
# The Belt and Road Initiative and the Partnership for Global Infrastructure and Investment

## GLOBAL INFRASTRUCTURE INITIATIVES IN COMPARISON

**OYINTARELADO (TARELA) MOSES, KEREN ZHU[1]**

***Oyintarelado (Tarela) Moses*** *is the Data Analyst and Database Manager for the Global China Initiative at the Boston University Global Development Policy Center. Previously, she worked on the international relations team of the Export-Import Bank of the United States as a policy analyst. She has also worked at the China Africa Research Initiative at the Johns Hopkins University School of Advanced International Studies and interned at the US Development Finance Corporation.*

## ABSTRACT

Infrastructure financing gaps in the Global South have widened in recent years with the need for addressing connectivity bottlenecks and climate-related challenges. To reach the United Nations 2030 Sustainable Development Goals (SDGs), an additional $3.2 trillion or 2 percent of global gross domestic product (GDP) is needed annually for sustainable infrastructure investment, and roughly $700 billion per year of climate finance is required to reach net zero emissions by 2050 (Bhattacharya et al 2019, Springer 2022). Global infrastructure initiatives such as China's Belt and Road Initiative (BRI), an infrastructure-led international economic engagement initiative and the Group of Seven (G7)-led Partnership for Global Infrastructure and Investment (PGII), an infrastructure partnership that aims to address infrastructure gaps of low- to middle-income countries, are positioned to further address these financing gaps. This working paper describes the development of and compares the features of the BRI and the PGII. Comparing these initiatives reveals similarities: a focus on infrastructure development, progress pathways evolved from intent to

[1] Acknowledgments: The authors thank Anjali Kini for research assistance support.



***Keren Zhu*** *is a Global China Post-doctoral Research Fellow at the Boston University Global Development Policy Center. She holds a Ph.D. in Policy Analysis from the Pardee RAND Graduate School. Her research focuses on the Belt and Road Initiative (BRI), global infrastructure, international development and program evaluation.*

implementation, a rebranding of existing development assistant efforts, domestic growth as a prominent priority and the utilization of similar financing tools. Divergent features of these initiatives center on types of infrastructure supported (hard versus soft), the project and financing scale, the reliance on state finance versus private sector finance, the number of actors involved and the level of coordination. Such similarities highlight areas of opportunity to work together through short-term or long-term collaboration. While differences highlight distinct attributes that make each initiative more or less attractive to recipient countries. Should the BRI and PGII continue to support projects and extend financing, the G7 and China would demonstrate reliability to host countries seeking to address infrastructure gaps.

**Keywords:** Global South, China, Belt and Road Initiative, BRI, Partnership for Global Infrastructure and Investment, PGII, Group of Seven, infrastructure development, infrastructure investment

## INTRODUCTION

Infrastructure financing gaps in the Global South have widened in recent years with the need for addressing connectivity bottlenecks and climate-related challenges. To reach the United Nations 2030 Sustainable Development Goals (SDGs) targets, an additional $3.2 trillion or 2 percent of global gross domestic product (GDP) is needed annually for sustainable infrastructure investment and roughly $700 billion per year of climate finance is required to reach net zero emissions by 2050 (Bhattacharya et al 2019, Springer 2022). The Belt and Road Initiative (BRI), an infrastructure-led international economic engagement initiative initiated by China in 2013, has contributed to and is positioned to further address financing gaps. However, the BRI alone cannot fully close the gaps. In addition, the accompanying risks associated with infrastructure development along the BRI have yet to be monitored and addressed, while supporting structures around physical infrastructure is needed to achieve inclusive and sustainable development.

Other global infrastructure initiatives such as Japan's Partnership for Quality Infrastructure in Asia, the Group of Seven (G7)-initiated Partnership for Global Infrastructure and Investment (PGII) and the European Union (EU) Global Gateway (GG) have emerged since 2015. These initiatives are often framed as alternatives to the BRI. However, addressing such financing gaps and reaching the SDGs can only be achieved as these initiatives complement one another through coordination at best or complementary competition at the least.

This working paper describes the development of and compares the features of the BRI and the PGII. Some overlapping features present a chance for these initiatives to work together, while divergent features present opportunities for recipient countries to choose between initiatives according to how they meet the demands for recipient country development projects and financing. Should these initiatives continue to support projects and extend financing, the G7 and China would demonstrate reliability to host countries seeking to address infrastructure gaps. Given the vast infrastructure and energy finance gaps that exist, it is imperative that countries and institutions within the BRI and PGII continue to encourage and improve the development of these initiatives.

## OVERVIEW OF THE BELT AND ROAD INITIATIVE (BRI)

China established the BRI in 2013 through speeches that marked the beginning of the "Silk Road Economic Belt" and the "21st Century Maritime Silk Road," first together known as the One Belt One Road (Wu and Zhang 2013ab). At its initial stage, the scope of work and the policy objectives of the BRI were vague. The publication of Vision and Actions on Jointly Building Belt and Road in 2015 shaped the BRI as it is known today. This document clarified the cooperation principles of the BRI including "consultation, contribution and shared benefits" (共商，共建，共享) and policy objectives including policy coordination, facility connectivity, financial integration, unimpeded trade and people-to-people bonds (PRC State Council 2015). Over time, the Chinese government has signed cooperation agreements with 145 countries and 32 international organizations under the BRI framework by the end of 2021 and the number of partners keeps growing (Xinhua 2021).

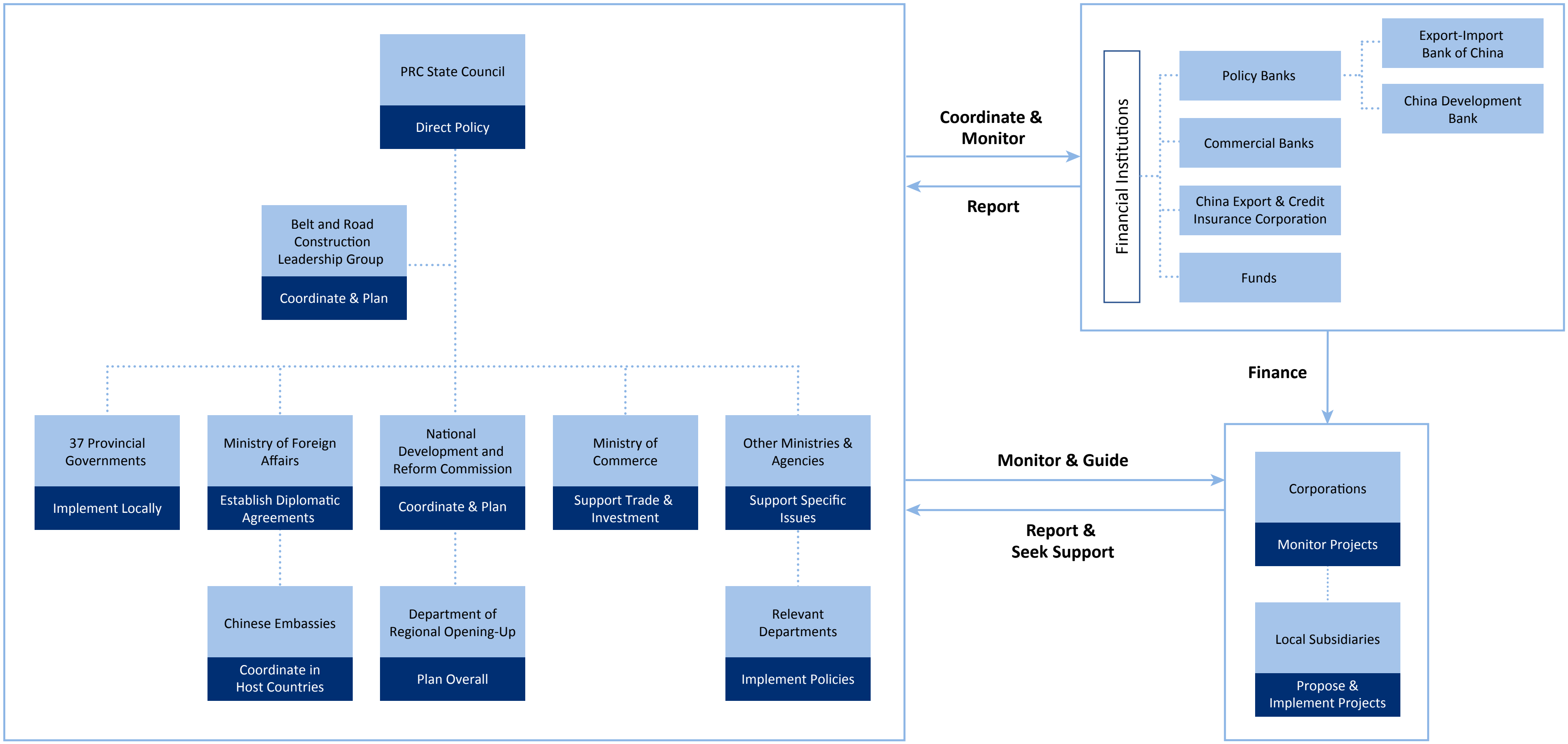
The Vision and Actions on Jointly Building Belt and Road policy document highlighted facility connectivity as a prioritized policy objective of the BRI. New roads, railways, ports, pipelines, dams, power plants and industrial parks have been built in BRI host countries through the continued overseas market expansion of construction contractors and emerging operational expertise in Chinese enterprises along with the support of Chinese development finance providers. According to the vision outlined in the official document, the BRI seeks to "reinforce infrastructure planning along BRI countries, integrate technological standard systems, and jointly promote the development of pivotal international transportation channels, and gradually form an infrastructure network connecting various sub-regions in Asia and across Eurasia" (PRC State Council 2015).

Many factors may explain the motivations underlying the proposal of the BRI. Example factors include domestic excess saving as a result of trade surplus, competition and underemployment in the construction industry, the need to establish new relations and win influence through global infrastructure development and to develop strategic routes to transport natural resources not controlled by the US and its allies (Dollar 2018). Despite such varied explanations, in practice, the BRI leverages China's comparative advantage in industrial capacity and infrastructure development to promote overseas financing and foreign direct investment (FDI) for Chinese companies supporting development projects overseas. By doing so, the state helps Chinese firms expand into international markets. Through economic cooperation, policy dialogues, strategic engagement and cultural exchange, the Initiative furthers China's new development cooperation strategy on a global scale.

Over the years, the BRI's governing structure has evolved to coordinate multiple government ministries and financial institutions as shown in Figure 1. At an institutional level, the Belt and Road Construction Leadership Group oversees the rollout of the BRI and coordinates efforts of different ministries and agencies (Xinhua, 2015). The National Development and Reform Commission (NDRC), Ministry of Commerce (MOFCOM) and Ministry of Foreign Affairs (MFA) are the three ministries dedicated to BRI cooperation, and other ministries are involved on an issue-specific basis. Different provinces, guided by overall BRI cooperation principles, proposed their localized plan for international cooperation under the BRI. Corporations, financed by Chinese policy banks – China Development Bank (CDB) and the Export-Import Bank of China (CHEXIM) – and growing diversified financial sources (commercial lending, equity funds, etc.) develop projects largely based on competitive bidding procedures.

Figure 1 depicts BRI governance and the amount of coordination that is required for the BRI. Some scholars view the BRI as seeking to solve domestic political fragmentation for foreign policy and economic objectives (Ye 2021). However, since the decision-making process of the BRI remains largely opaque, there is limited evidence on the extent to which the envisioned governance structure is implemented.

**Figure 1: Conceptualizing the BRI Governance Structure**




**Source:** Authors' visualization.

Although China does not officially release public documents that track the financial scope of the BRI, public information on Chinese policy bank finance and equity funds provides estimates of the BRI's large financial scale. Chinese financing institutions operate in a coordinated credit space where public finance is the foundation of finance for overseas projects in BRI host countries (Chin and Gallagher, 2019). According to the China's Overseas Development Finance (CODF) Database, managed by the Boston University Global Development Policy Center, China's policy banks have extended at least $287 billion in loans to recipient country projects across many sectors including transportation and power from 2013-2019 (Ray et al 2019). This amount may not even reach the full exposure capacity of CDB and CHEXIM. Commercial banks, China Export & Credit Insurance Corporation (Sinosure), equity funds and companies extending FDI are also involved in supporting projects under the BRI. China's overseas development investment funds (ODIFs) have already invested portions of their full potential capacity to extend $155 billion in equity finance for development projects (Moses et al. 2022).

For many recipient countries, the BRI's financial scale has given access to financing for addressing infrastructure gaps, which helps resolve infrastructure bottlenecks and promote long-term economic prosperity (Lin and Wang 2017). It also offers a framework for South-South cooperation in economic, political, social and cultural domains that may inspire these countries' choice of development pathways.

Meanwhile, the BRI also entails risks for China and participating countries. The risks for China include an increase in US-China tensions (particularly the competition over geopolitical influence), unsteady international partnerships and the shifting economic prospects of countries participating in the Initiative. In addition, BRI projects have revealed social and ecological risks, credit risks, macroeconomic risks, legal and regulatory challenges, poor governance and corruption in partner states, low return on investment and security risks (Ray et. al. 2019, Bandiera and Tsiropoulos 2019, Wuthnow 2017). For other countries, the BRI involves high upfront costs with unpredictable returns. These risks have prompted the Chinese government to initiate a process of reflection and recalibration regarding the BRI. Complex local politics can shift projects into unintended directions and climate change challenges mean uncertainty about the BRI's future, despite opportunities to contribute to achieving the SDGs.

## OVERVIEW OF THE PARTNERSHIP FOR GLOBAL INFRASTRUCTURE AND INVESTMENT (PGII)

The PGII was established by the G7 in 2022 at the 47th G7 leadership summit in Germany (G7 2022). PGII is described as a high quality $600 billion infrastructure partnership that aims to address infrastructure gaps of low- to middle-income countries. Leaders from Canada, France, Germany, Japan, Italy, the United Kingdom, the United States and the European Union characterized PGII as a relaunch of the Build Back Better World Partnership (B3W), announced in 2021 (White House Remarks 2022). PGII also incorporates the EU's Global Gateway (GG), an EU initiative announced in 2021 to address global investment gaps and support a global recovery from the economic impacts of the COVID-19 pandemic (White House Remarks 2022).

The establishment of PGII appears to be motivated by an effort to coordinate overseas infrastructure development actions amongst G7 countries, but PGII has also been framed as a geopolitical alternative to the BRI. Although European, American and Japanese institutions have extended financing for development to low- to middle-income countries for many years, the approach has been scattered, uncoordinated and untargeted. PGII is a rebranding of these institutions' efforts, through a more focused and targeted strategy where disjointed efforts become collective efforts. The US emphasis on a whole-of-government approach to PGII implementation exemplifies this coordination on a domestic and multilateral level. This coordination is in part a response to the demands of US private institutions that sought increased collaboration amongst US public institutions (EXIM 2022).

It is unclear how the PGII as described by the G7 is governed. However, the US PGII implementation plan, as well as the EU's implementation description demonstrate how PGII will work in practice. Conceptually, PGII is a collection of actions by multiple G7 financial and government institutions to reach the $600 billion pledge. The PGII is expected to mobilize G7 partners' financing and capacity building tools. Financing tools include short, medium and long term development finance (e.g., grants, equity investment, export credit loans, concessional loans, insurance and guarantees) that could also support commercial financing from the private sector for G7 countries' enterprises and investors seeking projects abroad. Capacity building efforts include development programs in the forms of training and incentive programs. Based on observing US institutions' counterparts, G7 institutions expected to be involved in PGII are listed in Table 2A of the Appendix alongside BRI institutions in Table 1A for ease of comparison.

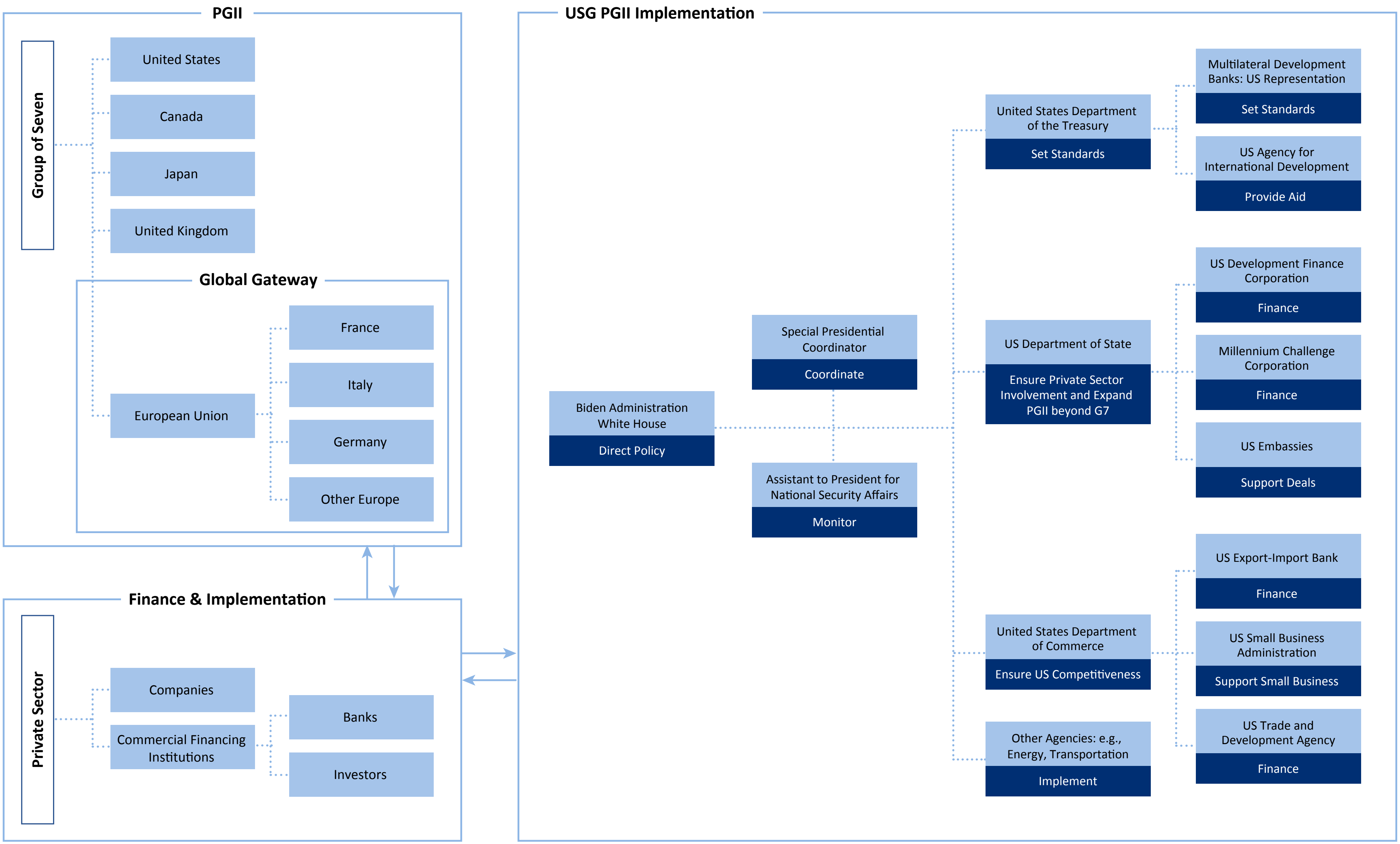
The US has provided details about how it will implement its approach through a presidential memorandum as shown in Figure 2 (White House 2022b). From the US perspective, a Special Presidential Coordinator will coordinate the whole-of-government approach. Large government agencies such as the Department of State, the Department of Treasury and the Department of Commerce will work together with smaller independent public financing institutions (such as the Export-Import Bank of the United States and the US Development Finance Corporation) and other agencies to establish strategies for implementing PGII. These US institutions will interact with their respective counterparts in other G7 countries as well as the private sector where applicable. The Assistant to the President for National Security Affairs will monitor institutional progress.

This governance structure plan from the US perspective shows the complexity of implementing the PGII. There are many actors involved, with different goals, motivations and interests. Coordination across domestic institutions, the private sector and countries will determine the level of success the PGII can achieve. From the EU perspective, the barrier to coordination within GG may be much lower, given that the EU is more established in its ability to coordinate amongst EU member states.

Within the GG, the EU will primarily employ the European Fund for Sustainable Development (EFSD+) of the Neighborhood Development and International Cooperation Instrument (NDICI) Global Europe, an EU program that promotes sustainable development, to provide the majority of investments for GG (EU 2022). Investment entities (e.g., Interreg Europe, InvestEU, Horizon Europe), EU member states, the European Investment Bank and the European Bank for Reconstruction and Development are also mentioned as participating institutions. A European export credit facility may also be created as an additional financial tool (EU 2022). Finally, European development finance institutions under the EU, will extend the bulk of GG financing (EU 2022). Table 3A in the Appendix lists these institutions and their respective financial pledges to the GG.

The PGII is smaller in financial scope when compared to the BRI. Of the $600 billion pledge, the US pledged $200 billion, the EU pledged $317 billion for GG over five years (see Table 1 in the Appendix for breakdown) and Japan pledged $65 billion (White House 2022, EU 2021, Nikkei 2022). Although the rest of the financing was not claimed by other G7 countries, other countries stated their commitment to the initiative. The financing will be directed to priority areas of climate, health and health security, digital technology and gender equity and equality. Specific to energy, the G7 also highlighted their commitment to establishing new Just Energy Transition Partnerships (JTEP) with Indonesia, India, Senegal and Vietnam (G7 2022).

**Figure 2: Conceptualization of the PGII Governance Structure from the US Perspective**




**Source:** Authors' visualization.

In June 2022, the US released a list of projects, contracts and capacity building programs under the PGII. These projects received $1.8 billion in loans, grants and equity commitments from US public institutions (see Table 4A in the Appendix for breakdown). This is a small portion of the $196 billion in full financing capacity US public financing institutions alone can achieve.[2] For the GG, the EU has committed $21.1 billion to green and digital transition projects in Morocco, Nigeria's digital economy package, a trans-European network project and others, despite announcements of large investment packages such as the $176 billion Global Gateway Africa-Europe Investment Package (see Table 5A in the Appendix for breakdown) (EU n.d.).

This smaller financial scale is indicative of some of the features unique to the PGII. First, the PGII financing model follows the Western private-sector-centered financial system. This system upholds the private sector as the engine of economic growth and requires the government to play a supplemental role by financially supporting riskier investments. Second, the PGII's priority areas capitalize on G7 countries' strengths in promoting soft infrastructure sectors (for example, health, gender equity, digital technology, etc.). Third, the PGII highlights shared standards G7 countries hold based on similar political systems and shared participation in multilateral organizations. These standards are materialized in several principles that G7 countries follow or are currently shaping. Such standards include the Japan-led Quality Infrastructure Principles, the Blue Dot Network certification framework, the OECD Arrangement on Officially Supported Export Credits and internal institutional financial and risk assessments.

The PGII can contribute to addressing the global investment infrastructure gap. If the initiative extends beyond rebranding of current actions of existing institutions, it could provide host countries with more options for infrastructure finance and implementation. Strong regulatory, social, environmental, transparency and accountability standards underpinning the PGII make it an attractive option for financing infrastructure in low-to-middle income countries, should the PGII be successful. However, the G7 has already suffered from reputational risks, given that B3W did not appear to move beyond a statement of intent. G7 countries also lack large amounts of public finance and must depend on the private sector to finance projects the private sector may not be willing to finance. Historically, many G7 institutions have faced challenges with catalyzing private sector investment. Instead, public finance has often been used to de-risk projects financed by public financing institutions and multilateral development banks (IEA 2022). Managing these risks will entail concerted efforts by G7 institutions, but should they be addressed, the PGII would substantially benefit recipient countries.

## COMPARING THE TWO GLOBAL INFRASTRUCTURE INITIATIVES

While the inception of the BRI and PGII occurred in different years and under different global economic circumstances, the initiatives' goals have similarities. Concomitantly, both initiatives have their unique attributes. These initiatives' similarities highlight areas of opportunity to work together, while their differences highlight distinct attributes that make them more or less attractive to recipient countries. Basic information and distinctive features of the two initiatives are summarized in Table 1.

[2] The US Development Finance Corporation has an investment cap of $60 billion (BUILD ACT 2018), the Export Import Bank of the United States has an exposure cap of $135 billion (EXIM Charter 2019), the Millennium Challenge Corporation has a fiscal year 2023 budget allocation of $800 million for programs and the US Trade and Development Agency has a FY 2023 budget of $67 million for programs (US Congress 2022).

**Table 1: Comparing the Belt and Road Initiative and the Partnership for Global Infrastructure and Investment**

| Category | BRI | PGII |
|---|---|---|
| Year Announced | 2013 | 2022* |
| Initiating Actor | China | United States |
| Number of Initiating Countries | 1 | 7 + European Union |
| Amount Announced (billion USD) | Unknown | 600 |
| Policy Priorities | Policy coordination, facility connectivity, unimpeded trade, financial integration, people-to-people bonds | Climate, Digital Infrastructure, Gender equality and equity, Health and health security |
| Financing Institutions | Policy Banks, Commercial Banks Policy Insurance Institutions, Equity Funds, Multilateral Organizations | Policy Banks, Commercial Banks, Policy Insurance Institutions, Multilateral Organizations |
| Financing Tools | Loans, Equity, Grants | Loans, Equity, Grants |
| Standards Introduced** | Standard Connectivity Action Plan 2015-2017, 2018-2020<br>NDRC Green BRI Directive | OECD Export Credit Arrangement, Quality Infrastructure Principles, Blue Dot Network Principles, Institutions' Internal Assessments |
| Status | Implementing – seasoned | Implementing - early stage |

* Although the PGII was established in 2022, its predecessor, the B3W was established in 2021.

** This is not an exhaustive list of standards introduced.

**Source:** Authors' visualization.

## Similarities

First, both initiatives have emerged through an evolutionary pathway of intent to implementation. Upon introduction, both initiatives were described in statements of vague intent without concrete plans. After an amorphous and ambiguous stage, both experienced a repackaging phase. For the BRI, it took two years for central agencies, policymakers, local governments and state-owned enterprises (SOEs) to expand and interpret the announcement of the BRI into an implementable initiative (Ye 2021). It was not until 2015 that China's NDRC, MOFCOM and MFA released BRI guidelines (MFA 2015, Ye 2021). Similarly, the PGII has evolved from an announcement of intent in 2021, packaged as the B3W, to an initiative with concrete goals and indications of more coordination.

Rebranding is also a feature common to both initiatives. China's financing institutions, CHEXIM and CDB, maintained the same mandates to support Chinese companies and exports before and after the BRI. Although the volume of finance increased, their patterns of finance remained the same (Ye 2021). CHEXIM continued to primarily support domestic industry export goods and services abroad, and CDB continued its status as a dominant infrastructure financier. Both institutions repackaged their activities under the BRI, while also issuing new loans for projects abroad. The PGII appears to be taking the same path. G7 financing institutions are fulfilling their mandates, while financing is now being branded as contributing to the PGII (DFC 2022). For example, the Zambia-Tanzania-Kenya (ZTK) interconnector project announced in 2020 has been rebranded as a project of the GG in the

EU-Africa Global Gateway Investment Package (COMESA 2020, EU 2022). At the same time, there are new features of committed financing from European institutions such as EFSD+ (NDICI)-Global Europe.

Domestic growth is prominent within the objectives of both initiatives. China's leaders sought to use the BRI to address domestic issues of industrial overcapacity, utilize foreign reserves and improve connectivity between China and the rest of the world through hard infrastructure and maintaining diplomatic relationships. The PGII's inherent goals also focus on bolstering domestic growth. The US plans to implement the PGII as a means to "enhanc[e] American competitiveness in international infrastructure development and creat[e] good jobs at home (White House 2022)."

The BRI and PGII share overlapping similarities in some of the sectors they aim to support. Greening the BRI has become a policy priority in China and the G7 has prioritized supporting projects that address climate change needs. The goals of developing green and sustainable infrastructure to minimize ecological impact, reducing pollution and increasing energy efficiency to confront the global challenge of climate change is evident in the BRI and PGII (NDRC 2022, G7 2022b).

In terms of financing actors at play, the BRI largely relies on Chinese policy banks (CDB and CHEXIM), large commercial banks (such as Bank of China, Industrial and Commercial Bank of China), a state-owned insurance agency (Sinosure), China's aid agency (China International Development Cooperation Agency), overseas development investment funds (such as the Silk Road Fund) and other lenders. Chinese companies utilize finance from these institutions to expand to overseas markets, introduce Chinese standards and technologies and buffer host countries' delayed payment. Similarly, the PGII also encourages finance from G7 public institutions. G7 public finance institutions will extend loans and guarantees on commercial banks to support G7 companies providing goods and services abroad. Project development and finance will adhere to G7 standards focused on values, high impact and transparency. Cooperation and communication between these state-level entities and between public and private sector actors is likely to require coordination effort within the PGII, as it has been required of the BRI.

Lastly, the PGII mirrors what the BRI has become. Under the pillar of infrastructure, the BRI has financially supported infrastructure development in largely low- to middle-income countries within sectors that BRI implementers (SOEs and other companies) have had the capacity to participate. Likewise, the PGII seeks to support infrastructure development within low -to middle-income countries. While this ambition has in part been underpinned by geopolitical competition, this similarity allows for joint contributions and boosts the amount of global public finance directed at infrastructure development if the PGII is to achieve its commitments.

## Differences

The initiatives also diverge in terms of their unique features. Historically, China's BRI is primarily focused on supporting traditional hard infrastructure: ports, roads, dams, railways, electric power plants and telecommunication facilities. Over the past two decades, China has accumulated experience in building infrastructure overseas, either by constructing contracted projects or through financially supporting those projects and China has developed a comparative advantage in cost and project turnover time. In comparison, the PGII focuses on "softer" outcomes, namely improvements in climate, health and health security, modernized digital technology and gender equity and equality. The G7 leaders could leverage their domestic and international experience to enhance equity and address the needs of vulnerable populations in these areas.

In terms of project scale, the BRI has supported megaprojects: large-scale, complex ventures that cost over $1 billion, involve multiple stakeholders and bring potential transformational impact on millions of people (Flyvbjerg, 2017). The prominence of megaprojects is evident from the percentage of projects exceeding $1 billion in Chinese overseas investment and BRI projects. According to the CODF Database, megaprojects account for 13 percent of the total number of projects (63 of 503 projects) and 55 percent of finance value ($158 billion of $287 billion) Chinese policy banks supported from 2013-2019 (Ray et. al. 2020). In contrast, PGII supported projects tend to be on the small to medium scale with the largest project supported by a $500 million loan through a US institution.

The BRI mainly relies on public bilateral loans (concessional and commercial) and investment backed by state-owned banks and funds to support project construction in developing countries. It also has had limited success in leveraging private capital (Zhang 2021). While striving to use the newly established Asian Infrastructure Investment Bank to power multilateral infrastructure financing, China's limited experience makes it largely reliant on the World Bank and Asian Development Bank for operational models. In contrast, the PGII seeks to mobilize bilateral and multilateral tools to catalyze hundreds of billions of dollars in private-sector capital. However, the long investment cycle and low return of public infrastructure projects have caused private sector financiers, more oriented to short-term returns, to shy away from this type of investment (World Bank 2021). To the extent that the PGII can more effectively mobilize private capital through its experience with bilateral and multilateral development finance, it would offer tremendous resources for financing global infrastructure.

Although the BRI and PGII both face significant needs for coordination, they also approach coordination differently. The Belt and Road Construction Leadership Group, a state-level steering committee housed at the State Council led by a vice premier, coordinates BRI efforts between different ministries, agencies, provinces, development banks and SOEs. At the ministerial level, the NDRC is responsible for implementing the directories from the leadership group and coordinating with other ministries. To date, there is limited evidence on the effectiveness of such coordination mechanisms. The PGII, while aimed at coordinating sources of bilateral and multilateral development finance for high-standard infrastructure investment, has yet to generate an overarching, transnational, issue-specific coordination mechanism across all G7 countries. However, each G7 country appears to solely coordinate their own institutions' contributions to PGII, similar to the US example depicted in Figure 2.

## CONCLUSION: POLICY RECOMMENDATIONS AND IMPLICATIONS

The development of the BRI and PGII is important for bridging the financial and capacity gaps in global infrastructure development, addressing global challenges and achieving the SDGs. Comparing these initiatives reveals similarities: a focus on infrastructure development, progress pathways evolved from intent to implementation, a rebranding of existing development assistant efforts, domestic growth as a prominent priority and the utilization of similar financing tools. The comparison also reveals divergent features in the types of infrastructure supported (hard versus soft), the project and financing scale, the reliance on state finance versus private sector finance, the number of actors involved and the level of coordination.

Given such similarities and differences, three policy recommendations emerge for China, the G7 and recipient countries.

- **Institutions in the BRI and PGII should consider collaboration in the long run.** While political and security tensions between the US and China suggest that the BRI and PGII may not work closely together any time soon, there is no reason to think that the two initiatives are necessarily at odds with one another. The PGII's infrastructure standard consortium focus on smaller interventions and "softer" components of infrastructure development can be potentially complementary to the BRI's focus on physical infrastructure development. Institutions within these initiatives could not only learn from one another's comparative advantages, they could also support different aspects of the same project based on their competitive advantages. Such collaboration may be supported through co-financing agreements between financing institutions. These agreements could be underpinned by multilateral platforms, such as restarting the international working group on export credits, which aimed to coordinate a set of common rules on export credits amongst China, G7 and other countries (SACE n.d.), or utilizing Finance in Commons, a platform that strengthens collaboration between public development banks (FIC n.d.).

- **If collaboration is not feasible in the short term, institutions in the BRI and PGII could pursue complementary competition.** Rather than competing solely on the most bankable or less risky deals, institutions under the two initiatives may consider spreading their capital across a diverse set of projects that leverage their comparative advantages while strengthening risk mitigation practices. Based on the capital, risk appetite, capability and willingness of PGII or BRI institutions, one set of institutions from the BRI could support a series of projects in one regional or sectoral area, while another set of actors from the PGII could support a series of projects elsewhere. For projects where there's competition, the best institution with competitive offerings would win, but BRI and PGII institutions can also seek to support other projects with less competitors. Additionally, BRI and PGII institutions can focus on collaborating more with host regional financing institutions and focus on working with recipient countries instead of competing with one another.

- **Recipient countries should leverage the differences in the initiatives to negotiate the best deal for their development projects.** The BRI and PGII collectively provide the Global South with multiple options for supporting hard and soft infrastructure in prospective recipient countries. This allows countries to negotiate the best deal for their development projects. Recipient countries can choose to work with certain partners based on their own preferences for project types, financing options, standards and bilateral relationships. Given these initiatives' attempts to coordinate multiple financing institutions across their respective governments, the opportunity to request blended finance to achieve greater concessionality is also on the table. This allows countries to choose partners based on their needs, rather than geopolitical concerns. However, such opportunities are contingent on the ability of China and the G7 to deliver on the BRI and PGII, respectively.

While there are opportunities for prospective cooperation, both the BRI and PGII currently have their own challenges.

The BRI is currently in a stage of recalibration and refining (Ye 2021, Zhu 2020), as China addresses a moment of internal economic flux and feedback it has received on projects with high risks (Ray et. al. 2020). Recent policies have indicated that China is encouraging diversification of financing beyond policy bank loans to increased FDI, ODIF finance and loans to regional lending institutions (Hwang et. al. 2022, FOCAC 2021, Moses et. al. 2022). In this context, China recently announced the Global Development Initiative (GDI), China's vision for pursuing greener, balanced development and reviving the global economy (Xi 2021). It is unclear what the GDI entails and how it will complement the BRI, but all new developments present an opportunity for shifts in the BRI.

The PGII has also suffered from reputational issues since the B3W, its predecessor, did not appear to have concrete lists of supported projects and cohesion across all G7 countries. Involving the private sector is a challenge and current public financing capacity is too low to make substantial contributions to addressing global infrastructure gaps. Internal domestic pushback against these initiatives, as politicians try to protect tax dollars are also issues that could curtail financing from the PGII. To address these challenges, the PGII should consider an overarching coordinating body or reporting mechanism across all G7 countries to keep each country accountable for achieving their commitments and pledges.

Amidst such challenges, the prospects of the two initiatives are particularly concerning given the existing infrastructure and energy finance gaps that remain. It is imperative that countries and institutions within the BRI and PGII continue to encourage the development of these initiatives. For the Global South, infrastructure development is one of a few catalysts of economic growth, therefore the success of these initiatives is consequential to achieving the SDGs and climate goals.

## REFERENCES


Bandiera, L., Vasileios, T. (2019) A Framework to Assess Debt Sustainability and Fiscal Risks Under the Belt and Road Initiative. World Bank Policy Research Working Paper 8891.

Bhattacharya, A., Gallagher, K.P., Muñoz, C.M., Jeong, M., Ma, X. (2019) Aligning G20 Infrastructure Investment with Climate Goals and the 2030 Agenda, Foundations 20 Platform. https://foundations-20.org/publication/aligning-g20-infrastructure-investment-with-climate-goals-the-2030-agenda/

Better Utilization of Investments Leading to Development Act of 2018 or the BUILD Act of 2018. https://www.congress.gov/115/bills/s2463/BILLS-115s2463rs.pdf

Chin, T. G., Gallagher, K.P. (2019) Coordinated Credit Spaces: The Globalization of Chinese Development Finance. https://onlinelibrary.wiley.com/doi/epdf/10.1111/dech.12470

COMESA. (2020) The ZTK Regional Power Interconnector is on Course. https://www.comesa.int/the-ztk-regional-power-interconnector-is-on-course/

European Union (EU). (2021) Global Gateway. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_6433

European Union (EU). (2022) EU - Africa: Global Gateway Investment Package - Infrastructure. https://ec.europa.eu/commission/presscorner/detail/en/fs_22_1122

European Union (EU). N.d. Africa Global Gateway Investment Package. https://ec.europa.eu/info/strategy/priorities-2019-2024/stronger-europe-world/global-gateway/eu-africa-global-gateway-investment-package_en

Export-Import Bank of the United States (EXIM). (2022) 2021 Competitiveness Report. https://www.exim.gov/news/reports/competitiveness-reports

Flyvbjerg, B. (Ed.) (2017) *The Oxford Handbook of Megaproject Management*. Oxford University Press.

Finance in Common (FIC). N.d. https://financeincommon.org/

Ge, T., Zhang, M. (2021) Belt and Road Initiative infrastructure investment Chain of Risks and Responding Strategies. <"一带一路"基础设施投资的连锁风险及应对策略>

Group of Seven (G7). (2022a) G7 Summit at Schloss Elmau: The Outcomes at a Glance. https://www.g7germany.de/g7-en/current-information/g7-summit-outcomes-2058314

Group of Seven (G7). (2022b) G7 Statement on Climate Club. https://www.g7germany.de/resource/blob/974430/2057926/2a7cd9f10213a481924492942dd660a1/2022-06-28-g7-climate-club-data.pdf

Hwang, J., Moses, O. (2022) Chinese Loans to Africa During the COVID-19 Pandemic. *Boston University Global Development Policy Center*. https://www.bu.edu/gdp/2022/04/22/chinese-loans-to-africa-during-the-covid-19-pandemic/

International Energy Agency (IEA). (2022) Africa Energy Outlook Special Report.. https://www.iea.org/reports/africa-energy-outlook-2022

OECD. (2022) The Blue Dot Network. https://www.oecd.org/daf/blue-dot-network-proposal-certification.pdf

Lin, J.Y., Wang, Y. (2017) Development beyond aid: Utilizing comparative advantage in the Belt and Road Initiative to achieve win-win. *Journal of Infrastructure, Policy and Development* 1, no. 2: 149-167.

Ministry of Foreign Affairs (MFA). (2021) Forum on China-Africa Cooperation Dakar Action Plan (2022-2024). http://www.focac.org/eng/zywx_1/zywj/202201/t20220124_10632444.htm

Moses, O., Gormley, L., Springer, C. (2022) "Identifying and Analyzing China's Overseas Development Investment Funds." Forthcoming.

National Development and Reform Commission. (2022) 关于推进共建"一带一路"绿色发展的意见. Guidance on Promoting Greening the Belt and Road Initiative. https://www.ndrc.gov.cn/xxgk/zcfb/tz/202203/t20220328_1320629_ext.html

PRC State Council. (2015) Belt and Road Initiative: Vision and Actions. <一带一路：愿景与行动> https://www.yidaiyilu.gov.cn/wcm.files/upload/CMSydylgw/201702/201702070519013.pdf

Ray, R., Gallagher, K.P., Kring, W., Pitts, J., Simmons, B.A. (2019) Geolocated Dataset of Chinese Overseas Development Finance. *Boston University Global Development Policy Center*. https://www.bu.edu/gdp/chinas-overseas-development-finance/

SACE. n.d. International Working Group on Export Credits (IWG). https://www.sace.it/en/International-Relations/international-working-group-on-export-credits-(iwg)

Springer, C. (2022) Testimony Before the US-China Economic and Security Review Commission: China's Energy Plans and Practices. https://www.bu.edu/gdp/2022/03/17/testimony-before-the-us-china-economic-and-security-review-commission-chinas-energy-plans-and-practices/

(2019) The Charter of the Export-Import Bank of the United States. https://img.exim.gov/s3fs-public/21-01-19-exim-bank-2019-charter-as-amended-final.pdf

United States International Development Finance Corporation (DFC). (2022) DFC Board of Directors Approves $1.6 Billion of Investment to Advance Energy Supply, Food Security, Climate Solutions, and Other Key Development Challenges. https://www.dfc.gov/media/press-releases/dfc-board-directors-approves-16-billion-investment-advance-energy-supply-food

United States Congress Bill. (2022) Appropriations for the Department of State, Foreign Operations, and Related Programs for the fiscal year ending September 30, 2023, and for Other Purposes. https://docs.house.gov/meetings/AP/AP00/20220629/114967/BILLS-117-FC-AP-FY2023-AP00-SFOPS.pdf



White House Remarks. (2022) President Biden Formally Launches the Global Infrastructure Partnership on the Margins of the G7. The White House Video.

White House. (2022a) FACT SHEET: President Biden and G7 Leaders Formally Launch the Partnership for Global Infrastructure and Investment. https://www.whitehouse.gov/briefing-room/statements-releases/2022/06/26/fact-sheet-president-biden-and-g7-leaders-formally-launch-the-partnership-for-global-infrastructure-and-investment/

White House (2022b) Memorandum on the Partnership for Global Infrastructure and Investment. https://www.whitehouse.gov/briefing-room/presidential-actions/2022/06/26/memorandum-on-the-partnership-for-global-infrastructure-and-investment/

World Bank. (2021) How to Attract Private Finance to Africa's Development. https://blogs.worldbank.org/ppps/how-attract-private-finance-africas-development

Wu, J., Zhang, Y. (2013) Xi Proposes a 'New Silk Road' with Central Asia. https://www.chinadaily.com.cn/china/2013xivisitcenterasia/2013-09/08/content_16952228.htm

Wu, J., Zhang, Y. (2013) Xi in Call for Building of New 'Maritime Silk Road.' https://usa.chinadaily.com.cn/china/2013-10/04/content_17008940.htm

Wuthnow, J. (2017) *Chinese Perspectives on the Belt and Road Initiative: Strategic Rationales, Risks, and Implications*. Washington, DC: National Defense University Press.

Xi, J. (2021) Full text of Xi's Statement at the General Debate of the 76th Session of the United Nations General Assembly. Xinhua. http://www.news.cn/english/2021-09/22/c_1310201230.htm

Xinhua. (2015) Belt and Road Construction Leadership Group's Q&A with Journalists on Belt and Road Development. <推进"一带一路"建设工作领导小组办公室负责人就"一一路"建设有关问题答记者问> http://www.gov.cn/xinwen/2015-03/29/content_2839848.htm

Xinhua. (2021) China has signed over 200 Belt and Road cooperation agreements with 145 countries and 32 international organizations.. <我国已与145个国家、32个国际组织签署200多份共建"一带一路"合作文件> http://www.gov.cn/xinwen/2021-12/16/content_5661337.htm

Ye, M. (2019) Fragmentation and mobilization: Domestic politics of the Belt and Road in China. *Journal of Contemporary China* 28, no. 119: 696-711.

Ye, M. (2020) *The Belt Road and Beyond: State-mobilized Globalization in China: 1998–2018*. Cambridge University Press.

Ye, M. (2021) Fragmented Motives and Policies: The Belt and Road Initiative in China. *Journal of East Asian Studies* 21, no. 2: 193 – 217. https://www.cambridge.org/core/journals/journal-of-east-asian-studies/article/abs/fragmented-motives-and-policies-the-belt-and-road-initiative-in-china/5F4614DAD278568FA5BBEBD92B6DD467

Zhu, K., Shi, R., Lempert, R. (2020) Recalibrating the Belt and Road Initiative Amidst Deep Uncertainties. *Journal of Mega Infrastructure & Sustainable Development* 2, no. 1: 47-68.

## APPENDIX

### Table 1A: BRI Institutions

| Country | Public Development-Related Institutions | | | | Commercial Institutions |
|---|---|---|---|---|---|
| | Aid Agency | Development Finance Institution | Export Credit Agency (ies) | Other Related Agencies | |
| China | China International Development Cooperation Agency (CIDCA) | China Development Bank (CDB) | Export-Import Bank of China (CHEXIM); China Export & Credit Insurance Corporation (Sinosure) | Belt and Road Construction Leadership Group, Ministry of Foreign Affairs, National and Development Reform Commission, Ministry of Commerce | Chinese commercial banks, companies (including state-owned enterprises), Overseas Development Investment Funds (private equity funds, sovereign development funds, joint investment funds) |

**Source:** Authors' compilation.

### Table 2A: Expected PGII G7 Institutions

| Country | Development Institutions | | | | Private Sector |
|---|---|---|---|---|---|
| | Aid Agency | Development Finance Institution | Export Credit Agency (ies) | Other Related Agencies | |
| United States* | United States Agency for International Development (USAID) | United States Development Finance Corporation (USDFC) | Export Import Bank of the United States (EXIM) | Millennium Challenge Corporation (MCC), U.S. Trade and Development Agency (USTDA), U.S. Department of Commerce, U.S. Department of State, US Department of Commerce etc. | G7 multinational companies and small and medium enterprises (SMEs), international commercial banks (e.g., CitiGroup, HSBC, Credit Agricole, MUFG Bank, Standard Bank, etc.), G7 investment funds (e.g., sovereign wealth funds, private equity funds, pension funds) |
| Canada | Canadian International Development Agency (CIDA) | Development Finance Institute Canada (FinDev Canada) | Export Development Canada (EDC) | Global Affairs Canada | |
| France | Agence Francaise de Developpement Group (AFD Group) | Proparco | Bpifrance Assurance Export | Ministry of Europe and Foreign Affairs | |
| Germany | Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH | Kreditanstalt für Wiederaufbau (KfW DEG) | Euler Hermes | Federal Foreign Affairs Office | |
| Italy | Italian Agency for Development Cooperation | Società italiana per le imprese all'estero (SIMEST) S.p.A, | Servizi Assicurativi del Commercio Estero (SACE) | Ministry of Foreign Affairs and International Cooperation | |
| Japan | Japan International Cooperation Agency (JICA) | Japan Bank for International Cooperation (JBIC) | Japan Bank for International Cooperation (JBIC), Nippon Export and Investment Insurance (NEXI) | Japan Overseas Infrastructure Investment Corporation for Transport and Urban Development (JOIN) | |
| United Kingdom | United Kingdom Aid Direct (UK Aid) | British International Investment (CDC Group) | United Kingdom Export Finance (UKEF) | Foreign, Commonwealth and Development Office | |

**Source:** Authors' compilation.



### Table 3A: EU Global Gateway Investment Allocation Breakdown

| Institution(s) | Amount (Billions Euros) |
|---|---|
| EFSD+ (NDICI)-Global Europe | 135 |
| EU Budget Grant Funding | 18 |
| European Financial and Development Finance Institutions | 145 |

**Source:** EU Global Gateway Press Release

### Table 4A: US PGII Commitments Listed in the White House Factsheet and List of PGII Projects

| Commitment Purpose | US Government (USG) Institution | USD Million | Type |
|---|---|---|---|
| The United States Development Finance Corporation (USDFC) disbursed $3.3 million of a technical assistant grant as a part of a $14 million grant financing package. The International Finance Corporation (IFC) committed $3.3 million, the Agence Française de Développement (AFD) committed $2 million, and the European Investment Bank (EIB) gave $5.2 million. | DFC, IFC, AFD, EIB | 14.00 | Grant |
| SubCom awarded a contract to build the Southeast Asia-Middle East- Western Europe submarine telecommunications cable. | NA | 600.00 | Contract |
| The USG (US Department of Commerce, Advocacy Center (DOC), the Export-Import Bank of the United States (EXIM) and the United States Trade and Development Agency (USTDA)) committed $4 million of additional capacity building for SubCom cable. | DOC, EXIM, USTDA | 4.00 | Grant |
| U.S. DOC and EXIM, U.S. firm AfricaGlobal Schaffer (Washington, DC), in collaboration with U.S. project developer Sun Africa (Miami, FL), signed a contract with the Government of Angola to develop a $2 billion solar project in four southern Angola provinces. | DOC, EXIM | 2000.00 | Contract |
| The USG committed $14 million towards the engineering and design of a small modular reactor (SMR) plant in Romania. Advocacy support from DOC, technical assistance from the US Department of State (State) and USTDA. | USG, DOC, State | 14.00 | Unknown |
| U.S. Agency for International Development (USAID) commitment to the World Bank's new Global Child Care Incentive Fund. | USAID | 250.00 | Grant |
| U.S. DFC committed up to $25 million to the Uhuru Growth Fund in West Africa. | DFC | 25.00 | Equity |
| DFC committed up to $30 million to the Omnivore Agritech and Climate Sustainability Fund 3. | DFC | 30.00 | Equity |
| State and USAID provided funding through the Digital Invest Program. | State, USAID | 3.45 | Blended |
| USAID will invest in South Asia's Smart Power Program. | USAID | 40.00 | Unknown |
| ADB Group was awarded a contract for a healthcare infrastructure project. | NA | 320.00 | Contract |
| The Millennium Challenge Corporation (MCC) in collaboration with the Government of Niger are implementing the $443 million Agriculture and Transportation compact | MCC | 443.00 | Grant |
| The MCC committed $420 million to Timor Leste, which includes $308 million for the Water, Sanitation and Drainage (WDS) project | MCC | 420.00 | Grant |
| DFC committed up to $500 million in debt financing for First Solar Project in Tamil Nadu, India. | DFC | 500.00 | Loan |

### Table 4A: US PGII Commitments Listed in the White House Factsheet and List of PGII Projects (continued)

| Commitment Purpose | US Government (USG) Institution | USD Million | Type |
|---|---|---|---|
| USTDA committed $1.2 million for broadband infrastructure expansion in South Africa | USTDA | 1.20 | Grant |
| DFC committed $31 million to GIP Medicina Diagnóstica S.A., Brazil. | DFC | 31.00 | Loan |
| State committed $2.96 million to AMI AC Renewables, Vietnam | State | 2.96 | Grant |
| DFC Disburses $83 Million (of $300 million) for Africa Data Centres to Expand ICT Infrastructure in South Africa | DFC | 83.00 | Loan |
| The Department of Transportation established the MOMENTUM technical assistance program. | Transportation | 0.00 | Other |
| USAID and Samhita-CGF through the REVIVE Alliance partnered with Mswipe and Mastercard to establish the digital payments incentive program with training In India. | USAID | 0.00 | Other |
| The Global Laboratory Leadership Program Expansion by the CDC. | CDC | 0.00 | Other |
| Healthcare Electrification and Telecommunication Alliance (HETA) by USAID. | USAID | 0.00 | Other |
| | Total Finance (Loan, Equity, Grant, Blended) | 1807.61 | |
| | Total | 4781.61 | |

**Source:** Authors' compilation. US White House Factsheet and List of PGII Projects.

### Table 5A: EU Global Gateway Commitments

| Commitment Purpose | Institution | Euros Millions | Type |
|---|---|---|---|
| European Union invests €1.6 billion ($1.8 billion) in Morocco for green and digital transition | EU and EU Commission | 1600.00 | Unknown |
| EU-Nigeria Digital Economy Package | EU and EU Commission | 820.00 | €160 million in grants and €660 million in loans |
| European Union, African Development Bank and the Cabo Verde Government co-financed the Maio port project in Cabo Verde | EU | 42.00 | Co-financed by the EU (€17 million), the African Development Bank (€17.8 million) and the Cabo Verde Government (€7.2 million) |
| Ivorian cocoa production support project | EU, EU Commission and Team Europe | 18.75 | Unknown |
| Ivory Coast security capacity strengthening project | EU, EU Commission and Team Europe | 10.00 | Unknown |
| Support and renewal of Côte d'Ivoire's climate commitments | EU, EU Commission and Team Europe | 6.00 | Unknown |
| Skills building project for Ivorian labor market | EU, EU Commission and Team Europe | 15.00 | Unknown |
| Support for cooperation and partnership between the EU and Côte d'Ivoire | EU, EU Commission and Team Europe | 8.20 | Unknown |

| Commitment Purpose | Institution | Euros Millions | Type |
|---|---|---|---|
| Technical cooperation facility, Annual Action Program | NDICI-Global Europe and Team Europe | 5.00 | Unknown |
| Contract with Niger for Resilience and Reconstruction | NDICI-Global Europe and Team Europe | 195.00 | Budget support program |
| Nexus Three Borders project in Niger | NDICI-Global Europe and Team Europe | 50.00 | Endowment |
| Education and job creation support project in Niger | NDICI-Global Europe and Team Europe | 50.00 | Unknown |
| EU-Ivory Coast-Ghana-Cameroon: Sustainable Plantation | EU and EU Commission | 25.00 | Unknown |
| Northern Ghana irrigation infrastructure | EU, EU Commission and France; amount mentioned is EU contribution only | 44.70 | Grant |
| African Union (AU)-EU Digital4Development Hub | EU and Team Europe (potentially) | 8.00 | Unknown |
| Developing Employment in Senegal | EU | 40.00 | Unknown |
| Vaccine Roll-out in Africa | Team Europe | 425.00 | Unknown |
| COVID Digital Certificates in Africa | EU | 15.00 | From the EU budget |
| Sexual and reproductive health and rights | Team Europe | 60.00 | From the EU budget and potential further finance from Team Europe |
| Trans-European Network (Western Balkans and Turkey region)* | EU | 9000.00 | Planned to grant |
| Additional support for Trans-European Network (including linkage of North African countries to the Union)* | EU | 4600.00 | Unknown |
| Youth Mobility for Africa (including Erasmus+) | EU and Team Europe (potentially) | 970.00 | Unknown |
| | Total | 18007.65 | |

**Source:** Authors' compilation. European Union Press Corner.

BU Global Development Policy Center

Boston University
53 Bay State Road
Boston, MA 02215

gdp@bu.edu
@GDP_Center
bu.edu/gdp


*The Global China Initiative (GCI) is a research inititiative at Boston University Global Development Policy Center. The GDP Center is a University wide center in partnership with the Frederick S. Pardee School for Global Studies. The Center's mission is to advance policy-oriented research for financial stability, human wellbeing, and environmental sustainability.*

**www.bu.edu/gdp**