

# **Building a Common Approach:** Global Infrastructure Standards

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# Building a Common Approach: Global Infrastructure Standards

## CONTENTS

Executive Summary	03
Introduction	03
Meta-Standards	03
Report Objectives and Methodology	04
Commonalities and Differences among Meta-Standards	04
The Challenges Facing the Adoption of Standards	05
Recommendations	05
Introduction	07
Sustainable Infrastructure Gap	07
Development of Infrastructure Meta-Standards	08
Objectives	09
Overview of Meta-Standards	10
Study Methodology	10
FAST-Infra	13
Background and Context	13
Framework	16
Status	17
Blue Dot Network	18
Background and Context	18
Framework	21
Status	22
Green Development Guidance	22

Background and Context	22
Framework	25
Status	26
Commonalities and Differences among Meta-Standards	27
Goals and Objectives	27
Meta-Standard Scope	32
Indicators and Metrics	34
Review Process	42
Data Platform	42
Meta-Standard Stakeholder Engagement	44
Governance Structure	45
Adoption Plans	46
Opportunities for Harmonization	48
Recommendations	49
Appendices	57
Literature Cited	57
Appendix A: Acronyms	63
Appendix B: List of Individuals Consulted	65
Appendix C: Objectives and Measures of Meta-Standards	66
Endnotes	72

#### **EXECUTIVE SUMMARY**

#### Introduction

Well-planned, -designed, and -built infrastructure projects are critically needed to improve economic productivity, transition to a low-carbon economy, mitigate environmental risks, and promote human rights and social inclusion. The urgency is greatest in emerging and developing economies. Encouragingly, both public—and private—sector investors are increasingly designating funds for just these types of infrastructure projects. A recent surge in public development finance (e.g., the United States' Build Back Better World, European Union's Global Gateway, and United Kingdom's Clean Green Initiative), in conjunction with existing bilateral and multilateral infrastructure initiatives (e.g., China's Belt and Road Initiative, the Asian Infrastructure Investment Bank), represent potentially hundreds of billions of dollars in new loans for green, sustainable, and quality infrastructure investments and guarantees. In the private sector, institutional investors such as pension funds are increasingly seeking sustainable, low-risk investments for their rapidly expanding environmental, social and governance (ESG) funds potentially representing billions more for sustainable, quality infrastructure projects.

And yet sustainable, quality infrastructure is still not being constructed at nearly the rate needed, especially in Middle- and Low-Income Countries (MLICs). A persistent barrier to tapping into financial resources is the absence of a reliable and widely recognized global standard or signal that identifies "bankable" infrastructure projects with low environmental, social, and governance risks, high debt transparency, and reliable economic returns over a project's life cycle. While there are a multitude of existing standards, rating systems, and guidelines for various aspects of infrastructure sustainability and quality, users find them difficult to distinguish. Consequently, the current landscape provides more confusion than clarity when selecting which infrastructure investments will support local, national, and global needs.

#### **Meta-Standards**

Over the last two years, three separate initiatives arose independently to promote a common approach to identify sustainable, quality, and/or green infrastructure projects. All three efforts target infrastructure development in MLICs. The first two global standard initiatives—FAST-Infra (Finance to Accelerate the Sustainable Transition-Infrastructure) and Blue Dot Network (BDN)—focus primarily on helping unlock private capital that can be mobilized to invest in sustainable, quality infrastructure. Both are largely premised on the assumption that public funds alone will not be sufficient to address the sustainable, quality infrastructure gap. A global infrastructure standard that reliably signals high quality, sustainable projects could potentially help channel billions of dollars in private institutional investments into emerging and developing markets. FAST-Infra, led primarily by finance-sector institutions, recently launched the Sustainable Infrastructure Label (SI Label) to identify sustainable infrastructure projects. The Blue Dot Network, led by the Governments of the United States, Australia, and Japan, recently introduced the Blue Dot Network framework for certifying quality infrastructure projects.

The third initiative, **Green Development Guidance**, has been developed by the Belt and Road Initiative International Green Development Coalition (BRIGC). The Green Development

Guidance has a narrower scope, focusing on an environmental-only classification for green infrastructure. It does not consider the social, governance, or financial risks that comprise sustainable and quality infrastructure. The primary aim of the Green Development Guidance is to encourage Chinese financiers and infrastructure developers to voluntarily select Belt and Road initiative (BRI) projects with low environmental risks.

#### **Report Objectives and Methodology**

The three initiatives have somewhat overlapping, but distinct, goals and standards; they have been developed at approximately the same time, and are being released in close proximity to one another; and there has been a relative lack of coordination among their developers, to date. These factors together raise a risk that the initiatives could result in further confusion rather than clarity for developers, financiers, and external stakeholders, and higher transaction costs for all market participants, potentially undermining the individual and collective objectives of the initiatives. In this report, we map out the rationale, approach, and technical aspects of each of the three meta-standards to better understand how they compare and differ from each other. We then offer recommendations on steps that could be taken to increase the adoption of all three meta-standards—independently and as a harmonized set.

This report is based on published documents from all three meta-standards, third-party sources such as white papers and media coverage, and interviews with key participants who were involved in developing the standards, engaging with stakeholders, and/or promoting plans to encourage widespread adoption.

### **Commonalities and Differences among Meta-Standards**

Each of the three initiatives has created a "**meta-standard**" that draws from and expands upon best available existing principles, guidelines, standards, rating systems, and certifications. The three initiatives have related goals and objectives, though with different approaches and scopes.

The **objectives** of FAST-Infra and Blue Dot Network are closely aligned in their primary aim to establish a globally recognized meta-standard that facilitates increased private-sector financing of sustainable, quality infrastructure, especially in MLICs. The Green Development Guidance, by comparison, emphasizes guidance for Chinese regulators, investors, and developers.

The Green Development Guidance has the narrowest **scope**, focusing on three environmental aspects: climate mitigation, biodiversity conservation, and pollution reduction. It does not address social or governance risks. FAST-Infra's SI Label focuses primarily on the ESG aspects of sustainable infrastructure. The BDN Certification's scope covers all quality infrastructure, which includes ESG requirements and other elements of the G20's Quality Infrastructure Investment (QII) Principles, such as good public governance, considerations of value for money, equal access, and sustainable development.

The three meta-standards vary in their structure, specific requirements, digital data platforms, governance structure, stakeholder engagement, and adoption plans.

### The Challenges Facing the Adoption of Standards

These initiatives face several challenges. The first lies in distinguishing between the three metastandards. A fundamental goal of each is to create a clear and widely recognized signal that identifies quality, sustainable, and/or green infrastructure projects with low risks. The virtually simultaneous introduction of the initiatives poses a risk of diluting the signal of each if they are poorly aligned and not well communicated.

The second challenge relates to the need for the meta-standards to be adopted concurrently by multiple stakeholder groups, including investors, project developers, and client-country governments. Acceptance by only one group could limit the effectiveness of the standard within the context where it is applied and frustrate broader adoption.

A final challenge is ensuring that MLICs are able to successfully participate in the meta-standard processes and realize their benefits. If no substantial efforts are made to achieve buy-in from MLICs to comply with requirements, these countries may perceive meta-standard requirements as introducing additional barriers to accessing infrastructure investments.

#### Recommendations

We offer nine recommendations of actions that could reduce friction and increase adoption of the three meta-standards.

#### 1. Measurement consistency

Close alignment of metrics and thresholds among the three meta-standards would promote consistency of communication, streamline requirements, and facilitate comparisons across meta-standards. We recommend that FAST-Infra, Blue Dot Network, and Green Development Guidance align their metrics and thresholds where areas of overlap occur.

#### 2. Rewarding certification

External review of sustainability and quality claims by a credible, independent auditor represents the best practice for conformity assessment against an auditable standard. We recommend that all three systems detail a process for independent external reviews to certify the claims of project developers and asset owners.

#### 3. Universal pre-screening tool

We recommend expanding and adapting a preliminary "quick-check" self-assessment tool for all three meta-standards to proactively encourage or discourage project types or subsectors and motivate meta-standard adoption.

#### 4. Coordinated secretariats

We recommend aligning the governance structures of the Blue Dot Network and FAST-Infra by assisting in the development of a coordination and communication strategy between the secretariats. Leveraging their individual strengths, the two secretariats could each take on additional responsibilities that would benefit the entire infrastructure community.

#### 5. Compatible data platforms

We recommend that FAST-Infra and Blue Dot Network co-design their data platforms and repositories for compatibility, comparability, and information sharing.

#### 6. Technical assistance for infrastructure project development

To even the playing field for MLIC governments and infrastructure developers, we recommend the FAST-Infra and BDN secretariats work with their affiliated development institutions to develop robust technical assistance and capacity development programs to support infrastructure meta-standard compliance.

#### 7. Strategic planning assistance

Upstream planning of infrastructure systems is often the most effective time to address sustainability and quality compliance. We recommend that the secretariats, working with their affiliated development institutions, develop guidance and support for incorporating the meta-standard frameworks into strategic environmental and social assessments and national infrastructure planning.

#### 8. Development finance institution alignment

The alignment of development finance institutions to a common set of indicators would be a powerful driver to accelerate awareness and adoption by investors, developers, and client-country governments. We propose an international task force to shepherd the process of establishing an aligned set of meta-standard requirements for development finance institutions.

#### 9. Global engagement

We recommend that a neutral body convene a global summit on common sustainable, quality infrastructure standards. The eight prior recommendations of this report could serve as a blueprint for the agenda of issues to be discussed, resolved, funded, and implemented.

#### **INTRODUCTION**

#### Sustainable Infrastructure Gap

A consensus exists that investing in quality, sustainable infrastructure will be critical to "building back better" as the world recovers from the economic crisis spurred by the COVID-19 pandemic ("A Green Stimulus to Rebuild Our Economy" 2020; Coalition of Finance Ministers for Climate Action 2020; International Monetary Fund 2020; Science Based Targets 2020; IEA 2021; The Climate Coalition 2020). Well planned, designed, and built infrastructure projects can generate jobs, help transition to a low-carbon economy, provide critical community services, mitigate environmental risks, build climate resilience, and promote human rights and social inclusion. Nowhere is the need greater for such sustainable, quality infrastructure than in the world's emerging and developing economies (Hepburn et al. 2020; World Economic Forum 2020).

And yet sustainable, quality infrastructure is not being constructed at the rate required to achieve these outcomes (International Energy Agency 2020; 2021b; Global Infrastructure Initiative 2021). Funding is a major issue, as trillions of dollars are needed to tackle the sustainable infrastructure gap (Global Infrastructure Hub 2021b; Woetzel et al. 2017; Andrijevic et al. 2020; Coalition of Finance Ministers for Climate Action 2020; Ridley 2021)—but an even more fundamental barrier exists. Investors, developers, and governments lack necessary information and the ability to identify and assess whether projects are truly high quality, low risk, and sustainable. This lack of confidence has resulted in underinvestment, especially in developing and emerging countries.

The problem is not a paucity of possible means for evaluating sustainability and quality attributes of infrastructure. A plethora of standards, rating systems, principles, guidelines, certifications, tools, and risk management frameworks already exist for identifying a wide range of sustainability and quality features (OECD and The World Bank 2018; Sustainable Infrastructure Partnership 2018; Ridley 2021; International Coalition for Sustainable Infrastructure 2021). However these tools and other resources are fragmented across the value chain, geographies, and sectors, making it exceedingly difficult for users to distinguish and select among them (International Coalition for Sustainable Infrastructure Initiative 2021). Consequently, confusion abounds. The lack of a common standard is a critical impediment to advancing investments in sustainable, quality infrastructure (Sustainable Infrastructure Partnership 2020; The Economist Corporate Network 2020; UNDP China and China Development Bank 2019).

For purposes of this report, we use the following definitions of quality, sustainable, and green infrastructure projects:

**Quality infrastructure projects** are projects with attributes such as environmental, social and governance (ESG) objectives as well as usefulness, openness, efficiency, stability, financial sustainability, integrity, governance, transparency, resilience, connectivity, and compatibility with the Sustainable Development Goals (OECD 2020).

**Sustainable infrastructure projects** are projects that are planned, designed, procured, constructed, operated, maintained, and decommissioned to ensure economic and financial, social, environmental (including climate resilience), and institutional sustainability over the entire life cycle of the project (Inter-American Development Bank 2018).

**Green infrastructure projects** are projects that contribute toward achieving low carbon and environmentally sustainable outcomes, such as renewable energy generation plants and mass-transport systems (China Council for International Cooperation on Environment and Development 2018).

#### **Development of Infrastructure Meta-Standards**

Over the last two years, three separate initiatives have arisen independently to promote a common approach to identify sustainable, quality, and/or green infrastructure projects (see Box)<sup>1</sup>. All three efforts target infrastructure development in Middle- and Low-Income Countries,<sup>2</sup> where the need for sustainable, quality infrastructure is greatest.

The first two global standard initiatives—FAST-Infra (Finance to Accelerate the Sustainable Transition-Infrastructure) and **Blue Dot Network** (BDN)—focus primarily on helping unlock private capital that can be mobilized to invest in sustainable, quality infrastructure. Both are largely premised on the assumption that public funds alone will not be sufficient to address the sustainable, quality infrastructure gap. Many private-sector investors—especially those with pension, insurance, and other institutional funds—are seeking ESG-compliant,<sup>3</sup> low-risk investments with long-term stable returns, but are not able to identify sufficient "bankable" infrastructure projects to meet their needs (Déséglise 2020; Global Infrastructure Hub 2021c). The lack of a trusted global standard impedes the vetting of and lending to sustainable, quality infrastructure projects, even when sufficient funds are available (Inter-American Development Bank 2018; Buchner et al. 2021; Inter-American Development Bank 2020). A global infrastructure standard that reliably signals high quality, sustainable projects could potentially attract billions or even trillions of dollars in infrastructure investments, especially in emerging and developing economies (Saner et al. 2021; Principles for Responsible Investment 2022; Goldman Sachs 2022). In addition to attracting private-sector financing, FAST-Infra and Blue Dot Network are also targeting public sector investors—multilateral and bilateral development finance institutions—to partner with national governments and the private sector in the promotion of sustainable, quality infrastructure (Hoque and Lev 2021; OECD 2022).

The third initiative, **Green Development Guidance**, focuses on China's overseas lending through its Belt and Road Initiative (BRI). The Green Development Guidance has a narrower scope than Blue Dot Network and FAST-Infra, focusing only on select environmental aspects of infrastructure. The initiative does not address social, governance, or financial risks. The Green Development Guidance is also not technically global, as it focuses specifically on Chinese-financed BRI projects. Nevertheless, we include this initiative because—due to the breadth of the BRI investments occurring in 160 countries—the classification system de facto aspires to be adopted as the reference standard across the majority of the world's middle- and low-income economies. Its primary aim is not so much to accelerate private-sector investments—as with Blue Dot Network and FAST-Infra—but to encourage Chinese financiers and infrastructure developers to voluntarily select BRI projects with low environmental risks (which may or may not correlate with other aspects of sustainable, quality infrastructure including social and governance risks).

A recent surge in public development finance (e.g., the United States and G7's Build Back Better World, European Union's Global Gateway, and United Kingdom's Clean Green Initiative) (European Commission 2021; Government of the United Kingdom 2021; White House 2021a), in conjunction with existing bilateral and multilateral infrastructure initiatives, represent potentially hundreds of billions of dollars for green, sustainable, and quality infrastructure investments and guarantees to assist MLICs with their economic recovery. These three infrastructure initiatives all offer a global standard that would raise the standards for COVIDrecovery infrastructure investments.

#### **Objectives**

The three initiatives have overlapping—though distinct—goals and measures; they have been developed over approximately the same time period and are being released in close proximity to one another; and there has been a relative lack of coordination among their developers, to date. These factors together raise a risk that the initiatives could result in further confusion rather than clarity for developers, financiers, and external stakeholders, potentially undermining the individual and collective objectives of the initiatives.

In this report, we map out the rationale, approach, and technical aspects of each of the three initiatives to understand how they compare with each other. We then offer recommendations on steps that could be taken to increase the adoption of all three—independently and as an aligned set.

### **OVERVIEW OF META-STANDARDS**

### Study Methodology

For this report, we use the term "meta-standard" to define an amalgamated standard that is drawn from the best available existing principles, guidelines, standards, rating systems, and certifications. So as not to "reinvent the wheel," each of the three initiatives have created their own meta-standard within the context of their infrastructure scope rather than establishing a wholly new set of criteria and measures.

# Table 1. Comparative terminology: Terms used in this report and their approximate equivalents for each of the three meta-standards

Report Terminology	FAST-Infra	Blue Dot Network	Green Dev Guidance
Infrastructure scope	Sustainable infrastructure	Quality infrastructure	Green Belt and Road Initiative (BRI) Infrastructure
Pillars (6)	Dimensions (4)	Elements (10)	Environmental aspects (3)
Objectives	Criteria	Themes and criteria	Indicators
Measures	Methodology and indicators	Requirements and thresholds	Contribution and harm criteria

This report is based on published documents from all three meta-standards, third-party published sources such as white papers and media coverage, and interviews with key participants who were involved in some aspect of meta-standard or sustainable infrastructure development.

Semi-structured interviews with 19 individuals were held during December 2021 through March 2022. All interviewees were informed that their comments would not be personally attributed and that direct quotes would not be used (with or without attribution) without explicit, case-by-case permission. A list of the interviewees who indicated their names could be shared can be found in Appendix B.

ltem	FAST-Infra	Blue Dot Network	Green Dev Guidance
Party responsible for submitting application for assessment	Project sponsor, developer, or owner	Project sponsor, developer, owner, investor, or contracting authority	Project developer or owner in conjunction with sponsoring financial institution
Life cycle stage applicability	All stages, from planning to decommissioning	All phases of the life cycle	Address all phases of green overseas investments— from evaluation to management and reporting
Result of assessment /	Binary:	Tiered:	Tiered:
evaluation	<ul> <li>No SI Label: project does not meet criteria</li> <li>SI Label: project meets baseline conditions for all 4 Dimensions plus positive contribution in one sustainability criteria</li> </ul>	<ul> <li>0 dots: project not certified</li> <li>1 dot: project meets essential requirements for all 10 Elements</li> <li>2 dots: project exceeds essential requirements in multiple Elements; considered "superior"</li> <li>3 dots: project excels in a number of Elements; Considered "best-in-class"</li> </ul>	<ul> <li>Red light: project discouraged; requires stricter supervision and regulation</li> <li>Yellow light: environmentally neutral projects with moderate impacts</li> <li>Green light: project encouraged</li> </ul>

#### Table 2. Protocols: Comparison of meta-standard processes and output

The published documents included the most recent available versions of each meta-standard. Of these, the most critical documents include:

- FAST-Infra Sustainable Infrastructure Label: Framework (FAST-Infra 2021b); FAST-Infra Sustainable Infrastructure Label: Dimensions & Criteria Indicators (FAST-Infra 2021b); and FAST-Infra Sustainable Infrastructure Label: Governance Framework (FAST-Infra 2021d)—all released November 2021.
- The Blue Dot Network: A proposal for a global certification framework for quality infrastructure investment (OECD 2022)—released March 2022.
- Green Development Guidance for BRI Projects Baseline Study Report (BRIGC 2020) released December 2020; Green Development Guidance for BRI Projects Phase II Task 1: Application Guide for Enterprises and Financial Institutions (BRIGC 2021a)—released October 2021.

# Table 3. Stakeholders: Comparison of stakeholders participating in meta-standard development

Report Terminology	FAST-Infra	Blue Dot Network	Green Dev Guidance
Originators of initiative	France's One Planet Lab	Governments of Australia, Japan, U.S.	BRI International Green Development Coalition
Steering committee members	HSBC, GIF, IFC, Climate Policy Initiative	Government representatives from Australia, Japan, U.S.	BRIGC, backed by MEE
Developers of initiative	HSBC, GIF, IFC, Climate Policy Initiative, OECD, Macquarie Group	Governments of Australia, Japan, U.S. with technical support of the OECD	BRIGC, supported by MEE
Support from governments or govt. agencies	None; France's One Planet Lab is no longer involved in initiative	Australia, Japan, U.S.	China's MEE-FECO; secondary support of NDRC, CBIRC
Participating NGO organizations	Climate Policy Initiative, World Resources Institute (WRI), Climate Works, World Wildlife Fund	NGOs participate in the Executive Consultation Group (ECG) which provides input into the development of the initiative	WRI, ClientEarth, Children's Investment Fund Foundation
Working groups/ advisory groups	Initial work carried out by three working groups with representatives from 30 organizations	Initial work carried out by OECD's Trust in Business Initiative working with steering committee input. Three working groups drawn from the ECG provide ongoing technical guidance on the work.	Initial work carried out by BRIGC and MEE

Each meta-standard framework has a technical portion with a hierarchical structure to describe and classify the requirements for awarding the label (FAST-Infra), certification (Blue Dot Network), or classification (Green Development Guidance). The meta-standards use different terms to describe their organization (summarized in Table 1):

• FAST-Infra comprises four Dimensions, each with one or more Criteria that contain Indicators for project-level evaluation. The document FAST-Infra Sustainable Infrastructure Label: Dimensions & Criteria Indicators provides an example methodology and a set of example indicators and example methodologies<sup>4</sup> for each Criterion.

- Blue Dot Network includes 10 Elements, each with one or more Criteria grouped according to themes. Each Criteria will eventually contain requirements and/or thresholds that measure and quantify project processes or outcomes.
- The Green Development Guidance covers three Environmental Aspects, each with specific Harm Criteria that sometimes differ across the sectors (e.g., energy, transportation, agriculture, and mining sectors).

To enable review of the distinct yet partially overlapping thematic coverage of the three metastandards, we define six Pillars that directly align with the concept of "quality infrastructure," as defined in the G20's Quality Infrastructure Principles (G20 2019). These six Pillars encompass all of the components of the three meta-standards. We specifically chose the word "pillar" to describe this concept because it has a similar meaning to Element, Dimension, and Environmental Aspect, but is not used by any of the meta-standards.

To facilitate comparison of the three initiatives, we have created tables of their meta-standard processes, protocols, and outputs (summarized in Table 2), stakeholders participating in meta-standard development (summarized in Table 3), and meta-standard requirements (summarized in Table 4). Table 5 and Appendix C provides a comparison of coverage by meta-standard for each of the six Pillars. More detailed comparisons can be found for four objectives: climate mitigation (summarized in Table 6), biodiversity conservation (summarized in Table 7), labor and human rights (summarized in Table 8), and debt sustainability (summarized in Table 9).

### FAST-Infra

#### Background and context

FAST-Infra grew out of French President Emmanuel Macron's One Planet Lab think tank, with an aim to promote innovative solutions to the global challenges related to climate change, biodiversity loss, and the well-being of societies (One Planet Summit 2022). Lab participants identified one critical barrier to private investment in sustainable infrastructure as the inability to verify which potential investment assets were genuinely sustainable. They advised that a globally recognized and trusted label which harmonized existing standards could build the confidence that financiers needed to increase private investments to sustainable infrastructure, especially within emerging and developing economies (Déséglise 2020; Ridley 2021). In 2019, a steering group formed to create the FAST-Infra initiative, founded by HSBC, International Finance Corporation (IFC), Organisation for Economic Co-operation and Development (OECD), Global Infrastructure Facility (GIF), and Climate Policy Initiative (CPI). The group's objective was to create an infrastructure label that could serve as a market-based signal that was built on transparency and open disclosure. The SI Label would build on existing standards, frameworks, and taxonomies to create a comprehensive framework and set of sustainability criteria. Their goal was, through the widespread acceptance of the SI Label, to transform sustainable infrastructure into its own liquid asset class (Hoque and Lev 2021).

The group modelled their proposed SI Label on a successful label from another green industry, the green bond market (Ridley 2021). This market had been transformed in 2014 by the introduction of the Green Bond Principles (GBP), which became the basis for a voluntary labeling scheme for green bonds (ICMA 2021).<sup>5</sup> Wide-scale adoption of this market-based labeling scheme coincided with tremendous growth in the green bond market (Ehlers and Packer 2017).

#### Figure 1. SI Label Dimensions (source: FAST-Infra 2021b)



The FAST-Infra Steering Committee used the model of the green bond market to begin a twoyear development process for the SI Label. Following the Green Bond experience, they began by mapping existing taxonomies and standards, organized working groups and roundtables, created a label prototype, and created a secretariat and data repository. FAST-Infra launched four working groups, the most active of which—the SI Label Working Group—focused initially on assembling definitions of sustainability and mapping the various existing standards such as the IFC Performance Standards, Equator Principles, multilateral development bank (MDB) safeguards, and infrastructure rating schemes, among others. In total, the working group mapped more than 20 standards, principles, and taxonomies. Drawing heavily on the IFC Performance Standards, this mapping effort resulted in the creation of 14 Criteria in four Dimensions. The working group then identified key performance indicators (KPIs) for each Criteria, drawing on existing measures and methodologies. During this process, they also searched for gaps in the coverage and measures of the IFC Performance Standards and other existing standards. One important early innovation that diverged from the IFC Performance Standards was the addition of resilience and adaptation to their ESG scope (Table 5).



#### Figure 2. FAST-Infra SI Label award process

After mapping and analyzing existing standards, the next stage entailed putting together a draft framework with assessment requirements. This required wider consultation, first through six roundtable discussions with a broad range of sectors, such as MDBs, financiers, government clients, credit setting agencies, non-governmental organizations (NGOs), then through an open public comment period, and finally consultation with 30 institutions to further refine FAST-Infra (Table 3). That phase culminated with the formal launch of the first version of the FAST-Infra framework at the UNFCCC COP26 climate change summit in November 2021 (Chang and Malik 2021). By that time, FAST-Infra had received endorsements from several industry associations and organizations, including Task Forces of the Sustainable Markets Initiative, Glasgow Financial Alliance for Net Zero, Investor Leadership Networks, Long Term Infrastructure Investor Association, and Local Governments for Sustainability (ICLEI), as well as several MDBs and GIF (Chang and Malik 2021).

#### Framework

The FAST-Infra Initiative has two major components: the SI Label and the FAST-Infra Tech Platform. The SI Label aims to be a widely recognized and transparent label that reliably communicates that an infrastructure asset meets international sustainability standards in terms of four Dimensions: (1) Environmental, (2) Social, (3) Governance, and (4) Adaptation & Resilience (Figure 1).

To be awarded an SI Label, an asset must meet the following requirements (Figure 2; FAST-Infra 2021c):

- Fall within the indicative list of eligible assets that have the potential to be labelled sustainable, as classified within FAST-Infra's Indicative and Non-Exhaustive List of Sustainable Assets, or provide rationale for inclusion if the infrastructure type is not included on the list (FAST-Infra 2021c).
- Fulfill the baseline conditions across all 14 Criteria within the four Dimensions of sustainability and document a measurable, positive contribution to at least one Criterion. Methods of measurement and indicators are provided for meeting each of these 14 Criteria, though applicants can substitute other methods/indicators if they provide an acceptable justification for why their alternative metric is equivalent or more rigorous (FAST-Infra 2021c; 2021b).
- Show compliance with minimum safeguards and risk management requirements, which include: (1) an Environmental and Social Impact Assessment (ESIA); (2) Climate Risk and Resilience Assessment for both physical and transition risk (if not included in the ESIA) including an asset-level statement on how the project will contribute to the transition toward net zero emissions; (3) an environmental and social management system; and (4) adherence to the IFC Performance Standards on Environmental and Social Sustainability and the Equator Principles (FAST-Infra 2021c).<sup>6</sup>
- Present declarations, disclosures, and reporting of an infrastructure asset's forecasted and/or actual sustainability performance, on an annual or multi-year basis (depending on the stage of the project cycle) (FAST-Infra 2021c).

The SI Label is voluntary and self-reported, though applicants are strongly encouraged to obtain external review of their application to facilitate trust and assurance for all stakeholders; if they do not, then they are required to provide a written justification. Disclosure is required at the pre-operational initiation stage and subsequently on an annual basis once the infrastructure has started operating. After reaching a steady state—or after 3 years of operational performance, whichever is longer—periodic reports are required but their frequency may be less than annual, provided there are no material changes in performance from previous annual impact reports. A previously awarded SI Label can be withdrawn (and the data repository updated accordingly) in the event that a subsequent performance report indicates that the project is out of compliance with the SI Label requirements (FAST-Infra 2021c).

The second component of the initiative is the FAST-Infra Tech Platform, a data repository and management platform (FAST-Infra 2021d; FAST-Infra Platform 2020). The platform and its management are modelled on the data repository for green bonds established by the ICMA secretariat. This platform will act as a centralized, transparent repository to disclose, report, and measure performance of assets over time. Disclosures and other reporting information will be available on all 14 Criteria for every project.<sup>7</sup> (see Data Platform Section for more details)

#### Status

Following the launch of its framework in November 2021, FAST-Infra has now moved into the "road-testing" stage. The FAST-Infra Steering Committee is actively pursuing commitments of individual financial institutions—especially members of the industry associations that endorsed FAST-Infra—to test the SI Label on individual projects. Several companies, such as Macquarie Group and HSBC, are using their own projects as a pilot to test and fine tune the SI Label. The FAST-Infra Steering Committee is also looking for additional "exemplar" pilot projects that can serve as case studies to showcase the SI Label. One obstacle that these pilot projects have already uncovered is the paucity of external reviewers with sufficient broad-based competencies to be able to verify the impacts and performance of assets against the wide range of the SI Label's Dimensions and Criteria. FAST-Infra held a roundtable in March 2022 with the private-sector companies and key stakeholders to begin obtaining feedback from those road-testing the SI Label.

Having released a request for proposals in June 2021 (FAST-Infra 2021a), FAST-Infra is now searching for one or more organizations to house its Secretariat. The primary roles of the Secretariat will be to create and manage a data reporting platform for the SI Label assets and to make regular updates of the SI Label requirements and protocols. Applicants for the Secretariat are being asked to propose a model to make FAST-Infra self-financing over time, perhaps by requiring a fee to obtain the label or to access the data repository.

As the primary responsibility for SI Label development and updating moves to the FAST-Infra Secretariat, the FAST-Infra Steering Committee will shift its attention to applying the SI Label, raising its visibility, encouraging the adoption of the label through incorporating a requirement for the SI Label by private investors, in host country tenders, and in MDB packages.

#### **Blue Dot Network**

#### **Background and Context**

In 2018, the Government of Japan, hosting the G20 Presidency, began promoting the adoption of Principles on Quality Infrastructure Investments (G20 2019). These principles were built on the G20's previous efforts to address the global infrastructure gap by encouraging greater private investment in infrastructure (OECD 2017). At the G20 Summit in Osaka in June 2019, all members<sup>8</sup> endorsed six voluntary, non-binding QII principles (Global Infrastructure Hub 2019). They include: (1) maximizing the positive impact of infrastructure to achieve sustainable growth and development; (2) raising economic efficiency in view of life-cycle cost; (3) integrating environmental considerations in infrastructure investments; (4) building resilience against natural disasters and other risks; (5) integrating social considerations in infrastructure investment; and (6) strengthening infrastructure governance (G20 2019).

Using the QII Principles as their foundational principles, the Governments of the U.S., Japan, and Australia in November 2019 launched the concept of a Blue Dot Network (BDN) as a new global standard that could promote the adoption of quality infrastructure and facilitate greater private investment (U.S. International Development Finance Corporation 2019). As with FAST-Infra, the rationale for Blue Dot Network is based, in part, on the acknowledgment that public financing alone will not be able to close the global infrastructure gap. Unlocking private capital would also be required to address the infrastructure investment shortfall in MLICs (Global Infrastructure Hub 2021b; "G7 Leadership Statement: Partnership for Infrastructure and Investment" 2021). For the Blue Dot Network, a key to attracting private financing would be acceptance of an internationally recognized certification that can help investors, governments, and developers distinguish projects that represent quality infrastructure—that is, infrastructure with sustainable growth and development, economic efficiency, low environmental and social risks, good governance (including open and transparent procurement), and resilience against natural disasters and climate change. The envisioned BDN Certification would serve as a "good housekeeping seal of approval" for quality infrastructure projects that have met high standards of governance, transparency, and developmental efficacy (Cronin 2021; Lew et al. 2021).



#### Figure 3. Blue Dot Network Certification process (source: OECD 2022)

The developers of Blue Dot Network were very clear from the program's initiation that the quality infrastructure certification is intended to be an objective, politically-neutral standard that could be applied to any infrastructure project globally, regardless of the origin of funding or construction (U.S. International Development Finance Corporation 2019). However, the early rollout of Blue Dot Network during the Trump Administration used language that strongly implied a contrast with China's overseas infrastructure investment initiative, the Belt and Road Initiative. The launch of Blue Dot Network also came on the heels of several pronouncements from the U.S. Government that criticized China's foreign investment policy.<sup>9</sup> Implying a comparison with BRI, the U.S. International Development Finance Corporation described Blue Dot Network as "a multi-stakeholder initiative that brings together governments, the private sector, and civil society to promote high-quality, trusted standards for global infrastructure development in an open and inclusive framework" (U.S. International Development Finance Corporation 2019).

Early in 2020 the U.S., Japan, and Australia Trust asked the OECD to provide technical support for the development of an infrastructure certification framework. The OECD was the ideal organization to take this on, given its global reputation for working in an objective manner with governments, policy makers, and citizens to establish evidence-based international standards and solutions to social, economic, and environmental challenges. When the Biden Administration took office in 2021, officials decided to continue the U.S. commitment to Blue Dot Network, adding additional emphasis to the climate component.

As with FAST-Infra, the Blue Dot Network developers' efforts initially focused on identifying and mapping existing international and regional standards and assessment frameworks before beginning to build their own framework, indicators, and protocols. OECD's Trust in Business Initiative led this effort, with input from OECD experts and representatives of the three founding governments. An Executive Consultation Group (ECG) and associated working groups with representatives from the private sector, government, academia, and NGOs were also established to provide input and feedback during meta-standard development (see Meta-Standard Stakeholder Engagement Section). After identifying 70 commonly international standards and frameworks, the OECD developed the outlines of the BDN Certification requirements.

As details of the meta-standards were being worked out, the Blue Dot Network again received global attention when U.S. President Joe Biden unveiled the B3W (Build Back Better World) Plan during the G7 Summit in June 2021. B3W is a U.S. development finance initiative that has the backing of the other G7 member nations.<sup>10</sup> Its primary goal is to address the infrastructure gap in the developing world and to advance economic recovery after the COVID-19 pandemic by creating a "values-driven, high-standard and transparent infrastructure partnership led by major democracies" (White House 2021a). The Administration noted that B3W would be "guided by high standards and principles, such as those promoted by the updated Blue Dot Network" (White House 2021a).

#### Figure 4. Blue Dot Network Elements (source: OECD 2022)



Promote sustainable and inclusive economic growth and development



Promote market-driven and private sector led investment, supported by judicious use of public funds



Support sound public financial management, debt transparency, and project-level and country-level debt sustainability



Build projects that are resilient to climate change, disasters and other risks, and aligned with the pathways towards 2050 net-zero emissions needed to keep global temperature change of 1.5° C within reach



Ensure value-for-money over an asset's full life-cycle cost



Build local capacity, with a focus on local skills transfer and local capital markets



Promote the non-discriminatory use of infrastucture services



Promote protections against corruption, while encouraging transparent procurement and consultation processes



Uphold international best practices of environmental and social safeguards, including respect for labour and human rights



Advance inclusion for women, people with disabilities, and underrepresented and marginalised groups

As with the initial rollout of Blue Dot Network by the Trump Administration, President Biden contrasted B3W with China's BRI. Presenting B3W, Biden commented that "China has this Belt and Road Initiative, and we think that there's a much more equitable way to provide for the needs of countries around the world." In other remarks, however, the Biden Administration has tried to sidestep the association with China's BRI (White House 2021b). For instance, when asked if the Blue Dot Network should be "viewed as a response" to China's BRI, U.S. Secretary of State Anthony Blinken responded that "this is about what we're for, not what or who we're against," and "what we're for ... is a race to the top ... based on existing standards established by the OECD, by the G20, and others." Nonetheless, the perception seems to remain among many that the Blue Dot Network and B3W seek to provide an alternative option to China's Belt and Road Initiative (Pesek 2019; Arha 2021; Sundararaman 2021; Staff 2021). As a result, among the media and some stakeholders, the BDN Certification carries potential political overtones as an effort to counteract China's BRI (Johnson 2021; Widakuswara 2021).

#### Framework

A proposed framework for the Blue Dot Network with the certification's justification and key features was publicly released in March 2022 (OECD 2022). The proposed framework has three major components: architecture of the certification framework, suggested scoring system, and the review process (Figure 3; OECD 2022).

- Criteria for determining the basis for awarding a certification. To be awarded BDN Certification, a project must demonstrate alignment with a set of essential requirements under each of 10 BDN Elements (Figure 4). These 10 Elements each contain two or more Themes, and each of these Themes have Criteria or expected actions and outcomes that the project must pursue (e.g., measures to protect the safety of its workers) and avoid (e.g., the emission of greenhouse gases) for certification. To determine if the Criteria have been met, a project uses specified qualitative or quantitative performance measures to demonstrate that it has met requirements. A given Criterion can have multiple requirements that represent different levels of performance.
- Scoring system. The Blue Dot Network uses a scoring system to translate compliance of requirements for each BDN Element into a composite score for an infrastructure project. To be certified (and receive at least one Blue Dot), a project must meet the essential requirement—or minimum competency—for every Criterion. Higher scores translate into more Blue Dots (up to three). (More details of the scoring system are available in Tables 2 and 4 and Indicators and Metrics Section).
- Review process. The review process begins with a quick-check assessment by the applicant followed by a full self-assessment conducted to assess the project's performance against the criteria under each of the 10 BDN Elements. Results from the self-assessment can be used to help the project developer recognize potential problems and improve the project proposal. Data supporting the claims, such as an environmental and social impact assessment, would be uploaded directly to the data platform. Once the application is complete, a third-party auditor is required to verify the claims and evidence provided in the application. If the project is confirmed to meet all of the baseline criteria, it would be

awarded one Blue Dot by the Blue Dot Network. If it also outperforms in several BDN Elements, it could be awarded more than one Blue Dot.<sup>11</sup>

#### Status

The voluntary certification framework is still at a fairly high level, lacking details such as proposed criteria, requirements, and thresholds for the 10 BDN Elements. Before releasing a full framework, the OECD and Blue Dot Network Steering Committee wants to pilot the certification process using infrastructure projects put forward by Blue Dot Network founding countries and ECG members. Through this early testing, they hope to determine the appropriateness and robustness of proposed indicators, sensitivity of different threshold levels, suitability across infrastructure sectors, and effort required by the certification process. They plan to use the findings and experiences from these pilot projects to develop a capacity building program. During this road-testing phase, Blue Dot Network is expected to further expand its consultation process with governments, private-sector associations and companies, academics, and non-profit organizations. The first Blue Dot Network certified project will likely not occur until later in 2022.

#### Green Development Guidance

#### Background and Context

The Government of China has promoted the Belt and Road Initiative—its massive overseas infrastructure lending program—as environmentally friendly since its inception in 2013. President Xi Jinping of China portrayed BRI as "green, healthy, intelligent and peaceful" (State Council 2016). BRI represented a "new vision of green development … that is green, low-carbon, circular and sustainable." (China Daily 2019).

Yet despite the stated intention by its central government to support a "Green BRI," China's record has been mixed to date. The great majority of BRI energy infrastructure investments, for example, have supported climate-polluting projects such as coal power plants rather than renewable energy projects (Zhou et al. 2018). Many of the early BRI projects were high-risk. Not surprisingly, many performed poorly on financial and ESG terms. By 2017, international attention began to focus on whether BRI was creating harmful environmental and social impacts and unsustainable debt burdens for recipient nations (Ascensão et al. 2018; Hillman 2018). Due to a confluence of many poor performing BRI loans and domestic economic concerns, by 2019 China became more selective in its BRI lending, pivoting toward projects with better returns, lower risk of default, and lower risk of local protests and stranded assets due to social and environmental concerns (Ma, Gallagher, and Guo 2020; Baxter 2021).

As a part of this effort to promote more lending to green BRI infrastructure projects, in 2017 the government established the Belt and Road International Green Development Coalition (BRIGC) as a platform for dialogue between the Ministry of Ecology and Environment (MEE) and international partners, mostly in the NGO community. Though BRIGC is not a Chinese government agency, it has had strong backing and participation by MEE, where its secretariat is housed<sup>12</sup> (Nedopil Wang 2021).

#### Figure 5. Two-stage project classification process of Traffic Light System

(source: BRIGC 2021a)



In late 2019, BRIGC formed a working group to develop environmental guidance for BRI investments that was consistent with international standards. The working group had strong involvement from MEE as well as representation from international stakeholders including NGOs, multilateral banks, and the private sector (Table 3). Like FAST-Infra and Blue Dot Network, the group's initial step was an extensive global mapping of existing standards, drawing heavily on IFC Performance Indicators, Equator Principles, Global Infrastructure Basel's SuRe, and others. From this exercise they created a new classification system—the Traffic Light System —and proposed guidance—the Green Development Guidance—to explain when and how to use the Traffic Light classification. Both the Traffic Light System and Green Development Guidance were adapted from existing international standards but retain distinct Chinese features that had been supported by the previous MEE Minister.

In December 2020, the BRIGC formally released the Green Development Guidance for BRI Projects Baseline Study (BRIGC 2020). The report offered nine recommendations for reducing environmental risks from BRI infrastructure loans. In October 2021, the BRIGC released the Application Guide for Enterprises and Financial Institutions, Task 1 (BRIGC 2021a) to provide specific guidance to stakeholder groups—investors, project owners, BRI country governmentsas to how to apply the Green Development Guidance to prospective BRI projects. Concurrently, BRIGC also released the first sector-specific application, Guide for Railways and Highway, Task 2 (BRIGC 2021b), to propose recommendations for promoting green development of BRI transportation projects.

The role of the Green Development Guidance Baseline Study and Application Guide are to provide guidance to government agencies, financial institutions, and project developers as they develop their own policies related to BRI lending and environmental risk management. They do not provide a specific guideline, label, or certification. The ultimate effectiveness of the Green Development Guidance depends on other entities—relevant Chinese government agencies, BRI country governments, industry associations, financial institutions, corporations—incorporating some or all of its classification system and environmental risk management protocols into their own policies.

# Figure 6. Green Development Guidance application guidance for infrastructure developers and owners (source: BRIGC 2021a)



Since the Green Development Guidance is not a government document, per se, but rather a report from a government-backed, quasi-public organization (BRIGC), promoting its adoption has required concerted and extensive consultation with government agencies. Throughout the development process, the working group has met with a range of Chinese government entities and other stakeholder groups. Substantial input was provided by MEE, the National Development and Reform Commission (NDRC), Ministry of Commerce (MOFCOM), Chinese policy banks (China Development Bank and Chinese Export-Import Bank), and the state-owned policy insurance corporation (Sinosure). Workshops have also been held with state-owned contractors and private-sector developers and construction firms, including a few large, non-Chinese firms. The meetings were convened by BRIGC, with MEE representatives playing a leading role including issuing formal invitations to the consultation.

#### Framework

China's Green Development Guidance is not a label or certification that must be applied for such as that of FAST-Infra and Blue Dot Network—and instead provides a project classification system and environmental risk management protocols to encourages voluntary alignment of BRI infrastructure projects with international environmental standards. Green Development Guidance does not address social or governance risks.

The centerpiece of the Green Development Guidance is the Traffic Light System, a simple colorbased categorization of projects into either green, yellow, or red depending on the risk potential for three Environmental Aspects: pollution reduction, climate mitigation, and biodiversity conservation (Figure 5).<sup>13</sup>

The Green Development Guidance presents the following process for classifying a proposed infrastructure project in the pre-construction phase (Figure 6):

- A project developer conducts the first stage of the Traffic Light System classification by determining the color code (red, yellow, or green) of the project type (or subsector) of the proposed project (BRIGC 2021a).<sup>14</sup> If this subsector typically has projects that fail to meet baseline conditions in any of the three Environmental Aspects, then it is automatically classified as "red." Any proposed project in the coal power subsector, for example, would be classified as red. Project types are classified as "green" if they meet the baseline condition for all Environmental Aspects and also have positive environmental benefits (called "positive contributions") in at least one area. "Yellow" projects are from subsectors that are environmentally neutral projects—that is, they reach the baseline conditions but do not have any positive environmental benefits.
- For individual projects classified as "red" project types, a second step involves evaluating the individual project's ability to mitigate or compensate for the potential negative environmental impacts that could be caused by the proposed project. If the proposed project is able to minimize or offset the environmental risk such that it adheres to baseline requirements, then the project can be classified as "red/yellow." If a proposed project can offset the risk and provide a positive environmental contribution, then the project can be classified as "red/green." Projects whose negative impacts in any of the three categories

cannot be reduced below the baseline level for any of the three Environmental Aspects are classified as "red/red." Such projects are considered to have the potential of serious and irreversible environmental harm to biodiversity, climate, or pollution. Lenders and developers are discouraged from building them.

- Applicants are then instructed to carry out a series of environmental risk management measures that differ depending on whether a project has been classified as "green", "yellow," "red/green," "red/yellow," or "red/red" (spanning from least to greatest oversight, respectively). Risk management measures include environmental and social management systems, environmental impact assessments, creation of grievance mechanisms, and regular reporting requirements.
- Once the initial classification has been completed by the project developer, the financial institution considering the project is required to verify the application. They are encouraged to employ external auditors to complement their internal review, especially for "red/red" and "red/yellow" projects. Financial institutions are also instructed to oversee the risk-management measures, differentiated in line with the color classification. The financial institutions are also encouraged to provide better financial terms for projects with "green" ratings and to consider excluding projects (or at least creating covenants for projects) with "red/red" or "red/yellow" ratings.

Given that the environmental guidance for overseas Chinese infrastructure loans has been very vague and ineffectual up to the present, BRIGC's efforts represent a significant advancement in codifying environmental standards for BRI projects in a manner that potentially brings clarity and guidance to project developers, financiers, and BRI host-country governments. The Green Development Guidance and Traffic Light System classification system, if adopted in BRI infrastructure lending, would significantly raise the bar for permissible environmental impacts, though gaps still remain between the Green Development Guidance and leading international environmental safeguards (e.g., Table 5, Table 7, Appendix C, and Section Indicators and Metrics Section).

#### Status

Since the release of the Application Guide in October 2021, BRIGC and MEE have been holding a series of capacity building workshops with Chinese institutions such as private and the stateowned banks, project developers, contractors, the two Chinese policy banks (China Development Bank and the Chinese Export-Import Bank), state-owned policy insurance corporation (Sinosure), China International Contractors Association, and others. The aim of these meetings is to educate stakeholders on the goals and protocol of the Green Development Guidance and Traffic Light System and how to translate guidelines into action. They also elucidate how these guidelines relate to another recent set of principles for greening BRI investments, the Green Investment Principles (GFC 2018; Nedopil Wang et al. 2022). Because the ambit of the Green Development Guidance often goes well beyond current policies of many agencies, part of the undertaking is to convince regulators of its relevance to their agencies. While the Green Development Guidance has not been fully adopted anywhere within the Chinese government, a handful of key agencies have begun promoting some of its key concepts. Most of the progress has resulted from efforts of MOFCOM and MEE. In July 2021, the agencies jointly published Green Development Guidance for Overseas Investment and Cooperation and in January 2022 they released the Guidance for Ecological and Environmental Protection of Foreign Investment Cooperation and Construction Projects. Both of these voluntary guidelines drew heavily on Green Development Guidance concepts such as a classification system (analogous to the Traffic Light System), an acknowledgement of the need for climate change response and biodiversity conservation, and emphasis on international standards rather than a sole reliance on "host country rule" (Nedopil Wang 2022). Significant attention from the two policy banks and Sinosure is also especially noteworthy, given the great influence these institutions exert on overseas infrastructure lending.<sup>15</sup> In early 2022, MEE and Sinosure signed a cooperation agreement over Green BRI (Sinosure 2022), opening the possibility of putting the Green Development Guidance and Traffic Light System into practice in the financial sector when assessing risks of China's oversea projects and investments. Most recently, in March 2022, four of the most relevant ministries for the development of the BRI-NDRC, MEE, MOFCOM, and the Ministry of Foreign Affairs (MFA)-issued a joint opinion promoting green development of BRI infrastructure projects. The opinion incorporated many elements of the Green Development Guidance, including lifecycle management guidance and the promotion of international standards (World Resources Institute 2022; NDRC, MEE, MOFCOM 2022).

#### **COMMONALITIES AND DIFFERENCES AMONG META-STANDARDS**

The three meta-standard initiatives have related goals and objectives, albeit with different approaches and scopes. In this section we highlight some of the most significant commonalities and differences among the three meta-standards.

#### **Goals and Objectives**

All three meta-standards share a similar overarching goal: the widespread adoption of a metastandard to promote better infrastructure development, especially in MLICs. The objectives and approaches put forward for achieving this goal, however, vary among the three. FAST-Infra and Blue Dot Network share significantly greater overlap with each other than with the Green Development Guidance.

FAST-Infra and Blue Dot Network are closely aligned in their primary objectives: each seeks to establish a globally recognized meta-standard that facilitates increased private-sector financing of sustainable, quality infrastructure, especially in MLICs. Their theory of change<sup>16</sup> rests on institutional investors (especially those with ESG mandates) having ample capital to address the sustainable infrastructure gap yet underinvesting in infrastructure—especially in emerging and developing economies—due to their inability to easily distinguish which projects are truly sustainable and high quality. The result is a perceived paucity of "bankable" projects. A trusted, globally recognized label or certification award such as the SI Label or BDN Certification would send a clear market signal that a project is sound and has addressed a number of key risks, thus assisting MLICs in attracting private financing.

ltem	FAST-Infra	Blue Dot Network	Green Dev Guidance
Basis of design	Meta-standard based on IFC Performance Standards as well as additional 'gaps filled' not currently covered therein	Blue Dot Network aims to operationalize the G20 Principles for Quality Infrastructure Investment and other international frameworks, principles and standards (including the IFC Performance Standards, the SDGs, the Equator Principles and the OECD Guidelines for Multinational Enterprises, among others)	The Green Development Guidance was designed based on global environmental project finance and green finance best practices (e.g., Performance Standards) and is a harmonized standard across many existing standards At the same time, integrates relevant standards applied successfully within China (e.g., stipulations of the Green Credit Guidance and the project catalogue logic of the Green Bond Catalogue)
Requirement for minimal approval	Meets all 14 baseline Criteria in all 4 Dimensions, and makes a positive contribution to at least one Criterion	Meets all essential requirements of 10 Elements; receives one dot	Yellow projects: No significant harm to any Environmental Aspect, and any residual environmental harm can be mitigated by the project itself Projects can transfer
			categories, such as "red" to "red/yellow", if mitigation measures are applied
Requirement for higher- tier approval	N/A; only one tier	Requirements for 2 or more dots	Green projects: No significant harm to any Environmental Aspect (after factoring in mitigation measures), and contributes positively to at least one aspect

#### Table 4. Requirements: Comparison of meta-standard requirements

ltem	FAST-Infra	Blue Dot Network	Green Dev Guidance
Excluded project types	Projects that do not meet baseline conditions are ineligible for SI Label but are not classified as excluded	Projects that do not meet essential requirements are ineligible for certification	Red projects with no potential for mitigation (that is "red/yellow" or "red/green") are recommended for the "Exclusion" list, such as coal-fired power, petrochemical, mining, and metal smelting projects
Pre-screening project evaluation	Indicative and Non- Comprehensive List that specifies categories of projects with good likelihood of being eligible for an SI Label	Proposed pre- screening tool (under development) for potential applicants to assess likelihood of being awarded Blue Dots	Table 4-1 of December 2020 Green Development Guidance Baseline Study and Annex 2 of October 2021 Green Development Guidance Task I lists potential "green," "yellow/ green," and "red/green" projects
Environmental and Social Management System (ESMS) Requirements	Commitment to establish ESMS required for planning phases; establishment of ESMS required for SI Label for projects in construction stages or later	Required as a component of BDN Element 8	Encouraged for all projects; financial institution should require regular reporting from the ESMS, particularly for "red", "red/yellow" and "red/green" projects (Recommendation 5)
Environmental and Social Impact Assessment (ESIA) Requirements	Publish in the public domain an ESIA produced by a qualified independent firm or consultant	Required as a component of BDN Element 8	Application of EIA/ ESIA dependent on the project's perceived risks (Recommendation 3)
Climate Risk and Resilience Assessment	Develop a full Climate Risk and Resilience Assessment for both physical and transition risk (using best practice methodologies), produced by a qualified independent firm or consultant	Addressed in BDN Element 4: climate risk and climate disclosure	Not directly addressed

ltem	FAST-Infra	Blue Dot Network	Green Dev Guidance
Information disclosure requirements	Declaration, disclosure, and reporting of an infrastructure asset's forecast and actual sustainability performance are core requirements	Information disclosure required across a number of BDN elements	Encourages environmental information disclosure (Recommendation 8)
Review process	External review is strongly encouraged, and written explanation is required if no external review not undertaken	Review process is based on initial self- assessments by applicant followed by required verification by an independent third- party	No review required; suggests that covenants could include the possibility of independent review of environmental performance with relevant financial consequences should the independent review deviate materially from self-reporting by project company
Coordinating institution	FAST-Infra Secretariat (composition TBD; considering leadership by WRI)	Blue Dot Network Secretariat (composition TBD; considering hosting at the OECD)	BRI International Green Development Coalition
Grievance mechanism	Not directly addressed	TBD	Enterprises and financial institutions are encouraged to establish and improve the grievance and response mechanism to allow public oversight of business activities (Recommendation 6)
Monitoring and evaluation	Annual progress reports are required for first three years after operations begin, and until the asset reaches steady state operations; after that, an impact report may not be appropriate absent material change	Certification will need to be reviewed, and subsequently confirmed, at predetermined intervals	Recommends reporting by financial institutions that includes emissions, pollution, and biodiversity impacts on metrics and targets; risk management; strategy; and governance (Recommendation 8)

In addition to their private-sector focus, FAST-Infra and Blue Dot Network also share a second objective related to a different stakeholder group. Each seeks to provide a meta-standard for use by governments, especially in emerging and developing markets.<sup>17</sup> The theory of change is rooted in the notion that, among all stakeholders, governments often have the greatest influence over what and how infrastructure is built in a country due to their potential roles in planning, preparing, regulating, and financing it. By integrating requirements for the SI Label or BDN Certification into planning processes and project tenders, these governments could increase the investment of sustainable, quality infrastructure projects into their country in two ways. First, governments may favor projects with an SI Label or BDN Certification. Second, by signaling the requirement for the SI Label or BDN Certification during the project solicitation process, they may also attract additional sources of financing that are specifically seeking sustainable infrastructure assets (such as institutional funds with ESG mandates).

The third objective shared by FAST-Infra and Blue Dot Network—and especially highlighted by Blue Dot Network—focuses on infrastructure developers and asset owners: each meta-standard seeks an infrastructure assessment process that is attractive to project developers. For Blue Dot Network in particular, buy-in by project developers is seen as critical to the success of their meta-standard. The theory of change is that a simplified and streamlined meta-standard will be viewed by developers and owners as an attractive way to demonstrate sustainability and quality compliance, facilitates reporting processes and increases exposure to potential investors looking for sustainable, quality projects. Over time, following this theory of change, sustainable, quality infrastructure projects should start to outcompete projects that do not have such an endorsement. Private-sector developers will have an incentive to adhere to standards even if they are not explicitly required.

BRIGC places different emphases on its objectives largely because it is primarily focused on guiding Chinese regulators, investors, and developers-mostly but not exclusively state-owned enterprises (SOEs) and government agencies. Attracting private-sector investment is an ancillary emphasis.<sup>18</sup> The Green Development Guidance's primary objective is to incorporate the Traffic Light System and risk management protocols into government regulations and guidelines related to overseas infrastructure lending. The theory of change is that, because BRI projects are largely funded and overseen by the central and provincial governments, the incorporation of the guidance from the Green Development Guidance and Traffic Light System (or their basic tenets) into regulations and guidelines of government agencies, policy banks, policy insurance, and SOEs would shift BRI lending away from environmentally risky infrastructure projects and accelerate funding for green infrastructure projects. BRIGC makes the case that this shift would subsequently benefit many stakeholder groups. For example, adoption of the guidance would help infrastructure developers identify and manage project with lower environmental risks and harms; it would provide less risky investment opportunities for Chinese financiers; it would encourage BRI host country governments to seek more sustainable infrastructure options for their loans as well as attract more international co-financing; and ultimately it would improve China's international reputation as a global environmental leader and economic partner (BRIGC 2021a).

#### **Meta-Standard Scope**

The scope of three initiatives varies considerably, with Green Development Guidance being the most targeted and Blue Dot Network the most expansive (Table 5).

The Green Development Guidance covers three Environmental Aspects: climate mitigation, biodiversity conservation, and pollution reduction. These three aspects fall within the Environmental Considerations Pillars of this report. Other components of the Environmental Considerations Pillar, such as circular economy and hazardous waste reduction, are not explicitly included in the Green Development Guidance. Focusing explicitly on environmental guidance, Green Development Guidance does not consider any of the other Pillars (BRIGC 2020; 2021a).<sup>19</sup>

Objective of Pillar	FAST-Infra Dimensions	Blue Dot Network	Green Dev Guidance
Pillar 1: Sustainable Growth & Development		Element 1	
		Element 6	
		Element 9	
Pillar 2: Economic Efficiency		Element 2	
Emelency		Element 5	
Pillar 3: Environmental	Environmental Dimension	Element 4	Climate Change
considerations	Dimension	Element 8	Biodiversity Conservation
			Pollution Control
Pillar 4: Building Resilience	Adaptation and Resilience Dimension	Element 4	
Pillar 5: Social	Social Dimension	Element 8	
Considerations		Element 10	
Pillar 6: Infrastructure	Governance Dimension	Element 3	
		Element 7	

#### Table 5: Pillars: Comparison of coverage across meta-standards

The scope of FAST-Infra goes well beyond Green Development Guidance. It covers a wider range of topics within the Environmental Considerations Pillar. FAST-Infra also encompasses three additional Pillars: Social Considerations, Building Resilience, and Infrastructure Governance. Fast-Infra's Dimensions are roughly equivalent to the ESG issues covered by IFC Performance Standards plus climate resilience and adaptation.

Blue Dot Network's scope is the broadest of the three, incorporating all four Pillars covered under FAST-Infra's Dimensions (including some additional Criteria under the Infrastructure Governance Pillar), plus the Sustainable Growth and Development and Economic Efficiency Pillars. Blue Dot Network's Elements mirror the six QII Principles (G20 2019).<sup>20</sup>

The divergent philosophies and objectives of the sponsoring entities can account for these differences in scope. The developers of the Green Development Guidance selected climate, biodiversity, and pollution because they deemed these target areas as the most relevant to their goal of accelerating green projects and reducing non-green projects in the drive to advance a Green BRI (BRIGC 2020). The Green Development Guidance Baseline Report notes that, "It is important to acknowledge that the classification proposed in this report focuses only on environmental aspects associated with the projects and does not make judgments on the financial viability of a project or the social aspects" (BRIGC 2020, p.40). The official vision of a Green Belt and Road<sup>21</sup> does not include attributes such as debt transparency, human and labor rights, or gender equality, so it is not surprising that these Pillars would not be included in the Green Development Guidance. That said, the Green Development Guidance does contain some social safeguards in the risk management section, such as guidance on independent environmental impact assessments (EIAs) and environmental and social management systems (ESMS) with a transparent grievance redress mechanism (BRIGC 2021a).

FAST-Infra's philosophy is that many financial institutions and infrastructure developers do not have the in-house capacity to assess ESG attributes for infrastructure; the SI Label provides a helpful and reliable assessment of the full suite of ESG factors plus resilience and adaptation. FAST-Infra is also premised on the assumption that investors and developers already make their own financial assessment of project attributes such as financial viability and thus are not seeking more information in this realm.<sup>22</sup> FAST-Infra consequently has not included the Economic Efficiency and Sustainable Growth and Development Pillars that, Blue Dot Network would argue, underlie "quality infrastructure."

Blue Dot Network's philosophy is that integrating ESG criteria in infrastructure investment is a necessary but not sufficient condition for ensuring that investments meet sustainability objectives. A focus on the full complement of quality infrastructure attributes aligns with Blue Dot Network's philosophy that, without good public governance, considerations of value for money and equal access, and a focus on long-term development objectives, investments are less likely to generate the expected benefit (OECD 2022). Hence they include all six Pillars in their framework because they believe that most investors would benefit from being able to easily assess such attributes when carrying out their analyses.

#### **Indicators and Metrics**

The three meta-standards also vary in the specific requirements that projects or assets must meet to receive the label, certification, or classification.<sup>23</sup> All three meta-standards identify a minimal condition (defined as "baseline condition" for FAST-Infra and Green Development Guidance; "essential requirement" for Blue Dot Network) for each Pillar. To be awarded an SI Label by FAST-Infra, at least one Blue Dot by the Blue Dot Network, or classified as "green" or "yellow" within Green Development Guidance, a project must meet the minimal conditions in every Pillar (Table 2).

Each meta-standard also has a higher-level tier for most Pillars that a project can meet. For FAST-Infra, this higher level is termed "positive contribution" and must be met in at least one of its Dimensions to be awarded the SI Label. For Green Development Guidance, this higher level is also termed "positive contribution" and must be met in at least one of its Environmental Aspects to be classified as a "green" project. For Blue Dot Network, projects must exceed the essential requirements in multiple Elements to receive two Blue Dots ("superior project") and must excel in multiple Elements to receive three Blue Dots ("best-in-class project").

The ultimate assessment of how the three meta-standards stack up against each other—at least for overlapping Pillars—will depend on comparing their indicators, metrics, and thresholds. Unfortunately, Blue Dot Network has not yet published any specific indicators or thresholds, so a full comparison is not yet feasible. However, to offer an initial glimpse of what the differing approaches, breadth, and relative stringency may look like, we compare the FAST-Infra and Green Development Guidance requirements. Green Development Guidance has many more indicators per Criteria than FAST-Infra. This is not surprising given that Green Development Guidance focuses on only three Environmental Aspects, and thus can provide more customized indicators for a range of infrastructure subsectors.<sup>24</sup> Despite the large number of indicators in the Green Development Guidance, many are quite vague and often have no associated metrics attached.<sup>25</sup> The fact that Green Development Guidance is a classification system—as compared to a labelling or certification system—may contribute to the lack of specific metrics associated with its indicators.

Below we consider in more detail four themes that represent areas of overlap between two or more meta-standards: climate mitigation (in the Environmental Pillar), biodiversity conservation (in the Environmental Pillar), gender inclusion (in the Social Pillar), and debt sustainability (in the Governance Pillar).

# Table 6. Climate mitigation: Inclusion of objectives and sample measures for climate mitigation across meta-standards

Objective or measure	FAST-Infra	Blue Dot Network	Green Dev Guidance
Energy sector, including e	electricity, heating, and co	oling	
Direct emissions cap	<ul> <li>For baseline: &lt;100g CO2e/kWh (whole project lifecycle emissions); no carbon offsets can be used to reduce below this threshold</li> <li>For positive contribution: "demonstrate a positive GHG emissions avoidance as compared to an appropriate baseline"; no carbon offsets can be used to contribute to avoidance</li> </ul>	Requirements are under development	<ul> <li>Neutral: 100–300g CO2e/kWh (whole project lifecycle emissions)</li> <li>Positive: &lt;100g CO2e/ kWh</li> </ul>
Emissions cap specifically includes scope 2 emissions	Recommended in "example methodology" but not addressed specifically in baseline requirement or positive contribution factor	Requirements are under development	Yes: emissions thresholds for neutral and positive contribution for "average emissions over whole project lifecycle and supply chain"
Actions / constraints to advance low-carbon energy technologies or sources	Project must "avoid lock-in to unabated fossil fuel consumption; not hamper the development and deployment of lower- carbon alternatives; [and] not substantially increase GHG	Requirements are under development	<ul> <li>Prohibits construction or operation of new coal-fired power generation, or retrofits to existing coal-fired power plants, including technology to enable extending useful life</li> </ul>
	emissions, measured against an appropriate baseline"		<ul> <li>"Gas-fired energy can only be seen as a transition technology if no other forms of baseline energy supply is available"; must apply CCUS as needed to reach less than 100g CO2/kWh (to achieve "yellow" light)</li> </ul>

Objective or measure	FAST-Infra	Blue Dot Network	Green Dev Guidance
Technical specifications for renewable energy generation, grids, and energy storage	Not specifically addressed	Requirements are under development	• Solar projects must meet quantitative thresholds for conversion efficiency of PV cells (silicon and otherwise) and battery module decay rates
			<ul> <li>Hydroelectric projects must include mitigations in accordance with relevant standards for mitigation hierarchy (e.g., IFC 2015 Hydroelectric Power Standard)</li> </ul>
			• Wind power generation must specify bird migratory areas, design standards, GB/ISO, or other local relevant standards
			<ul> <li>Grids must meet quantitative thresholds for energy efficiency, and system waste rates for wind and solar</li> </ul>
			<ul> <li>Waste-to-energy must include pollution control, and can only achieve "yellow" light</li> </ul>
Objective or measure	FAST-Infra	Blue Dot Network	Green Dev Guidance
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Other sectors (outside of	<sup>f</sup> energy)		
Guidance for other sectors	"Other project types may consider carbon offsets for Scope 1, 2, 3 and and/or lifecycle emissions provided global best practice for carbon offsets is applied (e.g., using global best-in-class, high quality, credible offsetting with robust and transparent monitoring and verification)"	Requirements are under development	<ul> <li>Includes thresholds and guidelines for passenger and freight transport, agriculture, and manufacturing</li> <li>Example for freight transport: cannot be dedicated to transporting fossil fuels; maximum 150 g CO2e/ton-km. Positive contribution requires emissions to be at most 50% of average reference for HDVs (approximately 90 g CO2e/ton-km) and that non-electrified infrastructure have a plan for electrification</li> </ul>

#### **Climate mitigation**

As seen in Table 6, FAST-Infra and Green Development Guidance share many similar requirements for climate mitigation. Our analysis focuses on energy projects (including heating and cooling), largely because that is where sufficient data are available for comparison: FAST-Infra and Green Development Guidance documents provide detailed requirements for projects in this domain.<sup>26</sup> Details on climate mitigation requirements for Blue Dot Network are not yet known.

There is substantial overlap in the requirements held by FAST-Infra and Green Development Guidance (BRIGC 2020; FAST-Infra 2021b). Both provide a numeric threshold for the direct emissions cap for their baseline requirement, though FAST-Infra's threshold is more stringent.<sup>27</sup> Furthermore, both seem to indicate that the emissions calculation should include Scope 2 GHG emissions (i.e., indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling).<sup>28</sup> FAST-Infra specifically disallows carbon offsets to be used to offset emissions below minimum threshold requirements; Green Development Guidance is silent on this issue.<sup>29</sup>

Both FAST-Infra and Green Development Guidance also have additional stipulations for advancing the adoption of low-carbon energy infrastructure and forestalling carbon-intensive infrastructure. For instance, FAST-Infra states that projects must "not hamper the development and deployment of lower-carbon alternatives," and Green Development Guidance states that new or retrofit coal-fired power plants are prohibited (red exclusion list) under the Traffic Light

# Table 7. Biodiversity: Inclusion of objectives and sample measures for biodiversity across meta-standards

Objective or measure	FAST-Infra	Blue Dot Network	Green Dev Guidance
Baseline compliance	<ul> <li>Project must achieve overall net gain for natural and modified habitats, as well as critical habitats including affected freshwater, terrestrial and marine habitats</li> <li>The project shall not lead to adverse impacts on biodiversity and ecosystem services and shall not significantly convert or degrade natural or critical habitats</li> <li>Any project operating in, or around critical habitats will adhere to the IUCN Key Biodiversity Area Business Guidelines, as appropriate</li> <li>A Critical Habitat Screening/Assessment should be conducted for projects located within internationally and/or nationally recognized areas of high biodiversity value</li> </ul>	Requirements are under development	<ul> <li>Project cannot be within 10 km of KBA</li> <li>Supply chain not affecting KBA</li> <li>Project not affecting ecosystem services</li> <li>Project not affecting livelihoods of hunters, gatherers, fishers</li> <li>Project's impact limited to within less than 500 m of site (e.g., water temperature impact, water chemistry impact)</li> <li>Does not affect routes of migratory species</li> <li>All biodiversity impacts reversible within 24 months after project disassembly</li> <li>No net loss of biodiversity (as defined through Biodiversity Mitigation Hierarchy)</li> </ul>
Positive contribution	<ul> <li>The project will enhance biodiversity and the natural environment to achieve a positive gain across natural and modified habitats, as well as critical habitats</li> <li>Offsets shall not be permitted in calculation of any positive gain claim</li> <li>In addition, project site selection and design shall ensure maximum ecological connectivity</li> </ul>	Requirements are under development	Project results in improvement of biodiversity (e.g., higher genetic biodiversity with same biodiversity mass, more biodiversity mass with equal genetic diversity)

System, and gas-fired energy "can only be seen as a transition technology if no other form of baseline energy supply is available" (BRIGC 2020, p. 48).

Green Development Guidance offers subsector-specific requirements and specifications whereas FAST-Infra's requirements remain more generalized. For example, Green Development Guidance provides quantitative thresholds for conversion efficiency of PV cells, both silicon and other technologies, as well as battery module decay rates.<sup>30</sup> FAST-Infra has no such requirement. Given the narrower scope of Green Development Guidance on climate mitigation, biodiversity conservation, and pollution, it is not surprising that it provides more detailed requirements for a range of infrastructure subsectors.

Objective or measure	FAST-Infra	Blue Dot Network	Green Guidance
Baseline compliance	<ul> <li>Project must identify and disclose human and labor rights issues across the supply chain, defined as at least Tier 1 Suppliers (partners with whom project directly conducts business) and Tier 2 Suppliers (sources where Tier 1 suppliers source their materials or inputs)</li> </ul>	Requirements are under development	Not addressed
	<ul> <li>Must promote local employment opportunities during construction and operation</li> </ul>		
	<ul> <li>Must implement plans and policies promoting ethical labor practices</li> </ul>		
	• Must monitor performance throughout construction		
Positive contribution	The project adopts human and labor rights safeguarding policies and processes across the supply chain, implements inclusive employment practices during construction and operation, enacts ethical labor practices, and works with local human rights service providers to support both affected and wider communities	Requirements are under development	Not addressed

# Table 8. Human and Labor Rights: Inclusion of objectives and sample measures for human and labor rights across meta-standards

#### **Biodiversity conservation**

Table 7 provides an overview of requirements related to biodiversity. For their baseline requirements, both FAST-Infra and Green Development Guidance have the objective of a net gain for biodiversity and natural and modified habitats and that infrastructure projects be sited outside of Key Biodiversity Areas (KBA). For their positive contributions in both meta-standards, infrastructure projects must provide an absolute (not net) improvement or enhancement of biodiversity—a relatively ambitious objective compared to current global norms.<sup>31,32</sup> Again, Blue Dot Network has not yet released any indicators or metrics.

Despite similar objectives for biodiversity conservation between the standards, the specific requirements diverge. The meta-standards vary in both approach and stringency: when considering KBA buffer zones, for example, Green Development Guidance's requirements are more rigorous than those of FAST-Infra. Green Development Guidance baseline requires that projects not be sited within 10 km of a KBA—a larger zone than required by FAST-Infra, which follows the International Union for Conservation of Nature (IUCN) Key Biodiversity Area Business Guidelines. FAST-Infra, however, requires that Critical Habitat Screening/Assessment are conducted for projects located within internationally and/or nationally recognized areas of high biodiversity value, a stipulation not included in Green Development Guidance. The requirements of FAST-Infra are written with more reference to existing systems of safeguards.

#### Human and labor rights

Table 8 provides an overview of requirements related to human and labor rights. This social objective is absent from Green Development Guidance, and requirements for Blue Dot Network are not yet known. FAST-Infra requirements center on disclosure of issues across the supply chain, promotion of local employment opportunities, policies, and performance monitoring.

#### Debt sustainability

Table 9 compares requirements for debt sustainability. Debt sustainability also falls outside the scope of Green Development Guidance. The requirements for Blue Dot Network are not yet known. FAST-Infra's baseline requirement has two main conditions for projects that benefit from a direct or contingent government financial obligation. First, asset owners must disclose these obligations. Second, they must provide documents to their government counterparts that serve to disclose how these obligations may affect the country's sovereign debt, such as through off-balance sheet liabilities. FAST-Infra further specifies that, to fulfill the latter requirement, asset owners must use the World Bank/IMF Public-Private Partnership Fiscal Risk Assessment Model or another IMF-approved method. FAST-Infra offers no option for a positive contribution with respect to debt sustainability.

# Table 9. Debt Sustainability: Inclusion of objectives and sample measures for fiscal management or debt sustainability across meta-standards

Objective or measure	FAST-Infra	Blue Dot Network	Green Dev Guidance
Fiscal management and transparency	• Baseline: Must disclose any direct and/or contingent government obligations. Asset owners will provide relevant documents to government counterparts for their disclosure of any direct and contingent impact of the project on the country's sovereign debt, such as reporting the offbalance sheet liabilities	Requirements are under development	Not specifically addressed
	• Example indicators include project-by-project mechanism for reporting impacts on country's sovereign debt, including quantitative assessment of the off-balance sheet and contingent liabilities for the government		
	• Example indicators include yes/no answer to whether the project has been assessed using the IMF-World Bank PFRAM or another IMF-approved method to estimate the quantitative impact on the country's sovereign debt and liabilities		
	• No option for a positive contribution with respect to this Criterion		

#### **Review Process**

Developers of all three meta-standards agree that infrastructure applications should be supported by data and evidence of compliance; they also agree that a third-party audit of these data is highly desirable and should be encouraged for all projects. However, the initiatives have a philosophical difference concerning whether an external review should be required.

Blue Dot Network requires an independent, third-party verification of the accuracy of the data and evidence provided by the applicant to ensure that it supports the claims being made in the initial self-assessment (OECD 2022). The developers of Blue Dot Network contend that relying only on self-reporting risks creating a label that could be seen as serving to greenwash projects that are not truly compliant. This risk, regardless of whether it is real or perceived, could jeopardize the reputation and credibility of the meta-standard. Blue Dot Network has not yet released details on the external review process or requirements. It is unclear whether the independent review mechanism would be coordinated through the Blue Dot Network Secretariat or accredited third parties.

For its part, FAST-Infra has consistently adopted the position that independent external review is not required to receive the SI Label but is strongly recommended. To receive an SI Label, projects that do not obtain external verification must provide an explanation for not doing so (FAST-Infra 2021c). FAST-Infra developers argue that leaving open the opportunity for self-reporting without external verification allows for greater participation of applicants. They also argue that market pressure is likely to drive the system toward third-party audits by giving preference to projects with external review and passing over projects whose self-reporting is inadequate. They point to the Green Bond market as a model: The Green Bond Principles strongly encourage but do not require third-party audits. An increasing number of Green Bonds are externally reviewed (Harrison and Muething 2021).<sup>33</sup> FAST-Infra has left room for adjustment, if needed: its secretariat can add a third-party requirement if they determine that market forces are not adequately policing self-reported applications.

Green Development Guidance also recommends external review, though relies mostly on firstparty declarations by infrastructure developers and verification by financial institutions. For the classification of "red," "red/yellow," and "red/green," Green Development Guidance requires independent evaluation to verify the infrastructure developer's self-evaluation, though no further details are provided on how to conduct this third-party evaluation (BRIGC 2020).

# Data Platform

Digital data platforms represent an important component of both the FAST-Infra and the Blue Dot Network. Both initiatives aim to develop a data platform that represents "one-stop shopping" with centralized tools and a streamlined process—a critical upgrade to the existing disjointed and difficult process that developers undergo to prepare their projects and meet requirements for one or more existing standards or rating systems. Developers of both envision that their secretariats will manage a data repository that hosts all applications, reporting information, and other disclosures for each proposed infrastructure project. FAST-Infra and Blue Dot Network each plan

to develop an online hub with a user-friendly interface that facilitates project preparation and application for the SI Label or BDN Certification application process.

The FAST-Infra Technology Platform is in the early stages of development. Working with several technology companies and project finance experts, designers are building upon the architecture and software of Sustainable Infrastructure Foundation's SOURCE, a multilateral platform for sustainable infrastructure led and funded by the MDBs that supports infrastructure project preparation (Sustainable Infrastructure Foundation 2021a; 2021b; Fast-infra Platform 2020). FAST-Infra seeks to develop a platform that can enable more streamlined and transparent project development and efficient risk management. FAST-Infra developers also believe that the open and transparent nature of a data repository should increase market pressure on project developers to continuously improve their sustainability performance. The FAST-Infra Platform.

The Blue Dot Network also plans to develop a dedicated digital platform to guide applicants through the certification process. They envision an integrated data platform that is user-friendly and streamlines the certification process by optimizing workflow, automating certain aspects of certification, and cross-checking data points against third-party data sources. In the Blue Dot Network framework document, OECD makes multiple references to the potential of external data sources, technologies, advanced analytics, and artificial intelligence that could assist and partially automate the certification process (OECD 2022). "[T]hrough combining project-level, company-level, and contextual data, and through applying data analytics to derive insights, the certification process could be significantly enhanced with reduced need for manual input [by applicants]" (OECD 2022, p. 35). Blue Dot Network has not yet begun the development of the platform.

The proposed data repositories of FAST-Infra and Blue Dot Network are also envisioned to serve as central repositories of projects that could provide a matchmaking service among prospective investors, developers, contractors, service providers, and governments. Both initiatives envision that their databases will have the ability for investors, governments, and other decision makers to not only view the overall score that a BDN Certified project receives, but also how projects perform on different indicators. An investor with a particular mandate related to ESG, health and safety concerns, or net-zero commitments, for example, would be able to easily identify projects that match their needs.

As a central repository of projects, these platforms are also expected to play a valuable educational role for all stakeholders by signaling which types of projects and attributes are most attractive to investors and showcasing best-in-class exemplar projects.

BRIGC does not have plans to manage the Traffic Light System project classification process. There are no plans to develop a centralized BRI dataset as a common data repository for developers and investors, though MEE has been developing a BRI Environmental Big Data Platform<sup>34</sup> that could serve in this capacity.

# Meta-Standard Stakeholder Engagement

As demonstrated by the theories of change described in section Goals and Objectives Section, wide-scale adoption of any meta-standard requires action among many stakeholder groups—investors, project developers, and governments. How each of the meta-standards have engaged various stakeholder groups provides insight as to which stakeholder interests wield the greatest influence in meta-standards development, as well as potentially which stakeholders may be most readily inclined to help disseminate or encourage meta-standard adoption.

FAST-Infra's stakeholder engagement was initiated with working groups that were largely populated by financial institutions and some NGO representatives. Engagement then broadened during the consultation phase with six roundtables that expanded to additional stakeholder groups such as construction firms, consultants and technical advisors, development finance institutions, insurers, credit rating agencies, NGOs, and governments. Finally, FAST-Infra held a 30-day open-comment period on its draft framework (FAST-Infra 2021e).

Even as FAST-Infra has consulted with an increasingly broader circle of stakeholders, the initiative has tried to maintain its private-sector focus and political neutrality. FAST-Infra has actively sought and obtained endorsements of private-sector industry associations. By comparison, though they have met with government officials representing the G20 and G7 and other nations, they have no government endorsements. The primary MLIC government engagement has occurred through one of the founding steering committee members, Global Infrastructure Facility.

Blue Dot Network's consultation process has put greater emphasis on reaching out to a wide range of stakeholders outside the finance sector. Blue Dot Network conducted a significant number of consultations with governments around the world. The OECD Trust in Business Initiative held over 100 bilateral interviews with leading businesses, civil society, governments, and trade unions. In mid-2021, Blue Dot Network established an Executive Consultancy Group composed of over 170 leaders from across the infrastructure ecosystem: investors, banks, project developers, engineering and construction firms, operators, advisory firms, academics, and civil society organizations including labor organizations. The full Executive Consultancy Group has met three times, with the most recent meeting held in March 2022 to discuss the proposed framework. Blue Dot Network has also hosted multiple working group sessions. In April 2021, Blue Dot Network is possible to obtain diverse perspectives on the demand for and merits of a global certification framework (OECD 2021). In October 2021, they ran a second survey for working group members on basic meta-standard requirements.

The group of BRIGC developers of Green Development Guidance was comprised of representatives of the Chinese government (from various departments within MEE) and the international entities including NGOs, academia, and several financial institutions. Throughout the process of developing the Green Development Guidance and Traffic Light System, BRIGC—often led by MEE—has consulted extensively with Chinese government agencies. The international NGO members of BRIGC have met with parties outside of China. Since the release of the Green Development Guidance Application, Task 1 in October 2021, BRIGC has

held a series of workshops with Chinese financial institutions—including the two policy banks and Sinosure, China International Contractors Association, banks, contractors, and others —to explain how to put the guidelines into action and combine them with the green finance principles.

In late 2021, FAST-Infra and Blue Dot Network began to have greater consultation with each other to share information. At that time, there had been no interaction between these two groups and Green Development Guidance.

#### **Governance Structure**

The development of each of the meta-standards was initially overseen of by a small group of individuals representing their founding organizations (Table 3). Green Development Guidance was designed by a task force of BRIGC members—including the Chinese government and international organizations. The development of FAST-Infra was overseen by a steering committee that included HSBC, GIF, IFC, CPI, and OECD. The development of the Blue Dot Network is governed by a steering committee composed of representatives from the Governments of the United States (Department of State, Agency for International Development, and International Development Finance Corporation), Australia (Department of Foreign Affairs and Trade), and Japan (Ministry of Foreign Affairs and Japan Bank for International Cooperation). Representatives of the G7, invited as observers, also attend some Blue Dot Network Steering Committee meetings.

Once the label or certification requirements and processes have been largely established, both FAST-Infra and Blue Dot Network Steering Committees plan to transfer day-to-day administration of their assessment process to an outside body that will serve as a secretariat. FAST-Infra has already defined the role of its the secretariat and is currently screening candidate organizations to take on the role (FAST-Infra 2021d; 2021a). FAST-Infra has directly modelled its secretariat after that of the Green Bond Principles, housed at ICMA. The FAST-Infra Secretariat will, among other duties, manage the data reporting platform; share knowledge on the benefits of the SI Label; assist Member Institutions<sup>35</sup> with SI Label declaration, disclosure, and reporting procedures; and lead the periodic updating of the SI Label requirements. The responsibilities of the Blue Dot Network Secretariat have not yet been publicly defined, but Blue Dot Network developers have indicated that an important role will be to provide support to applicants during the submission process. They are also likely to select an organization to house its secretariat that can work easily with governments and development finance institutions. Meanwhile, the structure and nomenclature of Blue Dot Network's Steering Committee will also likely evolve.

BRIGC does not envision setting up a formal secretariat for Green Development Guidance. BRIGC essentially serves as the de facto secretariat.

# **Adoption Plans**

Developers of all three meta-standards have acknowledged that the adoption process will require a push from both the demand and supply sides. Governments and financiers must require or favor projects that are certified, labeled, or classified as sustainable, quality investments; meanwhile, developers must also find it to their advantage to categorize their projects. While all are or plan to push for adoption along multiple fronts, they differ on where they direct their efforts.

FAST-Infra's SI Label adoption efforts have been primarily focused on financial investors. For the official launch of the SI Label at COP26 in Glasgow, they lined up endorsements from major financial industry associations and institutional investors. FAST-Infra's next phase requires moving from such endorsements to actual adoption of the SI Label. Building on the financial industry endorsements from Sustainable Markets Initiative's Financial Services Taskforce, Glasgow Net Zero Alliance, and Investor Leadership Network, FAST-Infra is now encouraging individual member institutions within these associations to begin to incorporate the SI Label into their lending policies. HSBC, the most prominent private sector backer of FAST-Infra, has discussed internally the possibility of requiring the SI Label for HSBC loans, but has not committed firmly to this or announced a formal policy. Steering committee members have also discussed with other financial institutions within the endorsing associations whether they would be willing to incorporate the label as part of their guidelines. Several institutions have begun to "road test" the SI Label on pilot projects; a roundtable is being held in late February for companies demonstrating an early interest in SI Label adoption.

Despite FAST-Infra's primary focus on private-sector investors, FAST-Infra is also encouraging the adoption of the SI Label in public-sector infrastructure investments. One of the founding steering committee members—the Global Infrastructure Facility—is leading an effort to promote the adoption of the SI Label by MLIC governments. GIF, through technical assistance to several MLICs, has encouraged governments to incorporate the SI Label (or at least many of its requirements) in early-stage infrastructure planning, such as in feasibility studies, commercial studies, and loan structuring. More generally, the FAST-Infra Steering Committee is also trying to encourage MDBs to require the SI Label for MDB-funded projects. FAST-Infra developers believe that, since the SI Label tracks closely with the ESG safeguards that many MDBs already use, the SI Label requirement would not require significant adjustments to their protocols. The Asia Development Bank is the first (and so far, only) MDB to provide technical assistance for loans that require the SI Label (Segal 2021). However, to date, no MDBs have indicated that they will require the SI Label for their loans.

The BDN Certification adoption plan is in an earlier stage of development. With the release of its framework in March 2022, Blue Dot Network appeared ready to begin road-testing the proposed certification process on infrastructure projects. Blue Dot Network will likely draw upon companies with representation on the Executive Consultation Committee to assist with early road-testing and adoption.

An even larger opportunity for Blue Dot Network adoption would be to link the BDN Certification directly to development finance assistance and loans from the steering committee founders—the U.S., Australia, Japan, other G7 members (currently "observers" on the steering committee). These countries represent hundreds of billions of dollars of infrastructure investments: Japan is already the lending leader of infrastructure in Asia. The U.S. has pledged to increase its infrastructure investments through Build Back Better World (B3W) as have other initiatives of G7 members such as the European Union's Global Gateway and the UK's Clean Green initiative (European Commission 2021; Government of the United Kingdom 2021; White House 2021a). As President Biden said at the Glasgow Roundtable, all these countries are "… part of a joint effort among the G7 partners to deliver high-quality, sustainable infrastructure" (Reuters 2021).

The sponsoring governments of the Blue Dot Network have not yet determined whether they will require BDN certification for their DFI loans generally. This is a question of ongoing consideration as the operational details of the Blue Dot Network—including certification requirements at each tier—continue to be firmed up. As the road-testing phase proceeds, Blue Dot Network will be monitoring the administrative and political costs and benefits before making decisions on how BDN Certification would be incorporated into their DFI financing processes.

One option currently being considered is mutual recognition between Blue Dot Network certified projects and those approved by their DFIs. The development finance agencies of the sponsoring countries already have their own safeguards and due diligence requirements. So, for example, if a project were to meet JBIC or DFC requirements then mutual recognition would mean that it would not need to be assessed on those elements that are part of the BDN Certification. This would allow the DFI projects to easily and quickly be BDN certified or, conversely, for BDN Certified projects to be expedited through DFI review.

The primary adoption plan for Green Development Guidance is to have the guidance—the Traffic Light System classification as well as the associated risk management practices—incorporated into various guidelines provided by individual Chinese government agencies. This requires generating a willingness within agencies to adopt the concepts as well as build competencies within their agencies to carry them out. BRIGC is also encouraging the adoption of Green Development Guidance along other pathways, such as advocating among individual financial institutions, SOEs, and industry associations to use the Traffic Light System classification as a guide for selecting projects. Finally, international partner organizations within BRIGC are also beginning to work with governments in BRI countries to educate them about the Traffic Light System, and to advocate that BRI country governments request green projects through project tenders and require developers and investors to apply the Traffic Light System and associated risk management systems.

In sum, each of the meta-standards are progressing on multiple fronts. While all three initiatives share the goal of targeting meta-standard adoption in emerging and developing economies (see section Goals and objectives Section), so far their focus on these countries is still nascent. A substantial push will be needed because, under current market conditions, project applicants in high-income countries are already better positioned to become the early adopters of the FAST-Infra's SI Label or BDN Certification. Stricter laws, regulations, and business environments

in many high-income countries create enabling environments that demand a high degree of sustainability compliance; thus project developers in these countries may find it relatively straightforward to apply for and be awarded an SI Label or BDN Certification. By comparison, infrastructure project developers in MLICs tend to operate at a disadvantage when meeting compliance with global standards. Data and documentation required for the meta-standard evaluations may be challenging to provide if national regulatory frameworks are relatively lax.

# **OPPORTUNITIES FOR HARMONIZATION**

The need for a clear and credible identification of projects that are truly high quality, low risk, and sustainable is well founded. The widespread recognition of a sustainable, quality infrastructure label, certification, or classification system could help mainstream sustainable, quality infrastructure as a distinct asset class with increased public and private financial support. With the pledges of hundreds of billions of dollars in new infrastructure investments in MLICs from B3W, Global Gateway, Clean Green, and BRI, an urgency exists to provide clarity to this spending.

However, given the overlap of the three new meta-standards, their relatively simultaneous introduction could result in further confusion rather than clarity, potentially undermining the efforts of all three. Fortunately, because all three meta-standards are still in the development phase and at an early stage of introduction to the global community, there are opportunities to clarify the role that each can play, seek common approaches where possible, and reduce perceived conflicts.

In the next section, we offer nine recommendations for actions for meta-standard developers and policy makers that could reduce competition and increase adoption of the three meta-standards. Because FAST-Infra and Blue Dot Network are both set up as self-contained assessment initiatives with affiliated governance and management structures—whereas Green Development Guidance is a classification system that aims to provide guidance to government agencies and infrastructure stakeholders—several of the recommendations are relevant only to FAST-Infra and Blue Dot Network. Our recommendations range from specific technical adjustments at the meta-standard level to global cooperation to build the enabling conditions for sustainable, quality infrastructure mainstreaming. We argue that if these meta-standard developers take actions to coordinate their requirements and roles, all three initiatives could thrive and the sum of their efforts would increase investment in sustainable, quality infrastructure adoption globally.

# Recommendations

#### 1. Measurement consistency

We recommend that FAST-Infra and Blue Dot Network fully align the technical standards for their Environmental, Resilience, Social, and Governance Pillars by using common indicators, metrics, and thresholds within overlapping Pillars and objectives.<sup>36</sup> An important step toward coordinating the meta-standards would be to closely align the technical standards for overlapping Pillars.<sup>37</sup> The developers of FAST-Infra and Blue Dot Network have already begun discussing the possibility of allowing mutual recognition of each other's classification schemes where their requirements and due diligence standards align. Blue Dot Network already plans to develop a recognition methodology for assessing alignment of different certifications/labels and their respective review processes (OECD 2022). While mutual recognition would reduce the need for multiple certification processes, it could create complications where requirements, measures, and processes diverge. Using the same measures in both meta-standards would reinforce each with the idea of a common global standard. It would also simplify the process for project applicants, who would not need to justify mutual recognition across systems. Additionally, it would also allow prospective investors to easily compare projects across different meta-standard systems.

Aligning measurements would not necessarily require that the initiatives choose between FAST-Infra's binary approach and Blue Dot Network's tiered approach. Though FAST-Infra has only two conditions (SI Label/No SI Label), its assignment of different levels of effort for baseline conditions and positive contribution provides a range of scenarios that could be matched with Blue Dot Network's multiple Blue Dots. For instance, for overlapping Pillars, one Blue Dot could be equivalent to meeting the FAST-Infra baseline requirements. Blue Dot Network's requirement for two or more Blue Dots could align with FAST-Infra's positive contributions in two or more areas. A coordinated scale for the four overlapping Pillars could be established so that the two systems are transparently aligned.<sup>38</sup>

Because FAST-Infra has already published its preliminary methodology and set of indicators (FAST-Infra 2021b) and Blue Dot Network is actively developing their own, alignment of measures in overlapping Pillars is not likely in the first versions of both meta-standards. To successfully align these measures in future iterations, the steering committees of both meta-standards would need to direct their respective secretariats to work together before the release of the second version of both meta-standards. One advantage of this delayed process is that the road-testing of the two sets of indicators and metrics should provide feedback on the accuracy and ease of measure for both.

Agreement on specific measures may be easier than agreement on their thresholds; it is possible that Blue Dot Network and FAST-Infra envision different levels of effort required for a particular measure.<sup>39</sup> If agreed-upon thresholds cannot be reached between the two systems, then FAST-Infra's positive contribution system could be further expanded to incorporate two levels of positive contributions, thus providing additional flexibility to coordinate with Blue Dot Network's tiered system.

The different roles of third-party audits in FAST-Infra and Blue Dot Network represents perhaps the most significant barrier to aligning meta-standards. Blue Dot Network developers may argue that the alignment of technical standards could inaccurately convey that the SI Label and BDN Certification are substantially equivalent within overlapping Pillars, whereas Blue Dot Network requires an external review that is only strongly recommended for the SI Label. However, we believe there is value in aligning technical standards; other means exist to distinguish between projects that are certified and those that are not (see Recommendation 2).

Although Green Development Guidance has substantially narrower coverage in terms of Pillars and objectives, a classification system that varies by infrastructure subsector, and less specific thresholds in many cases,<sup>40</sup> there remain opportunities for aligning its measures with those of FAST-Infra and Blue Dot Network. If the Green Development Guidance were to adapt its baseline metrics and thresholds so that they aligned with the other meta-standards for climate mitigation, biodiversity conservation and pollution—while continuing to customize the positive contributions by subsectors—it could be integrated into a common set of global standards while retaining its own Chinese character.

#### 2. Rewarding certification

We recommend that all three systems develop a process for independent external review to verify claims and a labeling scheme that clearly distinguishes projects whose claims are externally reviewed. External review of claims by a capable, credible, and independent auditor represents best practice for conformity assessment in any domain,<sup>41</sup> including sustainable infrastructure. All three meta-standards support transparency, agree that claims should be supported by data, and promote third-party review. However, only Blue Dot Network requires an external review. (Details concerning the Blue Dot Network review process are still in development and thus not possible to fully evaluate.<sup>42</sup>) FAST-Infra and Green Development Guidance have explicitly disavowed a requirement for external review at this time (though FAST-Infra strongly encourages it and requires a written justification if it is not used, and GDG recommends review for certain project types). We recommend that all three initiatives develop explicit external review protocols, ideally consistent with relevant ISO standards on conformity assessment, auditing, and certification (e.g., ISO/IEC 17000 and related standards in the ISO 17000 series).

For FAST-Infra and Green Development Guidance, we recommend that the developers take an additional step of adding the option of a "certified" version of the SI Label or Traffic Light System which would require a formal external review of all sustainability claims, as described above.<sup>43</sup> This should include distinct branding that the project could use for its investment materials or relevant documents. For instance, FAST-Infra could offer a "Certified SI Label" to complement the "SI Label" and Green Development Guidance could have a "Certified Green Light" classification to complement its "green light." This would allow project developers/owners to easily differentiate their projects to prospective investors and other stakeholders. There should also be a clear identification of certification status in the corresponding data repositories so that users can readily determine which projects have had sustainability claims externally reviewed.<sup>44</sup> Because certification is fundamental to the Blue Dot Network system, we recommend that the Blue Dot Network branding incorporate certification as such. For instance, developers of a project awarded one or more Blue Dots could receive a logo containing the word "Certified." The developer could refer to the project in investor or other materials as "Blue Dot Certified" or use similar language. This would allow project owners to highlight the investment they made to achieve certification, and hopefully encourage further adoption of certification and external review in the marketplace.

FAST-Infra is already finding it challenging to find external auditors with the breadth to carry out external reviews across all four of its Dimensions; Blue Dot Network will likely find this task even more daunting given its wider scope of 10 Elements. As a component of this Recommendation, we strongly encourage the meta-standard secretariats to support the development of a shared training program and community of practice for third-party auditors. The goal of this effort would be to create a pool of auditors qualified to certify infrastructure within any meta-standard system (see Recommendation 4).

#### 3. Universal pre-screening tool

We recommend that all three initiatives offer a pre-screening tool to further incentivize the selection of green, sustainable, quality infrastructure projects. The Blue Dot Network includes in its framework a preliminary "quick-check" self-assessment tool to assist applicants in gauging whether their proposed project is likely to satisfy the essential requirements for BDN Certification (OECD 2022). We strongly support the development of this preliminary pre-screening tool to provide prospective applicants with an easy, fast, and inexpensive way to help decide whether to commit to the more intensive and costly certification process. We further recommend expanding the function of the pre-screening tool to proactively encourage and discourage project types by their inherent sustainability. The tool could incorporate a filter that classifies a project type or subsector at the beginning of the screening process, before any specific details concerning the individual project have been added. Infrastructure subsectors that are valuable to the sustainable development of a country or region—for example, a project that generates electricity from solar or wind energy or a sustainable irrigation water management system—would earn a positive signal. The tool could provide a neutral signal for infrastructure project types that are not inherently sustainable or unsustainable, such as a bridge or hydropower plant. Finally, the tool could also return a negative signal for projects that risk causing significant and irreversible environmental or social damage such as "clean coal" power plants; this would send a strong signal that the project has little chance of meeting relevant criteria. This subsector-level screening would then be followed by a quick check of whether the specific project is likely to meet the essential requirements of the meta-standard, as described by the BDN Certification framework. As envisioned by Blue Dot Network, this tool could create a process of engaging project developers in a positive manner to address problems in their project proposal early in its development.

There are parallels between the positive, neutral, and negative signals recommended here and both the green/yellow/red light classifications of Green Development Guidance and the project types found on FAST-Infra's Indicative and Non-Exhaustive List. With these similarities in mind, the developers of Blue Dot Network, FAST-Infra, and BRIGC could co-design a single universal pre-screening tool to support all three of meta-standards.

### 4. Coordinated secretariats

We recommend that the steering committees of FAST-Infra and Blue Dot Network co-design the roles of their secretariats so that they can coordinate meta-standard development and jointly promote common standards adoption. Coordinating the functions of the Blue Dot Network and Fast-Infra secretariats represents an efficient and potentially powerful means of harmonizing the two meta-standards, both in their internal operations and for external messaging.

Secretariat coordination could be achieved through two separate approaches: either a single secretariat or a coordinated model. While a single secretariat would be most efficient for overseeing both meta-standards—a single entity could reduce overlap of effort, ensure consistency across meta-standards, and promote a single messaging campaign—it is not likely politically feasible. FAST-Infra portrays itself as a private-sector, politically neutral initiative, while Blue Dot Network is closely aligned to multiple governments. Thus, a single management system is not likely to be accepted by the two steering committees.<sup>45</sup>

A coordinated management model, however, could potentially sidestep this political issue: two independent but co-designed secretariats could separately manage their meta-standards. Each could also take on additional responsibilities that serve the entire infrastructure community, playing to their individual strengths. For example, the FAST-Infra Secretariat could take the lead in the creation of a data platform software and analytical tools (see Recommendation 5) and engagement with the private financial sector and MDBs. The Blue Dot Network Secretariat could take on training of third-party auditors (see Recommendation 2); engagement with governments in lending and borrowing countries; technical assistance and coordination of GIF, MDBs, and DFIs (see Recommendation 6); toolbox development (see Recommendation 5); and guidance on strategic environmental and social impact assessments and national infrastructure planning (see Recommendation 7).

# 5. Compatible data platforms

We recommend that FAST-Infra and Blue Dot Network co-design their platform to ensure that information submitted to one platform can be easily and accurately exported to the other. FAST-Infra and Blue Dot Network initiatives both include digital data platforms that streamline project preparation and application processes and serve as a matchmaking hub for project sponsors, developers, and owners to connect with prospective investors.<sup>46,47</sup> Ideally, these two data platforms would be coordinated systems. The designers of the two meta-standard platforms should prioritize compatibility and interoperability across the two systems as they develop the architecture, software, and reporting format for each. FAST-Infra has already has an early prototype developed that draws on Sustainable Infrastructure Foundation's SOURCE platform; Blue Dot Network should consider integrating its system with FAST-Infra as it begins to develop its digital platform.

Blue Dot Network, with its focus on streamlining and automating the certification application process, appears eager to use big data and advanced data analytics such as artificial intelligence to simplify the process for applicants. FAST-Infra could also benefit from such innovative data uses by working closely with Blue Dot Network.

The more closely the two initiatives collaborate on data platforms, the more likely they are to create a standardized system that is attractive to all stakeholder groups. Furthermore, the greater the compatibility across platforms, the easier it will be to build a sizable pool of sustainable and quality infrastructure projects for prospective investors to easily review and compare the range of sustainability attributes that are of most interest to their needs.

#### 6. Technical assistance for infrastructure project development

We recommend that the secretariats of FAST-Infra and Blue Dot Network work with development agencies to offer technical assistance and capacity development programs that help MLIC applicants and governments develop projects that will meet meta-standard requirements. As discussed above, applicants operating in emerging and developing economies are likely to be more challenged than those from wealthier countries when applying for a label or certification. Developers of FAST-Infra and Blue Dot Network have acknowledged that, to even the playing field, capacity building tools and programs and access to a community of practice will be needed for some applicants (OECD 2022).

FAST-Infra and Blue Dot Network are both well-positioned to foster technical assistance and capacity development. A strong pool of expertise and experience already exists in development finance institutions and development assistance agencies affiliated with both FAST-Infra (e.g., Global Infrastructure Facility, Asia Development Bank, and World Bank) and Blue Dot Network (e.g., OECD, USAID, USDFC, JICA, and AusAID). A recently announced sustainable infrastructure financing platform in Southeast Asia models such a partnership. Two private companies—HSBC Holdings and Temasek—have pledged to dispense over US\$ 1 billion of loans in five years for infrastructure projects that have been awarded FAST-Infra's SI Label; the Asia Development Bank will be providing technical assistance and project development expertise to support Southeast Asia applicants (Segal 2021).

Another form of technical assistance is the provision of tools for planning, financing, and building sustainable infrastructure. The secretariats, working with their affiliated development agencies, could support the design of a customized set of infrastructure tools and resources to specifically facilitate compliance with the requirements of each of the Pillars. The U.S. State Department and OECD recently announced a toolbox for addressing corruption and transparency in infrastructure that is coordinated with Blue Dot Network and could serve as a model. The infrastructure anti-corruption toolbox contains guidelines to improve corruption prevention and detection, training programs, multi-stakeholder dialogues, and capacity development (U.S. Department of State 2021). The development of similar toolboxes (including tools, training, stakeholder dialogues, and capacity development) for each Pillar could greatly enhance the infrastructure planning and implementation process for projects in challenging settings. Doing so in a coordinated fashion between Blue Dot Network and FAST-Infra could enhance the clarity and impact of their common goals.

#### 7. Strategic planning assistance

We recommend that the secretariats, working in conjunction with their partner development institutions, develop guidance and support for incorporating the meta-standard frameworks into strategic environmental and social assessments and national infrastructure planning. The three meta-standards assess compliance at the project-level. Yet by the time a developer considers seeking a certification, label, or classification for a specific project, many of the most significant and difficult decisions that affect sustainability and quality have already been made. These impactful decisions are typically made not by project developers or investors but by governments or regional entities. Government policies, planning, and tenders can determine, for example, what fuel source a country or region will rely on or whether future flooding scenarios must be considered.

Best practices for developing sustainable infrastructure call for early-stage strategic planning of infrastructure development—such as strategic environmental and social assessments (SESAs) or national infrastructure planning—that address all aspects of sustainability and quality and are coordinated across national and sub-national levels of government and public administration (United Nations Environment Programme 2021). Changes to infrastructure projects are easier to incorporate during the upstream stage of the infrastructure development cycle. It is relatively easy, for example, to reroute a proposed highway so that it avoids a sensitive habitat before political and financial capital have been invested in any one particular path. Incorporating sustainability considerations into early-stage planning decisions, policies, and government tenders can greatly increase the likelihood that infrastructure developed down the road will easily meet the compliance requirements of infrastructure meta-standards (World Bank 2005; UN Environment 2018; OECD 2006).

All three initiatives reference the importance of upstream planning, but it is beyond the capabilities of their secretariats to carry out national-level planning. We believe that their affiliated development agencies could play a significant role in drawing the connection between, on one hand, early-stage strategic environmental and social assessments and national infrastructure planning and, on the other hand, the development of an asset class for sustainable, quality infrastructure. One potential model comes from the International Association for Impact Assessment, which recently launched a project to promote the incorporation of strategic environmental assessments within the renewable energy sector by developing guidance, creating a learning platform to share strategic environmental assessment (SEA) experiences among those working in the sector, and setting up a help desk team of experienced experts in the field of SEA and energy planning (Netherlands Commission for Environmental Assessments 2022). A similar effort could be coordinated through meta-standard partner institutions to provide guidance, learning platforms, and call centers to support early-stage planning of national and sectoral sustainable infrastructure.

# 8. Development finance institution alignment

We recommend that public-sector partners of the three initiatives—development agencies and multilateral development banks—agree to a common set of meta-standard requirements and encourage meta-standard adoption for all public infrastructure loans or grants. Public-sector development finance institutions are uniquely well-positioned to catalyze the use of sustainable infrastructure meta-standards. They are the key providers of infrastructure finance for MLICs; through co-financing, they influence an even greater share of all loans. They also have the capacity to access global climate finance funds and mobilize resources for sustainable programs (Inter-American Development Bank 2020). While all major development finance institutions already have their own safeguards and due diligence standards, the agreement on a common set of indicators in the form of a meta-standard would be a very powerful driver for wide-scale adoption.

Developers of both FAST-Infra and Blue Dot Network—with their emphasis on private-sector investments—have devoted relatively little attention to leveraging the influence that public sector investors could provide. At present, there are no commitments by MDBs or bilateral development agencies to require a SI Label or BDN Certification for their infrastructure assistance or loan programs.<sup>48</sup> Only BRIGC is actively pushing Chinese government agencies to adopt the Green Development Guidance and Traffic Light System project classification as a part of their lending requirements (see Adoption Plans Section).

Within the MDBs, a broad recognition already exists that an aligned set of sustainable infrastructure indicators could mobilize greater public and private sustainable investment (Inter-American Development Bank 2020). Over the last several years, several efforts attempted to harmonize infrastructure sustainability indicators used by MDBs and partner organizations. For example, the World Bank's Public-Private Infrastructure Advisory Facility (PPIAF), Inter-American Development Bank, GIF, and EBRD have an ongoing project to establish an "Aligned Set of Sustainability Indicators" that represent a collaboration between leading international sustainability standard setters (Inter-American Development Bank 2020; Boswell et al. 2021; Saner et al. 2021). IDB has built on this effort to take stock of common elements and propose common sustainable infrastructure indicators that align with the SDGs (Inter-American Development Bank 2020). Making MDB loans conditional on being awarded BDN Certification or an SI Label would accelerate the awareness and adoption of the meta-standard by investors, developers, and governments.

Meta-standard adoption by bilateral development agencies can also play an important role, especially at a time when these agencies are responsible for translating the rhetoric of "high quality, sustainable infrastructure" of B3W and Global Gateway into actual infrastructure investments. A common standard recognized by all the bilateral development agencies that signify the sustainable, quality standards being met by their infrastructure quality and sustainability; visibly demonstrate transparency, high standards, and values purported by the donors; increase brand recognition for the common standard; facilitate rejection of unsustainable, low quality projects during the screening process; and attract private-sector co-financing. The very visible and transparent nature of a certification would also help development agencies justify their decisions in light of many other competing political and financial pressures that press for "shovel ready" rather than "shovel worthy" projects.

#### 9. Global engagement

We recommend that a neutral body convene a global summit on common sustainable, quality infrastructure standards. To date, consultation efforts notwithstanding, these metastandards have each been developed mostly within their own silos. More importantly, they have had only modest interaction with government representatives and infrastructure developers from MLICs—the ultimate end-users of the meta-standards.<sup>49</sup> If engagement does not include these stakeholders, it is possible that MLIC governments will perceive a global standard as just another requirement being imposed on them and yet another barrier to accessing infrastructure financing. Given that the three meta-standards all depend on voluntary compliance, none can afford to alienate key stakeholder groups such as MLIC governments. Thus, to create a successful global standard, a truly global conversation is necessary.

With the technical standards mapping and initial framework setting recently completed for the FAST-Infra SI Label, BDN Certification, and the Green Development Guidance, now is an opportune moment to engage client and lender governments, public and private sector actors, and NGOs for their input, customization, and buy-in concerning a global standard. A neutral body such as the G20 Infrastructure Working Group or the United Nations Environment Programme could be an ideal convener of a global summit on common sustainable, quality infrastructure standards. The summit would include participants from a diverse and geographically dispersed set of creditor and client countries.<sup>50</sup> The eight prior recommendations of this report could serve as a blueprint for the agenda of issues to be discussed, resolved, funded, and implemented. Addressing each of these issues would allow the three initiatives to customize their meta-standards to their target users (with their differing interests in green, sustainable, or quality infrastructure) while reducing friction with each other. The ultimate goal would be to align the initiatives and coordinate their communication so that they, in tandem, raise the bar for infrastructure development globally.

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# **APPENDIX A: ACRONYMS**

ADB	Asian Development Bank
ASSI	Aligned Set of Sustainability Indicators
B3W	United States Build Back Better World
BDN	Blue Dot Network
BRI	Belt and Road Initiative
BRIGC	Belt and Road Initiative International Development Coalition
CBIRC	China Banking and Insurance Regulatory Commission
CEO	Chief Executive Officer
CHINCA	China International Contractors Association
COP	Conference of the Parties
CPI	Climate Policy Initiative
ECG	Executive Consultation Group
EIA	Environmental Impact Assessment
ESG	Environmental, Social, and Governance
ESIA	Environmental and Social Impact Assessment
ESMS	Environmental and Social Management System
EU	European Union
FAST-Infra	Finance to Accelerate the Sustainable Transition - Infrastructure
G7	Group of Seven
G20	Group of Twenty
GBP	Green Bond Principles
GDG	Green Development Guidance
GHG	Greenhouse Gas
GI Hub	Global Infrastructure Hub
GIF	Global Infrastructure Facility at the World Bank
ICMA	International Capital Market Association
IDB	Inter-American Development Bank
IFC	International Finance Corporation
IPSF	International Platform on Sustainable Finance
ISO	International Organization for Standardization
IUCN	International Union for Conservation of Nature
KBA	Key Biodiversity Area
KPI	Key Performance Indicator
MDB	Multilateral Development Bank
MEE	Chinese Ministry of Ecology and Environment

MEE-FECO	Chinese Ministry of Ecology and Environment - Foreign Environmental Cooperation Center
MFA	Chinese Ministry of Foreign Affairs
MLIC	Middle- and Low-Income Country
MOFCOM	Chinese Ministry of Commerce
NDRC	Chinese National Development and Reform Commission
NGO	Nongovernmental Organization
OECD	Organization for Economic Cooperation and Development
QII	Quality Infrastructure Investment
SDG	Sustainable Development Goal
SEA	Strategic Environmental Assessment
SESA	Strategic Environmental and Social Assessment
SI Label	Sustainable Infrastructure Label of FAST-Infra
SOE	State-owned Enterprise
TLS	Traffic Light System of the Green Development Guidance
UNFCCC	United Nations Framework Convention on Climate Change
WRI	World Resources Institute
WWF	World Wildlife Fund

# **APPENDIX B: LIST OF INDIVIDUALS CONSULTED**

The following were some of the individuals interviewed for this project. Two individuals chose to have their names not listed:

Isabel Cane, Director, Trust in Business initiative, Organisation for Economic Cooperation and Development

Chad Dear, Senior Social and Environmental Sustainability Analyst and Multilateral Development Bank (MDB) Team Lead, United States Agency for International Development

Christian O. Deseglise, Head of Sustainable Finance, HSBC

Alexis Erwin, Senior Analyst and Lead for Sub-Saharan Africa in the Multilateral Development Bank Team, United States Agency for International Development

Juan Garin, Policy Advisor, Sustainable Finance and Infrastructure, Organisation for Economic Cooperation and Development

Robin Grenfell, Manager, Green Investment Group, Macquarie Group

Towfiqua S. Hoque, Senior Investment Officer, Global Infrastructure Facility

Sergiu Jiduc, Sustainable Infrastructure Lead, Worldwide Fund for Nature - Singapore

Carmel Ruth Lev, Strategy, Knowledge & Partnerships Consultant, Global Infrastructure Facility

Hayden Morgan, Director, Morgan Green Advisory

Erik Myxter-Iino, Senior Researcher, Inclusive Development International

Christoph Nedopil, Director, Green Finance & Development Center, Fanhai International School of Finance, Fudan University

Kate Newman, Vice President, Sustainable Infrastructure and Public Sector Initiatives, World Wildlife Fund-US

Amélie Schmidt-Ott, Junior Policy Analyst, Organisation for Economic Cooperation and Development

Peter Thorin, Senior Advisor - Blue Dot Network, United States Department of State

Ye Wang, Associate, Finance Center and Sustainable Investment Program, World Resources Institute -China

Mamiko Yokoi-Arai, Deputy Head of Financial Markets Division / Head of Infrastructure and Alternative Financing Unit, Organisation for Economic Cooperation and Development

# **APPENDIX C: OBJECTIVES AND MEASURES OF META-STANDARDS**

Objective or measure	FAST-Infra	Blue Dot Network	Green Dev Guidance
Pillar 1: Sustainab	le Growth & Developn	nent	
Sustainable and inclusive growth and development		Element 1: Promote sustainable and inclusive economic growth and development. Themes:	
		<ul> <li>SDG Alignment</li> </ul>	
		<ul> <li>Alignment with national and local development strategies</li> </ul>	
		• Job creation	
		<ul> <li>Access to infrastructure services</li> </ul>	
Building local capacity		Element 6: Build local capacity, with a focus on local skills transfer and local capital markets. Themes:	
		Capacity development	
		Skills transfer	
		<ul> <li>Local capital markets</li> </ul>	
Non-discriminatory use of infrastructure services		Element 9: Promote the non-discriminatory use of infrastructure services. Themes:	
		Non-discriminatory contracts	
		<ul> <li>Inclusive regulatory frameworks</li> </ul>	
		<ul> <li>Sustainable and affordable pricing</li> </ul>	

Objective or measure	FAST-Infra	Blue Dot Network	Green Dev Guidance
Pillar 2: Economic	Efficiency		
Catalyzing public and private investments		Element 2: Promote market- driven and private sector led investment, supported by judicious use of public funds. Themes:	
		Private-sector participation	
		<ul> <li>Sustainable funding</li> </ul>	
		Competitive environment	
		• Risk allocation and mitigation	
		Catalytic finance	
Ensuring value-for- investment		Element 5: Ensure value-for- money over an asset's full life- cycle cost. Themes:	
		<ul> <li>Project appraisal and selection based on life cycle assessment</li> </ul>	
		<ul> <li>Choice of delivery mode (PPP vs traditional procurement)</li> </ul>	
		<ul> <li>Competitive procurement based on life cycle costs</li> </ul>	
		<ul> <li>Effective project management, monitoring and oversight</li> </ul>	
		Efficient maintenance	
		<ul> <li>Technology and innovation</li> </ul>	
Pillar 3: Environmental Considerations			

#### ar 3: Environmental Considerations

Biodiversity	Dimension 3, Criterion	Element 8: Uphold	Aspect 2: Biodiversity
conservation	1: Protection and	international practices of	Conservation
	Enhancement of	environmental safeguards.	
	Biodiversity & the	Theme:	
	Natural Environment	• Biodiversity	

Objective or measure	FAST-Infra	Blue Dot Network	Green Dev Guidance
Efficient natural resource use, circular economy	Dimension 3, Criterion 2: Promotion of the Efficient Use of Natural Resources/ Waste Reduction & Supporting the Transition to a Circular Economy	Element 8: Uphold international practices of environmental safeguards. Theme: • Resource efficiency and circular economy	
Pollution prevention and control	Dimension 3, Criterion 4: Embedding Pollution Prevention and Control	Element 8: Uphold international practices of environmental safeguards. Themes:	Aspect 3: Pollution Control
		• Pollution	
		<ul> <li>Waste and hazardous materials</li> </ul>	
Risk management	Management of environmental risks is part of the framework, not a specific	Element 8: Uphold international practices of environmental safeguards. Theme:	Differentiated management of environmental risks is part of
	Dimension/Criterion	<ul> <li>Management of environmental risks</li> </ul>	not specific Environmental Aspects
GHG emissions reduction	Dimension 1, Criterion 2: Climate Change Mitigation/GHG Emissions Reduction	Element 4: Build projects that are aligned with the pathways towards 2050 net- zero emissions needed to keep global temperature change of 1.5 degrees Celsius within reach. Theme:	Aspect 1: Climate Change
		GHG emissions	
GHG emissions disclosure	Disclosure is part of the framework, not a specific Dimension/ Criterion	Element 4: Build projects that are aligned with the pathways towards 2050 net- zero emissions needed to keep global temperature change of 1.5 degrees Celsius within reach. Theme:	
		Climate disclosure	

Objective or measure	FAST-Infra	Blue Dot Network	Green Dev Guidance
Pillar 4: Building R	esilience		
Risk evaluation, adaptation and resilience	Dimension 2, Criterion 1: Evaluating Risks and Building Resilience & Adaptive Capacity at the Project and System Scales	Element 4: Build projects that are resilient to climate change, disasters, and other risks. Themes: • Climate risk • Disaster risk assessment • Resilient plans and designs • Emergency preparedness and response	
Dilley & Casial Canaidayatiana			

#### **Pillar 5: Social Considerations**

Project choice and/or process to encourage inclusivity	Dimension 3, Criterion 1: Promoting Gender & Ability Inclusivity	Element 10: Advance inclusion for women, people with disabilities, and underrepresented and marginalized groups. Themes:	
		<ul> <li>Addressing needs of women and marginalized groups</li> </ul>	
		<ul> <li>Employment opportunities</li> </ul>	
		<ul> <li>Safety and well-being for women and vulnerable users</li> </ul>	
Indigenous peoples	Dimension 3, Criterion 5: Promoting Stakeholder Engagement	Element 8: Uphold international practices of social safeguards. Theme: • Indigenous peoples	
Cultural heritage	Dimension 3, Criterion 5: Promoting Stakeholder Engagement	Element 8: Uphold international practices of social safeguards. Theme: • Management of social risks	
Risk management	Social risk management is part of the framework, not a specific Dimension/ Criterion	Element 8: Uphold international practices of social safeguards. Theme: • Management of social risks	ESMS system part of differentiated risk management guidance

Objective or measure	FAST-Infra	Blue Dot Network	Green Dev Guidance		
Health and safety	Dimension 3, Criterion 2: Promoting Health & Safety	Element 4: Build projects that are resilient to climate change, disasters, and other risks. Theme:			
		<ul> <li>Community health and well- being</li> </ul>			
Human and labor rights	Dimension 3, Criterion 3: Protection and Enhancement of Human & Labor Rights	Element 8: Uphold international practices of social safeguards. Themes:			
		• Human rights			
		• Labor and working conditions			
Mitigation of land acquisition and resettlement	Dimension 3, Criterion 4: Land Acquisition & Resettlement Mitigation	Element 8: Uphold international practices of social safeguards. Theme:			
		<ul> <li>Involuntary resettlement</li> </ul>			
Stakeholder engagement	Dimension 3, Criterion 5: Promoting Stakeholder Engagement	Element 8: Uphold international practices of social safeguards. Theme:			
		<ul> <li>Meaningful stakeholder engagement with affected communities</li> </ul>			
Pillar 6: Infrastructure Governance					
Disclosure of project-level	Dimension 4, Criterion 3: Embedding	Element 3: Support sound public financial management,			

project-level liabilities	3: Embedding Government Policies for Project Fiscal Transparency & Procedures	public financial management, debt, transparency, and project-level and country-level debt sustainability. Theme: • Disclosure of liabilities	
Government / public financial stability	Dimension 4, Criterion 3: Embedding Government Policies for Project Fiscal Transparency & Procedures	Element 3: Support sound public financial management, debt, transparency, and project-level and country-level debt sustainability. Theme: • Public financial stability	

Objective or measure	FAST-Infra	Blue Dot Network	Green Dev Guidance
Anti-corruption	Dimension 4, Criterion 1: Embedding Anticorruption Policies & Procedures Requirements / metrics	Element 7: Promote protections against corruption, while encouraging transparent procurement and consultation processes. Theme: • Anti-corruption	
Transparent procurement	Dimension 4, Criterion 2: Embedding Transparency & Accountability Policies & Procedures	Element 7: Promote protections against corruption, while encouraging transparent procurement and consultation processes. Theme: • Transparent procurement	

# **ENDNOTES**

- 1 In this paper we use "sustainable, quality infrastructure" as a shorthand for infrastructure that displays attributes of quality, sustainable, and/or green infrastructure projects, depending on the context of its use (see Box: Definitions). The scope of "sustainable, quality infrastructure" will depend primarily on the meta-standard being discussed: Blue Dot Network focuses on "quality infrastructure," FAST-Infra on "sustainable infrastructure," and Green Development Guidance on "green infrastructure."
- 2 In this report, "Middle- and Low-Income Countries," as defined by the World Bank is used interchangeably with "emerging and developing economies."
- 3 "ESG criteria" are a set of environmental, social, and governance standards that socially conscious investors use to screen potential investments.
- 4 The FAST-Infra framework notes that recommended methods of measurement and indicators are "indicative, providing users the flexibility to provide rationale for the use of best available techniques as practices evolve," and also notes that "projects/assets need to provide rationale if other methods/indicators are used" (FAST-Infra 2021c).
- 5 The Green Bond Principles (GBP) are a collection of voluntary process guidelines that outline best practices for bond issues that serve social and/or environmental purposes. The principles were developed collaboratively by capital market intermediaries, issuers, investors, and environmental organizations under the leadership of the International Capital Market Association (ICMA). Like FAST-Infra, the GBP emphasize transparency and integrity and strongly recommend, but do not strictly require, independent external assessment of claims (ICMA 2021).
- 6 For each of these requirements, if local and/or national laws are more stringent then they would apply instead.
- 7 In addition to the SI Label and data repository, FAST-Infra has three more finance-related components: (1) A Global Revenue Guarantees, which are regional diversified guarantee funds/off-take guarantees covering several months of debt payments with interest/premium payments; (2) An Open-Sourced Managed Co-Lending Portfolio Programme that is essentially a syndication structure allowing for participation from a wide range of MDBs in emerging markets and investors; and (3) a Sustainable Infrastructure Warehousing Financing Facility which is meant to blend concessional, DFI, and commercial capital to fund national development banks' sustainable infrastructure activities.
- 8 G20 members are Argentina, Australia, Brazil, Canada, China, the European Union, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, and the United States.
- 9 For example, in 2018, then-Vice President Mike Pence accused China of using "debt diplomacy" to expand its influence. Pence stated "Today, [China] is offering hundreds of billions of dollars in infrastructure loans to governments from Asia to Africa to Europe to even Latin America. Yet the terms of those loans are opaque at best, and the benefits flow overwhelmingly to Beijing." (Pence 2018)
- 10 G7 members are Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.
- 11 Blue Dot Network has not yet determined if they will have 2, 3, or more Blue Dots.
- 12 The BRIGC Secretariat is managed through MEE's Foreign Environmental Cooperation Center.
- 13 Green Development Guidance combines a taxonomy-based approach (i.e., certain types of projects can receive a "green" or "yellow" light, provided other conditions are met, while other types of projects can never receive a "green" or "yellow" light) with a process-standard approach (i.e., requiring projects to incorporate safeguards, use particular reporting processes, or commit to certain financial covenants as part of a process protocol) (Nedopil, Dordi, and Weber 2021). These result in objective environmental thresholds for different subsectors, as well as process standards to ensure environmental risk management through safeguard procedures.
- 14 Within six key industries, color coding is determined by project type (industry subsector) through a pre-identified classification matrix (Annex 2). For projects falling outside of these key industries, the applicant determines the color code using a Checklist to Identify Contribution and Impact of Three Environmental Aspects (Table 2–3 of BRIGC 2021a).
- 15 The vast majority of China's overseas development lending comes from its two state-owned policy banks, the Chinese Development Bank and the China Import-Export Bank. Sinosure, China's largest state-owned policy insurance company, provides the vast majority of Chinese overseas policy insurance, a requirement for overseas lending.
- 16 None of the theories of change mentioned in this section are published; these are interpretations of the authors.
- 17 While this theory of change refers specifically to governments that are building infrastructure in their own country, a similar argument can be made to countries or multilateral institutions providing development assistance or loans for infrastructure. Development Finance Institutions can also play a significant role working with governments in the national planning or project solicitation phase of infrastructure development.
- 18 It is worth noting, however, that in this next phase Chinese private-sector investors and developers appear likely to make up a much larger percentage of Chinese overseas infrastructure investment. Yi Gang, Governor of the People's Bank of China, noted that "Private sector investment [will be] the main force, and government investment mainly plays the role of leverage, leveraging and guiding private sector investment." (China News Network 2019). As ESG compliance and green finance plays an increasingly large role in the Chinese economy, this objective will become increasingly important in a Chinese context (Choi, Li, and Heller 2021).
- 19 While the concentration on the Environmental Considerations Pillar is consistent with the characterization of a Green BRI, it is somewhat surprising that the Building Resilience Pillar was excluded from the Green Development Guidance classification system, given the high interest of many BRI countries in constructing climate-resilient infrastructure and investing in climate adaptation.
- 20 Though Blue Dot Network's scope is the most broad, a Global Infrastructure Hub survey of quality infrastructure model projects submitted by G20 member nations were characterized predominantly by the Environmental Considerations Pillar. The Building Resilience Pillar was least represented in these projects (Global Infrastructure Hub 2021a).
- 21 "We should pursue the new vision of green development and a way of life and work that is green, low-carbon, circular and sustainable. Efforts should be made to strengthen cooperation in ecological and environmental protection and build a sound ecosystem so as to realize the goals set by the 2030 Agenda for Sustainable Development." Xi Jinping, President of P.R. China, Second Belt and Road Forum for International Cooperation, April 27, 2019.
- 22 Interviewees reported there was repeated debate during the development of the FAST-Infra framework on whether to include a financial component in the meta-standard. Some argued that, because MLICs do not have a uniform view of fiscal responsibility, it would be useful to incorporate this into the SI Label. This viewpoint did not prevail, with the exception of the inclusion of the Debt Transparency Criterion.
- 23 As noted in Table 1, these requirements are called Metrics or Thresholds in Blue Dot Network, Indicators in FAST-Infra, and Contribution and Harm Criteria in the Green Development Guidance.
- 24 For example, for biodiversity conservation, the Green Development Guidance lists a wide range of specific indicators such as supply chain impact on Key Biodiversity Areas. FAST-Infra's indicators for biodiversity conservation are less targeted.
- 25 For example, supply chain is not defined as to whether this includes inputs, transportation and distribution, waste generated in operations, processing or use of sold products, end of life treatment of resources, etc.
- 26 The Green Development Guidance—but not FAST-Infra or Blue Dot Network—also provides detailed requirements for infrastructure projects in other sectors (passenger transport, freight transport, agriculture, and manufacturing).
- 27 Green Development Guidance allows a maximum of 300 grams of  $CO_2$ -equivalent per kWh (g  $CO_2e/kWh$ ) to achieve the baseline, and maximum 100 g  $CO_2e/kWh$  to achieve a positive contribution whereas FAST-Infra allows a maximum of 100 g  $CO_2e/kWh$  as its baseline threshold and a "positive emissions avoidance" for its positive contribution. In both cases, the meta-standards specify that these figures refer to emissions over the whole project lifecycle.
- 28 For FAST-Infra, this is recommended in the "example methodology" but not addressed specifically in the baseline requirement or the positive contribution factor. The Green Development Guidance states that the emissions thresholds include the "whole supply chain," which would presumably include Scope 2 emissions.
- 29 However, a project may use carbon removal offsets to reduce its reported carbon footprint.
- 30 For instance, the Green Development Guidance requires that the minimum conversion efficiency of polycrystalline and monocrystalline silicon cells be 19% and 21%, respectively. In a sense, this requirement is an expression of Pillar 4 (and BDN Element 5), ensuring value-for-money over an asset's full life-cycle cost. This also resonates with efficient use of natural resources, although the text of the Green Development Guidance technical specification—in this section—does not explicitly justify the conversion efficiencies on either the basis of efficient resource use or ensuring value-for-money.
- 31 Performance Standard 6 requires net gain for critical habitat, but outside of critical habitat, the Performance Standard only requires "no net loss and preferably a net gain of biodiversity." Practice has evolved since the Performance Standards were published in 2012, however (Boswell et al. 2021). There was a general view in the FAST-Infra working group consultations that achieving "net gain" for biodiversity and ecosystem impacts—through avoidance, mitigation, and/or offsets—is by now standard practice; the group did not receive feedback that this requirement would be seen as overly cumbersome.
- 32 FAST-Infra and Green Development Guidance are also similar in considering the measurement of outcomes—rather than measurement of a process—as their primary approach. For example, FAST-Infra requires that a project shall not lead to adverse impacts on biodiversity and ecosystem services, nor significantly convert or degrade natural or critical habitats. Similarly, Green Development Guidance would classify a project as "red" (initially) if it would potentially cause significant harm to biodiversity, which is defined as "risks significantly worsening the status quo of biodiversity."
- 33 The green bond market distinguishes between review through a second-party option and third-party audit, also called certification. Green bonds typically have second-party option reviews, though certification is increasing. For infrastructure reviews, FAST-Infra and Green Development Guidance clearly allow second-party option but Blue Dot Network only requires third-party audit or certification.
- 34 BRI Environmental Big Data Platform: http://eng.greenbr.org.cn/.
- 35 FAST-Infra Member Institutions are "private entities that invest in and/or finance sustainable infrastructure assets, as well as other key stakeholders who are meaningfully engaged in sustainable infrastructure."
- 36 For example, if the respective secretariats agree that the FAST-Infra emissions cap for energy projects of 100 grams of CO<sub>2</sub>e emissions per kWh is consistent with the BDN Element/Criterion to build projects that are aligned with the pathway toward 2050 net-zero emissions and a 1.5 degree Celsius temperature rise, the two meta-standards could both reference the same threshold figure and the same emissions/temperature pathway.
- 37 FAST-Infra's Environmental, Social, and Adaptation & Resilience Dimensions have nearly identical themes to those addressed in BDN Elements 4, 8, and 10. FAST-Infra's Governance Dimension has some overlapping themes with those addressed BDN Elements 3 and 7. Green Development Guidance's three Environmental Aspects overlaps with FAST-Infra's

Environmental Dimension and BDN Elements 4 and 8. See also Table 5 and Appendix C.

- 38 One possible system could be as follows:
  - 1 Blue Dot = Achieving baseline requirements for all 14 FAST-Infra Criteria

2 Blue Dots = Achieving baseline requirements for all 14 FAST-Infra Criteria plus a positive contribution in any of the 14 FAST-Infra Criteria

3 Blue Dots = Achieving baseline requirements for all 14 FAST-Infra Criteria plus positive contribution in multiple Pillars (including at least one of the 14 FAST-Infra Criteria)

- 39 For example, hypothetically Blue Dot Network developers may want a net-zero requirement for two Blue Dots that is more rigorous than the GHG criteria that FAST-Infra requires for its positive contribution; alternatively, BDN developers may not want to require a biodiversity gain with no offsets for a project to receive two Blue Dots, even if FAST-Infra requires it for its positive contribution.
- 40 It is also worth noting that Green Development Guidance provides substantially more detail in some areas, such as numeric technical thresholds for solar PV cell efficiency. It is unlikely that Blue Dot Network or FAST-Infra would adopt numeric thresholds such as these; they would likely feel that these thresholds are too specific for the scope of the standard, even as they support the underlying idea of financial viability and/or value-for-money.
- 41 According to ISO, a "conformity assessment" is a set of processes that demonstrate that a product, service, or system meets the requirements of a standard.
- 42 For instance, in published materials to date, OECD specifies that the entity conducting the review must be an independent third party but does not allude to an external review protocol or reference ISO/IEC standards for conformity assessment. The OECD recommends that BDN streamline the review process by requiring an initial self-assessment and focusing the review on that self-assessment, but does not offer details yet about how much supporting evidence applicants should submit: "Through leveraging self-assessments and requiring that the applicant submit documentary evidence, an independent verification limits the scope of the third-party review to ensuring the framework has been properly applied during the self-assessment, verifying the accuracy of the claims made by the applicant, ascertaining the validity and the strength of the evidence submitted in support of the claims, and confirming or adjusting the assessment and scores." (OECD 2022, p. 32). This process, operationalized, seems to conform with best practices for independent external review, but a full assessment would depend on the requirements for submittal of evidence, selection of a third-party reviewer, and other aspects of implementation.
- 43 We also emphasize the importance of a clear distinction between verification of all claims versus verification of some or no claims. The FAST-Infra Example Indicators do suggest the use of certification for some claims already. For instance, the Example Indicator for "Embedding Sustainability and Compliance Policies and Procedures" (Criterion 4 in the Governance Dimension) suggests certification to ISO14001 for environmental management. We explicitly recommend against FAST-Infra allowing a project to use the "Certified SI Label" in the event that some, but not all, claims have been externally verified. To do so would create further confusion and invite a race to the bottom, encouraging minimally acceptable conformity.
- 44 Several recommendations for distinguishing certified projects include providing an icon to brand certified projects; adding visual aids such as a "certified" icon for data repository listings; adding a filter feature so users can quickly view only certified projects; and indicate certification status at the top of every project description in the data repository to minimize "clicking through" project information.
- 45 While a single, shared secretariat is not likely to be acceptable to the Blue Dot Network and FAST-Infra Steering Committees, if the situation should change, one organization stands out as the most likely candidate: The OECD, as an organization with international credibility for working with governments, policy makers, and citizens to establish evidencebased international standards and solutions to social, economic, and environmental challenges. Both meta-standards already have a connection to OECD, as the developer of the Blue Dot Network certification and a founder of FAST-Infra.
- 46 Green Development Guidance does not envision a single data platform for Traffic Light System-classified projects.
- 47 Though Blue Dot Network has not yet developed its own data repository, GI Hub has developed a QII Database, developed on behalf of the G20, that includes resources and facilities relevant to quality infrastructure investment under the QII principles (Global Infrastructure Hub 2021c).
- 48 Some development finance agencies are currently considering mutual recognition between their safeguards and requirements with Blue Dot Network certification requirements.
- 49 The Blue Dot Network may be somewhat more advanced in this domain than others, as its Executive Consultation Group contains numerous private-sector and civil-society representatives from MLICs in Asia, Africa and Latin America.
- 50 The International Platform on Sustainable Finance (IPSF), as a multilateral forum for dialogue between policy makers, could serve as a model. IPSF aims to increase the amount of private capital being invested in environmentally sustainable investments. IPSF was founded in 2019 by the European Union and relevant authorities of Argentina, Canada, Chile, China, India, Kenya, and Morocco. "Through the IPSF, members can exchange and disseminate information to promote best practices, compare their different initiatives and identify barriers and opportunities of sustainable finance, while respecting national and regional contexts." Under the auspices of a IPSF Taxonomy Working Group, in 2021 the European Commission and China (People's Bank of China) have jointly unveiled the "EU-China Common Ground Taxonomy-Climate Change Mitigation (CGT)." (IPSF Taxonomy Working Group 2021).

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