Building on International Consensus for Quality Infrastructure
Moving toward Implementation of Sustainable Development Goal 9

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THE ISSUE
- Without concrete international action, the global quality infrastructure gap will hinder the realization of the UN 2030 Agenda for Sustainable Development, economic recovery from Covid-19, and the ability of countries to avoid going into long-term debt.
- While recent international consensus on quality infrastructure standards (led by the G7 and G20) provides a sturdy foundation, development stakeholders should pivot toward implementation, through creating new resources to build local standards-implementation capacity, mainstreaming infrastructure standards in development work, and strengthening accountability systems.
- Sustainable Development Goal 9 (SDG 9) on Industry, Innovation, and Infrastructure—and the accompanying ecosystem of responsible multilateral bodies—offers significant insights for practical implementation of international standards and an attractive platform for building global momentum on quality infrastructure initiatives, including the Blue Dot Network (BDN).

INTRODUCTION
The Biden-Harris administration has made improving U.S. infrastructure a cornerstone of its domestic policy agenda. The originally proposed $2 trillion infrastructure plan aims to rebuild critical domestic systems, improve employment opportunities for Americans, and overhaul infrastructure policy to give greater focus to sustainability. The United States is not alone in this quest for improved infrastructure, and other countries have also begun initiatives outside their borders. China, having supported its own radical, state-led domestic infrastructure expansion, is now looking to finance, plan, and build major transportation and infrastructure projects in the developing world as part of its Belt and Road Initiative (BRI), launched in 2013. While many observers expect the total value of the BRI to decline in coming years, the initiative is likely to continue serving China’s geopolitical interests through its strategic infrastructure transactions and the legacy of completed projects.

There have been no similar, comprehensive, globally coordinated infrastructure initiatives in response to Chinese foreign infrastructure investments. While the United States has focused on creating and promoting accountability through international alignment behind quality infrastructure standards, there need to be concrete movements that create more alternatives to the BRI’s financing model. Fortunately, in an April 2021 statement on climate financing, President Joe Biden signaled greater interest in supporting the implementation of the G20 Principles on Quality Infrastructure Investment, utilizing such programs as the burgeoning Blue Dot Network (BDN).
The BDN, created in 2019 under the Trump administration in partnership with Japan and Australia, was an impressive yet underdeveloped attempt to recognize infrastructure projects that uphold international quality standards by issuing them a “blue dot” certification. Amassed, the blue dot projects would signal a global effort to uphold quality standards, give preference to responsible private-sector actors, and increase private-investment flows. With many countries often defaulting to the lowest-cost option in selecting infrastructure contracts, the benefits of the “blue dot” brand could provide alternatives for countries to consider. At the time of creation, the BDN was cast as part of a larger effort to counterbalance Chinese infrastructure investments in the developing world. Although the BDN was never finalized, it has the broader capacity to build out a community of recognized upholders of quality standards. While it is unusual for a new administration to pick up a prior administration’s effort, the BDN has significant potential, specifically to create an international center of gravity that can implement climate-related standards.

Despite broad international consensus on quality infrastructure objectives, the challenge that remains is implementation, which is largely dependent on the ability to align specific national-level criteria, procurement processes, and private-sector incentives. When considering the wide array of preexisting infrastructure standards and initiatives, it remains unclear how countries can—through the BDN or more broadly—successfully and realistically incorporate international standards into domestic infrastructure interests, including within the United States. Implementing shared criteria and building the core institutional ecosystem to support it will require significant development resources so that member states can cooperate to turn broad, collective language on “quality” into a tangible, on-the-ground reality.

Quality infrastructure is critical to all the development objectives encapsulated in Agenda 2030, from education and health to digital development. The objectives of implementing quality infrastructure targets, however, are listed in UN Sustainable Development Goal 9 (SDG 9) on Industry, Innovation, and Infrastructure. SDG 9 includes four infrastructure-focused targets that international actors can pursue to enhance the quality of infrastructure projects (see Box 1). Through national reporting frameworks, it also offers accountability—a major challenge in the global infrastructure space.

While recognizing that quality infrastructure can help achieve all the sustainable development goals, this short brief specifically examines SDG 9 as an organizing framework and platform for countries to implement new infrastructure projects. Although international agreements on quality infrastructure are often referenced throughout development policy circles, practical coordination with UN agencies and direct alignment with development frameworks have been more limited. This short brief will look at ways that the United States can reengage with development agencies and leverage SDG 9 to amplify international consensus, prevent duplication of efforts, and ensure emerging initiatives such as the BDN can be successfully implemented in the developing world.

SDG 9 does not purely cover infrastructure. The broader goal has eight targets and 12 respective indicators that also encompass key provisions on industrialization, scientific research, and policy environments. The targets most relevant to infrastructure include:

- Target 9.1, which explicitly calls for quality infrastructure;
- Target 9.4, which centers on environmentally conscious infrastructure;
- Target 9.a, which looks at international support for infrastructure development; and
- Target 9.c, which centers on increasing access to the internet and communications technologies.

The goal possesses unique advantages not found in other international standards regarding quality infrastructure. Because SDG 9 and its associated indicators do not provide a robust checklist for implementing quality infrastructure, they can be leveraged to find commonalities with other international infrastructure efforts and even increase general international buy-in to major infrastructure initiatives.
BACKGROUND
The need for quality infrastructure across both the developing and developed world is significant. By 2040, the total global infrastructure financing gap to reach the SDGs is estimated to be almost $15 billion, with emerging markets in Asia, Latin America, and the Caribbean constituting the greatest demand. The annual infrastructure financing gap is also expected to grow in both proportion and volume for at least the next 10 years, signaling the need for urgent international action. In the short term, the Covid-19 pandemic and an evolving and complex climate crisis will only further exacerbate the vast global infrastructure divide.

THE NEED FOR QUALITY INFRASTRUCTURE
Quality infrastructure is foundational to development outcomes, cutting across economic and social sectors. However, developing countries face several barriers to implementing large-scale quality infrastructure projects and bridging the significant financing gap. In some cases, countries must incur significant external debt to fund these projects, plunging them into precarious financial situations. They may also experience an array of negative social and environmental externalities associated with poorly planned infrastructure.

To address the global infrastructure gap—especially in developing countries—policymakers around the world have taken several steps to improve quality infrastructure standards, often through multilateral means. The Addis Ababa Action Agenda, one of the first instances of collective action calling for a “global infrastructure forum,” built upon nascent efforts to improve capacity building for infrastructure through public-private partnerships and improved domestic resource mobilization. In 2016, building on the Addis Ababa language, the United Nations specifically called on member states to support quality, reliable, sustainable, and resilient infrastructure in SDG 9.

In examining quality infrastructure and associated international frameworks and standards, this piece uses the International Network on Quality Infrastructure’s (INetQI) definition of quality infrastructure:

The system comprising the organizations (public and private) together with the policies, relevant legal and regulatory framework, and practices needed to support and enhance the quality, safety and environmental soundness of goods, services and processes.

INetQI further emphasizes the importance of quality infrastructure to accessing domestic and foreign markets, calling it “a critical element in promoting and sustaining economic development, as well as environmental and social wellbeing.”

The SDGs are a set of 17 interconnected goals—adopted by all 193 UN member states—that shape the development framework of Agenda 2030. As a powerful indicator of consensus, the SDGs have also become a critical rallying point for countries to achieve more ambitious and aligned development cooperation beyond the base framework and individual indicators, including financing projects through the Joint SDG Fund and working to speed Covid-19 recovery.

After the SDGs were announced in 2016, the Group of Seven (G7) and Group of 20 (G20) issued numerous relevant policy documents on quality infrastructure. These include the G7 Ise-Shima Principles for Promoting Quality Infrastructure Investment, the Charlevoix Commitment on Innovative Financing for Development, the Roadmap to Infrastructure as an Asset Class, and the important G20 Principles for Quality Infrastructure Investment (see annex for more information on each).
THE ALTERNATIVE INFRASTRUCTURE MODEL

There are two main causes of the increased attention to quality infrastructure since 2015: the controversial impact of infrastructure investments in Afghanistan and the 2013 announcement of China’s One Belt, One Road (OBOR). Later renamed the Belt and Road Initiative (BRI), OBOR explicitly prioritized infrastructure development along both land and sea routes. Since 2013, China has also announced a number of BRI-related offshoots such as the Digital Silk Road (mostly made up of private companies), the Health Silk Road, and “green Belt and Road” efforts to supplement the initiative’s early focus on transport and energy. The projects are largely financed and implemented through state-owned policy banks such as the Export-Import Bank of China.

Valued at over $1 trillion dollars, today’s Belt and Road transactions constitute the largest global infrastructure project to date—outweighing the comparable investments of the Marshall Plan and even that of all large multilateral development banks (MDBs) combined. While its infrastructure-heavy transactions were not initially seen as development efforts, China’s growing engagement in international development spaces has changed the overall thinking about its global investments. China’s three white papers outlining its development strategy illustrate an evolving interest to “count” Belt and Road transactions as development and to reshape the development landscape, including a notable recent push to influence international organizations and multilateral standards-setting bodies.

Even though the BRI was created concurrently with several international deliberations and consensus agreements on quality infrastructure, the project skirted aligning with those reforms (as well as existing MDB standards). China often finances infrastructure projects that have weak commercial viability, leading to continued concern about underlying motivations and opportunities for local corruption. The 2019 CSIS report The Higher Road: Forging a U.S. Strategy for the Global Infrastructure Challenge detailed China’s decades-long pressure on local officials to select the lowest-cost option “without regard to long-run operational costs or longevity,” thereby reinforcing long-term corruption at the expense of the public good.

The large-scale projects also prompt concerns of long-term economic sustainability—public debt in Djibouti increased from 50 percent of gross domestic product (GDP) to 85 percent after only two years of involvement with the BRI. China experts suggest the BRI may have intentionally sought to exploit the vacuum of formal infrastructure standards, allowing its state-owned enterprises make the rules. Writing for the Carnegie Endowment for International Peace, Evan Feigenbaum and Michael Nelson assert that “Beijing’s national champions [have] opportunities to set de facto standards by building backbone infrastructure in markets where they predominate.” This trend is perhaps most concerning in highly contested and critical spaces “like ultra-high voltage power transmission, [where] China is the only country currently deploying relevant technologies on a large scale.” Such technologies are present in numerous projects, particularly those that seek to build “safe cities” by outfitting new buildings with surveillance technology.

The Covid-19 pandemic provided a unique moment to address BRI projects’ adherence to international standards and push for greater global ambition regarding quality infrastructure, specifically based on host countries’ concern about the health of Chinese projects. In the past year, over 60 percent of BRI projects have been somewhat or severely affected, with many put on hold. China has also announced that it will restructure the BRI post-pandemic to focus less on traditional understandings of infrastructure and more on information and communications technology, public health, and trade. This pause allows time to unpack the dichotomy between the BRI’s expected positive development impacts and its resulting negative economic, social, and cultural externalities.

FILLING THE GAPS IN MULTILATERAL APPROACHES TO QUALITY INFRASTRUCTURE

In the lead-up to the G20 Principles for Quality Infrastructure Investment (also known as the Osaka Principles) in 2019, CSIS analysis called for countries to work toward adopting a universal set of standards to “directly and tangibly” support the international development community’s diverse interests. While the Osaka Principles set a foundation for broad international consensus on quality infrastructure standards, much work remains to determine both narrower targets and criteria for local partners to use. Without greater consideration of national-level constraints and implementing partners’ perspectives, countries will be unlikely to break from country-level standards that create “gridlock” and allow “corruption and rent seeking practice to prevail,” leaving major disparities between international standards and the realities that citizens experience.
While SDG 9, the Osaka Principles, and supporting resolutions illustrate growing political will to shape infrastructure standards and hold all donors accountable to them, these preexisting frameworks alone are not enough. The international community, led by the United States, should provide resources to enhance local adaptation, improve technical development capacities, and establish well-managed accountability systems. Such actions will help developing countries in implementing infrastructure standards and provide an attractive international accountability mechanism to ensure commitments are followed through. These actors should work toward the following:

**Holistic Approach to Quality Infrastructure Mainstreaming**

- **Refine and adapt infrastructure criteria with a focus on implementation**
- **Enhance resources for development actors working to build local capacity**
- **Strengthen accountability and reporting systems**
- **Mainstream infrastructure standards into public and private sectors**

SDG 9’s focus on country-level change lends itself well to generating support for carrying out infrastructure improvements—while still leaving room for infrastructure practitioners to take on specific, localized activities to support quality infrastructure.

**Refine and Adapt Infrastructure Criteria with a Focus on Implementation**

International standards on quality infrastructure will require continual tailoring to better fit on-the-ground contexts. To create a menu of options, policymakers should harmonize existing criteria and incentivize their implementation. New criteria efforts that deserve attention include the following:

- The **Finance to Accelerate the Sustainable Transition-Infrastructure (FAST-Infra)** effort—led by HSBC, the Organization for Economic Cooperation and Development (OECD), the International Finance Corporation, the Global Infrastructure Facility (GIF), and the Climate Policy Initiative—seeks to create a global labeling system for sustainable infrastructure assets that support Agenda 2030. This framework includes 14 key criteria that will inform upcoming conversations at the G7, G20, and 26th UN Climate Change Conference of the Parties (COP26), offering a powerful starting point for shared implementation. The GIF has already begun applying this framework to “social infrastructure” responses to Covid-19, hoping to apply best practices toward the crisis.

- The American Society of Civil Engineers’ (ASCE) **Standard Requirements for Sustainable Infrastructure** will provide important insights and guidance for future U.S. infrastructure initiatives and commitment to the SDGs.

- The 10 **Equator Principles (EPs)** have been adopted by 118 financial institutions in 37 countries for application in determining, assessing, and managing environmental and social risk in projects.

When attempting to harmonize existing standards, local perspectives will be critical to the iterative processes of piloting, adapting, and eventually refining criteria. The OECD suggests that common clauses and contractual building blocks should be adapted to individual contexts to address “the heterogeneous nature of infrastructure.” The process of choosing and adapting standards also boosts local decisionmaking and ownership, which will further benefit from SDG 9 and the Agenda 2030 framework given their focus on local implementation and reporting mechanisms. Yet while SDG 9 does provide the outline for these activities, local leaders and communities will also likely need such incentives as subsidized financing options, preferential treatment on trade, debt restructuring, or soft-power programming like workforce development.

**Enhance Resources for Development Actors Working to Build Local Capacity to Align with International Standards**

Next, it is critical that international development agencies enhance their ability to support national-level technical capacities to improve infrastructure. As CSIS experts noted in 2019, “the lack of a human capital base that is capable
of planning, procuring, implementing, and maintaining a multitrillion dollar infrastructure project continues to be one of the main challenges for the emerging markets.” This is unfortunately still the case. Development agencies do not currently have a framework to assist countries in: (1) evaluating which projects are priorities; (2) evaluating potential contracts; and (3) introducing quality standards for all contractors and quantifying the downsides of not meeting those standards.

Closing this gap will require a concerted effort and new resources, both budgetary and in terms of personnel. Development agencies will need to invest in technical experts to support local training on international standards, support national-level bodies as they review potential projects and contracts, and create a mechanism for ensuring projects are in compliance. This effort could also take the form of new partnership, including through agencies already closely aligned with Agenda 2030. The United Nations Office for Project Services (UNOPS), for example, has highlighted the links between quality infrastructure and the SDGs and provided local capacity support to governments working on infrastructure projects in order to accelerate progress on SDG goals.

An analogous challenge in scope and scale was the U.S. Agency for International Development’s (USAID) experience establishing tax systems in Central and Eastern European states after the collapse of their communist systems. This daunting exercise required action at all levels of the fiscal ecosystem, including developing tax codes; streamlining administrative tasks such as registration, collection, and auditing; and creating and executing budgets with transparent processes for accounting, inter-governmental fiscal relations, and pension reform. As the lead technical assistance provider, USAID worked closely with local ministries of finance through long-term technical advisers. These advisers became “an integral part of the local team, often serving many years in countries of the region, thereby gaining credibility”—an approach that helped manage the frequent change in the top officials, assuring that departures did not undermine the program.

While infrastructure is wholly different from tax systems, both require a similar investment in development capacity. Although long-standing development agencies have the necessary relationships with local governments to mount a proper global response to the quality infrastructure gap, development agencies will need to devote significant resources to build out teams of experts that could train and mentor local staff to oversee potential infrastructure projects. This response would also need to be faster and more responsive than long-term tax counterparts. Precedents for such a swift approach include the Infrastructure Transaction and Assistance Network and the Department of Commerce’s Commercial Law Development Program, which have “flown in” development, investment, and legal advisers in response to quickly moving deals.

One example of early U.S. success in procurement is the 2013 U.S. Trade and Development Agency (USTDA) Global Procurement Initiative (GPI), which partners with the George Washington University Law School and the Massachusetts Institute of Technology to train foreign procurement officials on best practices in infrastructure financing, such as considering life-cycle costs and looking beyond the lowest-cost bidder. The program currently supports 13 partner countries through engaging with academia, building in-country capacity, and organizing trips for foreign procurement officials to observe state-level procurement reform in the United States. The GPI is successful because it brings to light the life-cycle costs of a project, not just initial costs, and thereby elevates the inherent link between quality infrastructure and sound procurement practices.

In particular, efforts by the OECD can help development agencies think through implementation of principles across a range of contexts. In 2019, the OECD presented principles regarding social and economic resilience in its Reference Note on Environmental and Social Considerations in Quality Infrastructure, which joined other international frameworks in flagging the importance of quality infrastructure to achieving Agenda 2030. The OECD’s 2020 Compendium of Policy Good Practices for Quality Infrastructure Investment is an additional example of a shared understanding of infrastructure.
and its applicability to various contexts. The document is particularly useful in its response to the Covid-19 pandemic, calling for members to support a “a strong, resilient, inclusive and green recovery” that will be more resilient to future shocks.

However, the United States will need to expand beyond ongoing technical assistance initiatives, which may benefit from reflecting on the implications of past approaches in Afghanistan and Pakistan. In his 2014 analysis of lessons learned from USAID activities in Afghanistan, the special investigator for Afghanistan reconstruction drew attention to the unsustainability of large-scale infrastructure support to the country. In many cases, infrastructure projects were able to skirt regulations and planning requirements because they were considered part of the larger military operation. The report also found that U.S. funding for Afghanistan to employ technical advisers in key ministries had resulted in significant financial mismanagement.

In acknowledgement of this legacy, development agencies should reinvest in quality procurement practice and build out cadres of U.S. technical advisers who have experience working on domestic projects. This will help it meet target SDG 9.3, which calls for increased technical support on infrastructure design and implementation. Furthermore, through incorporating SDG 9, governments and development agencies can leverage the SDGs’ robust network of experts and implementers to incorporate best practices.

**MAINTAIN INFRASTRUCTURE STANDARDS INTO OTHER COMPLEMENTARY PUBLIC AND PRIVATE SECTORS**

This shift will also require non-infrastructure development practitioners to become familiar—through government- or agency-wide mainstreaming processes—with how quality infrastructure relates to their own work. The interconnected nature of the SDG framework and Agenda 2030 often enables some mainstreaming. Engaging on SDG 9, for example, often requires development practitioners to consider how their actions affect the other 16 SDGs, which cover a range of thematic areas from energy (SDG 7) to poverty (SDG 1).

For example, democracy, rights, and governance practitioners should understand the nexus between democracy-building activities and infrastructure; conversely, elements of good governance, such as inclusive project design, should be applied to infrastructure life cycles. Strong infrastructure governance ensures that the right projects get built and are free of corruption—and are delivered in a manner that is efficient, cost-effective, affordable, and trusted by users, citizens, and other stakeholders. Experts specializing in fragility or seeking out innovative means for improving resilience should increase understanding of how infrastructure investments—including through the BRI—affect fragile and conflict spaces.

Development practitioners working on digital systems should also increase their familiarity with quality infrastructure standards, as the distance between digital infrastructure and more traditional “hard infrastructure” begins to close. SDG target 9.c specifically calls for devoting more attention to “information and communications technology” in developing countries as an infrastructure objective. The G20 made significant progress toward linking infrastructure with digital technologies during Saudi Arabia’s 2020 presidency, but there is more work to be done to ensure those working on bridges and road constructions rely on a shared vocabulary with those working on 5G networks and subsea telecommunications cables.

U.S. development officials working closely with the private sector understand how firms evaluate infrastructure projects—especially their potential risks. Mobilizing private investments will make or break achieving the joint goals of recovering from the pandemic and implementing quality infrastructure, and investors are increasingly aware of the multi-faceted benefits that come from supporting quality infrastructure abroad. In the words of one private-sector investor, “The consideration of ESG [environmental, social, and governance] factors has moved from being ‘nice to have’ to being ‘must have.’” Lowering barriers to entry and proactively de-risking—or demystifying risk perception—can form a powerful foundation for new private-sector partnerships.

Alignment behind the SDG platform provides opportunities to ground infrastructure efforts in broader understandings of development through relating projects to goals such as SDG 6 (clean water and sanitation), SDG 10 (reduced inequalities), and SDG 11 (sustainable cities and communities). In fact, a UNOPS mapping study found that infrastructure impacts 92 percent of all SDG targets. Private-sector financing will also be crucial to any modern international infrastructure push, and the SDGs may provide a more effective mechanism for companies to achieve their environmental, social, and corporate governance goals than investing into standalone
infrastructure initiatives. In addition to traditional infrastructure investment platforms, engaging with the SDGs provides more development-oriented resources and sources of funding, such as the SDG Investor Platform and the Joint SDG Fund.

**STRENGTHEN ACCOUNTABILITY AND REPORTING SYSTEMS**

Finally, the international community should begin to build in accountability systems. In 2019, in the lead-up to the G20 Osaka summit, CSIS analysis called for new attention to “developing credible indices, metrics, and standards to measure quality, creating roadmaps for bilateral development agencies and providing them with recommendations on how they could improve their assistance.” And in September 2020, the Multilateral Development Bank’s Infrastructure Cooperation Platform released a set of sustainable infrastructure indicators, seeking to create a “common language” that aligns with and complements the SDGs.

One potential avenue for improving reporting and accountability is the SDG voluntary national review (VNR) process, the primary accountability mechanism for detailing progress toward achieving Agenda 2030. VNRs are entirely country-led and often presented at the annual UN High-Level Political Forum. Because of their public nature, VNRs are very effective at sharing best practices, highlighting national initiatives, and asserting international leadership on the SDGs. They are also critical for supporting data collection efforts on SDG indicators and provide some incentives for countries to switch to or create new monitoring programs. To support countries in this process, the United Nations produces yearly guidance on conducting a VNR, from delineating the necessary “building blocks” to steps for after the presentation.

Since the establishment of the SDGs, only 17 out of 193 UN member countries have not produced a VNR, among them the United States. In contrast to many of the other 16, the United States is not currently experiencing conflict or facing resource constraints, suggesting that the decision not to participate has primarily been due to political considerations. Conversely, Japan’s most recent 2017 VNR highlights several priorities related to the SDGs, among them “Sustainable and Resilient Land Use, Promoting Quality Infrastructure.” This includes an international commitment to spending $200 million to promote quality infrastructure over the next five years, efforts that are amplified by their ties to SDG 9.

Competitors have also leveraged the narrative-building aspect of VNRs for their own gain. China’s most recent SDG progress report (not a full VNR) highlights the sometimes contentious BRI as a sustainable infrastructure achievement—even citing Sri Lanka’s Hambantota port project, which was leased to a state-owned Chinese operator for 99 years due to debt troubles. As a future priority, the report emphasizes “align[ing] BRI cooperation with the 2030 Agenda”—though given China’s reluctance to change controversial practices, it is possible that Agenda 2030 may instead become aligned with the BRI, impacting the United Nations’ catalytic potential. However, in the opposite direction, if the BRI establishes higher-level accountability criteria that do align with an internationally agreed-upon framework, future and ongoing initiatives may lead to more profitable Chinese transactions and even potential cooperation with the United States.

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**AUSTRALIA**

Australia provides an aspirational example of domestic infrastructure leadership and SDG 9 implementation. Australia has markedly expanded public infrastructure investment in the last five years, partially contributing to an infrastructure boom that is also supported by a rapidly growing population and favorable markets. Infrastructure Australia, a government agency that primarily focuses on public infrastructure advising, has primarily led the charge. Other prominent actors include the country’s Infrastructure and Project Financing Agency.

Building on this boom—and the results of two in-depth infrastructure audits in 2015 and 2019—the Australian government is now implementing the Infrastructure Investment Program, which will spend over $110 billion over the next decade, primarily on transportation infrastructure. To facilitate the process, the Australian government has created an innovative Infrastructure Priority List that highlights projects they intend to tackle in the upcoming year, increasing transparency and facilitating private-sector investment. Taking a whole-of-government approach that involves all states and territories, the program possesses many of the same principles as SDG 9. Furthermore, the 2019 Infrastructure Audit emphasized the importance of infrastructure to reaching the SDGs but noted that Australia’s current rate of progress on SDG 9 remained slower than desired.
APPLYING THE APPROACH: BLUE DOT NETWORK 2.0

The international community has come a long way on implementing quality infrastructure, aided by recent agreements. However, countries should give greater focus to mainstreaming quality infrastructure standards at national and sub-national levels, especially as infrastructure investments increase in the post–Covid-19 era. The International Monetary Fund (IMF) has already encouraged countries to take advantage of lower interest rates during the pandemic to invest in infrastructure. The World Bank has also signaled a willingness to finance green infrastructure to aid the economic recovery from Covid-19. If it does not move quickly, the international community may lose a major opening to implement infrastructure standards and risks perpetuating low-quality infrastructure for another generation.

The 2019 CSIS paper “Pursuing Quality of Infrastructure for Sustainable Growth” called for the G20 to include a global accreditation system and process as a means to “enhance the efforts to achieve transnational and transcontinental infrastructure connectivity.” That same year, the Trump administration began working to build that accreditation through the BDN, which pushed for infrastructure that is “open and inclusive, transparent, economically viable, financially, environmentally and socially sustainable, and compliant with international standards, laws, and regulations.” Reinforcing the objectives of the G20 Osaka Leaders’ Declaration, the BDN sought to define common certification standards for quality infrastructure and to create a visible brand behind that certification. Many have compared the process to the Leadership in Energy and Environmental Design (LEED) rating system, which has permeated U.S. building standards and some international sustainability efforts.

While evolving, the current iteration of the BDN uses a criteria methodology that pulls from the G20 Principles for Quality Infrastructure Investment, the Charlevoix Commitment on Innovative Financing for Development, and the Equator Principles. The post-Trump version of the network has also distanced itself from the heavily anti-China language that accompanied its original rollout. Building on the Biden-Harris administration’s general spirit of multilateralism, it has sought to extend the partnership base beyond Australia and Japan, specifically centering on engagement with European allies. The current BDN has emphasized working within the existing development ecosystem to establish a structure for managing membership, accreditation, and accountability.

Though the new administration is still adapting the network, the BDN may be recast to leverage quality infrastructure criteria to support wider social and economic impacts and more competitive private-sector financing. Yet the BDN is a single tool, not a strategy, and a common global vision will help align development actors across the U.S. government. In 2019, CSIS’s Global Infrastructure Task Force, led by Stephen Hadley and Ambassador Charlene Barshefsky, called for developing a strategic vision for quality infrastructure abroad, to be chaired by a deputy director for infrastructure who can engage with both the National Security and National Economic Councils. The strategic vision and accompanying policy objectives should align behind SDG 9 targets—such as 9.1, 9.4, and 9.c, which focus on high-quality, environmentally conscious, and digital infrastructure—and establish a strong programmatic foundation to guide more specific standards choices for programs.

Based on this envisioned strategy, the BDN could focus on alignment with existing international standards, including new efforts such as FAST-Infra and ASCE’s Standard Requirements for Sustainable Infrastructure. In doing so, the BDN should compile and interlink a varied menu of standards rather than expect countries and projects to conform to a static list. The aggregation of criteria should be a full interagency effort that builds on the work of the USTDA, the Department of the Treasury, and the International Development Finance Corporation.

To be successful, the network will also need meaningful bilateral alliances (specifically in Europe) to ensure support for MDB efforts to harmonize standards. The MDBs, especially the World Bank, have also increased their focus on implementing quality infrastructure, expanding upon a long legacy of financing. The G20’s Global Infrastructure Facility likewise brings together governments and MDBs to support over 100 projects in 52 countries, totaling $74 billion dollars raised from private-sector investors and multilateral development partners. Not only does the facility act as a hub for banks to share information regarding the end-to-end implementation of quality infrastructure, but it also offers country-focused capacity support.

U.S. development agencies might explore using new multilateral partnerships to reinforce these frameworks. The staffing and training needs associated with a new set of criteria will be significant. Given current personnel gaps,
a temporary solution might be to partner closely with international agencies. For example, engagement with UNOPS might build on the agency’s success in fighting corruption on development projects, including through procurement reform and public spending to enhance transparency on potential infrastructure contracts. UNOPS staff could be trained in the BDN criteria and support its integration into their capacity activities.

To harness the catalytic powers of SDG 9 and the BDN, the United States will also have to improve the relationship between domestic and international commitments. In The Higher Road, the authors warned against focusing too heavily on deep domestic needs for infrastructure that might overshadow and distract the United States while the “world beyond its borders is remade by this epochal infrastructure transformation.” Yet neither can U.S. investments abroad be carried out without regard for domestic conditions. To serve both foreign policy and the American middle class, the BDN should be applied at home, with key BDN partners using the standards, adopting the brand, and taking the lead on collective action, including toward SDG 9. This will have the dual purpose of building trust and setting a global example.

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STAKEHOLDER RECOMMENDATIONS

1. The international community should reinforce SDG 9 by refining and harmonizing criteria for quality infrastructure to be more relevant for country-level development specialists and infrastructure implementers, including by:
   a. Identifying opportunities, resources, and personnel support for meaningful quality infrastructure investments that prioritize supporting local partners throughout the full implementation life cycle, with an emphasis on procurement processes
   b. Enhancing local capacity for standards implementation through technical assistance for local private and public actors who can, in turn, promote local accountability and push back on corruption
   c. Utilizing the interconnected nature of the Agenda 2030 platform to support mainstreaming quality infrastructure into existing development activities, such as in the governance and digital transformation sectors
   d. Supporting MDB efforts to act as repositories for ever-evolving best practices, lessons learned, and documentation on quality infrastructure implementation

2. The U.S. government should close the gap between domestic and international understandings of quality infrastructure needs, implementation, and progress through applying SDG 9 accountability measures that are consistent across all nations, including by:
   a. Committing the United States to submit a VNR at the 2022 UN High-Level Political Forum, highlighting both domestic and international initiatives that support the achievement of SDG 9. As part of this process, it should:
      i. Invest in finding and collecting national-level data for SDG 9 targets
      ii. Encourage and provide guidance for cities and states to submit voluntary local reviews (VLRs) that will help improve tracking of local infrastructure outcomes
      iii. Follow the example of bilateral partners, such as Canada and Australia, in investing in domestic infrastructure agencies and, where possible, aligning long-term infrastructure strategies with SDG 9
   b. Uplifting infrastructure as a national security priority, building on the March Interim National Security Strategic Guidance to develop interagency policy mechanisms led by a deputy director for infrastructure and build out a strategic approach, of which BDN would be one tool
c. Rolling out BDN criteria, a vast effort that will require:

i. Alignment with SDG 9 and other international infrastructure standards regarding domestic infrastructure procurement, construction, and maintenance

ii. Investments in U.S. development agency personnel with the technical infrastructure knowledge to support training on the new criteria

iii. Partnerships with UN agencies that already support infrastructure capacity building abroad

3. **G7 and G20 members** should increase multilateral and bilateral alliances in support of collective action on **Agenda 2030** by:

a. Actively incorporating the perspective of civil society in developing quality infrastructure initiatives and standards to increase buy-in beyond government actors

b. Developing additional measures to increase accountability and enforceability of quality infrastructure standards, building on both nascent and ongoing initiatives such as SDG 9

4. The **United Nations** should harness MDB progress on infrastructure—including the recent development of common indicators—to reinforce accountability on Agenda 2030 by:

a. Participating in discussions to ensure that any new standards frameworks (such as BDN criteria, the ASCE’s Standard Requirements for Sustainable Infrastructure, and FAST-Infra) align with existing schemas

b. Ensuring that any reporting associated with infrastructure-related Covid-19 recovery initiatives includes MDB common indicators and is incorporated into public SDG reporting frameworks

5. **Private-sector actors** should continue to support the SDGs’ financial objectives by dedicating private capital, demystifying risk, and paying additional attention to the role of infrastructure as an asset class.

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<table>
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<th>Name of Standard</th>
<th>Year</th>
<th>Forum</th>
<th>Key Points</th>
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| G7 Ise-Shima Principles for Promoting Quality        | 2016 | G7 Japan  | • "Principle 1: Ensuring effective governance, reliable operation and economic efficiency in view of life-cycle cost as well as safety and resilience against natural disaster, terrorism and cyber-attack risks
• Principle 2: Ensuring job creation, capacity building and transfer of expertise and know-how for local communities
• Principle 3: Addressing social and environmental impacts
• Principle 4: Ensuring alignment with economic and development strategies including aspect of climate change and environment at the national and regional levels
• Principle 5: Enhancing effective resource mobilization including through PPP" |
| Charlevoix Commitment on Innovative Financing for    | 2018 | G7 Canada | • Discusses the role of development finance in achieving the SDGs and Agenda 2030
• Affirms the need for the private sector to finance "open and non-exclusive use of infrastructure" to achieve sustainable development outcomes
• Emphasizes the importance of “transparency, rule of law, good corporate governance, human and labour rights, environmental and social standards, economic efficiency in view of life cycle costs, resilience against risks such as natural disasters, attraction of new industries and private investment, transfer of expertise, open and non-exclusive use of infrastructure and sustainable and responsible financing.” |
| Roadmap to Infrastructure as an Asset Class          | 2018 | G20 Argentina | • Calls for “innovative new mechanisms” to finance infrastructure projects
• Seeks to address the “heterogenous” nature of infrastructure through offering improved options for standardization
• Champions infrastructure that is affordable, accessible, inclusive, and broadly beneficial “while being tailored to individual country conditions and consistent with local laws and regulations.” |
| G20 Principles for Quality Infrastructure Investment  | 2019 | G20 Japan  | • "Principle 1: Maximizing the positive impact of infrastructure to achieve sustainable growth and development
• Principle 2: Raising Economic Efficiency in View of Life-Cycle Cost
• Principle 3: Integrating Environmental Considerations in Infrastructure Investments
• Principle 4: Building Resilience against Natural Disasters and Other Risks
• Principle 5: Integrating Social Considerations in Infrastructure Investment
• Principle 6: Strengthening Infrastructure Governance” |

Source: Authors’ analysis of above standards (G7 Ise-Shima Principles for Promoting Quality Infrastructure Investment; Charlevoix Commitment on Innovative Financing for Development; Roadmap to Infrastructure as an Asset Class; and G20 Principles for Quality Infrastructure Investment).