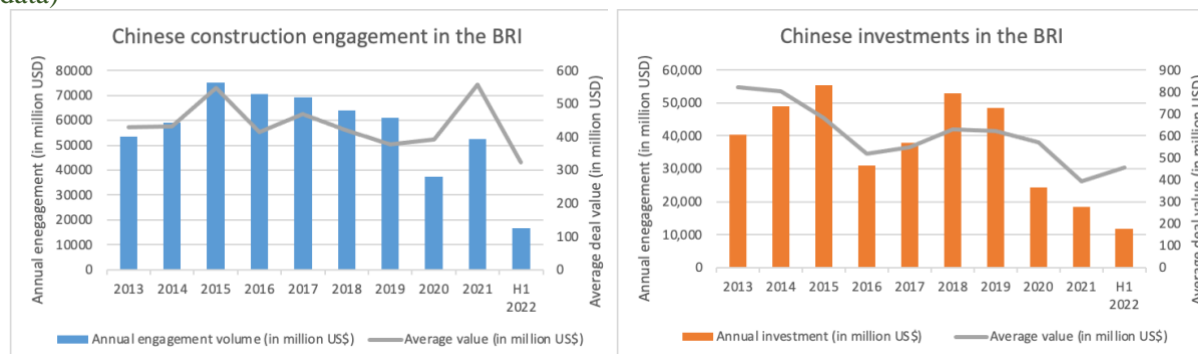
For construction projects, the deal size in H2 2022 was significantly smaller than in 2021, with about US\$5324 million in 2022 compared to US\$558 million in 2021.

A reason might be that some large investment deals were resource backed (e.g., oil, gas) driving up average values. In

contrast, construction projects tended to be smaller, possibly as they rely on sovereign guarantees that became harder to secure due to tighter recipient

government budgets and adjusted risk management models of Chinese financial institutions (see Figure 3).

Figure 3: Deal size of Chinese engagement in the BRI: left, for construction projects; right investments (Source: Green Finance & Development Center, FISF Fudan University, based on AEI data)



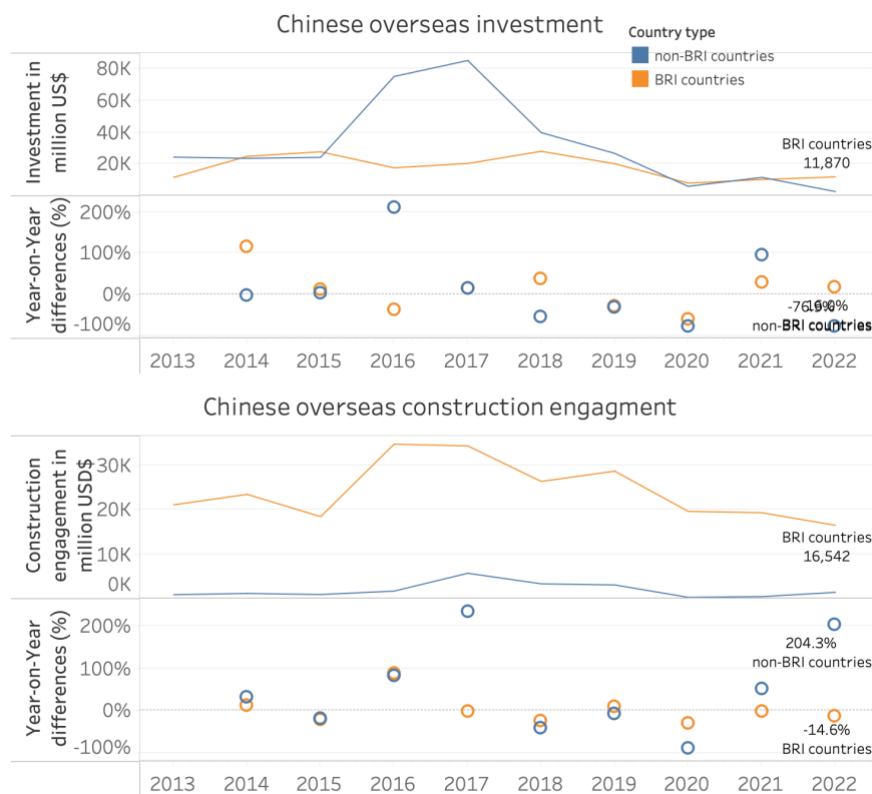
BRI countries continue to outperform non-BRI countries

Chinese construction and investment activities in the BRI in H1 2022 were about US\$24 billion higher than in non-BRI

countries: in investment deals, BRI countries outperformed non-BRI countries by US\$9 billion; in construction engagement, BRI countries outperformed non-BRI countries by US\$ 15 billion.

Figure 4: Chinese overseas engagement 2018 – 2022 (each H1) in BRI and non-BRI countries
(Source: Green Finance & Development Center, FISF Fudan University, based on AEI data)

Chinese engagement in BRI and non-BRI countries 2013-2022 (each H1)



(c) Copyright 2022 Green Finance & Development Center, FISF Fudan University (Data: AEI and others)

Regional and country analysis of Chinese BRI engagement

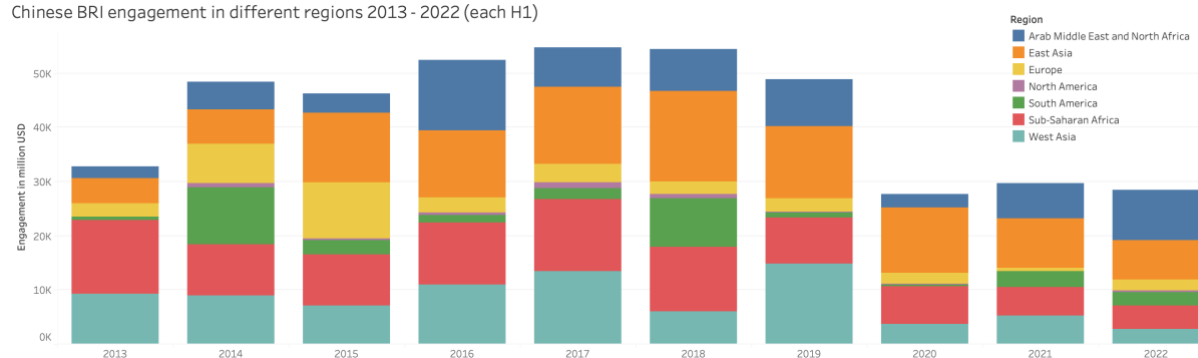
Strong engagement in Middle Eastern countries, as well as in East Asia

Chinese BRI engagement was not evenly distributed among all regions. BRI countries in the Middle East received the largest share of Chinese BRI engagement (about 33% in H1 2022). Middle Eastern countries received about 57% of Chinese BRI investments in H1 2022. Middle

Eastern countries increased their share of overall BRI engagement from 8% in H1 2020 to about 32% in H1 2022. Contrary, countries in East Asia saw their share of investments drop from 48.8% in H1 2020 to 10.7% in H1 2022 (see Figure 5). At the same time, East Asian countries could expand their share of construction engagement from 14% in H1 2021 to 35% in H1 2022.

Figure 5: Chinese engagement in different BRI regions

Chinese BRI engagement in different regions 2013 - 2022 (each H1)

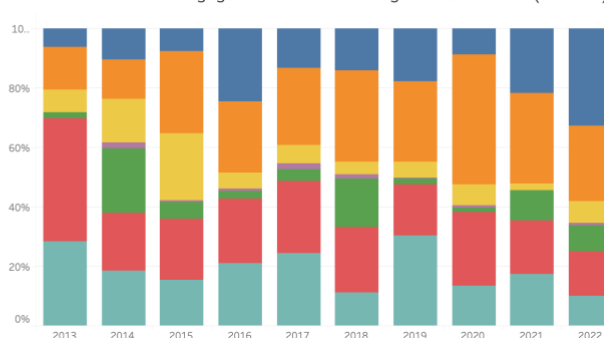


Growth/decline of BRI engagement in different regions (comparing H1)

		2015	2016	2017	2018	2019	2020	2021	2022
Sub-Saharan Africa	Construction	-17%	24%	32%	-31%	-14%	-5%	-64%	6%
	Investment	117%	13%	-26%	93%	-53%	-66%	341%	-37%
Arab Middle East and North Africa	Construction	-34%	261%	-62%	34%	-4%	-59%	107%	-50%
	Investment	332%	224%	-43%	86%	-100%		399%	
West Asia	Construction	-19%	97%	40%	-64%	106%	-63%	54%	-55%
	Investment	-23%	3%	-21%	-16%	209%	-87%	-17%	14%
South America	Construction	15%	-26%	-50%	30%	-77%	-40%	1,067%	4%
	Investment	-91%	-100%		451%	-91%	-66%	558%	-34%
East Asia	Construction	-12%	123%	25%	-0%	-4%	6%	-4%	-4%
	Investment	174%	-29%	8%	32%	-32%	-21%	-48%	-57%
Europe	Construction	-78%	-10%	-44%	580%	106%	-29%	-92%	1,675%
	Investment	75%	-75%	28%	-63%	-61%	2%	15%	-100%
North America	Construction	130%	-17%	468%	-24%	-80%	44%	-100%	
	Investment	-100%		-100%					

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Share of Chinese BRI engagement in different regions 2013 - 2022 (each H1)



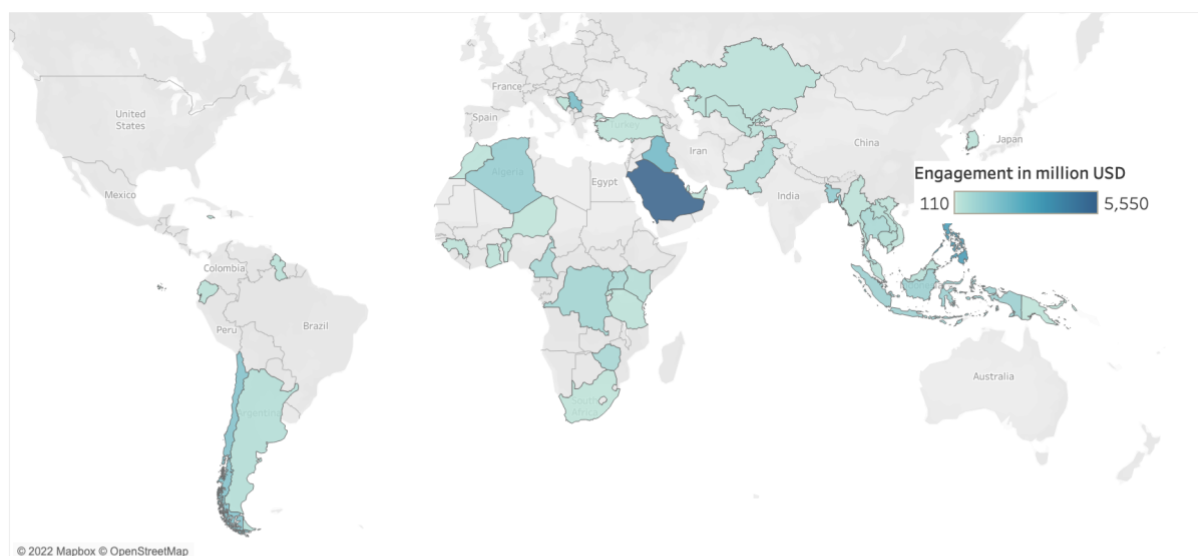
China's financing and investment spread across 42 BRI countries in H1 2022, with 15 countries receiving investments and 35 with construction engagement. The country with the highest construction volume in H1 2022 was the Philippines, with about US\$3.3 billion, followed by Serbia (about US\$1.9 billion) and Iraq (about US\$1.5 billion). Regarding BRI investments, Saudi Arabia was the single largest recipient with about US\$5.5 billion

in investments, followed by Democratic Republic of Congo (US\$600 million) and Indonesia (about US\$560 million).

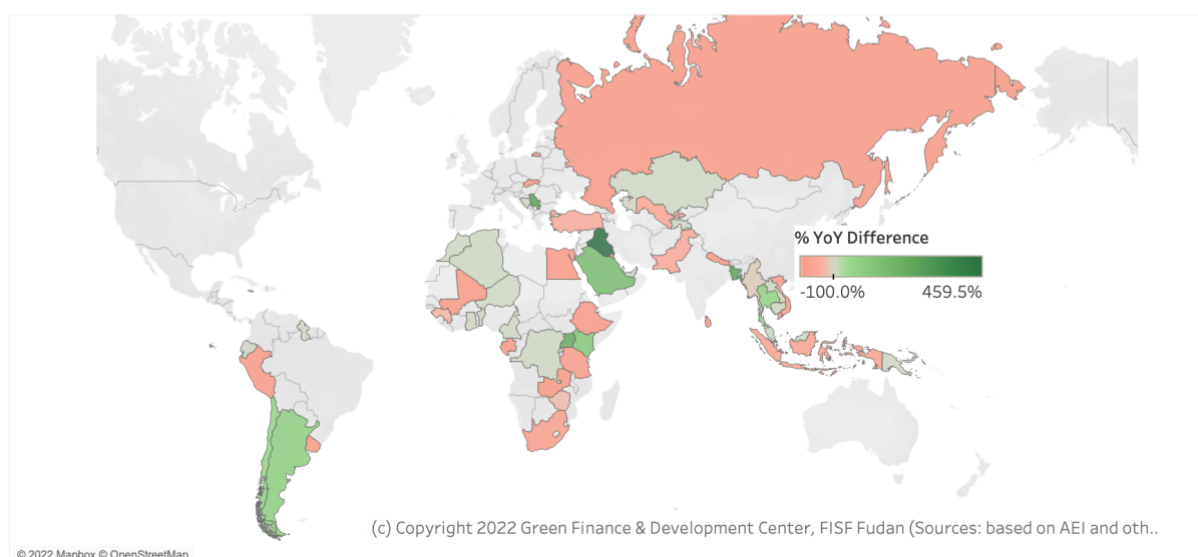
Multiple countries saw a 100% drop of BRI engagement compared to H1 2021, such as Russia, Egypt, while China's engagement in Pakistan for the China Pakistan Economic Corridor (CPEC) dropped by about 56% (see Figure 6).

Figure 6: Trends of Chinese BRI engagement across different countries 2022 (top) and comparison of H1 2021 and H1 2022 (bottom)

Chinese total engagement in the Belt and Road Initiative (BRI) in 2022



YoY Difference



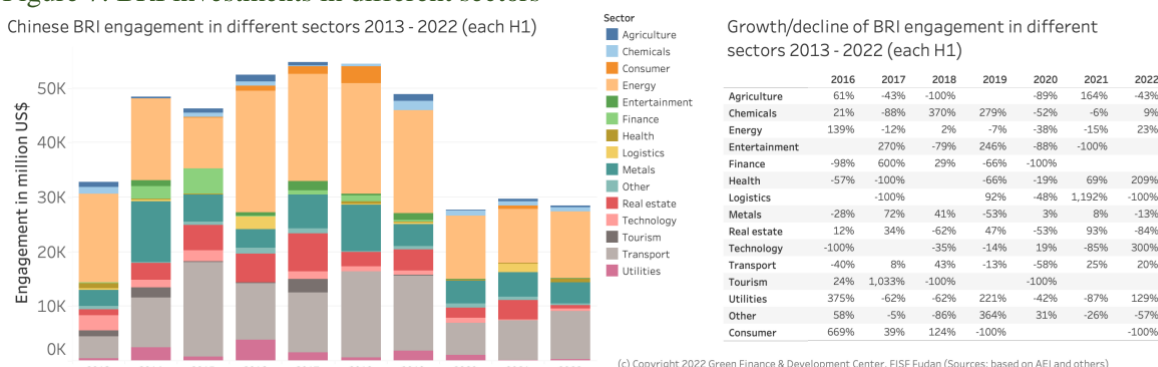
Sector trends of BRI engagement

Chinese contractors and investors were engaged across fewer sectors in H1 2022 than in previous years. The focus of BRI in infrastructure, particularly in energy and transport, expanded to about 73% in H1 2022 (up from 63%% in 2021).

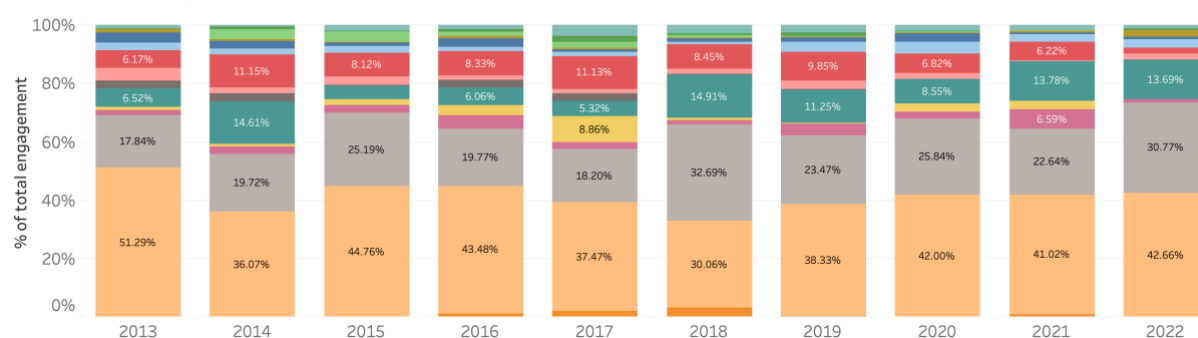
In H1 2022, particularly the technology sector experienced a significant growth of engagement of 300% compared to H1 2021, followed by the health sector with a growth of 209%. This compares to a drop of investments in logistics, consumer products, and agriculture) (see Figure 7).

Figure 7: BRI investments in different sectors

Chinese BRI engagement in different sectors 2013 - 2022 (each H1)



Sector share of BRI engagement 2013- H1 2022

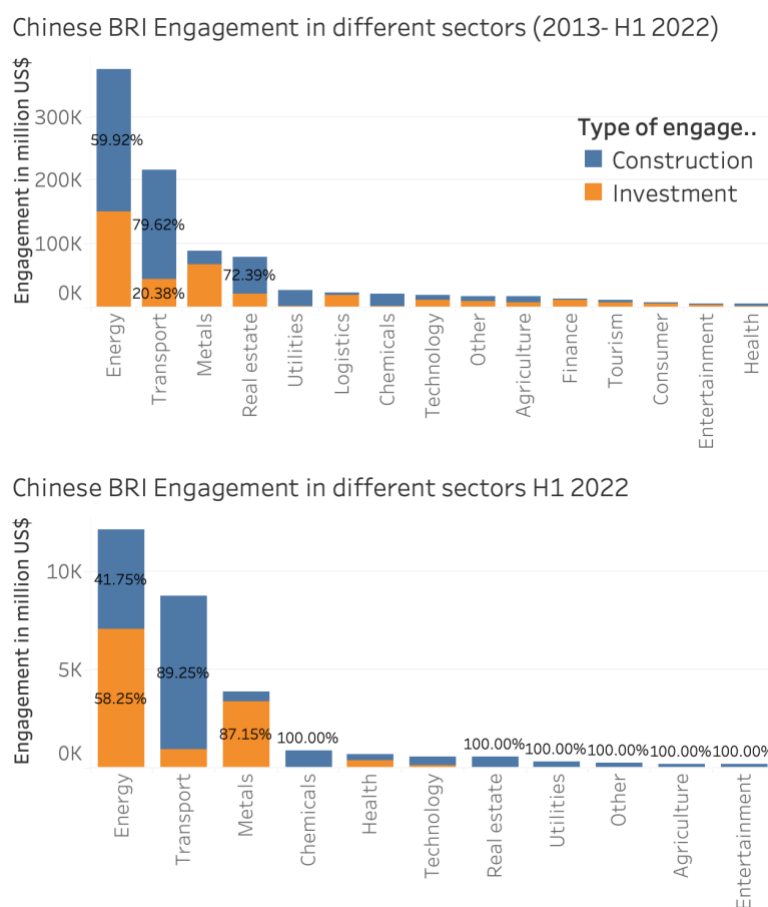


Of growing importance is the mining sector particularly in African and Latin American countries. For example, the latest preliminary agreement worth US\$1.83 billion (not part of the current dataset due to its preliminary nature) is the PowerChina deal in Democratic Republic of Congo. The project is expected to produce 2.2 million tonnes per annum (MTPA) of granular muriate of potash over an initial 31-year life. Yet, mining projects have also run into considerable issues, such as denials of a government takeover of the Tenke copper-cobalt mine currently by China Moly, which was suspected to understate its levels of reserve to reduce royalties to the government.⁵

When distinguishing Chinese BRI engagement in different sectors between investment and construction, data show that total engagement in the energy sector is about evenly split between construction and investments for the years 2013-2022, but increased to about 58% investments in H1 2022. This contrasts to transportation engagement, which is mostly through construction contracts (e.g., road construction, airports, shipping), and only 20% through investments (e.g., ports). Metals, meanwhile, constitute the second largest investment sector for Chinese engagement in the countries of the BRI (see Figure 8).

⁵ <https://www.aljazeera.com/news/2022/6/10/update-1-china-moly-denies-congo-administrator-takes-over-its-tenke-copper-cobalt-mine>

Figure 8: Chinese BRI engagement in different sectors through construction and investment (2013-H1 2022)



Energy-related engagement in the BRI

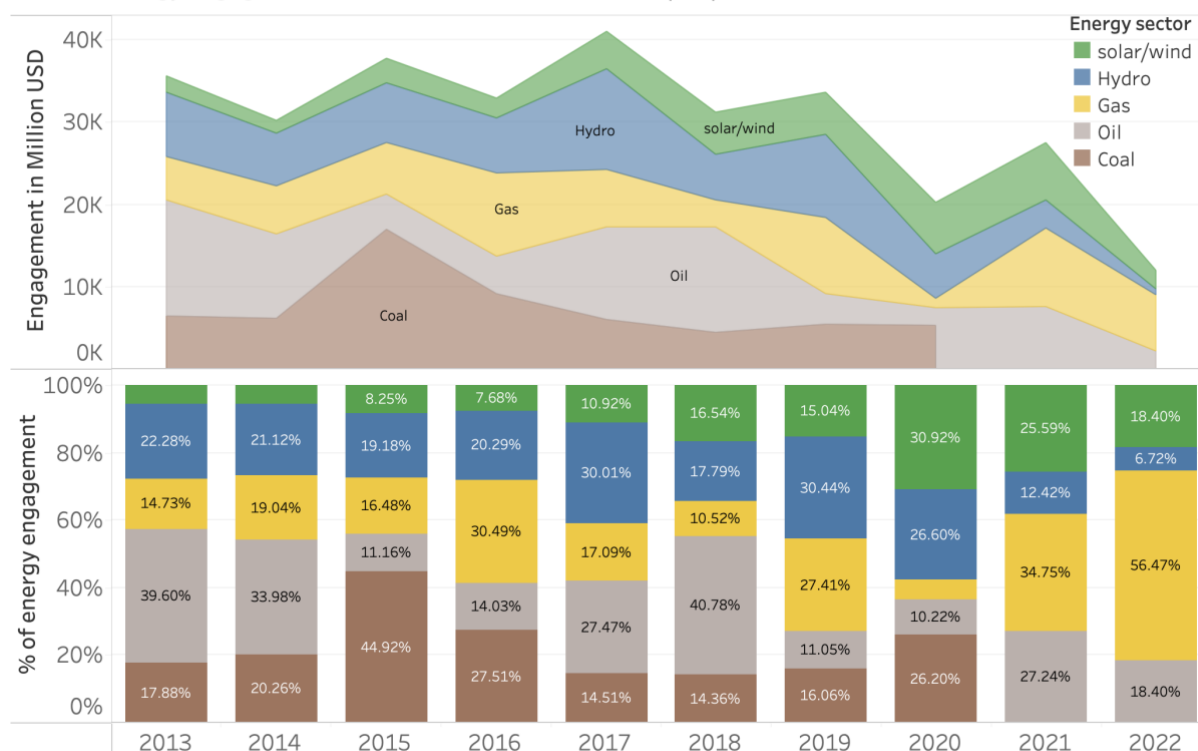
Chinese engagement related to the energy sector constitutes most of China's BRI engagement. In H1 2022, total engagement in the energy sector reached about US\$11.9 billion. This compares to more than US\$8.8 billion engagement in

H1 2021 and more than US\$18 billion in 2019.

In H1 2022, most energy engagement went into gas (56%), followed by solar and wind (18%) and oil (18%).

Figure 9: Chinese total energy engagement in the Belt and Road Initiative (BRI) 2013- H1 2022

Chinese energy engagement in the Belt and Road Initiative (BRI) 2013- H1 2022



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Coal

China did not engage in coal-related investments or construction projects since 2020, but some plants have been announced.

Since the announcement by China not to build new coal fired power plants in September 2021, China aimed to specify through the “Opinions on promoting green development of ‘One Belt One Road’” published by four ministries in March 2022 that explained to not build “new” coal fired power plants. One question, however, is how to deal with already approved or agreed on coal-fired power plants, including 11.2 gigawatts that have secured financing and the necessary permits but are yet to begin construction.⁶ Another issue are captive

power plants: in February 2022, China Energy Engineering Corporation won the bid for a 4 x 380-megawatt thermal power plant on Obi Island, Indonesia. The project owner is PT Halmahera Jaya Feronikel, a joint venture between Chinese Lygend and Indonesia’s Harita Group, which is a captive power plant in an industrial park in Indonesia.⁷

Oil and gas

Oil and gas investments also constituted about 80% of Chinese overseas energy investments and 66% of Chinese construction contracts.

Gas engagements were higher than in previous two years and constituted 56% of China’s energy engagement: in all of 2021, China’s engagements in gas totaled US\$9.5 billion, while the first half of 2022

⁶ <https://energyandcleanair.org/2022-chinese-overseas-coal>

⁷ <https://thepeoplesmap.net/globalchinapulse/chinas-overseas-energy-investments-after-the-no-coal-pledge-an-assessment/>

has already seen US\$6.7 billion of gas engagements. Main recipient of gas investments was Saudi Arabia (about US\$4.6 billion), followed by Iraq.

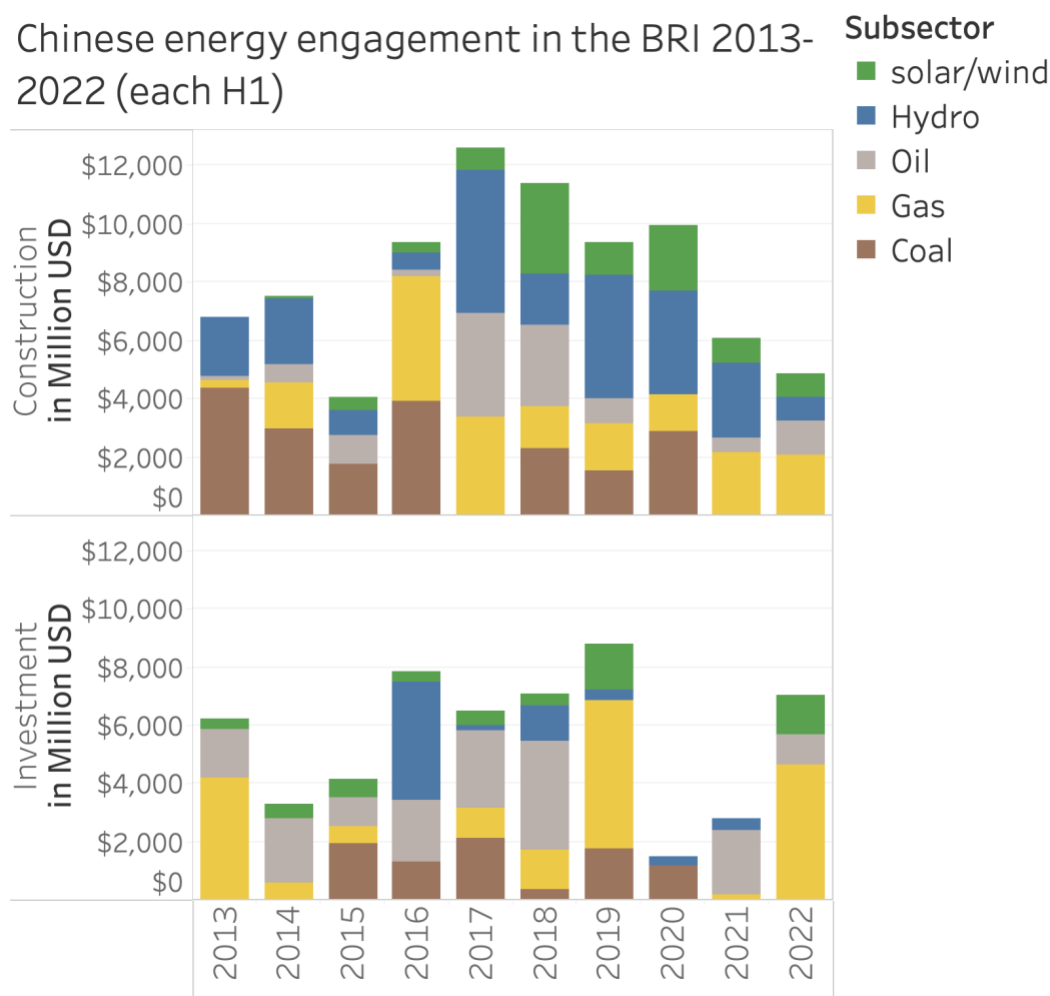
China's engagement in oil-related projects in the BRI constituted about 18% of total Chinese energy engagement in the BRI, amounting to about US\$2.2 billion in H1 2022 (down from US\$2.7 billion in H1 2021). These contracts were made in four countries: Iraq, Uganda, Algeria, and Ecuador.

Green energy/hydropower

China's engagement in green energy (solar and wind) and hydropower amounted to about US\$3 billion in H1 2022. This compares to US\$3.8 billion engagement in H1 2021 and US\$6.5 billion in H1 2018 (see Figure 9).

Chinese green energy and hydropower investment were US\$1.4 billion in H1 2022 (compared to US\$400 million hydro investment in H1 2021). Construction projects related to green energy (including hydropower) decreased from US\$3.4 billion in H1 2021 to US\$1.6 billion in H1 2022.

Figure 10: Chinese energy engagement through investment and construction in the BRI 2013-2022 (each H1) by subsector



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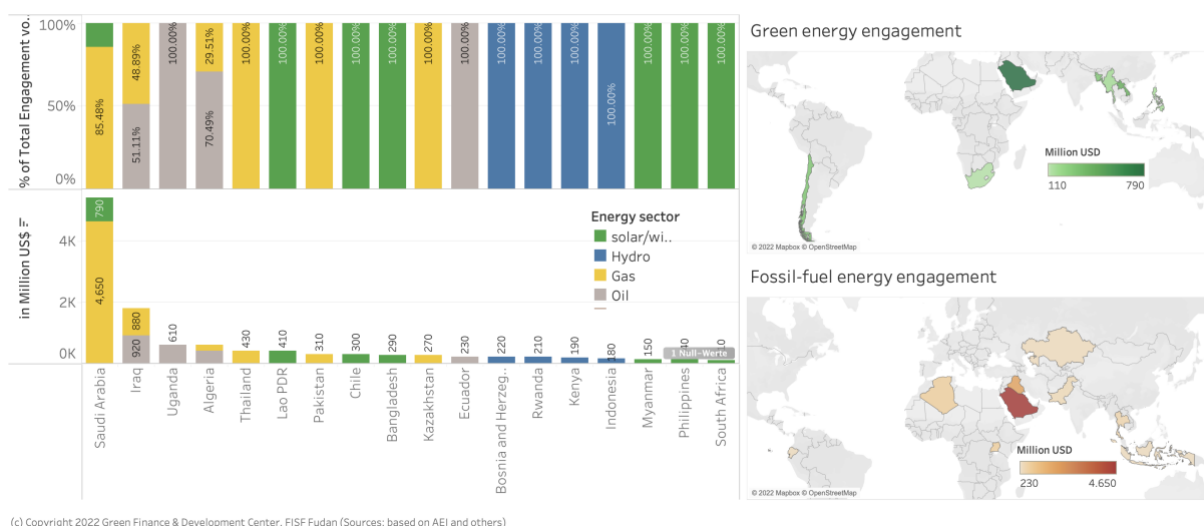
Energy engagement in different countries

Analyzing Chinese energy engagement in different BRI countries, we find that Saudi Arabia was the country that received the most energy engagement in H1 2022, followed by Iraq. With the strong engagement in these two countries, Iraq remained the third most important partner in the BRI for energy engagement between 2013 and 2022, while Saudi Arabia moved up to the fourth place (the most important partner remain Pakistan, followed by the Russian Federation).

Saudi Arabian Oil Company (“Aramco”) and an international investor consortium, led by affiliates of BlackRock and Hassana, cooperate on the lease and leaseback deal (previously announced on December 6, 2021). The consortium comprises leading institutional investors including, amongst others, Keppel Infrastructure Trust, Silk Road Fund, and China Merchants Capital.⁸ Saudi Arabia also saw cooperation on solar projects, such as a US\$210 million project with Jinko Solar (see Figure 11).

Figure 11: Chinese energy engagement in the Belt and Road Initiative (BRI) by country in 2021

Chinese energy engagement in the Belt and Road Initiative (BRI) 2022 by country



Transport engagement in the Belt and Road Initiative

Transport-related engagement is key to providing the means to trade between China and the BRI countries. Accordingly, China has invested in and constructed projects in road, rail, aviation, shipping, and logistics across the world (see Figure 12).

Aviation: Only one aviation-related construction project in Tanzania was

announced in H1 2022, worth about US\$190 million.

Rail: Most rail projects with Chinese engagement in H1 2022 could again be found in East Asia, including the continuation of the high-speed rail projects connecting China through Thailand and Malaysia to Singapore (Kunming-Singapore rail). The 422 km long

⁸ <https://www.aramco.com/en/news-media/news/2022/aramco-closes-gas-pipeline-deal-with-global-investor-consortium>

<http://www.silkroadfund.com.cn/enweb/23809/23812/42569/index.html>

railway connecting China and Laos had begun operating in December 2021⁹. In January, the Philippines' Department of Transportation (DOTr) awarded a \$2.8bn contract to a Chinese consortium to build the first phase of the 565km Bicol rail scheme on the country's main island of Luzon.¹⁰ No new rail engagement had been announced on the African continent, while non-Chinese contractors were able to secure large deals, such as the US\$8.7 billion rail project in Egypt won by Siemens in May 2022.¹¹

Road-transport: China continues to engage in road construction projects across many countries. However, some projects that had been announced several

years back are still not constructed, such as a US\$70 million road annuity project with a length of 66 kilometers in Kenya announced in 2014. The value of China's engagement in H1 2022 financing and investments in road infrastructure increased compared to H1 2021 from around US\$7.5 billion to about US\$8.7 billion (which compares to about US\$14 billion in H1 2019).

88% of transport-related projects were construction projects, while several road projects were investment projects (similar to the road annuity project in Kenya mentioned above).

Ports: No port-related projects were announced in H1 2022.

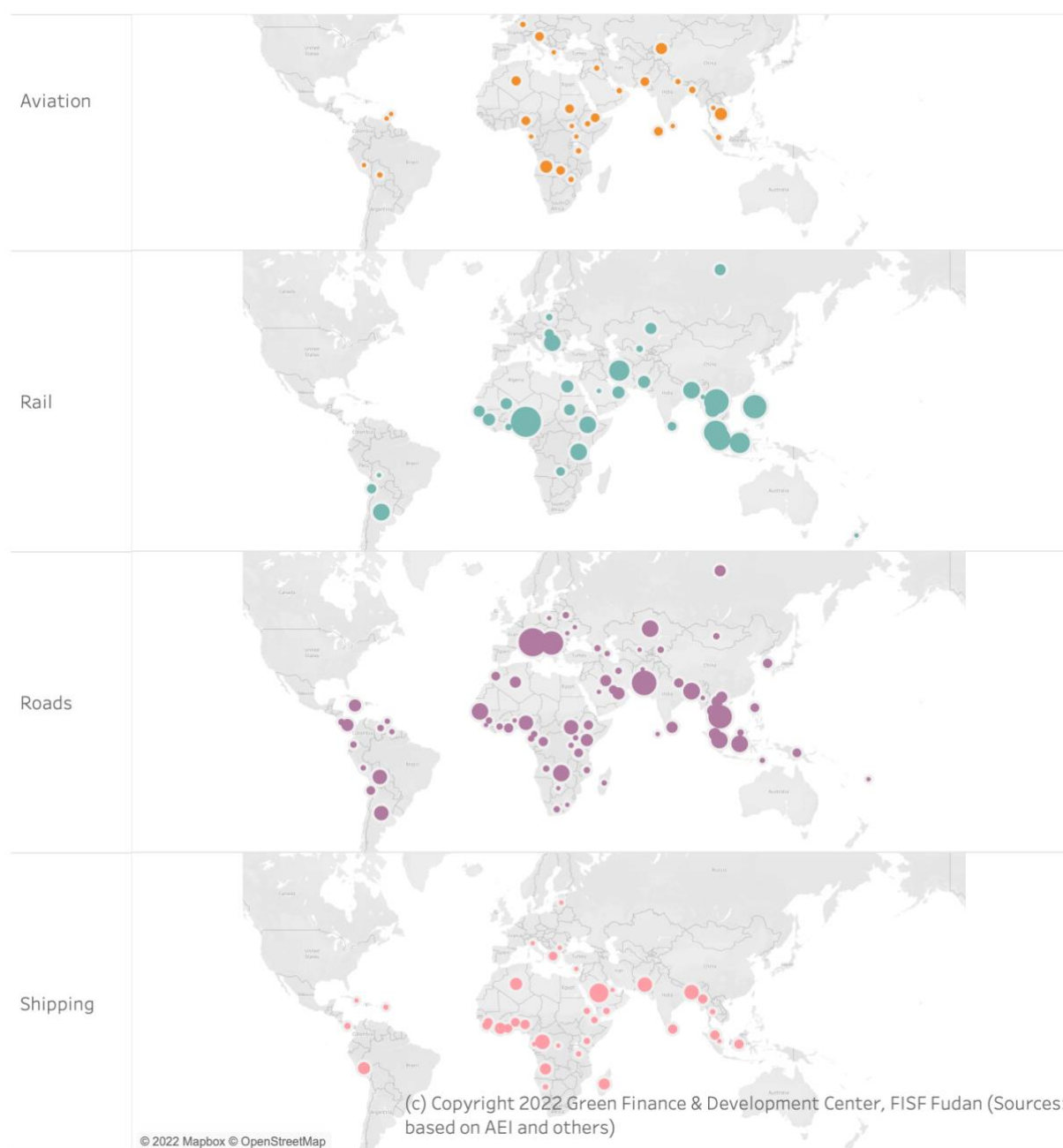
⁹ <https://asia.nikkei.com/Politics/International-relations/China-Laos-railway-begins-with-limited-service2>

¹⁰ <https://www.globalconstructionreview.com/chinese-team-awarded-2-8bn-first-phase-of-philippines-bicol-rail-scheme/>

¹¹ <https://railynews.com/2022/05/siemens-misirda-87-milyar-dolarlik-yuksekk-hizli-demiryolu-insa-edecek/>

Figure 12: Chinese engagement in BRI transport infrastructure 2013 – H1 2022

Chinese transport-related engagement in BRI countries 2013- H1 2022



Major players in BRI investments

Among the major players for BRI investments in H1 2022 were exclusively Chinese SOEs (see Table 1). The Chinese companies most prominently featured in construction projects in the BRI in H1 2022 was China Railway Engineering, China

Communications Construction and Power China. For investment projects, the consortium leading the Saudi Arabia oil deal with Aramco made the Silk Road Fund and China Merchants Bank leading investors.

Table 1: Major Players in BRI investments in 2021 (parent companies)

Largest Chinese investors in the BRI in H1 2022 (parent companies)

	% of total
Silk Road Fund, China Merchants	61.8%
State Power Investment Corporation	13.3%
Sinosteel	9.0%
China Minmetals	8.0%
United Energy	8.0%

Largest Chinese companies involved in construction projects in the BRI in H1 2022 (parent companies)

	% of total
China Railway Engineering	23.2%
China Communications Construction	22.6%
Power Construction Corp. (PowerChina)	15.1%
China Railway Construction	9.5%
China National Petroleum Corp. (CNPC)	7.1%
China Petroleum and Chemical (Sinopec)	5.7%
China National Chemical Engineering	5.3%
China Energy Engineering	4.2%
China Petroleum and Chemical (Sinopec), China General Te..	3.7%
China Minmetals	3.6%

China's BRI investments in a global comparison

Globally, FDI in 2022 continued to rebound¹² after the 2020 induced lull in foreign direct investments. Already 2021 saw an increase of FDI to US\$1.58 trillion – up 64% compared to 2020, as data released by UNCTAD in June 2022 showed.¹³ Accordingly, global FDI recovered to pre-pandemic levels in 2021.

This rebound of FDI was particularly strong in developed economies, which experienced a growth of FDI by 134% from 2020 to 2021. This was driven by doubling

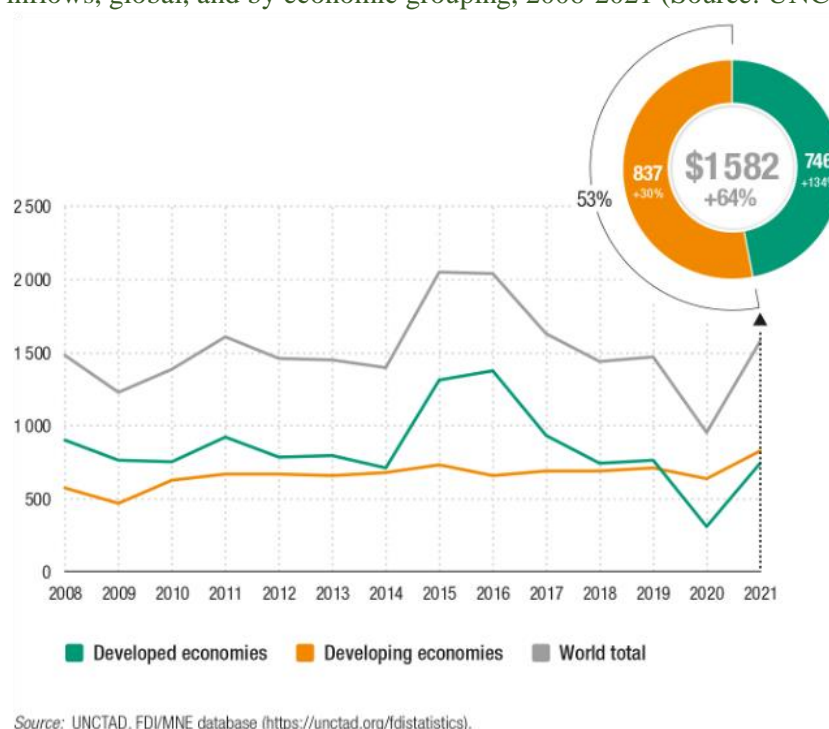
inflows into the US, particularly through cross-border M&A and high levels of retained earnings of multinational enterprises. Inflows in developing countries (including many BRI countries) were US\$837 billion in 2021, an increase of FDI by about 30% (40% when excluding China).

Overall, developing countries experienced higher FDI (US\$837 billion) than developed countries (US\$746 billion) in 2021 (see Figure 13).

¹² <https://www.fdiintelligence.com/content/data-trends/investment-activity-spikes-in-may-amid-supply-chain-woes-81167>

¹³ <https://unctad.org/press-material/global-foreign-direct-investment-recovered-pre-pandemic-levels-2021-uncertainty>

Figure 13: FDI inflows, global, and by economic grouping, 2006-2021 (Source: UNCTAD)



Particularly, countries in East and South-East Asia benefited from increased FDI in 2021 (Mainland China and Hong Kong saw a combined record US\$322 billion of inflows, a 13% increase compared to 2020).

African countries saw an increase of 113% from 2020 to 2021 (from US\$39 to US\$83 billion), however mostly driven by one transaction in South Africa. Total greenfield announcements on the continent remained depressed, at US\$39 billion (up from US\$32 billion in 2020). International project finance deals targeting Africa showed a rise of 26% in number (to 116) and 336% in value to US\$121 billion (after US\$36 billion in 2020). The rise was concentrated in power (\$56 billion) and renewables (\$26 billion).

Latin American countries saw FDI levels increase by 56% from US\$86 to US\$134 billion, driven by strong inflows in traditional industries such as automotive manufacturing, financial and insurance services, and electricity provision.

The positive trend continued at least until May 2022, which saw the highest fDi Index score recorded since July 2019.

Global FDI growth outperforms Chinese BRI investments

Global FDI in emerging markets excluding greater China increased by 40% from 2020 to 2021. This compares to a 25% decrease in Chinese BRI investments from 2020 to 2021. 2022 investments in the first half reached about 63% of the total 2021 investments, so a stronger recovery is possible. When discounting single large deals, such as the Saudi Arabia oil deal, however, the 2022 investment volume in the first half amounted to 37% of the total 2021 volume.

Chinese outward FDI ranks among top 4 globally

According to UNCTAD data, Mainland China's total outward FDI and M&A in 2022 amounted to US\$145 billion making it the 4th largest outward investor globally (down from 2nd position in 2020). This compares to about US\$147 billion from Japan, about US\$152 billion originating

from Germany, and about US\$403 billion from the US (see Table 2). At this time, however, it is not clear where these investments went to.

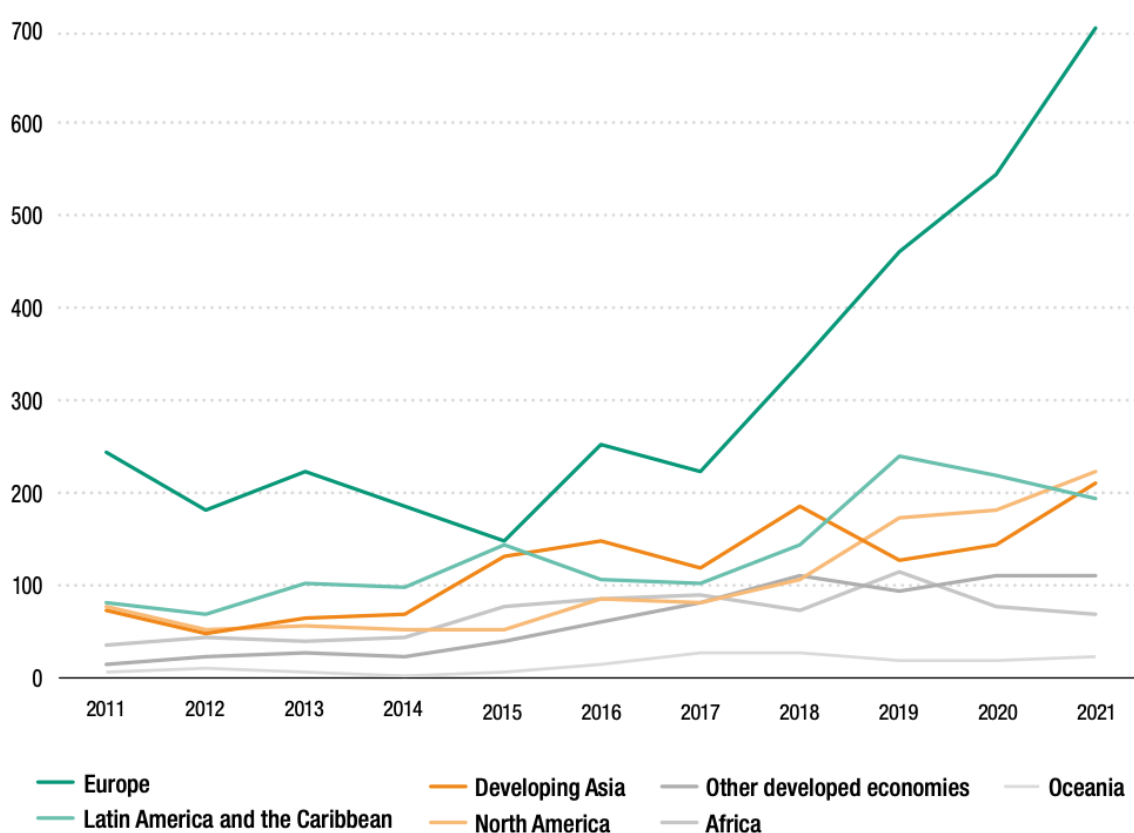
Table 2: Largest sources of FDI in 2021
(Source: UNCTAD)

Country	Outward FDI, M&A in US\$ billion
United States	403
Germany	152
Japan	147
China	145
United Kingdom	108

Most global project finance is in renewable energy

The combined value of greenfield announcements and international project finance deals related to sustainable development goals (SDGs) sectors exceeded the pre-pandemic level by almost 20 per cent, according to UNCTAD. US\$35 billion went into renewable energy in emerging economies in 144 different projects (a growth of 24% since 2020, but a drop of 13% compared to 2019). This compares to only US\$4 billion in non-renewable energy investments. In emerging economies, almost half of the projects require some form of public sector participation (compared to 80% private sector finance in developed countries)

Figure 14: International investments in renewable energy by region (Source: UNCTAD World Investment Report 2022)



Source: UNCTAD, based on information from Financial Times Ltd, fDi Markets (www.fdimarkets.com) for greenfield projects and Refinitiv SA for international project finance deals.

Outlook for 2022 foreign direct investments

According to UNCTAD, the outlook for FDI in 2022 is “worrisome”. International project finance in infrastructure sectors is expected to continue to provide growth momentum. However, new project activity in the first quarter of 2022 recorded a decrease of 21%, and international project finance deals were down 4%. This is due to factors, such as the war in Ukraine, the ongoing effects of COVID19, as well as continued uncertainty

on China’s COVID-19 lockdowns. All this increases financing risks considerably, particularly in emerging markets that are facing a triple crisis of inflation (particularly relevant in food, fuel), exchange rate risks, and sovereign debt risks (you can find detailed information and interactive graphics on this topic on our Brief on Debt in the Belt and Road Initiative¹⁴).

Outlook for Belt and Road Initiative (BRI) Finance and Investments

Chinese finance and investments into the Belt and Road Initiative countries in the first half of 2022 have remained steady.

For the rest of 2022, despite continued lockdowns particularly in China, with continued uncertainty of COVID-19, and continued issues of sovereign debt, as well as the Ukraine war, further recovery of BRI investments requires caution. On the one hand, there is clear need for investments to boost growth in the post-COVID19 world supported by global financial institutions, including developing finance institutions (such as the World Bank, Asian Development Bank, AIIB), from which Chinese contractors can benefit. We are also seeing more opportunities through greater competition on infrastructure finance, with the G7’s Partnership for Global Infrastructure and Investment (PGII) that pledged US\$600 billion within five years.

We continue not to expect Chinese BRI engagement to reach levels as in 2018-2019. This is also a recognition of the

Chinese Ministry of Commerce (MOFCOM), which put a break on fast overseas expansion in its 14th Five-Year Plan (FYP)¹⁵ for 2021 to 2025: it plans for China to invest US\$550 billion (that includes non-BRI countries), down 25% from US\$740 billion in the 2016-2020 period. Also, Chinese contracting volume is planned to decrease from US\$800 billion in the previous FYP to US\$700 billion in this FYP.

In line with our previous predictions, this does not necessarily mean that the deal number is decreasing. As we have been seeing in 2021 and early 2022, many smaller projects have been financed even in more difficult economic circumstances and often provide both the means to boost sustainable economic development, provide employment and are better able to protect the environment. At the same time, we see two types of large projects to continue: strategic investments (such as in ports, resources), and resource-backed deals (such as in mining, oil, gas).

¹⁴ <https://greenfdc.org/public-debt-in-the-belt-and-road-initiative-bri-covid-19/>

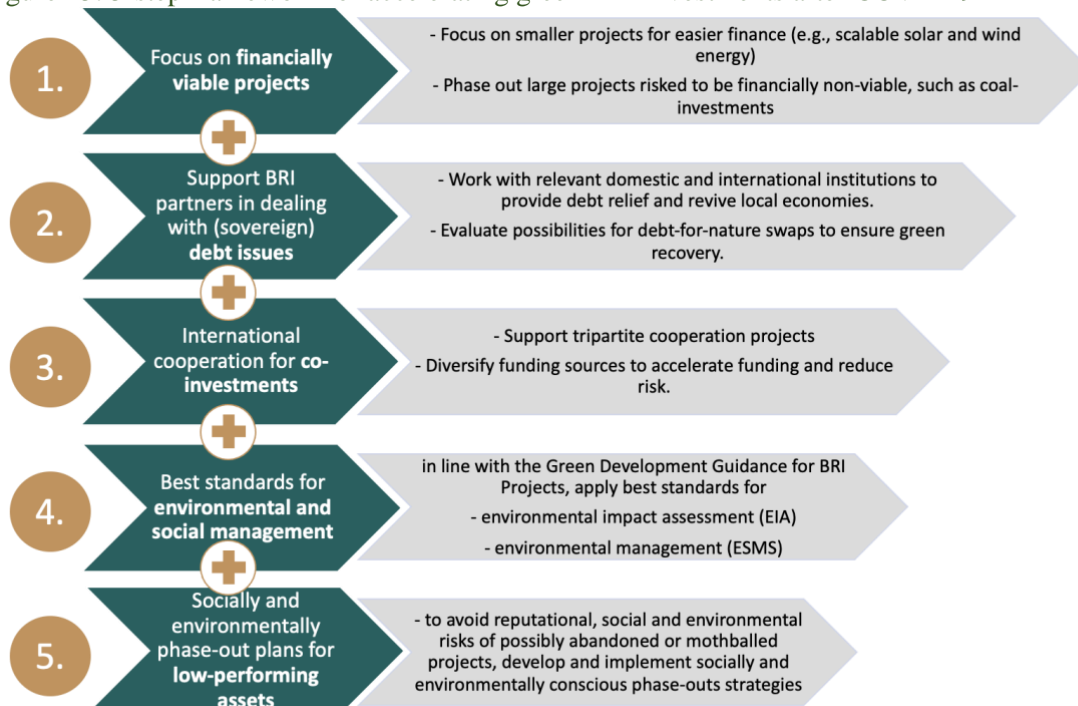
¹⁵

<http://images.mofcom.gov.cn/zhs/202107/2021070811>

0842898.pdf?mc_cid=25492edd68&mc_eid=7d8719095d

To move the BRI investments forward, we expand our recommendations from the previous reports:

Figure 15: 5-step framework for accelerating green BRI investments after COVID19



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1. Focus on projects that are financially sustainable and cut losses in non-profitable projects

Investors in BRI projects within China and outside China should focus on smaller projects that are easier to finance and faster to implement. Particularly in infrastructure and energy investments, scalable solar and wind investments seem viable, as long as local conditions provide the relevant grids to handle renewable energy supply

With decreasing energy cost for renewable energy, we also see an opportunity to invest in early phase-out of existing older coal projects, which would be both economically and environmentally relevant.

2. Support partner-countries and partner businesses in dealing with (sovereign) debt-repayment of already invested BRI

projects, e.g., through debt-for-nature swaps and nature performance bonds.

Debt is a major concern for future growth in many BRI countries. As we found in our in-depth analysis of debt in BRI countries, China has a unique opportunity to support BRI countries in dealing with their debt both bilaterally and multilaterally. Dealing with the debt issue is crucial for providing BRI countries with the necessary fiscal space for future investments.

While debt-for-resource or debt-for-equity swaps might seem beneficial for China in the short-term to reduce the debt burden in the BRI countries, these swaps tend to undermine future domestic growth opportunities for BRI countries. Rather, Chinese relevant stakeholders together with international partners through multilateral frameworks should support green recovery by swapping part of the debt for nature and providing necessary

frameworks to increase transparency and accountability of the use of funds.

Furthermore, sustainable debt instruments could be applied to raise more funds, e.g., through nature performance bonds.¹⁶

3. Increase international cooperation for BRI projects to allow existing and useful projects to go ahead also in difficult times.

Tripartite cooperation with international financial and implementation partners can support BRI projects through better access to financial resources, risk sharing and knowledge sharing. Particularly non-SOEs that often have a higher burden of accessing investments from Chinese large financial institutions could benefit through broader access to finance, as witnessed for example in the Zhanatas wind farm in Kazakhstan, co-financed by EBRD, AIIB, GCF and ICBC, while it was build and is operated by China International power Holding¹⁷. Also, Chinese financial institutions could benefit to de-risk project finance by broaden their international cooperation. A new report “China Third-Party Market Cooperation for Infrastructure Finance Financing Mechanism Handbook was released in September 2021 to accelerate tri-partite project finance.¹⁸

In addition, with European Union (EU) launching its “Global Gateway” and the US pushing its “Build Back Better World” (B3W) initiative, competition for the BRI is increasing. However, if cooperation for

project finance and development in emerging markets is the goal, Chinese investors and developers can accelerate their cooperation with both public and private financial institutions from various economies, particularly if they manage to share standards.

4. Increase use of common environmental and social standards in project evaluation (e.g., environmental impact assessment EIA) and for environmental and social risk management (ESMS)

In July 2021, the Ministry of Commerce (MOFCOM), together with the Ministry of Ecology and Environment, issued the “Guidelines for Greening Overseas Investment and Cooperation”¹⁹ and in January 2022, the “Guidelines for Ecological Environmental Protection of Foreign Investment Cooperation and Construction Projects”²⁰. Within these Guideline, Chinese developers are encouraged to adhere to international or Chinese environmental standards, particularly in countries whose domestic environmental standards and governance does not meet international standards.

This is a formalization of a number of previous Guidances, including the “[Green Development Guidance for BRI Projects Baseline Study](#)” and the “Application Guide for Enterprises and Financial Institutions” backed by various relevant Chinese ministries published by the BRI Green Development Coalition (BRIGC) in December 2020 and October 2021

¹⁶ <https://www.f4b-initiative.net/news/new-%E2%80%9Cnature-performance-bond%E2%80%9D-to-tackle-twin-sovereign-debt-and-biodiversity-crises>

¹⁷ <https://www.ebrd.com/news/2020/ebird-aiib-icbc-and-gcf-provide-us-953-million-for-wind-farm-in-kazakhstan.html>

¹⁸ <https://greenfdc.org/china-third-party-market-cooperation-for-infrastructure-projects-financing-mechanism-handbook/>

¹⁹

<http://images.mofcom.gov.cn/hzs/202107/20210716144040753.pdf>

²⁰

http://www.mee.gov.cn/xxgk2018/xxgk/xxgk05/202201/t20220110_966571.html

respectively. These guidances calls for Chinese overseas investors to apply independent environmental impact assessments (EIA) and strict environmental and social risk management (ESMS) to ensure projects and investments are minimizing environmental harm and maximizing environmental benefits. Also, the Green Investment Principles (GIP) integrate sustainability into corporate governance, requiring boards to understand environmental, social and governance risks, as well as disclosing environmental information.

By applying international standards, Chinese financial institutions can more easily raise capital on the global capital markets, accelerate co-financing with international partners and take responsibility to fulfill the goal of building a “Green Belt and Road”.

5. Develop socially and environmentally conscious phase-out strategies for non-performing investments

Several investments in the Belt and Road Initiative have had to be stopped, mothballed or cancelled due to financial (e.g., difficulties in financing or servicing debt) and operational reasons (e.g. due to travel restrictions or problems in supply chains). According to our study, over 50% of announced coal fired power plants have been mothballed.

In order to avoid reputational, social and environmental risks arising from stopped, mothballed or cancelled projects, plans should be developed and implemented by financial institutions including insurance companies, developers, local governments and relevant Chinese authorities that compensate any losses to workers and companies up to a specific extent, and that ensure that nature around mothballed and particularly stopped projects can be remediated. This also helps avoid having skeleton constructions serve as a reminder of unfinished projects.

Appendix: About the Belt and Road Initiative (BRI)

The Belt and Road Initiative (BRI) China's main international cooperation and economic strategy. The BRI is also known as the "One Belt One Road" (OBOR), the "Silk Road Economic Belt and the 21st-century Maritime Silk Road" or just the "New Silk Road". Its Chinese name is 一带一路 (yi dai yi lu). It was announced by Chinese President Xi Jinping in Kazakhstan in October 2013.

The construction of the Belt and Road Initiative is anchored in the Chinese constitution.

Goals of the Belt and Road Initiative – and how to make it green

The BRI has officially "five goals":

- policy coordination,
- facilities connectivity,
- unimpeded trade,
- financial integration, and
- people-to-people bonds.

Over the past years, the emphasis on developing a "green" and "high-quality" Belt and Road Initiative have accelerated. The Ministry of Environmental Protection (now Ministry of Ecology and Environment) had published the Guidance on Promoting Green Belt and Road already in 2017. The document stresses the relevance of the "ecological civilization", "green development concepts", "principles of resource efficiency and environmental friendliness" within the five goals of the Belt and Road Initiative.

During the 2019 Belt and Road Forum, green and sustainable development of the Belt and Road Initiative took center stage, together with debt sustainability.

Accordingly, the Ministry of Ecology and Environment jointly initiated the BRI International Green Development Coalition (BRIGC) and international partners. With its 10 working groups, the BRIGC aims to support green development, in e.g.,

- green finance
- green transport
- green innovation
- green urbanization
- green standards

In 2020, the MEE and several relevant ministries backed the Green Development Guidance for BRI Projects Baseline Study published by the Belt and Road Initiative International Green Development Coalition (BRIGC). The Guidance lays out 9 recommendations for greening the BRI and an initial project taxonomy ("traffic light system" that distinguishes projects with high environmental risk (red projects) and projects with environmental benefits ("green projects"). In 2021, an implementation Guide for financial institutions and project developers was published. Also, in 2021, the Green Development Guidelines for Overseas Investment and Cooperation were published by MOFCOM and MEE, while the same ministries published the Guidelines for Ecological Environmental Protection of Foreign Investment Cooperation and Construction Projects in January 2022 to stress relevant environmental risk management practices.

Find an overview of relevant policy documents for the Belt and Road Initiative [here](#).

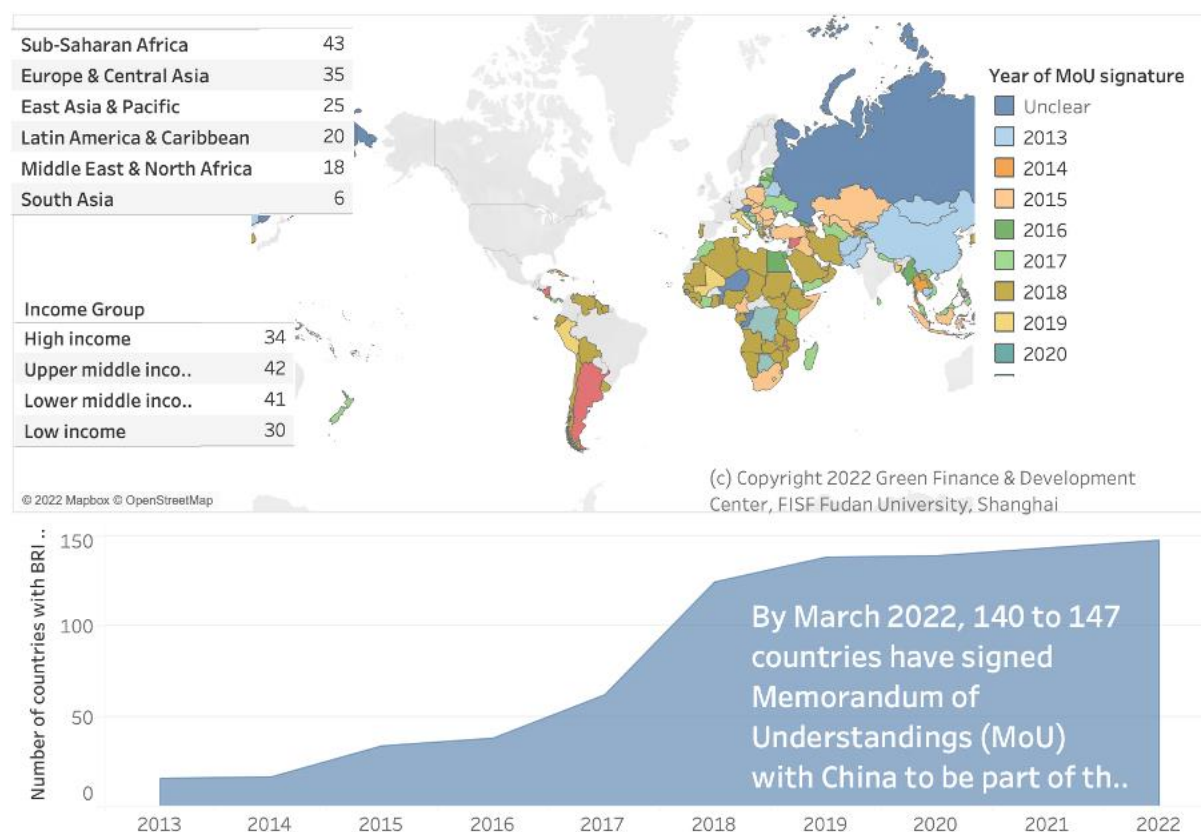
Countries of the Belt and Road Initiative

According to official information, in June 2022, 147 had signed cooperation agreements for the BRI. For countries and organizations to “join” the BRI, China and the respective country or organization sign a Memorandum of Understanding (MoU).

For 7 countries listed in official Chinese media (yidaiyilu.gov.cn), we could not confirm a signature of an MoU for bilateral cooperation under the Belt and Road Initiative framework.

The following BRI map shows the list of countries that have signed MoUs or are said to be members of the BRI. You can find a more detailed list of countries of the Belt and Road Initiative (BRI) [here](#).

Countries of the Belt and Road Initiative





About the author

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Christoph regularly provides expertise to governments, financial institutions, enterprises and civil society to accelerate the application of sustainable finance. He works with the China Council for International Cooperation on Environment and Development (CCICED), the Chinese Ministry of Commerce, as well as various private and multilateral finance institutions (e.g., ADB, IFC, UNESCAP) and international governments.

He is the lead author of the UNDP SDG Finance Taxonomy, the Green Development Guidance Baseline Study of the BRI Green Development Coalition under the Chinese Ministry of Ecology and Environment, and has authored four books, dozens of articles, and research reports. Christoph is serving as board director and supports various companies in scaling sustainability in businesses and finance.

Christoph holds a Master of Engineering and a PhD in Economics from the Technical University Berlin, as well as a Master of Public Administration from Harvard Kennedy School.



About the Green Finance & Development Center

The Green Finance & Development Center (GFDC) is a leading research center that provides advisory, research and capacity building for financial institutions and regulators for green and sustainable finance in China and internationally.

The GFDC works at the intersection of finance, policy and industry to accelerate the development and use of green and sustainable finance instruments to address the climate and biodiversity crisis, as well as contribute to better social development opportunities.

The topics of our work at the Green Finance & Development Center respond to the needs and developments of the financial markets and related policies in China and internationally, while we also aim to provide evidence-based advisory and research for future policies and strategies to accelerate the greening of finance in policy and practice.

To drive green finance development, GFDC works in four inter-related labs:

1. Green BRI Lab
2. ESG Lab
3. Green Innovation Lab
4. Biodiversity Finance Lab

The Green Finance & Development Center was founded in 2021 by Christoph Nedopil. It is associated with the Fanhai International School of Finance (FISF) at Fudan University in Shanghai, P.R. China.



Contact us for more detailed analysis on green and sustainable finance, the Belt and Road Initiative (BRI) and sustainable development.

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