Report

Scaling up high-quality project pipelines

What role for multilateral development banks?

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Abstract

Multilateral development banks (MDBs) can help emerging market and developing countries build the high-quality project pipelines that are critical to meet climate and development goals.

By examining ways to address market gaps and boost project preparation support, this report analyses how MDBs can scale up the supply of bankable projects significantly.

The report summarises priority actions for MDBs and their shareholders. It underscores the importance of MDBs improving their support for countries to address sector-specific obstacles to market creation, of scaling financing, coordinating funding models and pooled resources, and enhancing support for country ecosystems.

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Acronyms

AFD	Agence Française de Développement
AP3F	Asia Pacific Project Preparation Facility
AsDB	Asian Development Bank
EBRD	European Bank for Reconstruction and Development
EMDE	emerging market and developing economies
G20	Group of 20
GCA	government contracting authority
GI Hub	Global Infrastructure Hub
GIF	Global Infrastructure Facility
IADB	InterAmerican Development Bank
ICA	Infrastructure Consortium for Africa
ICT	information, communication and technology
IEG	Independent Expert Group
IFC	International Finance Corporation
IPPF	Infrastructure Project Preparation Facility
MDB	multilateral development bank
PPF	project preparation facility
PPP	public–private partnership
PSOD	Private Sector Operations Departments
SDG	Sustainable Development Goal
WBG	World Bank Group

1 Introduction

Developing countries (excluding China)[1] will need to invest an additional $3 trillion each year to progress towards the Sustainable Development Goals (SDGs) and climate goals by 2030. At least $500 billion of this must be mobilised annually from external private capital sources (G20 IEG, 2023b). However, finance without projects would be a bridge to nowhere. Strong pipelines of projects are essential for countries to meet climate and development targets.

A significant proportion of these additional resources will be allocated and invested in developing and maintaining sustainable infrastructure (Bhattacharya et al., 2022). However, many countries, particularly emerging market and developing economies (EMDEs), cannot translate their infrastructure deficits into well-defined and well-prepared project pipelines (GI Hub, 2019). Inadequate legal, policy and regulatory frameworks, and insufficient institutional capacity and financial resources hinder countries' ability to develop projects successfully and at scale. Furthermore, delivering public assets and services through public–private partnerships (PPPs) has heightened the complexity of project preparation.[2]

Infrastructure projects, especially in critical sectors like transportation and energy, often entail substantial upfront investments and risks of project failure. If properly analysed and structured, many projects could attract financing, including from private investors (Kortekaas, 2015). Yet investors cannot make informed assumptions about expected outcomes or translate uncertainty into risk without sufficient facts and analysis established during project preparation – including through demand, engineering and costing analysis. Even for those projects that do materialise, limited investment in project preparation often means that they are poorly designed, and therefore are more likely to fail and incur high financial, social and environmental costs (Fioravanti et al., 2019; MDB Working Group on Infrastructure, 2011).

In view of their range of instruments and closeness to country contexts, multilateral development banks (MDBs) are in a position to boost the high-quality project pipelines that are necessary to deploy

[1] The Group of 20 (G20) Independent Expert Group (IEG) provides separate data on China, as the country's overall investment requirements by 2030 nearly match those of all other emerging markets and developing economies combined (G20 IEG, 2023a). Compared to 2019, an additional annual $1 trillion in financing commitments is necessary for China to meet climate and SDG-related investments by 2030.

[2] Determining whether PPP is the most suitable delivery method requires broader expertise than for traditional public-sector projects, thus increasing the costs of project preparation (GI Hub, 2019). Regulatory quality for project preparation is, on average, lower for PPPs than traditional public investments across all country income groups and regions (World Bank, 2020).

project funds and mobilise private investment. Their financial and technical assistance can enhance the enabling environment for project preparation and support countries in preparing individual projects.

In 2023, the G20 IEG on Strengthening MDBs recommended 'tripling the pipeline of bankable projects and working to ensure its conversion to strong deal flow through stepped-up support' (G20 IEG, 2023a: 64). However, this was not a new priority for the G20. Box 1 summarises efforts since the early 2010s, and yet many challenges remain today – including underfunding of project preparation activities and high fragmentation of the project preparation system.

Box 1 G20 initiatives and activities promoting the scale-up of high-quality project pipelines

- In 2010, the Seoul Summit initiated a **G20 High Level Panel on Infrastructure**, mandated to provide recommendations on enhancing infrastructure investment in developing countries. The panel's final recommendations included measures to build a strong and sustainable supply of bankable projects, by fostering an enabling environment and increasing available funding (G20 High Level Panel on Infrastructure, 2011). These efforts were complemented by those of the **MDB Working Group on Infrastructure**, which submitted an Infrastructure Action Plan to the G20 in 2011 (MDB Working Group on Infrastructure, 2011). The Plan included several proposals to boost the effectiveness of Project Preparation Facilities (PPFs), such as a mapping exercise and an assessment of existing PPFs, but these activities were only partly completed in later years.[3]
- In 2014, under Australia's Presidency, the G20 set up the **Global Infrastructure Hub (GI Hub)** for knowledge sharing, networking and collaboration to improve infrastructure outcomes and bridge the infrastructure investment gap. That year the G20 also established the **Global Infrastructure Facility (GIF)**, a PPF hosted by the World Bank, to assist developing countries in planning, identifying, preparing, structuring and negotiating infrastructure projects.
- In 2018, during Argentina's Presidency, the G20 endorsed the **Roadmap to Infrastructure as an Asset Class** (G20, 2018a) and the **G20 Principles for the Infrastructure Project Preparation Phase** (G20, 2018b) to enhance the robustness of infrastructure project pipelines. Principles included: a strong

[3] See Chapter 4 of this report for a discussion of the challenges of mapping and assessing the landscape of PPFs and individual initiatives.

project rationale, the appraisal of options, commercial viability, long-term affordability, and the ability to deliver the project and maintain it over time. Reporting to the G20 Infrastructure Working Group, the **MDB Infrastructure Cooperation Platform** was established that year, focused on enhancing coordination among MDBs on infrastructure standards, project preparation and credit enhancement.

- In 2019, under Japan's Presidency, the G20 endorsed the **G20 Principles for Quality Infrastructure Investment** (G20, 2019), to maximise the positive impact of infrastructure projects on achieving sustainable, resilient and inclusive growth and development.

Source: Authors' elaboration based on the documents cited and an overview in Tadas (2023).

This report:

- provides an analytical framework to navigate the various actions that can contribute to building high-quality project pipelines and the main challenges. It also elaborates on why MDBs – individually and as a system – are well-placed to support countries in expanding high-quality project pipelines (Chapter 2);
- analyses how MDBs have supported project preparation through both 'upstream' market support (Chapter 3) and strengthening of country ecosystems for project preparation, including in the context of PPFs (Chapter 4). It summarises the main challenges, lessons and potential solutions identified in the literature;
- outlines the main challenges for financing upstream market support and project preparation, and the options attempted thus far to address these (Chapter 5);
- draws lessons for shareholders and MDBs to help client countries boost high-quality project pipelines (Chapter 6).

We have reviewed the literature on upstream market support and project preparation support to boost project pipelines. Our analysis also encompasses documentation from previous G20 processes,[4] including the G20 Infrastructure Working Group and the G20 Development Working Group.[5] The literature is extensive, and we have focused on key issues and solutions.

[4] It is worth noting that some documents from previous G20 and MDB efforts are not available in the public domain.

[5] Furthermore, to test ideas and receive inputs, we arranged and participated in a series of consultations: first, with MDB shareholders, members of the G20 and invited countries, and international organisations at a meeting of the G20 International Financial Architecture (IFA) Working Group on MDBs (IFAMDB) on 8 May 2024, with their written feedback to a preliminary version of the note (interim note); second, through a more targeted meeting with colleagues in MDBs (strategy departments, or equivalent, and colleagues working on project preparation) on 16 May 2024, and with government officials from selected members of the G24 on 17 May 2024; and third, via another meeting of the G20 IFA on 12 June, followed by written feedback.

This report does not map the large number of PPFs, or the diverse range of tools designed to support project preparation. Instead, individual PPFs and tools are discussed selectively to substantiate our analysis. Several ad hoc mappings of the PPF system have been conducted (Nassiry et al., 2018; Adam Smith International, 2014; ICA, 2012), but no centralised database or platform provides consolidated and well-maintained data on the entire PPF ecosystem. Furthermore, except for Nassiry et al. (2018), none of the existing mappings have made their detailed, underlying data publicly available. This implies that consolidated and standardised data on PPFs – including their characteristics, access criteria and funding volumes – are unavailable (World Bank, 2022).[6] Please also note that we focus on the role of MDBs alone, not of other financiers for project preparation.

[6] The Cities Climate Finance Leadership Alliance hosts a Project Preparation Resource Directory that helps stakeholders find information on PPFs supporting projects at the subnational level. However, no such platform is currently available for PPFs operating at the national level.

2 Scaling up high-quality project pipelines and the role of MDBs

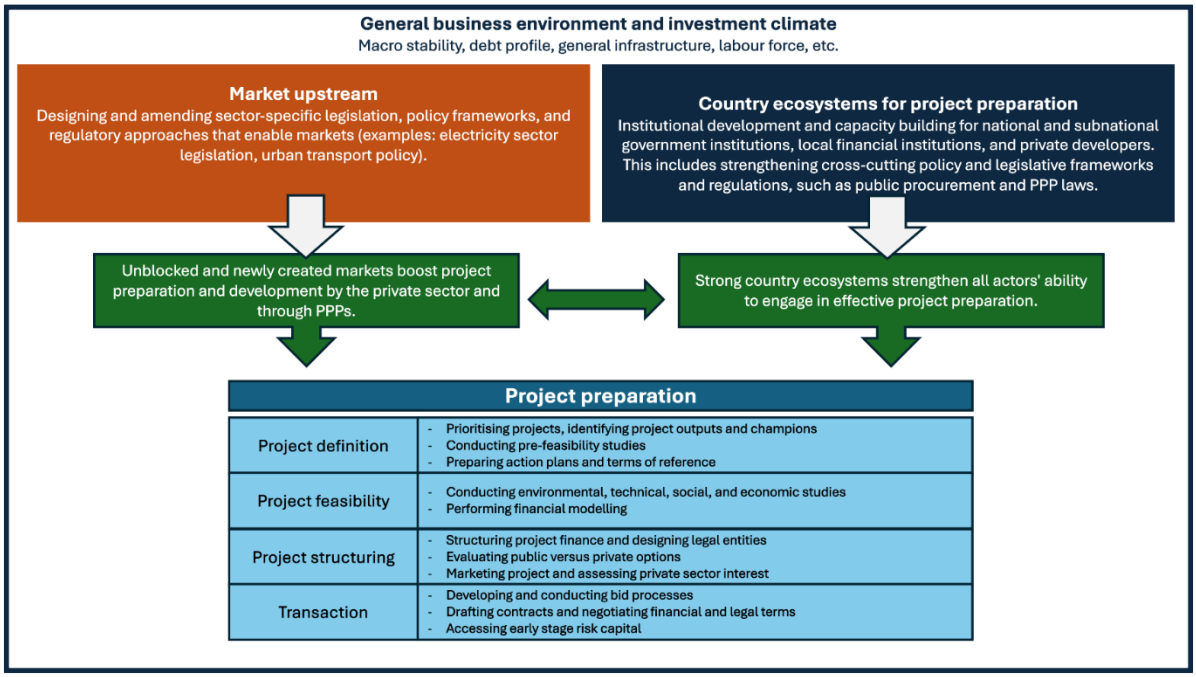
2.1 ‘Market upstream’ support and country ecosystems for project preparation: a framework

The policy literature offers various (and often overlapping) definitions and approaches around project pipelines and preparation. For clarity, we have devised a framework to structure our analysis and recommendations (see Figure 1).

The literature traditionally defines project preparation as *the steps from the conceptualisation of a project to contract award, including project definition, feasibility analysis, deal structuring and transaction support* (Kortekaas, 2015). However, scaling up high-quality project pipelines, especially in the context of private and PPP investments, requires more than just project preparation. There is often a need to strengthen the general business environment and investment climate, sector-specific legislation, policy frameworks, regulations and country ecosystems for project preparation.

- **General business environment and investment climate:** It is essential to improve the quality of a country’s investment climate and business environment in order to cultivate an ecosystem that fosters robust, high-quality project pipelines and that attracts private finance (Le Houérou and Lankes, 2023). This includes many general enabling factors, i.e., macroeconomic stability, the rule of law and a country’s labour force.
- **‘Market upstream’:** Sector-specific legislation, policy frameworks and regulations are needed to create functional markets that allow the private sector to convert opportunities into actual projects. Such measures generate benefits for all (potential) projects in a sector. An example is legislation that strengthens the market for private clean energy off-take.

Figure 1 Building strong and high-quality project pipelines: a framework



Source: Figure developed by the authors based on information from Le Houérou and Lankes (2023), World Bank (2022), GI Hub (2021 and 2019), Fioravanti et al. (2019), ICA (2015 and 2012), Kortekaas (2015).

- **Country ecosystems for project preparation:** It is crucial that effective government institutions exist at national and subnational levels that can be entrusted with the oversight and management of project preparation and that have a clear mandate and strong capacity to do so (GI Hub, 2019). Project preparation activities and responsibilities are deeply rooted within a country's context. Depending on the specific project and circumstances, preparation activities can be managed by different actors, such as government ministries and departments, state-owned enterprises or private-sector developers.[7] Institutional development is intertwined with the enhancement of cross-cutting policy and legislative frameworks, including those governing public procurement and PPPs. Such robust frameworks increase predictability and transparency for all stakeholders. Furthermore, national development banks, local commercial banks and private

[7] A distinction is also commonly made between public-sector and private-sector project origination (ICA, 2012). First, projects initiated and conceptualised by the public sector are usually motivated by development priorities and emphasise economic and social returns rather than financial gains. In cases where the government eventually aims to involve the private sector in such projects, like in the context of a PPP, it manages project development to the point where it can attract sufficient interest from private developers to take over. Second, projects identified and initiated by private developers are either without direct public-sector assistance or those that rely on government involvement, for example, as a full or partial off-taker. Furthermore, while a central agency, such as an infrastructure authority, often develops infrastructure plans, in most countries responsibilities for project preparation are more decentralised and distributed across various government contracting authorities (GCAs), such as ministries or departments. At the same time, more centralised agencies or dedicated units are often established to take charge of projects executed as a PPP.

developers must be integrated into efforts to strengthen country ecosystems for project preparation.

2.2 The role of MDBs in building high-quality project pipelines

MDBs are uniquely positioned to support the development of robust and high-quality project pipelines. They can draw on decades-long expertise in project preparation, provision of technical advice, and close engagement with governments and other country-level stakeholders. Furthermore, they are major providers of technical and financial assistance to EMDEs, including on concessional terms, and they are pivotal in the global effort to finance and achieve the SDGs and climate targets (G20 IEG, 2023b). MDBs can mobilise and catalyse private investment, and they can operate where others – especially the private sector – cannot. They can prioritise long-term socioeconomic and environmental impacts over short-term commercial gains.

This report focuses on two ways that MDBs can support countries to build high-quality project pipelines:

1 Boosting the creation of functional markets through market upstream activities (orange area in Figure 1, discussed in Chapter 3); and

2 Strengthening country ecosystems for project preparation (dark blue area in Figure 1 covered in Chapter 4).

Activities to support high-quality project pipelines tend to span many MDB departments, instruments, engagement types and funding sources (GI Hub, 2019; ICA, 2012), with MDBs' sovereign arms traditionally leading this support. Technical assistance projects aim to enhance capacity and support governments to improve policy, regulatory and institutional frameworks.

Technical advisory services for specific projects tend to be integrated into MDBs' standard project loans, while policy reforms can be supported by MDBs' policy-based loans. Historically, MDBs' non-sovereign arms have primarily provided project financing downstream. However, there have been concerted efforts in recent years to boost their involvement in upstream activities to support the development of project pipelines (Chapter 3).

Particularly over the last two decades, and often in collaboration with bilateral donors, MDBs have established a number of PPFs (GI Hub, 2019). These are *mechanisms that hold ringfenced, unallocated funds for project preparation activities*.[8] The focus and type of assistance provided varies by PPF, but generally they support the preparation of specific projects and/or provide technical assistance

[8] Various definitions of PPFs exist. We draw on different sources, including Oberholzer et al. (2018) and ICA (2015 and 2012). We distinguish PPFs from programmes with pre-allocated funds and advances on MDB development credits.

and capacity-building to strengthen the enabling environment in a country. Chapter 4 summarises the PPF landscape and challenges faced.

Approaches vary for financing the diverse range of MDB interventions that can build project pipelines. Support is provided on a grant basis incorporated into loans or, for advisory services on specific projects, costs are recovered on successful commercial or financial project closure. Modalities also vary by MDB and reflect the ability of the client country to access finance. In general, costs for upstream activities that provide widespread benefits across many projects – such as capacity-building and technical assistance to strengthen institutions and regulatory frameworks – are more difficult to recover than expenses incurred in preparing a specific project. Chapter 5 illustrates the main modalities and options for financing upstream support and for strengthening country ecosystems for project preparation.

3 ‘Market upstream’ support

The absence of well-regulated, functional markets is a significant obstacle to translating project opportunities into actual investments (Le Houérou and Lankes, 2023). Barriers to project development and investment can be sector-specific and, therefore, they extend beyond a lack of enabling factors linked to the general business environment and investment climate (see Figure 1).

Obstacles derive from market failures caused by unpriced positive or negative externalities, information asymmetries, inadequate property rights, economies of scale that require high upfront investments, monopolistic or oligopolistic market structures, or incentives that prevent the emergence of markets (World Bank, 2019). The absence of functional markets is often linked to poor government strategic planning and transparency, which leads to unclear signals to market participants (World Bank, 2022).

Measures are required to target these sector-specific barriers (Le Houérou and Lankes, 2023). Diagnostics and analyses of existing bottlenecks is a key starting point to identify necessary reforms and policy actions. Actions will often include creating or improving sector-specific policies, regulations and standards within which markets can function. Additional initiatives may focus on fostering innovation and competition by, for example, lowering entry barriers or, in certain instances, pursuing privatisation.

Governments can also play a role in developing and showcasing successful pilot initiatives, facilitating the replication of best practices and promoting the spillover of ideas. The clean energy market is an example. Here, governments can improve investment signals by implementing measures that strengthen the market for private clean energy offtake. They can support efforts to standardise power purchase agreements (PPAs), promote PPAs of sufficiently long tenure to be bankable, and enable power generators to implement cost-reflective energy tariffs. Chile has been highly successful in developing PPAs, driving substantial private investment in the development of wind and solar projects (Climate Finance Leadership Initiative et al., 2021).

MDBs can help countries address sector-specific challenges to create markets that catalyse project development and investment downstream. With their strong focus on diagnostics and technical

assistance, and instruments such as policy-based lending, the sovereign-lending arms of MDBs are well-positioned to support governments in implementing public-sector reforms for market creation. Private-sector arms or divisions of MDBs can contribute their expertise and experience to the underlying diagnostics, and they can directly support capacity strengthening among private actors.

An evaluation of 16 International Finance Corporation (IFC) case studies identifies four channels through which an MDB's private-sector arm can contribute to market creation (World Bank, 2019),[9] namely: 1) fostering innovation; 2) generating demonstration effects; 3) enhancing skills, capacities and governance structures at the firm level; and 4) supporting integration into value chains. For example, an MDB can support a new firm entering the market to compete, or it can support an incumbent firm in launching a pioneering service. These actions can create demonstration effects that prompt other producers to emulate the service by introducing competing offerings over time.

Effective coordination between MDBs' public- and private-sector activities is critical, therefore, for market creation. However, silos between these arms or divisions are often ingrained. Staff tend to belong to and operate in separate organisational divisions or different entities, and, more fundamentally, there are substantial differences in business processes, the nature of clients and the professional backgrounds among staff (IADB, 2023; AsDB, 2022).

Recent reform initiatives have aimed to strengthen the interaction between MDBs' public- and private-sector arms to support market-creation efforts,[10,11] but more significant effort is needed to enable transformational change. Specifically, additional reforms and new approaches are required around incentive frameworks (see section 3.1), diagnostics and country strategies (see section 3.2), and also organisational structure, mobility and professional development (see section 3.3).

The particular reforms and innovations required will vary, according to the operational focus, size and strengths of each MDB, as well as their resources and expertise for providing upstream technical

[9] This typology of key channels is valuable as it distinguishes the market creation-focused activities of an MDB's private-sector arm from its broader initiatives aimed at developing the private-sector in general.

[10] In the context of its new strategy, the IFC is working towards a more proactive role in supporting the creation of markets and projects, in close coordination with the World Bank (IFC, 2021 and 2020). The World Bank Group (2023) has also recently launched the Global Challenge Programmes (GCPs), which are envisioned as programmatic sector engagements with integrated upstream-to-downstream, replicable and scalable approaches. GCPs aim to combine public and private solutions under the One World Bank approach and to include systematic engagement with the private sector through upstream work. Other MDBs are also undergoing similar reforms. For instance, the IADB Group's new institutional strategy underscores the importance of public–private cooperation (IADB, 2024). A key goal of its new Synergies Framework is to foster market creation by combining the IADB's capabilities in improving the enabling environment with IDB Invest's private-sector solutions and expertise, as well as with the IDB Lab's capabilities and risk appetite to promote innovation.

[11] The Viewpoint Note refers to MDBs 'intensifying their upstream engagement with governments to address regulatory and other barriers to private sector investment, incubate robust project pipelines, and provide early-stage investment' (Heads of MDBs, 2024: 12).

support and policy advice for regulatory and institutional reforms (AsDB, 2021). However, MDBs will need to cooperate more closely to leverage synergies. As examples, Box 2 and Box 3 describe coordinated efforts by MDBs in market creation in the renewable energy sector in Egypt and in the information, communication and technology (ICT) sector in East Africa, respectively.

Box 2 Collaboration to create renewable energy markets in Egypt

The Benban Solar Park in Egypt is an example of how government policy reforms can help create markets and unlock private investments. It also demonstrates the impact of collaboration among development financiers on public-sector reforms and private-sector mobilisation.

With support from the International Monetary Fund (IMF) and the World Bank, between 2014 and 2016, the Government of Egypt removed the state monopoly over the energy sector by reforming its electricity tariffs and the legal and regulatory framework.

These reforms unlocked private-sector investment to construct and operate power plants, including Benban, near Aswan, which is the largest solar power plant in Egypt at the time of writing, and one of the largest in the world.

The project ‘crowded in’ about $2 billion of private investments, including through private-sector arms of MDBs and development finance institutions (DFIs). For example, IFC spearheaded a package whereby nine international banks financed 13 projects in the solar park. The European Bank for Reconstruction and Development (EBRD) led another consortium of lenders to finance an additional 16 projects. Proparco (the private-sector arm of Agence Française de Développement (AFD)) financed a further project, while the Multilateral Investment Guarantee Agency offered political risk guarantees to 12 projects.

An agreement was reached for IFC to ensure its own performance standards were applied across all projects, in order to reduce the transaction costs associated with multiple sets of environmental, social and governance (ESG) standards being applied by each MDB.

Source: Houérou and Lankes (2023).

Box 3 ICT market creation through a well-integrated public–private approach in East Africa

The efforts to establish the East African Submarine Cable System (EASSy) linked public- and private-sector support between multiple MDBs and development partners to foster market creation. This

10,000-km undersea cable system was deployed in 2010 and generated demonstration effects that spurred the construction of another submarine cable in the region. It also enhanced ICT markets by increasing competition for telecommunication capacity. The initiative expanded broadband internet coverage and led to falling prices in both Kenya and Madagascar. The EASSy project was made possible by a joint investment by the African Development Bank, AFD, Germany's KfW, the European Investment Bank (EIB) and IFC.

In particular, IFC and the World Bank coordinated their activities throughout the project. The World Bank's Regional Communications Infrastructure Programme supported regional integration and preparation of the necessary legal and regulatory environment before the cable's installation. The IFC advised on the governance structure for the project and connected participating countries with the international ICT network. IFC also invested in local mobile operators, such as Airtel, increasing competition and improving service quality and affordability.

Source: Summary based on information from World Bank (2019).

3.1 Enhance MDBs' incentive structures

Incentive structures must be updated and enhanced to ensure effective coordination between MDBs' public- and private-sector arms. This will then maximise the impact of MDBs' support for market creation.

There is concern within MDBs' public-sector arms that efforts to crowd in the private sector may complicate transactions and relations with client agencies and affect their ability to meet lending targets (Le Houérou and Lankes, 2023). There is also concern that if one MDB attempts to create space for private-sector investment, another MDB might opportunistically offer sovereign lending for that project.[12] To address this, MDB shareholders can ensure that MDBs align on and adhere to key approaches and 'rules of the game' that incentivise behaviours aimed at creating space for the private sector.

Within MDBs' private-sector arms, incentives need to shift away from closing large, profitable and low-risk transactions in a short time frame towards fostering market creation through long-term investments that can involve small transaction volumes and higher risks (AsDB, 2021; World Bank, 2019).[13] Adjustments in performance metrics are essential to enable private-sector arms to promote market creation effectively. For instance, focusing on interventions that generate demonstration effects can result in smaller transaction

[12] For example, by offering sovereign lending for a project that can attract private financing in the context of a PPP.

[13] This also intersects with the debate on various approaches to 'crowding-in' private financing (Publish What You Fund, 2024; AsDB, 2021).

volumes, which can create tensions with volume targets (AsDB, 2022). In addition, some countries that require market-creation interventions are small, low-income or fragile, which leads to smaller deal sizes and higher business risks (World Bank, 2019). To seize market-creation opportunities in these contexts, MDBs' private-sector arms must assume and manage greater risks, with corresponding adjustments in incentives for staff. To this end, the World Bank Group's (WBG) Independent Evaluation Department recommends regular assessments of the adequacy of IFC's risk-taking capabilities to carry out market-creation activities in countries eligible for assistance from the International Development Association (IDA) and other structurally weak economies (World Bank, 2019).

It is also crucial that incentive structures align across MDBs' public- and private-sector arms to foster collaboration between the two. Interviews with MDB staff and leadership have highlighted that collaboration and teamwork are resource-intensive and time-consuming activities, yet often this is not reflected adequately in individual performance metrics and institutional scorecards (AsDB, 2022 and 2021). Indeed, these stakeholders have underscored the importance of measuring, recognising and rewarding collaboration between public- and private-sector arms of MDBs.

3.2 MDBs' diagnostic tools and country strategies

Many MDBs have attempted to enhance cooperation between their public- and private-sector arms in developing diagnostic products and country strategies to improve their effectiveness in analysing and addressing obstacles to market creation (AsDB, 2021).

A common challenge is that diagnostic tools, typically led by MDBs' public arms, often do not sufficiently integrate the expertise and perspectives of private-sector arms (IADB, 2023; AsDB, 2022; World Bank, 2019). To address this, WBG's IFC 3.0 Strategy introduced a new diagnostic tool – Country Private Sector Diagnostics (CPSD) – and IFC Country Strategies (IFC, 2021 and 2020; World Bank, 2019). CPSDs are designed to assess the state of a country's private sector and provide economy-wide and sector-specific recommendations for reforms and policy actions. IFC Country Strategies build on the CPSDs and outline action plans to deepen IFC's engagement in response to policy reforms. More importantly, these strategies are internal documents intended to contribute to WBG's overarching Country Partnership Frameworks (CPFs). While these efforts represent positive steps forward, integration of IFC Country Strategies into the CPFs remains limited due to resistance to change and inertia. Challenges have also been faced in aligning the two documents, which offer different levels of detail (Le Houérou and Lankes, 2023).

Within the Asian Development Bank (AsDB), non-sovereign projects are administered through the Private Sector Operations Department

(PSOD) and not a separate entity. Efforts have been made to involve this department in upstream analysis, including through Country Partnership Strategies (CPS) and the delivery of AsDB's Strategy 2030 (AsDB, 2022). According to a recent assessment, sovereign and non-sovereign collaboration intensified in the drafting of recent CPS documents; however, success has varied widely across countries (ibid.) due to particular factors around leadership and collaboration. Leadership from country directors and teams has been identified as critical to developing and delivering integrated CPS, alongside opportunities for exchange and interaction between AsDB's sovereign and non-sovereign arms.[14]

At the Inter-American Development Bank (IADB), efforts have been made to involve IDB Invest (its private-sector arm) more systematically in formulating country strategies. A recent evaluation acknowledges progress, but it recommends more active and continuous engagement of IDB Invest in dialogue with client governments while implementing country strategies (IADB, 2023).

3.3 Foster well-integrated and joint MDB operations

Collaboration to develop joint diagnostics and country strategies represents an initial step to promote market creation. However, feedback and exchange are needed between MDBs' public- and private-sector arms throughout implementation, too.

For instance, MDB colleagues engaged in public-sector reform efforts need to understand the evolving challenges facing private stakeholders as reforms are being implemented. Several approaches can foster continuous knowledge sharing, collaboration and integrated expertise across MDBs, although effectiveness and relevance will vary depending on the context where each MDB operates:

- **Cross-cutting sector or thematic groups** provide valuable platforms for exchange and joint learning across public- and private-sector arms (AsDB, 2022).
- **Co-locating public- and private-sector colleagues in the same physical space and teams** can boost knowledge transfer and collaboration. For example, AsDB's PSOD has increased its use of rotational assignments, posting staff to country offices (ibid.). Regional hubs, like that in Georgia where public- and private-sector colleagues work together in sectoral groups, are also rated as effective (ibid.). At the WBG, the local presence of staff has driven IFC's market-creation results, enabling colleagues to engage in policy dialogues with national actors alongside their World Bank colleagues (World Bank, 2019).

[14] AsDB's Independent Evaluation Department has identified shortcomings in metrics designed to track and reward collaboration that exemplifies the One ADB approach. These metrics tend to focus on public–private joint transactions, neglecting other vital forms of collaboration such as the joint development of diagnostics that promote long-term systematic change (AsDB, 2022). This challenge also extends to individual-level performance metrics and work plans, where the evaluation suggests that metrics and time reporting should be better aligned to enable staff – particularly from the private-sector side – to contribute more fully to work and discussions on sector reforms, including policy and regulatory issues.

- **Professional development and training opportunities** can enable staff to gain insights into the operations and activities of both sovereign and non-sovereign operations. For example, AsDB's Office of Public–Private Partnership trains resident mission staff in PPP structuring (AsDB, 2022).
- **Greater mobility of staff between public- and private-sector arms** throughout their careers can facilitate the development of networks, experience and expertise in both domains (IADB, 2024; AsDB, 2022).[15]

Strong leadership is also a crucial overarching success factor in enhancing coordination between MDBs' arms, and in fostering integrated solutions for market creation. AsDB staff have indicated that resident mission leadership, in particular, can foster collaboration between public- and private-sector arms (AsDB, 2022). Effective leaders have expertise across public- and private-sector diagnostics and operations; they cultivate robust relationships with diverse stakeholders including government entities, development partners, the private sector and civil society; and they facilitate inclusive consultations to harness ideas from colleagues with diverse expertise. This highlights the importance of empowering in-country leadership with the authority and training to fulfil this integrated role at the country level. IADB's Office of Evaluation and Oversight has underscored the need to provide continuous and tailored training to country representatives, who are frequently recruited from the public-sector arm, to enhance their capability to fulfil IDB Invest-related functions (IADB, 2023).

[15] IADB's new institutional strategy identifies 'public–private sector experience as a requirement for career development' and 'incentivising mobility across the Group' as key enablers to foster synergies within the organisation (IADB, 2024: 44). AsDB's Independent Evaluation Department recognises the complexities and challenges associated with providing staff exposure across the public–private sector divide, but it underscores the importance of cultivating a broader cohort of AsDB staff proficient in both sovereign and non-sovereign operations (AsDB, 2022).

4 Country ecosystems for project preparation

Most literature on PPFs stresses that the system is highly fragmented, with significant proliferation and diverse mandates, focus areas and business models. Often, there is relatively modest financing (World Bank, 2022; GI Hub, 2021; Bhattacharya et al., 2019; Nassiry et al., 2018; Kortekaas, 2015).

To the best of our knowledge, the most recent comprehensive overview of PPFs identifies at least 130 Facilities[16] worldwide, of which 53% are led by MDBs (GI Hub, 2021). Very few PPFs were in place before 2000, but their number has grown exponentially since then. For example, over 80% of MDB-led PPFs were created after 2015 (GI Hub, 2019).

Concerns are not new about fragmentation of the PPF system, nor are recommendations to review their structure and consolidate Facilities. As elaborated in Box 1, in 2011 the G20 High Level Panel on Infrastructure (2011: ii) noted the existence of numerous PPFs and recommended that the size and range be reviewed 'with the view to restructuring them on a more sustainable basis, including the provision of additional resources if needed'. The same year, the Infrastructure Action Plan of the MDB Working Group on Infrastructure to the G20 (2011) advocated pooling resources across PPFs through mergers and/or syndication arrangements, and it encouraged better coordination and the establishment of multi-donor windows within existing PPFs. The Working Group further recommended assessing existing PPFs in Africa to inform restructuring 'to have fewer, more effective facilities' (ibid: 3).[17]

However, attempts to harmonise the PPF system in the early 2010s were largely unsuccessful – PPFs proliferated instead of being consolidated. Several groups have attempted to assess the PPF ecosystem comprehensively (Nassiry et al., 2018; Adam Smith International, 2014; ICA, 2012), but they have been challenged by limited data, time and resources. In particular, it has proven difficult to assess and compare PPF performance because of scarce

[16] Approximately 14 of these PPFs support project preparation in a single country. Examples include the Brazil Infrastructure Project Preparation Fund (PSP), the India Infrastructure Project Development Fund (IIPDF), the Kenya Climate Innovation Centre (CIC) and the Philippines Infrastructure Preparation and Innovation Facility.

[17] At the time, this focus on Africa was due to the perception that there were a particularly large number of PPFs for that region, while Asia seemed to have comparatively fewer.

information about individual Facilities and their characteristics (e.g., mandates, focus areas and business models) and limited evaluations.[18, 19] There is a general lack of accountability and transparency regarding the PPF ecosystem, which makes it challenging for actors like the G20 to steer the system and monitor progress. Meanwhile, MDBs struggle to access the necessary information to coordinate more effectively.

4.1 MDBs as key partners to strengthen country ecosystems for project preparation

MDBs' involvement in project preparation, particularly via PPFs, arises primarily as a response to challenges faced by national systems.[20] Government ministries and departments, state-owned enterprises and private developers are key actors in scaling up high-quality project pipelines. MDBs should contribute to stronger country ecosystems for project preparation, for example by strengthening the capacity of these actors and supporting efforts to enhance the legal and regulatory enabling environment (Bhattacharya et al., 2019; GI Hub, 2019). The medium-to-long-term goal should be to strengthen country ecosystems to a point where a country can develop projects more independently and gradually decrease its reliance on MDBs' project preparation support.

4.1.1 MDB support for government institutions and the development of national PPFs

MDBs can strengthen institutional capacity for project preparation at national and subnational levels, focusing on the specific needs and gaps within individual country contexts (World Bank, 2022; Bhattacharya et al., 2019; GI Hub, 2019). For instance, for Latin America, Fioravanti et al. (2019) differentiate between the support requirements of middle-income countries with mature institutional environments, including for PPP development (like Brazil, Chile, Colombia, Mexico and Peru), and low-income countries where such environments are still in their initial phase. Support for the latter group should strengthen institutions as well as legal and policy frameworks, while the first group might primarily need tailored advisory services at the project level. MDBs can coordinate diagnostics for institutional project preparation readiness at the country level within the framework of country platforms, ensuring these diagnostics are integrated into MDBs' country strategies.

Indeed, countries adopt different institutional arrangements for project preparation. A central agency, such as an infrastructure

[18] The team assessing PPFs in Africa in 2012 (ICA, 2012) describe significant challenges in fulfilling their original terms of reference, which included reviewing and rating the performance of individual PPFs.
[19] Nassiry et al. (2018) observe that many PPFs do not regularly publish performance assessments. When they do, methodologies differ, making comparisons difficult.
[20] Failures of national systems are not restricted to low- and middle-income countries. However, they are often much less severe in the case of high-income countries (GI Hub, 2021; World Bank, 2020).

authority, is often responsible for developing infrastructure plans, but in most countries project preparation responsibilities are decentralised and distributed across various government contracting authorities (GCAs), such as ministries and their line departments. More centralised agencies or units are often established to support projects executed as a PPP (see Box 4 case study for the Philippines).

While the required support varies by country, based on a detailed country-level review of project preparation practices across 15 countries, GI Hub (2019) has distilled several best practices to overcome barriers and strengthen country ecosystems for project preparation by empowering public institutions at the national and subnational levels. This includes developing clear plans and policy frameworks to signal government commitment for infrastructure development. Governments should translate infrastructure needs into a comprehensive infrastructure roadmap that guides project selection and prioritisation, empower central agencies to institutionalise project preparation and standards (see Box 4), build complementary capacity in GCAs and establish adequate ring-fenced resources for financing project preparation, which may involve creating national PPFs.[21]

Strengthening country ecosystems may lead to an increase in the number of PPFs, which could appear contradictory to efforts around reducing fragmentation. However, national PPFs should be distinguished conceptually and practically from those with a global scope hosted directly by MDBs or other agencies. When integrated into country ecosystems, national PPFs can enhance local capacity and ownership and provide an opportunity to integrate local knowledge.[22] In many ways, such arrangements replicate, or even innovate upon, the systems successfully utilised by high-income countries for project preparation. In other words, concerns regarding the fragmentation of PPFs should primarily target the global level and structures of international and bilateral partners, rather than country-level structures.

Box 4 Case study: Strengthening country ecosystems in the Philippines

Since 2010, the Government of the Philippines has undertaken significant steps to revamp the country's systems for project preparation. It has collaborated with international partners in this

[21] The GI Hub analysis provides several key guidance principles for such PPFs: clarity regarding PPFs' objectives, scope of operation, and interface with GCAs; effective governance and robust policy, regulatory and legal frameworks (such as PPP laws), and sustainable financing, including the integration of PPFs into the broader enabling environment, complementing efforts of other agencies that support project preparation; accessible support for subnational governments (GI Hub, 2019).

[22] For example, national PPFs can often build a pool of local experts who are well-versed in national regulations and standards, and who can dedicate significant time to on-site engagements – factors crucial for achieving success in project preparation and development (Oberholzer et al., 2018).

endeavour, utilising technical and financial support from MDBs such as AsDB.

Strengthening the institutional framework

The Philippines has established a robust institutional framework with well-defined responsibilities for project planning and preparation. Project preparation activities are largely decentralised and managed by implementing agencies. The National Economic and Development Authority (NEDA) is the country's central socioeconomic planning body, responsible for reviewing, evaluating and monitoring infrastructure projects in line with the national development plan. As part of its reform efforts and with AsDB support, the government established a PPP Centre that coordinates and promotes PPP projects nationwide. The Centre champions the PPP programme by: (i) empowering implementing agencies in all aspects of project preparation; (ii) providing advisory services and technical assistance in project preparation and implementation; and (iii) advocating for policy reforms to enhance the legal and regulatory framework for PPPs.

Setting up the Project Development and Monitoring Facility (PDMF)

Historically, limited budgets constrained the scale of project preparation efforts and the quality of project readiness in the Philippines. In response, and in collaboration with international partners, the government established independent in-country PPFs that provide targeted financial and technical assistance for project preparation. The PDMF, managed by the PPP Centre and co-financed by the Philippines and Australia through AsDB, is an example. The PDMF assists implementing agencies to develop a pipeline of viable, bankable projects and funds the engagement of external consultants and transaction advisors. A key feature of the PDMF is the establishment of panels of consultants who are pre-qualified under AsDB procurement guidelines, which helps ensure high-quality project preparation. The PDMF also receives technical assistance from the World Bank's Public–Private Infrastructure Advisory Facility (PPIAF).

Source: Based on information from GI Hub (2019: Philippines case study).

4.1.2 MDB support for other country-level actors

MDB support to build project pipelines at the country level should reach beyond government institutions. National Development Banks are key partners for MDBs in identifying and scaling up projects (Bhattacharya et al., 2019). The Brazilian National Development Bank (BNDES) is one example. The Brazilian Private Sector Participation (PSP) Facility was created with resources from

the InfraFund, IFC and BNDES to support project preparation (Fioravanti et al., 2019). BNDES also participates in the oversight committee of the PSP Facility, and it is directly involved in project preparation.

A country's local financial institutions, particularly banks, can also be powerful intermediaries when equipped to develop and finance project portfolios (Lankes, 2021)**.** EBRD's Sustainable Energy Financing Facilities (SEFFs) are useful examples here.[23] Through SEFFs, EBRD provides credit lines to local financial institutions for sustainable energy projects, enabling these institutions to extend loans to clients, including residential borrowers, small and medium-sized enterprises, and renewable energy project developers (EBRD, 2024). Beyond financing, each SEFF establishes a project implementation team that supports local financial institutions in identifying eligible projects, provides technical advice and studies, and enhances project design. This approach allows EBRD to support relatively small projects indirectly, with funding ranging from a few thousand euros for residential loans to several million euros for business clients.

Finally, MDBs can also partner directly with developers who bring project development expertise to EMDEs (Lankes, 2021). An example of this approach is Gridworks, a platform for development and investment in Africa's electricity network that is owned and funded by British International Investment, the UK's DFI (Gridworks, 2024). Gridworks partners with utilities and developers in the African power sector, including by making equity investments in transmission, distribution and distributed renewable energy, both on and off-grid. For instance, Gridworks' investment in Virunga Power[24] allows the company to develop a portfolio primarily focused on hydropower-distributed renewable energy projects across eastern and southern Africa (Gridworks, 2023). It also offers technical expertise and supports Virunga Power's discussions with key stakeholders. Future independent evaluations would be highly valuable to assess the effectiveness and impact of Gridworks and similar DFI initiatives (see also the discussion in Chapter 3).

4.2 Broad versus specialised support for project preparation

Attempts to assess the PPF system have faced challenges, but the literature still captures useful lessons about PPFs. Findings may appear contradictory, however. While some argue for broad-based PPFs (encompassing all sectors and project preparation stages), others emphasise the importance of highly specialised and targeted support. These discussions underscore the need for a clear,

[23] SEFFs are commonly viewed as financing rather than PPFs. However, as described in the text, they involve a significant technical capacity component.

[24] Virunga Power is an African private utility that develops, invests in and operates renewable power projects. As of June 2024, Virunga Power changed its name to Anzana Electric Group (Anzana Electric Group, 2024; Virunga Power, 2024).

overarching strategy on the role of MDBs in project preparation. We propose key principles for such a strategy, where the PPF system embraces greater integration and cooperation to offer a 'one-stop-shop' experience for countries, while leaving room for specialised, highly targeted PPFs that are integrated well into the overall system.

4.2.1 The power of increased cooperation and integration

In the literature, broad-based approaches to project preparation refer to countries having access to a comprehensive support system, serving as a one-stop shop both for strengthening their project preparation capabilities and receiving assistance for specific projects. A large, global PPF covering all stages of the project preparation process, sectors and countries would sit at the extreme end of the spectrum. But this model would be unrealistic and suboptimal, as it would stifle positive competition and innovation. Instead, MDBs should develop a common strategy and a theory of change, articulating the overarching objectives and guiding principles for their coordinated support of project preparation. Strengthening country ecosystems in project preparation should be at the heart of this strategy.

First, each MDB should evaluate whether the PPFs hosted within their institution and other initiatives offering project preparation support are structured to facilitate a seamless one-stop-shop experience for country clients and minimise transaction costs. Where this is not the case, MDBs should pursue strategies to optimise the project preparation support provided within their respective institutions.[25]

Each MDB should also critically assess whether its institutional setup provides the right incentives to support project preparation. For instance, EBRD (2018) found that it was suboptimal to locate its Infrastructure Project Preparation Facility (IPPF) within a business unit primarily focused on sovereign lending. The institutional placement of a PPF can restrict access from other business units and, more importantly, lead to a focus on the sovereign lending operations of an MDB while neglecting opportunities to attract financing from the private sector or other MDBs (see also discussions in Chapter 3 on support to market creation, and Chapter 5 on financing).

Finally, based on a common strategy, MDBs should strengthen their efforts to coordinate project preparation support, for instance within the framework of country platforms. Depending on their local and sectoral expertise and historical involvement, this may entail particular MDBs leading these efforts in different countries.

[25] During consultations for this report, several MDB colleagues voiced interest in learning from the experiences of other MDBs with PPFs, especially with regards to successful models of cost recovery.

4.2.2 The power of specialised and targeted approaches

Increased coordination and integration of project preparation functions across processes, sectors and countries, as described above, does not imply that there is no room for targeted and highly specialised tools and PPFs. To develop well-designed projects at scale, it can be crucial to offer country actors packaged assistance with easily replicable templates for use across similar projects (Lankes, 2021). For example, standardised contractual design can speed up project preparation while building on best practices and reducing transaction costs (Ad-hoc MDB/DFI Expert Group on Infrastructure and Investment, 2023). Standardisation can also facilitate the aggregation of infrastructure projects into a critical mass that is more attractive to investors.

Several promising initiatives have been launched in this regard. Open Solar Contracts established by the International Renewable Energy Agency (IRENA) and the Terrawatt Initiative (TWI) is one example. This provides free and standardised contract documentation to the global solar community to streamline project development (IRENA, 2019; IRENA and TWI, 2019).[26] Another example is the Scaling Solar initiative, which is commonly classified as a PPF. Scaling Solar combines a range of WBG services under a single engagement, offering an end-to-end standardised package for solar projects (Scaling Solar, 2024). This package includes technical advice and support, fully developed templates for bankable projects, competitive financing and insurance, as well as risk management and credit enhancement. Expanding on this approach, WBG has launched new initiatives in recent years, such as Scaling Wind (IFC, 2024a) and Scaling Mini-Grids (IFC, 2024b). While more assessments are needed of the successes, failures and lessons from such packaged, standardised approaches,[27] early analyses suggest they can strengthen and speed up project preparation.

Highly targeted PPFs and tools are mechanisms that need to be integrated into the broader collaborative efforts that are outlined in Section 4.2.1. Countries should still have access to a one-stop shop for project preparation anchored in country platforms. PPFs like Scaling Solar or tools like the Open Solar Contracts would form part of the support services that countries can benefit from through these coordinated arrangements. It should be considered whether MDB country teams, coordinating at the country level, require support to ensure they have a complete overview of available tools and programmes.

[26] Open Solar Contracts has been developed through collaborative engagement with global stakeholders and it incorporates best practices. The initiative is designed to reduce barriers to entry for small-scale developers and those operating in developing countries.

[27] For instance, in the case of Scaling Solar, there have been discussions about key learnings from successful outcomes in Zambia (see, for example, Emery, 2023). Future independent evaluations of such programmes would provide valuable insights into best practices, replication and scale-up.

To this end, G20 initiatives like the GI Hub and the GIF – which operates throughout the project cycle, connecting upstream and downstream activities – could play an even greater role by maintaining a centralised repository of support tools and programmes, and hosting focal people with comprehensive knowledge of the entire project preparation ecosystem. These focal people can guide and advise both MDBs and country stakeholders upon request.

5 Financing upstream support and project preparation

The time and costs estimated for project preparation can vary considerably based on the complexity and the readiness of a project. Project preparation typically requires an average of six years (IMF, 2020), while costs (including pre-construction finance) usually represent 5% to 10% of total project investment (World Bank, 2022).

Considering the trillions of dollars in additional investment required to achieve the SDGs and address climate change – much of it for infrastructure – this implies that tens of billions might be needed annually to finance project preparation. Furthermore, at least in the short-to-medium term, some new projects are likely to exhibit progressively lower levels of readiness as more funding flows to lower-income countries and/or fragile countries. Higher standards and new requirements around sustainability, inclusion and technology are also driving up project preparation costs (GI Hub, 2021).

Currently, consolidated data is not readily available regarding the amount of funding allocated to project preparation and associated capacity-building efforts in PPFs. This is a concern. The estimates above neither incorporate funding allocated to projects that fail to materialise nor do they include funding for capacity-building activities not directly associated with a specific project. Recent mappings of the PPF ecosystem – such as those by GI Hub (2021) and Nassiry et al. (2018) – do not include information on the financial resources available to PPFs. Nassiry et al. (2018) note that they found information on the scale of resources deployed for only around one-third of the Facilities included in their mapping.[28]

There is even more uncertainty regarding the amount of money spent on project preparation from sources other than PPFs. In a simple back-of-the-envelope calculation, with important limitations, the Infrastructure Consortium for Africa (ICA, 2012) estimates that PPFs had provided a maximum of around 20% – and most likely

[28] Studies providing estimates of PPF financing volumes are now outdated or they focus on a single region (Africa), such as ICA (2012) and ICA (2015).

substantially less – of total project preparation funding in Africa at the time of publication.

This lack of data makes it challenging to understand financing volumes and gaps, to coordinate co-financing effectively, and to identify where resources might be underutilised. Furthermore, it hinders attempts to measure the development impact of money spent on project preparation and capacity-building. This is particularly problematic when seeking to modify incentives within the broader system, as detailed below.

5.1 Funding models for upstream support

Upstream activities have widespread benefits across many projects, but their associated costs are difficult to recover compared to expenses for a specific project (Fioravanti et al., 2019).[29]

Upstream support delivers a public good with large but dispersed benefits – including capacity-building and technical assistance to strengthen a country's institutions or legal and regulatory frameworks. All stakeholders (including non-borrowing MDB shareholders, MDBs and client country governments) should recognise the opportunity cost of not investing in upstream support. For instance, sector-specific interventions that promote market creation can foster an environment where private developers take the initiative to develop and finance projects that would otherwise require public support. In the medium-to-long run, therefore, investment in upstream support can save resources that MDBs would otherwise allocate to directly support the preparation of specific projects (EBRD, 2018).

5.2 Funding models for project preparation

Approximately 50% of PPFs (both non-MDB and MDB-led) offer grant funding while the remainder offer support through concessional loans, guarantees or equity (GI Hub, 2021).[30]

As early as 2011, the G20 High Level Panel on Infrastructure (2011) advocated a stronger focus on cost recovery of project preparation expenses, with more selective use of grant financing. The lack of data makes it difficult to assess progress since then; however, several recently established PPFs – including the Asia Pacific Project Preparation Facility (AP3F), GIF and Africa50 – have embraced at least partially reimbursable models.[31] The landscape is also rapidly

[29] It may be possible to recover costs (particularly from middle-income countries) in instances where technical assistance loans fund upstream support. However, this is frequently outside the scope of PPFs.
[30] Due to data limitations, no comprehensive overview exists of total financing volumes provided through various instruments, particularly outside of PPFs. Task managers at MDBs often draw on multiple funding sources to help countries finance project preparation, including by advancing credits to cover early studies that might be necessary to obtain loan approval. Capacity-building efforts may be provided through larger technical assistance programmes.
[31] The literature does not comprehensively review MDBs' approaches to cost recovery for project preparation.

evolving, to include philanthropy, investor alliances (e.g., the Climate Finance Leadership Initiative) and impact funds.

To recover preparation costs for specific projects, approaches will vary based on project characteristics and country circumstances. The business models and recovery approaches discussed here apply to broader, larger PPFs at the MDB level and smaller, national PPFs. For national PPFs focused on a single large country (such as in the Philippines and Brazil), co-financing arrangements between MDBs and national governments and/or national development banks can enhance accountability and resourcefulness, as national authorities have a direct stake in the financial performance of the PPF.

A PPF should have a clear business model and rationale behind it. Three main types of business models can be adopted (WEF, 2015):

- **Aid organisation model:** Here, a PPF operates without cost recovery and instead requires regular replenishment. This approach is used for projects that offer substantial economic, social and/or environmental benefits, but that cannot attract private investors as they are not financially viable (typically due to poor revenue-generating flows), even after careful project development. For projects with limited financial viability, an MDB can expect the recovery of project preparation costs in a sovereign lending operation. Instead of utilising a PPF, this is commonly achieved by incorporating the preparation costs into the MDB's project loan, which will be repaid gradually over time. However, special considerations must be made for low-income, fragile and vulnerable countries, such as those experiencing debt distress. These countries often require resources on highly concessional or grant terms.
- **Social business model**: This model operates on a cost-recovery basis, typically aiming for recovery only upon successful financial closure of a project. Recovery usually encompasses 100% of project preparation costs or, in some cases, 100% of project preparation costs plus a fixed margin. The purpose of the margin is to enhance the financial sustainability of the PPF by offsetting losses from projects that fail to achieve financial closure. This model is commonly adopted to support the development of PPPs, where project preparation costs are refunded by the successful private bidder, either directly or indirectly. Notably, both the AP3F and GIF use this model to recover costs for downstream project preparation support (GIF, 2020; AsDB, 2016).
- **Venture capital model:** This model is particularly useful for attracting private investors as it can generate profits. It is used, for example, by Africa50 Project Development (A50PD), a for-profit enterprise seeking to provide attractive risk-adjusted returns to its shareholders while supporting project development. Two recovery approaches are feasible under the venture capital model:

3 **Recovery of project preparation costs plus a variable margin:** The margin is often contingent on the performance of predetermined indicators for project-quality design, such as high consumer benefits. This model incentivises the PPF to optimise both preparation costs and quality. However, there are some risks regarding potential manipulation of the business case or model assumptions by the PPF, which determine the payoff corresponding to the project performance indicators.

4 **Equity investment in the project:** Project preparation costs are converted into equity, resulting in the PPF obtaining an equity stake upon commercial closure. The alignment of interests with incoming investors gives the PPF a strong incentive to optimise preparation costs and quality. However, there are potential drawbacks. First, the PPF might prioritise designing the project and related concessions to maximise profitability, potentially leading to, for example, excessively high user charges. Mitigating such conflicts requires public scrutiny and accountability. Moreover, this model can adversely affect the PPF's cash flow, as funds are tied up for an extended period. One solution is to explore options to promptly sell the equity stake.

It is possible to integrate more than one of these models into a single PPF. For example, two windows can be established with different cost-sharing arrangements: a public window to develop public-sector projects and a private window to develop PPPs, as originally implemented by the EBRD's IPPF (EBRD, 2018).

The World Economic Forum (WEF, 2015) proposes a tiered PPF structure, based on the different risk appetites and return expectations of different investors. Under this model, there are three classes of participation rights in the PPF:

1 **Grant tranche (aid organisation model):** This tranche would be subordinated to all other investors, with no (or limited) expectation of return or cost recovery. It would serve as a buffer for losses to the other two tranches, thereby enhancing their appeal for more risk-averse and return-oriented investors. Investors in this tranche could be bilateral donors, MDBs and governments.

2 **Junior tranche (social business model):** This is a second-loss tranche, subordinate to the senior tranche, which expects project cost recovery with minimal or no margin. It could incur a net loss once the grant tranche is exhausted. Investors in this tranche might include national development banks, sovereign wealth funds, and impact and social investors.

3 **Senior tranche (venture capital model):** For this tranche, the dual layers of ‘protection buffers’ provided by the other two tranches would be crucial in attracting private investors, such

as banks, seeking a risk-adjusted return. In the case of particularly risky projects, MDBs could provide additional risk-mitigation instruments, such as guarantees.

There is considerable variation in how PPFs approach cost recovery, if they do at all. Furthermore, the approach to cost recovery chosen by one MDB can significantly affect the range of feasible options for others. For instance, there are cases where governments have hesitated to utilise PPFs with partial or complete cost recovery, even for PPPs where private investor contributions could have been feasible (EBRD, 2018; Adam Smith International, 2014). This hesitation has linked, at least partially, to governments having access to grants from other PPFs and funding sources. It implies inefficient use of limited grant resources, which should ideally be utilised to catalyse other funding or to support public-sector projects in the poorest, most vulnerable countries that are not able to borrow on non-concessional terms.

Drawing on the considerations and strategies outlined here, MDBs should enhance knowledge exchange and align on best practices for PPF business models and recovery approaches. Specifically, experimentation with new approaches should be encouraged, such as with venture capital models or the three-tranche model. Establishing guiding principles and best practices will also inform MDBs' support and technical assistance to national-level PPFs, which face the same challenges concerning business models and financial sustainability.

5.3 Coordination of funding and pooling of resources

Opportunities exist to coordinate the use of existing funds and capabilities. The overarching goals must be to increase available financing and financial sustainability, and to modify the underlying incentive structure that discourages MDBs from preparing projects that another MDB or a private investor may fund.

First, there is a need to integrate better and syndicate funding for project preparation. This may be from inside or outside of MDB-led PPFs, especially in the case of large, transformational and/or regional projects whose funding requirements for project preparation can exceed the capabilities of individual PPFs (Bhattacharya et al., 2019; ICA, 2012; Kharas and Sierra, 2011). Coordination might vary across different parts of the project preparation cycle, types of projects, sectors and countries. For example, EBRD's IPPF has accessed GIF funding for preliminary feasibility studies (EBRD, 2018). However, further scaling up of these efforts is essential. Country platforms could provide an ideal mechanism to coordinate the pooling of funds. The recent announcement by the Heads of MDBs (2024) of the launch of a collaborative co-financing platform marks an important step towards a more coordinated approach to matching (potential) projects and project preparation resources at the country level.

Moreover, it is important to also change some of the underlying incentive structures of the project preparation system. The success of individual MDBs, especially regarding accountability to shareholders, continues to be measured mainly by an MDB's lending volumes. This implies that an MDB investing in project preparation experiences a loss if a project goes on to be funded by a private investor or another MDB. To avoid this, MDBs can require that an agreement be signed ahead of project preparation stipulating that the project will be financed by that same MDB.

While this is an option, from an efficiency perspective the comparative strengths of MDBs and their respective PPFs should benefit other MDBs and stakeholders. For instance, if one MDB excels in assisting Pacific Island governments with project preparation, this MDB should extend support in preparing projects for other MDBs too, rather than duplicating efforts and expertise across institutions. To encourage this, those MDBs investing in project preparation should receive financial compensation. Some of the reimbursable models discussed in the previous section can address this challenge. An additional option is the establishment of common funding pools.

As part of these efforts, performance measurements for MDBs must change, both for the institution and for MDB management and staff. Metrics should factor in the positive impact generated when MDBs support the preparation of projects that are then financed by others. Changing underlying incentive structures would likely also diminish the proliferation of PPFs at the global level, as institutions tend to establish their own PPFs because they need to support project preparation for projects they can finance.

Finally, there is a critical need for greater funding – particularly from donor governments – allocated to project preparation and capacity-building. The sheer volume of high-quality projects needed to achieve the SDGs and climate goals is staggering, even with reimbursable models for PPFs and enhanced coordination and efficient use of existing funds.

Beyond increasing funding for individual MDBs and PPFs, a viable option could be to establish a new funding mechanism, or perhaps one housed within the GIF, that is accessible to all MDBs for project preparation and support activities for capacity-building and developing an enabling environment. This fund could feature multiple windows, potentially mirroring the three-tier structure discussed earlier, and thereby attract diverse investors. Different eligibility criteria would be established based on how MDBs intend to use the fund's resources. It is worth noting here that GIF estimates that 'every $1 provided in GIF project preparation support has mobilized $100 in actual private investment at financial close' (GIF, 2024: 9).

6 Priority actions to build high-quality project pipelines

Developing countries will need to see a significant scale-up in investment to achieve the SDGs and climate goals. This is particularly true for infrastructure development to enable transformative change, with project investment needed from both public and private sources.

However, many countries struggle to translate their infrastructure deficits into well-prepared project pipelines. Their legal, policy and regulatory frameworks are inadequate, and they lack institutional capacity and financial resources.

This scarcity of well-developed projects hinders private capital mobilisation and potentially the ability of MDBs to expand investments. To deploy public funds and mobilise private funds effectively, we therefore argue that robust project pipelines must be expanded substantially.

MDBs and their shareholders can reflect on the evidence reviewed in this report to boost high-quality project pipelines and support project preparation. In this context, the G20 can provide high-level guidance, encourage implementation through its representatives on MDB boards, and request periodic reporting on progress.

1. **MDBs should update and enhance incentives to foster coordination between their public- and private-sector arms in support of market creation and project development.** In Chapter 3, we have argued that well-regulated markets are critical to translating project opportunities into investments. When it comes to their role, MDBs should improve their support for countries to address sector-specific obstacles to market creation. That includes better integration of their public- and private-sector support within individual institutions and across MDBs. MDB shareholders can play a crucial role in ensuring that MDBs align on and adhere to key approaches and ‘rules of the game’ that incentivise behaviours that aim to create space for the private sector.

2 **MDBs should better align the strategies and diagnostic tools of their public- and private-sector arms.** Many MDBs have been grappling with the challenge of enhancing cooperation between their public- and private-sector arms in the development of diagnostic products and country strategies. A common challenge is that these tools, typically led by MDBs' public arms, do not integrate sufficiently the expertise and perspectives of their private-sector arms.

3 **MDBs' public- and private-sector arms should also collaborate throughout the implementation of joint strategies and initiatives**. A number of strategies – staff mobility, thematic or cross-cutting sector groups, professional development and training opportunities – can help foster knowledge sharing and collaboration, and they can help integrate experiences within and across MDBs.

4 **MDBs should strengthen country ecosystems for project preparation by supporting government institutions, local financial institutions and private developers.** Governments often find it difficult to translate infrastructure needs into comprehensive roadmaps and build the necessary national institutions. They need diagnostics to identify capacity gaps, technical support for infrastructure planning, and advice on the development of robust policy and legal frameworks. Building on previous G20 and MDB coordination efforts, MDBs should develop a common strategy and theory of change for coordinated support of project preparation at the country level. This would include providing countries with a one-stop shop for project preparation, especially within the framework of country platforms.

5 **Shareholders and MDBs should invest more in project preparation, including in efforts to build capacity and strengthen the development of country ecosystems.** Project preparation costs are significant as a proportion of total project investment. Greater investment should also extend to technical assistance for sector-wide and sector-specific upstream support (e.g., legal and regulatory frameworks) to foster an enabling environment.

6 **MDBs should experiment with innovative approaches to PPF business models and recovery approaches that can attract private investors**. Options include venture capital models and the three-tranche model.

7 **MDBs should enhance integration and syndication of project preparation funding across MDBs and MDB-led PPFs, particularly for large, transformational and/or regional projects.** MDBs should leverage country platforms as well as the collaborative co-financing platform recently announced by the Heads of MDBs (2024). G20 initiatives like the GI Hub and the GIF could also be expanded to provide a

centralised repository for support tools and programmes, as well as experts who have a comprehensive view of the entire project preparation ecosystem. Those experts should guide and advise both MDBs and country actors upon request.

8 **Shareholders and MDBs should establish frameworks to promote and incentivise collaborative project preparation efforts among MDBs, prioritising collective impact over individual lending metrics**. In particular, they should identify modalities to reimburse MDBs for project preparation and capacity-building efforts, and they should update impact metrics to capture the space that MDBs create for other investors.

In summary, MDBs and their stakeholders have a unique opportunity to shift infrastructure development projects and scale up investment in emerging and developing countries. They can drive transformative change by boosting support for market creation and project preparation, by embracing innovative approaches for cost recovery and by strengthening collaboration.

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