CITIES CLIMATE FINANCE LEADERSHIP ALLIANCE

Policy Brief

Leveraging National Development Banks To Enhance Financing For Climate-Smart Urban Infrastructure

Directed to City Officials (Mayors, Chief Financial Officers, Climate and International Relations Directors)

March 2021

KEY TAKEAWAYS

- While National Development Banks are well positioned to scale up financing for climate-smart urban infrastructure, only a small minority finance local governments or green infrastructure.

- This research evaluated the demand (cities) and supply (NDBs) side barriers of climate-smart urban infrastructure financing to identify actionable opportunities to scale up NDB financing for climate-smart urban infrastructure. Twelve maturity dimensions were identified across NDBs' strategic, financial, operational, and business parameters, representing areas of opportunities and specific actions that can be taken to capture them.

- Overcoming barriers faced by cities and NDBs also requires close collaboration between stakeholders, including national governments and DFIs. Each key stakeholder identified can play a role individually and collaboratively in bridging the gap in financing green urban infrastructure.

Half of the world's population lives in cities, and 2.5 billion people are expected to migrate from rural to urban areas by 2050. Cities make up 80 percent of global GDP and urban activities are major sources of GHG emissions. Cities occupy only 2% of land mass on earth but are responsible for approximately 75% of global emissions.

While being significant contributors to climate change, cities are also at most risk from its impacts. Inaction on climate change will lead to increased inequality both within and among countries. Climate change can have significant financial implications that can create a threat to the stability of the financial system, by disrupting business operations and increasing unexpected expenditures. Up to USD $4 trillion worth of assets are at risk from climate change in cities worldwide.

Urban density can have a significant positive impact on the management of climate change, improving the quality of life and lowering their carbon footprint through more efficient infrastructure and planning. Infrastructure needs are most acute in cities, and even more so in developing countries and smaller cities. Infrastructure financing needs are estimated at US$ 4.1-4.3 trillion per year from 2015 to 2030. Making infrastructure low-emissions and climate-resilient will require additional costs of US$ 0.4-1.1 trillion per year.[1] However, climate-resilient infrastructure is estimated to have a favourable benefit-cost, with the World Bank estimating that investing US$ 1 trillion in the incremental cost of making infrastructure more resilient in developing countries would generate US$ 4.2 trillion in benefits.[2]

To close the investment gap in climate-smart urban infrastructure, National Development Banks (NDBs) have the potential to play a stronger role. Sitting at the nexus of public policy and the financial system, NDBs are well positioned to scale up financing for green urban infrastructure. Based on their strong local knowledge and proximity to cities, they are the ideal intermediaries to channel funds for climate-smart urban infrastructure and provide technical assistance and project preparation support for local governments.

This analysis from the Cities Climate Finance Leadership Alliance (Alliance) aims to provide a conceptual framework that looks at the essential dimensions that must be in place to enhance the role of NDBs in financing climate-smart urban infrastructure. The research builds on the main conclusions from the Alliance's Policy Brief on "Enhancing the Role of National Development Banks in Supporting Climate-Smart Urban Infrastructure".[3]

This latest research has focused on:

- **Cities as the demand side of green[4] urban infrastructure financing**. The analysis is based on interviews with six municipalities to develop key insights on the challenges in accessing finance for green urban infrastructure projects, particularly from national development banks. The research and analysis on common barriers and key enablers for cities is presented.

1 Cities Climate Finance Leadership Alliance (Alliance). "The State of Cities Climate Finance 2015." Alliance, 2015, ccfla.wpengine.com/wp-content/uploads/2015/12/CCFLA-State-of-City-Climate-Finance-2015.pdf.
2 Global Commission on Adaptation. "Urban Resilience Infrastructure: an Imperative in a Climate Uncertain World." The Rockefeller Foundation, 20 Sept. 2019, www.rockefellerfoundation.org/blog/urban-resilience-infrastructure-imperative-climate-uncertain-world/.
3 Cities Climate Finance Leadership Alliance (Alliance). Enhancing the Role of National Development Banks in Supporting Climate-Smart Urban Infrastructure. Alliance, 2020 https://www.climatepolicyinitiative.org/wp-content/uploads/2020/08/Enhancing_the_ Role_of_National_Development_Banks_in_Supporting_Climate_Smart_Urban_Infrastructure.pdf
4 There is no widely accepted definition of "green infrastructure", but for the purpose of this memo, we refer to all low carbon, climate resilient infrastructure.

- **The supply side of green urban infrastructure financing, and specifically the role of NDBs.** The research focuses on the barriers and opportunities that NDBs face in financing green urban infrastructure. Based on the interviews with ten NDBs globally, the study develops a "maturity" model of the key attributes required by an NDB to successfully support green urban infrastructure finance.

Key considerations for City Officials

There are a number of dimensions for City Officials to consider in terms of access to finance from NDBs for climate-smart urban infrastructure projects.

Potential Role for National Development Banks and Subnational Development Banks to Finance Green Urban Infrastructure

NDBs can play a role in enhancing the support for municipalities throughout the climate-smart infrastructure lifecycle but only 4% of Public Development Banks are specifically mandated to finance local governments. NDBs are uniquely positioned to support local governments from throughout the project lifecycle in the pre-investment phase from concept, design and scoping to pre-feasibility and feasibility, and the investment phase with implementation. NDBs can offer a range of non-financial support such as project preparation facilities and technical assistance for capacity building, as well as financial instruments such as grants, equity, debt and guarantees that are suitable for the municipalities' infrastructure project needs.

Subnational Development Banks (SDBs)[5] can act as financial intermediaries and channels for local governments, combining financial structuring, local government management and infrastructure, bridging an important gap between local governments and financial resources. However, there are major differences among countries in the mandate and operations of SDBs and the role they can play in supporting climate-smart urban infrastructure.

Barriers and Enablers for Cities in Accessing Financing for Green Urban Infrastructure Projects

The research and interviews with six municipalities revealed a number of barriers and enablers that were encountered by cities in financing climate-smart urban infrastructure.

5 Subnational Development Banks (SDBs) are a subset of NDBs, with a specific mandate to provide funding and financing to local and regional governments for public services provision and investments in infrastructure projects.

Table 1: Barriers for Cities in Accessing Finance for Climate-Smart Urban Infrastructure from NDBs

<table>
<tr><th colspan="2">Policy, Legal, and Regulatory Barriers</th></tr>
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“Short-termism”: The election cycle every ~4 years inhibits Mayors from pursuing long-term infrastructure projects with climate resilient features and benefits that are not visible within their administration.
Debt limit on city budget (e.g. Fiscal Responsibility Law in Brazil).
Coordination among ministries as signatories and approval from stakeholders is complex.
Urban infrastructure projects may receive financing but getting permits/approval to implement the work may take time or get rejected at a later stage.
Compliance requirements can cause (unwarranted) delays.
Limited access to eligible financial sources, e.g. cannot borrow from NDBs, only from dedicated SDB.
City size / sophistication limits financing options and access to PPP solutions.
Limited authority to collect taxes and fees which implies weak revenue base.
Limited decision-making power on priority sectors including large urban infrastructure projects.
Changing national priorities due to Covid-19 pandemic and changes in administration.
Regulatory constraints restrict a city from issuing green bonds, which limits its access to diverse sources of finance.

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<tr><th>Institutional Barriers</th><th>Financial Barriers</th></tr>
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Lack of understanding of MDBs/NDBs criteria/principles of assessment for projects
Lack knowledge of climate finance players and objectives of funds that can be channeled through NDBs
Lack of awareness, communication or relationship with NDBs
Lack of technical capacity / financial expertise to understand the requirements of NDBs for green infrastructure projects
Lack of human resources and technical capacity to clearly define project objectives, prioritize projects based on cost benefit analysis, social and environmental impact, climate risk assessments, etc.
Lack of data collection capabilities
Competing priorities with basic public services especially in developing countries

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Lack of understanding in the financial structuring of infrastructure projects
Limited financial resources leading to weak creditworthiness
Cities that are regarded as creditworthy and have greater fiscal capacity can receive better financial terms, interest rates and tenors from MDBs than NDBs. The cost of capital is lower from MDBs and therefore more attractive to the city.

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While there are many barriers cities face in accessing financing for climate-smart urban infrastructure financing, with the right enabling conditions, cities through collaborative efforts with key stakeholders may overcome these barriers. The enablers explored in Figure 2 are some common themes of external factors that can enhance a city's access to finance climate-smart urban infrastructure.

Figure 1: Key Enablers for Cities' Access to Financing for Climate-Smart Urban Infrastructure

External Enabling Conditions	Policy, Legal and Regulatory	Advocacy with national government	Advocacy and relationship with national policy makers ensures political commitment and support for green urban infrastructure projects
		SDBs & NDBs	As public policy tools specifically mandated to support local governments and are transformative tools to enhance municipal capacity through fiscal decentralization and financial intermediation.
		Government transfer	The national government's transfers to the local government can support the financing of infrastructure projects, particularly those with a limited revenue base.
	Financial and Non-Financial Support	Planning Tools and Resources	Acquiring planning tools and resources to improve capacity to develop projects from conception to financing to prove viability of projects with clear objectives.
		Linkages to financial intermediation	Intermediaries that support in connecting the capacity building and financing needs of municipalities in green infrastructure projects can help narrow the gap.
		De-risking tools	Guarantee programs, equity programs or credit support mechanisms offered by MDBs and NDBs can mobilize private sector investments.
		Technical Assistance for Capacity Building	TA is offered by MDBs/DFIs/NDBs to enhance the capacity of the municipality and strengthen them financially in order to increase their access to finance.
		Project Preparation Facilities	PPFs offered by MDBs/DFIs/NDBs would help municipalities build a pipeline of bankable green infrastructure projects that are ready for financing solutions.

Additionally, a number of key city-based internal success factors can enhance its access to finance for climate-smart urban infrastructure from NDBs. These include:

- **Revenue capture**: Securing the municipality's revenue stream through tax collection and its strong utilities management are key requirements to become eligible for financing, as it will demonstrate the municipality's financial strength and capability.
- **Integrated project and portfolio management:** Having a strong and integrated portfolio and program management system in place helps to ensure a strong and complete bankable projects pipeline that has fulfilled all the requirements for an administration to make choices between eligible projects.
- **Successful contract, supply chain and enterprise management:** Contract management ensures appropriate procurement processes and that the highest standards of compliance, oversight, good governance, timely repayment of debt, etc. are adhered to. Similarly, supply chain management ensures meeting functionality for costs, while

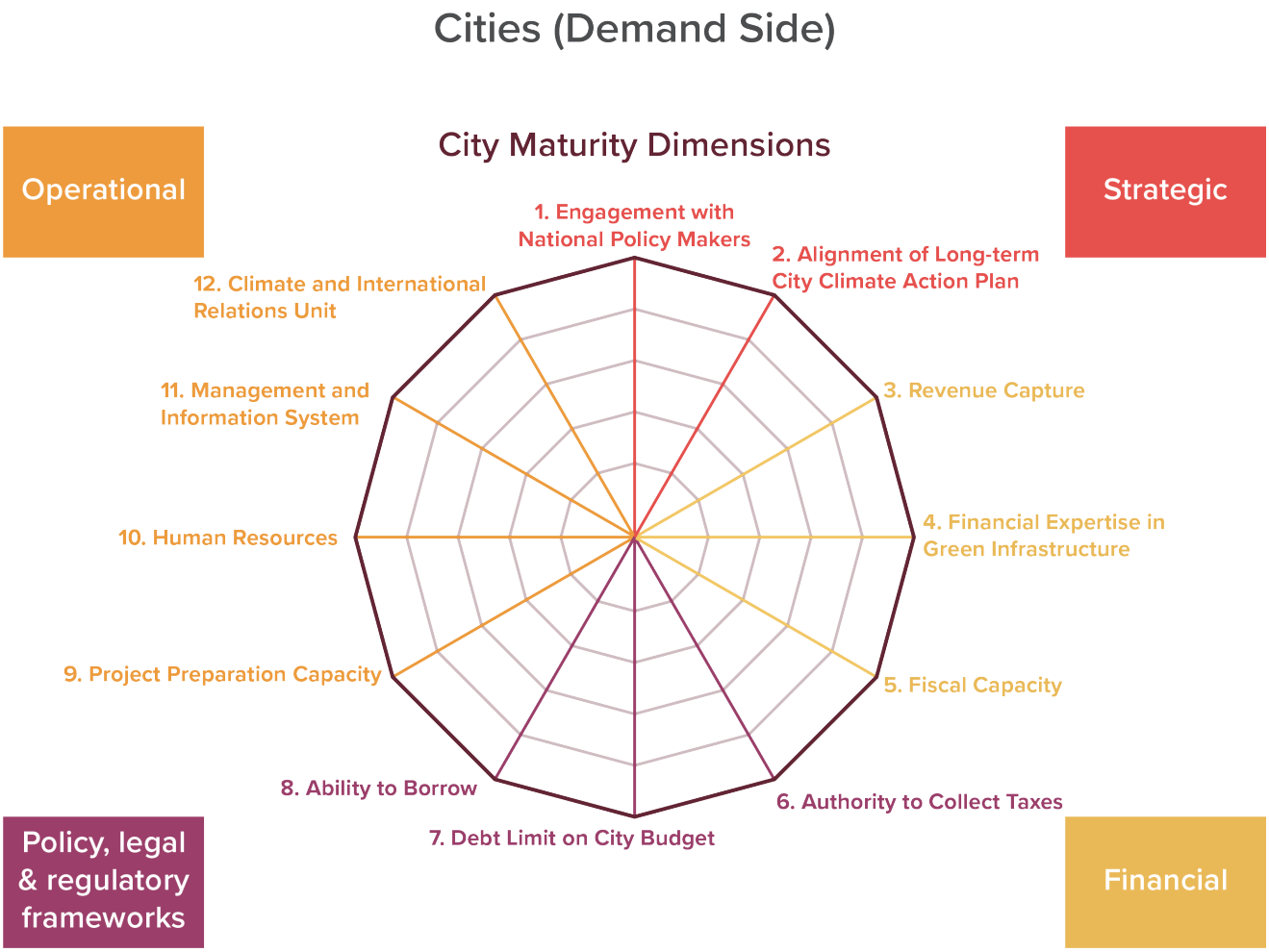
complying with legislation and regulations. A robust enterprise management system is required for organization and alignment across functions.

- **Strong relationships:** Building fruitful relationships with national governments and financial institutions is important for advocacy of financing projects. Participating in cities initiatives on climate action and being a member of city networks is crucial for peer-learning, knowledge-sharing and technical support.

The City Maturity Model for Climate-Smart Urban Infrastructure

Cities vary vastly in size, technical and financial capacity, and climate-smart infrastructure needs based on their vulnerability to climate change. The cities interviewed for this report range in their levels of strategic, financial and operational performance, and regulatory provisions. Key parameters required for a "mature" city in terms of climate-smart infrastructure financing were identified. Common themes have emerged based on best practices and key success factors, which helped shape the 12 dimensions of the City Maturity Model below.

Figure 2: The City Maturity Model



Each of the 12 dimensions contribute to a city's ability to access finance from NDBs. The dimensions are explained below.

At the strategic level:

1. **Engagement with National Policy Makers** is a good practice that ensures that the city's infrastructure plans are designed through engagement with national policy makers. A top-down approach will garner political will and motivation to implement green urban infrastructure projects.
2. **Long-term City Climate Action Plans** ensure alignment of projects with national climate goals (and nationally determined contributions). Climate Action Plan Projects would have clear goals, objectives and priorities as well as public support.

At the financial level:

3. A city's ability to optimize **revenue capture** from both tax collection and utility management signals financial strength, particularly to financiers and enhances its access to sources of finance.
4. A city's **financial capacity** to structure climate-smart infrastructure projects is critical. A city's access to information and knowledge of climate finance players, regionally and internationally, and the objectives and criteria of concessional climate funds enhances their access to diversified sources.
5. A city's **fiscal capacity** and independence determines its access to sources of finance. Cities that are creditworthy, manage finances well and use methodologies that emphasize sustainability and transparency have an enhanced capacity to finance investments in climate-smart infrastructure.

At the policy, legal and regulatory level:

6. A city's **legal authority** over local taxes gives it power and responsibility to collect and follow up on payments to build strong revenue.
7. The **debt capacity** within a city's balance sheet is large enough to accommodate the large cost of financing climate-smart urban infrastructure.
8. A city's **ability to borrow** from diverse sources of finance gives it access to climate funds, NDBs and others. A city's ability to borrow is also determined by its creditworthiness.

At the operational level:

9. A city's **project preparation capacity** and access to tools and support for pre-feasibility studies, cost-benefit analysis, environmental, climate and social impact assessments strengthens their project pipeline, enables prioritization and access to finance.
10. A city's **human resources** are adequately qualified in green urban infrastructure planning and financing. The city has the ability to hire qualified staff to ensure the long-term success of project implementation and maintenance.
11. Utilizing a **management information system** to monitor long-term capital plans and tracking the development of projects builds an immunization against the changing priorities of different administrations.

12. A city with a **climate unit** and international relations personnel has the capacity to dedicate resources to research, peer knowledge exchange on cities climate networks and outreach for partnerships and relationship building with international climate finance players.

Cities that aim to enhance each of these dimensions based on their strengths and weaknesses will strengthen its capacity to sustainably finance climate-smart infrastructure projects and enhance access to finance from NDBs.

Recommendations

It is recommended that city officials:

Strategic factors

1. Engage with **national policy makers** to gain political will and commitment to support in financing and implementation of green infrastructure projects. Garner political support for projects from relevant ministries to avoid overlap or disruptions during implementation of climate-smart infrastructure projects and streamline functions.
2. Design and align **City Climate Action Plans** with national priorities to ensure political motivation to support. Climate considerations would be integrated across departments including budget, urban planning, mobility and other functions to ensure a comprehensive green approach.

Financial factors

3. Strengthen city **revenue capture** to invest in climate-smart urban infrastructure which signals financial strength and capacity to financiers.

Case Study 1: The City of Cape Town, South Africa

The City of Cape town has optimized the city's revenue capture system by enforcing the collection of taxes, particularly through property taxes imposed on registered landowners. Further revenues are generated through utility tariffs, particularly on water which is bought from the federal government and then distributed to citizens. Cape Town ensures that water is metered relentlessly and as a result have successfully captured continued streams of revenue allocated to both the upkeep of water systems and to provide additional forms of funding for the municipal government.

By building and securing these revenue streams while utilizing sophisticated financial and data management systems implemented by inhouse teams of experts, Cape Town has demonstrated an elevated level of creditworthiness. Thanks to this credit worthiness, Cape Town's climate-smart infrastructure projects are viable for financing from major DFIs and have received low-cost credit from bilateral DFIs such as KfW and Agence française de développement.

4. **Build financial** expertise in green infrastructure and a strong **long-term capital plan** with a project pipeline that overcomes interruptions due to changes in administration.

5. Seek support to build **financial capacity** from NDBs, SDBs and IFIs through technical assistance and project preparation facilities to clarify objectives, prioritize projects, enhance project design and enable access to finance from diverse sources.

Policy, legal and regulatory factors

6. Play an active advocacy role with national authorities, with the support from subnational development banks, to decentralize fiscal **authority to collect taxes**. Seek support for mandates, funding sources and structures for climate-smart infrastructure investments at scale.
7. Play an active advocacy role with national authorities, with the support from subnational development banks, to find innovative solutions to allow **debt / increase debt limit on city budget**.
8. Play an active **advocacy role** with national authorities, with the support from subnational development banks, to overcome regulatory, legal and policy conditions that restrict or limit a city's **ability to borrow** from NDBs.

Case Study 2: The City of Chefchaouen, Morocco

The City of Chefchaouen funds most of its infrastructure projects through national government transfers and local contributions, as it is limited in its ability to borrow from other sources. The Subnational Development Bank in Morocco, Fonds d'Equipement Communal (FEC) or the Municipal Equipment Fund, is the only financial entity from which municipalities can borrow. Since FEC provides financial and non-financial support to all eligible municipalities in Morocco and acts as an intermediary to channel funds from the national government and international sources of finance, this places a strain on the capacity of FEC to cater to the needs of different municipalities.

Additionally, Chefchaouen does not have the legal authority to collect local taxes, which is the responsibility of the national government. With a limited city budget, municipalities become largely dependent on the national government for the financing climate-smart urban infrastructure. To build a stronger revenue stream, municipalities such as Chefchaouen can work on advocacy along with FEC, Subnational Development Bank associations and coalition of municipalities to encourage fiscal decentralization.

Operational factors

9. Seek financial and non-financial support from NDBs, SDBs, IFIs and city climate associations to enhance the city's **project preparation capacity** throughout the project development lifecycle, from pre-investment phase (in concept, design and scoping) to the investment phase (with implementation).
10. Develop **human resources** by hiring qualified staff and training existing staff that ensure climate-infrastructure projects are well designed and maintained.
11. Invest in a strong **Management Information System** to coordinate among departments and monitor and track progress of projects.

12. Dedicate resources for **international outreach** and set up a **climate unit** to join city climate initiatives for peer knowledge exchange of good practices and access to technical climate tools and resources to help with pre-feasibility and feasibility stage climate risk assessments of projects, E&S impact assessments, etc. Seek to form and strengthen alliances with adjacent local governments / coalition of municipalities to coordinate climate-smart infrastructure investments at scale.

Case Study 3: The City of Belo Horizonte, Brazil

The City of Belo Horizonte has an International Relations (IR) division, with strong leadership, which is aimed at implementing an important strategy that supports the city's outreach efforts. The International Relations division maps out over 150 international institutions to monitor the resources available and matches them with the various city hall needs. The division's directors are responsible for dialogue and external communication to bridge the gaps.

Based on the research and findings on the available international community tools and resources, the team can then prioritize and adapt city infrastructure projects to meet the standards and requirements that will enable their access to financial and non-financial support. The IR team then submits the eligible projects to the different development finance institutions. Belo Horizonte was among the 6 finalists in the SmartCity Expo, an achievement they attributed to planning and utilizing tools and data to climate-smart urban infrastructure.

The IR team also underscores the importance of learning from best practices from cities around the world and encourages dialogue for innovative solutions among different stakeholders to overcome traditional barriers to city climate-smart infrastructure financing. The IR division demonstrates the importance of having resources dedicated at the city level to engage in outreach with local, national, regional and international climate finance players and remain updated with the latest trends

These opportunities are summarized in the following mind map, which also highlights the supporting stakeholders who must be engaged for effective achievement of each dimension's primary objective. Different stakeholder groups must support cities and NDBs in overcoming barriers, as this responsibility cannot fall solely on either party. In other words, overcoming the barriers is not solely in the purview of NDBs or cities. Each key stakeholder identified in the mind map can play a role individually and collaboratively in supporting cities to effectively seek support to bridge the gap in financing green urban infrastructure.

The full knowledge product 'Leveraging National Development Banks To Enhance Financing for Climate-Smart Urban Infrastructure' includes further case studies and examples of how NDBs are implementing the recommendations listed above.

Access the knowledge product on the Alliance website.

Figure 4: Mind map of opportunities to enhance Cities' ability to finance climate-smart urban infrastructure and relevant stakeholders

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ABOUT THE CITIES CLIMATE FINANCE LEADERSHIP ALLIANCE

The Cities Climate Finance Leadership Alliance (the Alliance) is a coalition of leaders committed to deploying finance for city level climate action at scale by 2030. It is the multi-level and multi-stakeholder coalition aimed at closing the investment gap for urban subnational climate projects and infrastructure worldwide. Climate Policy Initiative (CPI) serves as Secretariat for the Alliance. Funding for the Alliance's activities is jointly made available through two German government ministries: The Federal Ministry for Economic Cooperation and Development (BMZ) and the Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety (BMU).

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