Access to **Finance** for **Adaptation Measures** at the **Hyper-local** Level Guide

— as part of the **CitiesAdapt's**

Future-Proofing Our Neighbourhoods: Your How-to Guide on Hyper- Local Climate Adaptation Measures

Supported by:

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on the basis of a decision by the German Bundestag

IKI INTERNATIONAL CLIMATE INITIATIVE

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CITIESADAPT

Welcome to the ***"Access to Finance for Adaptation Measures at the Hyper-Local Level Guide"***, a resource accompanying the **CitiesAdapt's** publication "Future-Proofing Our Neighbourhoods: Your How-to Guide on Hyper-Local Climate Adaptation Measures" (from now on referred to as "CitiesAdapt's Model Approach").

As part of the "**CitiesAdapt's** Toolbox and Resource Library", the intention of this resource is to guide municipal officials on how to navigate the challenging landscape to access finance for climate adaptation measures at the neighbourhood level in mid- small sized cities. Ideally, small-scale measures implemented as pilot projects, incorporating **Nature-based Solutions** (NbS) in public spaces, while considering future replication and scaling up.

This document is structured in two parts: an 'Overview' section which contains the scope and obstacles to access finance for landscapes with these characteristics, and a 'Guidance' section which gathers some action-oriented approaches to be applied in similar contexts.

Imprint

Project:
CitiesAdapt – Strengthening Climate Change Adaptation in Cities

CitiesAdapt aims to improve resilience to Climate Change impacts in selected cities and disadvantaged urban neighbourhoods in Mexico and South Africa. It is an IKI (Internacional Climate Initiative) project implemented by the GIZ and financed by the German Federal Ministry for Economic Affairs and Climate Action (BMWK) and the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV)

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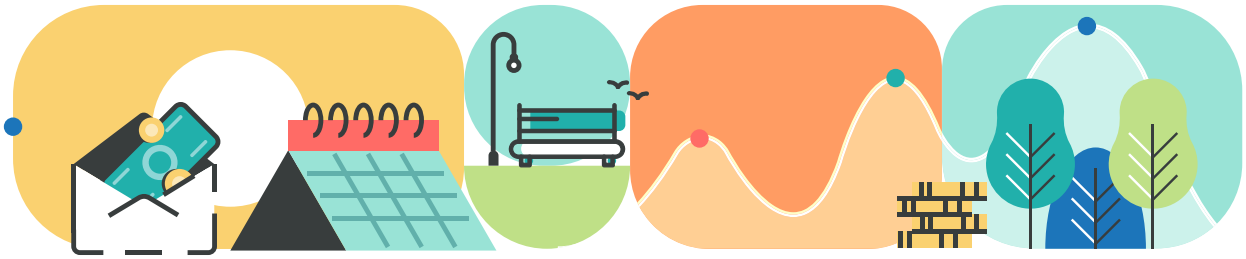


Section 1: Overview

1. Introduction

It is probable that, before reading this resource, you're already familiar with the *CitiesAdapt's* Model Approach. The *CitiesAdapt's* Model Approach was developed as a practical, how-to guide to assist municipal officials in following a user-friendly approach to develop nature-based adaptation interventions conducted in a participatory manner in public spaces of disadvantaged neighbourhoods. It is partially informed by the experiences of the pilot projects developed in the two cities supported by the *CitiesAdapt* [1] project towards climate-resilient urban planning: City of Merida, in Mexico and the City of uMhlathuze, in South Africa.

With that in mind, this resource also looks at the existing financing architecture (national, regional, and international) to identify the best suitable sources for cities to fund their adaptation projects, with specific examples from both above-mentioned countries. Nevertheless, it is always provided a more general explanation for each approach, which can be adapted to similar contexts in other countries.

2. Scope

This resource is targeted towards municipal officials from mid-small cities in departments related to planning, climate change, and community engagement, in cities that are interested in designing and implementing climate adaptation measures at the neighbourhood-level. As already mentioned, measures with the scope of small-scale climate adaptation pilot projects making use of NbS in the public space with an intention to replicate this pilot at neighbourhood/city-wide scale, or even regional scale through partnerships with other cities. These characteristics are important, as they pose specific challenges which can become opportunities to design the path for financing. Given that this guide is dedicated to approaches to make such projects feasible for finance-readiness, it would be ideal to already bring onboard from the beginning of the project development, representatives from the mentioned departments that oversee finance matters or from the specific finance department in the city.

Characteristics of such a city include:

- The city is keen on implementing a small-scale climate adaptation project, ideally as a pilot, with a portion of the budget already allocated. However, it requires guidance on how to replicate the project to achieve a larger, more impactful outcome.

- The city might not have an allocated budget for a pilot project but can develop a simple project proposal with its own resources. However, it might still be needed to secure buy- in from other departments, political and / or municipal representatives.

1 CitiesAdapt is a project implemented by the international development agency Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, funded by the International Climate Initiative (IKI) and commissioned by the German Federal Ministry for Economics and Climate Action (BMWK) and the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV). For more information on the project CitiesAdapt, please check the publication "Future-Proofing Our Neighbourhoods: Your How-to Guide on Hyper-Local Climate Adaptation Measures" which is the primary document to which this resource belongs.

- The estimated cost for planning and implementing the (pilot) project is approximately EUR 100,000.

- The city is mid-small sized. Smaller cities often face greater challenges and limitations, particularly in terms of resources and capacity, which can make accessing finance more difficult compared to larger cities. However, larger cities can also adapt this guide to suit their own context.

Adaptation projects in climate finance differ from mitigation efforts because their benefits are often less direct and harder to quantify, as they typically don't generate immediate revenue. Unlike mitigation, which focuses on reducing emissions, adaptation emphasizes resilience, offering long-term financial advantages through avoided costs and added co-benefits. In particular, Nature-based Solutions (NbS) provide additional environmental and social value, making them a powerful tool in adaptation finance. Therefore, the approaches presented in this guide are action-oriented and practical recommendations to such cities on ways to fund measures with this scope. As such, the character of the pilot project would:

- Focus on measures that have a relatively low cost when compared to larger and more impactful infrastructure interventions. In that sense, no or low-regret options such as Municipal Own Source Revenue (OSR), crowdfunding and policy steering instruments, alongside project preparation facilities (PPF) might be a better fit.

- Does not rely on expected revenues, excluding most instruments that would require repayment.

3. Context

3.1 Urban climate finance needs – a global perspective

Today, 55% percent of the world's population lives in cities and this figure is expected to increase 75% by 2050. While cities produce 75% of global GHG emissions, they are also particularly vulnerable to the impacts of climate change [2] . Cities have a yearly global investment need for sustainable infrastructure of USD 4.5-5.4 trillion, from which USD 1 trillion are missing annually.

This crisis is particularly acute in Sub-Saharan Africa and South Asia, where cities are growing faster than anywhere else in the world. This infrastructure gap challenge is further exacerbated by increasing needs for making existing and new infrastructure climate resilient [3] . Just 9%, or USD 6.8 billion, of the USD 75 billion of urban climate finance tracked at the project-level on average in 2017-2018 was invested annually in adaptation across more than 1,000 projects.

The proportion of adaptation projects remains low and funded projects are mostly in the waste and wastewater management sector. Regarding sources

2 IPCC (2021) Climate Change 2021: The Physical Science Basis. Sixth Assessment Report

3 World Bank Group. (2018). Financing a Resilient Urban Future : A Policy Brief on World Bank and Global Experience on Financing Climate-Resilient Urban Infrastructure. World Bank, Washington, DC

of urban adaptation finance, Multilateral Development Finance Institutions (DFIs) provide most of the tracked finance. In terms of instruments, project-level market-rate debt and low-cost project debt are predominant, with very small use of de-risking products such as guarantee instruments [4] .

3.2 Obstacles in accessing climate adaptation finance

As discussed earlier, while mid-sized and small cities face significant challenges in accessing climate adaptation finance, there remains a strong opportunity to highlight the tangible benefits of such investments. Moreover, cities can utilize key strategic levers to enhance their chances of securing funding for small-scale adaptation projects, such as aligning projects with national and international climate goals and presenting robust cost-benefit analyses that underscore the long-term economic, social, and environmental advantages of adaptation efforts.

Challenges in urban adaptation finance access can be exacerbated by some characteristics that are more typical to urban areas (where governance can be more complex), in middle and low-income countries (with less sophisticated financial markets), and in adaptation and resilience sectors (where projects have a higher 'public good' component). Cities need to be on the lookout for the potential challenges in alignment with these characteristics to identify how to better attract private investment. Some key challenges are summarised below [5] :

- In the *policy and regulatory area*, unclear, overlapping jurisdictional control between cities and national governments may lead to friction especially in the case of conflicting mandates and limited fiscal autonomy of municipalities. Also, decentralisation of fundraising responsibilities to local and regional governments especially after the 2008 financial crisis, whilst overall a positive shift, has led to less funding being available due to more limited fundraising capacities at the local levels.

- Regarding *financing and economics*, many cities, mostly in developing countries, have very limited creditworthiness, heavily constraining borrowing capacity especially on international markets. In addition to this key challenge, cities face other barriers that are generic across accessing finance, such as low investment returns and high cost of capital; inadequate availability of upfront and development capital; limited availability of private insurance and (sovereign-backed) guarantees.

- In terms of *pipeline development*, despite some availability in project preparation support, cities often lack the capacity to develop, finance and manage projects. This challenge is more critical when it comes to climate adaptation projects, where data uncertainty is usually high.

4 CPI (2021). The State of Cities Climate Finance, Cities Climate Finance Leadership Alliance

5 Various sources, including: Richmond, M. et al. (2021), An Analysis of Urban Climate Adaptation Finance. Cities Climate Finance Leadership Alliance

Floater, G. et al. (2017). Global Review of Finance for Sustainable Urban Infrastructure. Coalition for Urban Transitions.

Box 1[6]: **Mid-small cities, exacerbated challenges but also opportunities**

Cities with less than 1 million inhabitants accounted for 58% of the urban population in low- and middle-income countries (LMICs) in 2020 (OECD & UN Habitat, 2022) and small and intermediary cities will account for much of the future urban growth in the coming decades. Whilst the need to implement climate mitigation and adaptation measures is critical, the capacity and resource limitations in smaller municipal governments are usually higher. Also, fewer than 20% of the 500 largest cities in LMICs, and hardly any of the smaller cities, are considered creditworthy by international or national ratings.

Small-scale projects make commercial-type financing even more challenging, given its low cost and impact scale. However, when looking at it as a pilot to be scaled up, there are also **opportunities** to leverage.

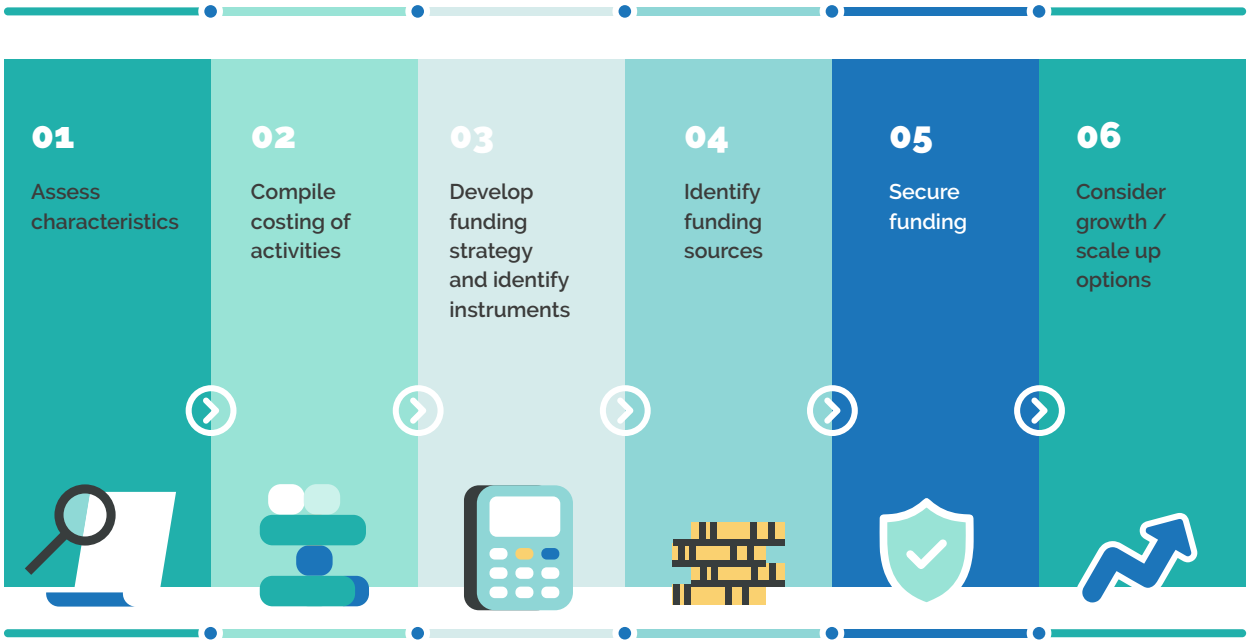
- Scalability: there is the possibility to combine small-scale interventions into larger projects when applying for funding (city-wide or partnering with other cities), therefore, achieving higher impacts and minimum requirements for external funds/loan.
- Flexibility: there is a need for financial instruments that are cheap and flexible, or a combination of different ones, allowing to share risks among parties.
- Focus on Nature-Based Solutions: Small-scale projects offer a chance to implement NbS locally, demonstrating attainable co-benefits like enhanced biodiversity and community well-being. these can serve as pilots for scaling up to larger projects, attracting broader funding opportunities.
- Sustainability / maintenance: from a financial perspective, the long-term costs of small, localized projects are typically much lower than those of large infrastructure projects, particularly when incorporating NbS, which often require less maintenance.
- Cross-cutting topics: given the focus on disadvantaged neighbourhoods and therefore the closeness to impacted communities, there is the opportunity to mainstream gender and pro-poor perspectives, especially through the participatory processes and co-creation with vulnerable groups.

6 Diagram by CitiesAdapt and wider source: John Michael LaSalle (2023), Cities Climate Finance Leadership Alliance, March 2023, available at: https://citiesclimatefinance.org/publications/supporting-access-to-climate-finance-for-small-and-intermediary-cities-a-guide-for-project-preparation-facilities/

Section 2: Guidance

This section provides a step-by-step guidance on what mid-small sized municipalities would need to take into account to develop and finance small-scale adaptation measures. It is important to emphasize that these projects are not developed in isolation but are part of a broader political, jurisdictional, and economic context, both within the municipality and the country. This multidimensional framework presents challenges, but it also opens opportunities for scaling projects and accessing broader financial resources. Since the costs of small-scale adaptation projects are relatively low, municipalities are more inclined to seek funding from local and national sources. While international funding is also an option, it often requires projects to demonstrate higher impact and meet minimum cost thresholds, making it harder to align with small-scale initiatives. However, the experimental nature of pilot projects proposed here can help build a compelling case for replication by demonstrating feasibility and securing buy-in from partners, financial institutions, and other stakeholders.

The diagram below briefly illustrates the high-level key steps that can be taken, in alignment with the CitiesAdapt's Model Approach.



STEP 1: Assess characteristics

Dedicated resources should be allocated by the municipality to evaluate the nature of the project. The first recommended step is for the municipality to identify a key resource that can assist in capturing the relevant information on costs and budgeting.

It can start by assessing the characteristics of both the neighbourhood and the project. Since the focus is on a small-scale adaptation pilot using NbS in public spaces, key characteristics to consider for the finance landscape include:

- An estimated budget of approximately EUR 100,000 for planning and implementation.
- No direct revenue expected, though there are measurable avoided costs and co-benefits.
- The city's limited creditworthiness, necessitating consideration of non-repayment financing options.

STEP 2: Compile costs for activities

There are three different phases of financing for such initiatives, considering the scope proposed by the *CitiesAdapt's* Model Approach:

1. Planning: This phase can be time-consuming and may involve multiple organizations. Depending on the governance model, it can also be costly if there are many stakeholders and extensive consultations needed. The key focus here is to ensure that all stakeholders align around a common vision. This planning phase can be handled internally by the municipality or its agencies, but municipalities can also choose to engage external service providers, often funded by the private sector or donors, based on their resource capacity. However, it's recommended that municipalities first assess their internal resources—such as urban development agencies or related technical departments—that could contribute to studies, capacity building, and personnel. This approach can help save costs by developing the planning steps in-house.

This phase includes compiling costs for the following:

- ***Concept design*** *- Develop a conceptual approach or design intent for the project.*
- ***Pre-feasibility*** *- Technical and financial pre-feasibility studies to evaluate the project's preliminary viability and assess whether it is technically sound and economically feasible.*
- ***Consultation*** *- Activities (e.g., surveys, meetings) to collect feedback from residents, allowing them to influence decisions and priorities. This process should inform Environmental and Social Impact Assessments, when needed.*
- ***Detailed design*** *- Detailed design of the project including, e.g., architectural/engineering plans, specifications, cost estimates (incl. O&M needs) etc. It can be done through contractors.*
- ***Detailed cost estimate*** *- Descriptions and measurements of all construction items required, along with detailed costs. This estimate is compiled from the detailed design, usually in the format of bill of quantities, and may be developed by contractors.*
- ***Dissemination*** *– Sharing the information about the project with the affected community and key stakeholders to ensure buy-in and support.*

2. Capital investment: these are usually the highest costs and incur over a relatively short period of time.

This phase includes compiling costs for the following:

- ***Procurement*** *– This includes all the necessary documents the contractor will need to estimate the cost and proceed with the construction. It may cover procurement conditions, project specifications, architectural drawings, and other relevant details.*

- ***Construction*** *– The actual execution of the construction work by the contractor selected during the procurement phase.*

- ***Supervision*** *– A quality assurance process to ensure that the construction complies with the detailed design, procurement specifications, and local regulations and standards.*

3. Operational costs: The expenses associated with maintaining and operating projects can be significant and extend over a long period. However, there are strategies that can be implemented to minimize the financial burden of these long-term costs, particularly for initiatives that serve the public good.

This phase includes compiling costs for the following:

- ***Operation and Maintenance (O&M)*** *- Program for ongoing O&M, focusing on strategies to reduce long-term maintenance costs. This may include utilizing local skills and materials, enforcing measures to limit major repairs and extend equipment lifespan, ensuring safe and functional systems over time, and planning for O&M financing. For example, cities could explore forming partnerships with local stakeholders, such as NGOs, schools, and community organizations in nearby neighbourhoods, to support activities like waste cleaning and maintenance. This approach can foster project ownership, enhance sustainability, and reduce costs.*

Guiding questions

In many projects, ongoing costs are primarily driven by personnel expenses (e.g., staff required for tree maintenance, experts delivering programs related to environmental or health monitoring, or public awareness and engagement) and production costs (e.g., maintenance materials). Consider the following:

- **What are the fixed costs?** For Nature-based Solutions (NbS) projects, fixed costs may include personnel expenses for a team of gardeners conducting maintenance, where costs remain constant regardless of activity levels.

- **What are the variable costs?** In NbS projects, variable costs may fluctuate, such as the number of trees that need to be replanted annually or the amount of fruit harvested from the trees.

- **Is there scope for economies of scale?** Within our scope, economies of scale might be achieved by purchasing trees or materials in bulk, which could result in discounted pricing.

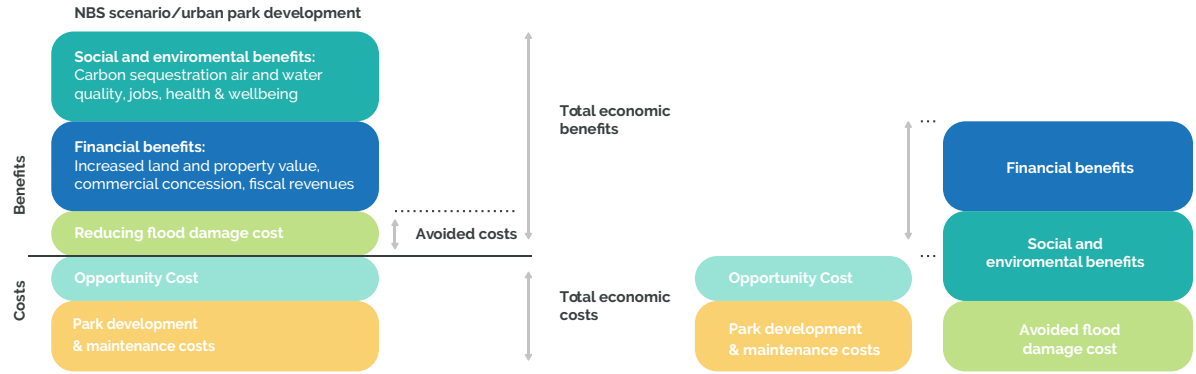
STEP 3: Develop a funding strategy and identify instruments

Strategy

- Overall, securing and maintaining high-level political and public administration support is crucial for successfully accessing funding. To achieve political backing, alignment is required between the top-down approach (city vision, strategies, and planning processes) and the bottom-up approach (citizen and community participation and co-creation). Additionally, developing sustainable business models is key to building a solid business case, positioning the pilot project as a pathway to unlocking large-scale investment. This is typically the first step in demonstrating the feasibility of scaling the adaptation initiative across the entire city [7] .

Although accessing finance for adaptation measures is often challenging, it is still possible to build a business case for piloting Nature-based Solution (NbS) projects. The benefits of climate adaptation interventions can be quantified through methods like Natural Capital Accounting (NCA) and Cost-Benefit Analysis (CBA), which help establish economic value indirectly. These approaches consider a range of economic, social, and environmental benefits. Compared to grey infrastructure, NbS offers co-benefits that can be both valued and accounted for, such as improved health and wellbeing, better air quality, job creation, enhanced biodiversity, and increased land and property values. Additionally, NbS projects can help reduce costs by preventing the damage caused by floods, such as disruptions to infrastructure, housing, and public health (e.g., through the reduction of vector-borne diseases).

While climate change is often the responsibility of a single municipal department, a more coordinated approach involving various departments—such as health, public safety, and risk management—can unlock funding from multiple sources and better address these challenges. This cross-departmental collaboration can also help municipalities capture and quantify these avoided costs more effectively. A great approach to achieve this strategy is weighting the long-term benefits of NbS against the costs associated with its implementation and upkeep. The diagram below, from the publication "Smart, Sustainable and Resilient cities: The Power of Nature-based Solutions, Annex II" [8] provides an example of CBA. It illustrates how to consider the avoided costs and added benefits of NbS in relation to the opportunity and maintenance costs, when planning an urban park as a NbS.



Source: UNEP (2022). Smart, Sustainable and Resilient cities: the Power of Nature-based Solutions - Annex II: Financing Nature-based Solutions for Smart, Sustainable and Resilient Cities, available at: https://www.unep.org/resources/report/smart-sustainable- and-resilient-cities-power-nature-based-solutions

7 Siobhan McQuaid (2019), Financing and Business Models Guidebook, available at: https://connectingnature.eu/sites/default/files/images/inline/Finance.pdf
8 UNEP (2022). Smart, Sustainable and Resilient cities: the Power of Nature-based Solutions - Annex II: Financing Nature-based Solutions for Smart, Sustainable and Resilient Cities, available at: https://www.unep.org/resources/report/smart-sustainable-and-resilient-cities-power-nature-based-solutions

As noted in the introduction to this section, although we are focusing on a highly localized project, it operates within a broader national and international context. The local level allows for the development of pilot projects directly with neighbourhoods. The strategy used here, is that from this experience, the acquired knowledge and experience can then be replicated in an improved way to other public spaces of the given neighbourhoods or in other neighbourhoods in the city. Alternatively, it could also be replicated on a regional scale by partnering with other nearby cities, composing for example, a system of interconnected public spaces adapted to climate change, which could be part of, e.g., a green infrastructure plan from the city.

Instruments

There are numerous examples of lists of instruments used by municipalities that can be adapted to suit the criteria of the scope of this approach. The Cities Climate Finance Leadership Alliance (CCFLA) has recently developed a useful 'Financial Instruments Toolkit' which allows filters by different categories. These financials instruments can be used to finance urban adaptation projects in disadvantaged communities. Examples of the instrument categories, together with the names of the financial instruments are listed below:

Guiding questions

- Is there sufficient political buy-in?
- If not, what steps can be taken to secure it?
- Is the business model viable?
- What financial instruments are available for this project?
- What instruments have been successfully used in similar contexts or for similar projects?

- **Municipal own source revenue (OSR) and Policy steering instruments**
  - Land sales or auctions
  - Land or infrastructure leasing
  - Property tax
  - Development charges
- **National government transfers**
  - Intergovernmental transfer
  - Revenue support
  - Ecological fiscal transfers (EFT)
- **International climate finance**
  - Technical assistance grants
  - Viability gap funding
- **Payment for ecosystem services (PES)**
  - National payment for ecosystem service (PES) schemes
  - Public-private payment for ecosystem service (PES) schemes
  - Stand-alone voluntary payment for ecosystem service (PES) agreements between buyers and sellers
- **Individual and community financing**
  - Crowdfunding
  - Community fund
  - Philanthropic organisations and charities.

You can further explore other instruments and descriptions by clicking the link:
CCFLA financial instrument toolkit

Reducing costs

In implementing climate adaptation projects, municipalities often face significant financial constraints. However, there are several strategies that can help reduce costs while ensuring the project's success. One of the most effective approaches is to create and maintain partnerships with relevant stakeholders and interested parties [9]. These partnerships can take many forms, such as collaborations with local NGOs, private sector entities, universities, or community groups. By sharing responsibilities and resources, municipalities can alleviate the financial burden of the project. For instance, stakeholders might contribute expertise, materials, labour, or even co-financing opportunities. These collaborations not only reduce upfront costs but also foster community ownership, long-term sustainability, and shared benefits, making the project more resilient in the long run.

Guiding questions

- **Are there opportunities to partner with other social service providers to help reduce costs, such as through shared responsibilities for public space maintenance?**
- **How can volunteers be engaged to lower maintenance costs?** Community involvement in tasks like cleaning or upkeep can significantly reduce expenses while enhancing local ownership.
- **Can adjustments in project delivery, such as alternative planting techniques, help reduce maintenance costs?** For example, using low-maintenance or native plants could lessen the need for frequent care and thereby cut ongoing costs.

Public Funding Instruments and Mechanisms

Whilst this document does not focus on repayment instruments and revenue-generating options, there can be useful and efficient ways for citizens or enterprises to generate some income to finance initiatives through 'land value capture'.

There are various public funding instruments and mechanisms opportunities that municipalities can tap into as an alternative to the repayment instruments and revenue-generating options. Examples of such mechanism that are available in South Africa or Mexico entail (not limited to):

- **Betterment levies:** Capturing the value generated by public projects.
- **Taxes:** Pooling funds from sectors that benefit from the project, such as healthcare.
- **User fees:** Charging for the use of public facilities/spaces (e.g., parks or medical facilities) for renting the place for events or general entrance.
- **Developer contributions/charges:** Fees required for building permits.
- **Offsetting/compensation-linked funds:** Compensation required for developments that negatively impact nature or increase climate change risks.

9 Siobhan McQuaid (2019), Financing and Business Models Guidebook, available at: https://connectingnature.eu/sites/default/files/images/inline/Finance.pdf

Regulatory planning instruments: Mandating private stakeholders to implement adaptation measures (e.g., requiring new land developments to include green spaces with nature-based solutions).

Please note that the list of potential public funding instruments and mechanisms that municipalities can explore does not only have to be limited to the above items.

To access such funding, it is important to be able to capture the value created through relevant indicators, such as those outlined below.

Economic indicators:

- Increase in land value (commercial/residential), for example, in proximity to parks.
- Increase in housing prices (property-related taxes).
- Increase in commercial property value (property tax & rate charges).

Contribution to local economy:

- On-site businesses benefit from increased foot traffic and usage.
- Technology transfer and upskilling of local firms.
- Creation of new jobs and enterprises (e.g., eco-tourism), emerging business clusters, and new markets fostered through incentives and subsidies.
- Enhanced attractiveness of the area for new businesses, stimulating inward investment and a vibrant start-up environment.

Market prices:

- Individual income generation or cost savings, such as producing food via urban agriculture or reducing energy expenses with green roofs.
- Utilization of spaces like parks as carbon sinks to contribute to climate resilience.

Guiding questions

- What are the direct revenue generation possibilities from the planned activities?
- What indicators can be used to capture non-monetary value, such as environmental, social (including health and well-being), and economic indicators?
- Which partners have aligned interests in achieving these non-monetary indicators?
- Are there opportunities to co-create joint programs with these partners to reduce or share delivery costs? Could this collaboration unlock new funding opportunities?
- Explore alternative funding sources such as philanthropy, corporate social responsibility (CSR) programs, or crowd-funding platforms.

STEP 4: Identify funding sources

A landscape and stakeholder database or mapping tool can be valuable for tracking specific funding sources for these types of projects. It also helps monitor national or international calls for small-scale projects in areas such as adaptation, environment, climate change, public spaces, or neighbourhood development.

Cities can identify financing opportunities in a range of sectors such as forestry, water, energy, urban planning, urban development infrastructure, construction, industry, transport, waste, and technology, amongst others. They should also be on the lookout for the grants provided by the various types of funders: private, public, international or public/private mix.

Box 2: **Selected funding options for adaptation measures in Mexico**

Many options for financing climate action projects are available in a range of sectors, including in forestry, water, energy, urban planning, urban development infrastructure, construction, industry, transport, waste, and technology.

Two options of financial schemes that can be explored by cities in Mexico for funding their small-scale interventions in public spaces include:

- **Programa FAIS – BANOBRAS**
  - The Banobras-FAIS Program is a financial scheme that supports investments into initiatives that benefit and prioritise the population that is in extreme poverty.
  - This funding scheme exclusively finances projects such as drinking water; sewerage; drainage; electrification; basic infrastructure of the educational sector and the health sector; housing and urbanisation improvements. Thus, it provides an opportunity for possible scalability in the future where cities can combine smaller projects across different departments into one large project.
  - The financial scheme is designed so that the municipalities' finances are not compromised in future and that debt is not inherited to another administration, making it viable for small-scale pilot projects using NbS in public spaces.
- **Fondo de Cambio Climático**
  - The Special Climate Change Fund (SCCF) was established under the United Nations Framework Convention on Climate Change to finance programmes under the various categories, one of them being adaptation to climate change (water resource management, land management, agriculture, health, infrastructure development, fragile ecosystems, integrated coastal zones, climate-change related disaster risk management). Thus far, only the facilities related to adaptation to climate change and technology transfer have largely been operational.

- The funding scheme identifies that the activities to be funded should be country driven, cost-justified and should incorporate poverty reduction strategies. Given these requirements, there is an opportunity for cities to use the aggregation model (partnering with other cities at a regional scale) to meet the minimum requirements of the funding and achieve higher impacts that they can capitalise by demonstrating avoided costs and added benefits in their proposal to justify the viability of NbS projects.

Box 3: **Selected funding options for adaptation measures in South Africa**

There are grants available in South Africa which target numerous areas including: water, urban settlements, integrated city development and public transportation. To access the grants, municipalities are expected to fulfil eligibility criteria which are dependent on the nature of the grant. Although some grants may be eligible only for specific regions or are currently suspended, possibilities to be explored include:

- **Municipal Infrastructure Grant = CoGTA**

- The aim of the Municipal Infrastructure Grant (MIG) is to eradicate municipal infrastructure backlogs in poor communities to ensure the provision of basic services such as water, sanitation, roads and community lighting. The Department of Cooperative Governance (CoGTA) is responsible for managing and transferring the MIG and provides support to provinces and municipalities on implementing MIG projects.

- The areas supported by the grant are directly related to the scope of the approach proposed in this guide, such as basic household services for poor households and public municipal facilities. Further checking on the calls for proposals might be checked, as the grant might be on hold.

- Neighbourhood Development Partnership Grant – National Treasury

- The Neighbourhood Development Partnership Grant (NDPG) is aimed at spatial transformation that will improve the quality of life and access to opportunities for under-served residents living in metropolitan municipalities and secondary cities in South Africa.

- Municipal urban networks and infrastructure are the target areas that overlap with the scope proposed in this guidance. Nevertheless, limited municipalities are entitled to apply, requiring further check on the eligibility criteria depending on the city.

Other possibilities worth checking the status in South Africa when planning adaptation measures in public spaces are the Urban Settlements Development Grant and the Integrated City Development Grant.

Guiding questions

- What sources of finance are available - at different levels (neighbourhood / municipal / national / international)?
- What funding channels and instruments are accessible through these sources?
- What sources are applicable to a project in the specific city/neighbourhood?
- What sources can be accessed at a later stage, when the project is ready to expand or scale up?

STEP 5: Secure funding

The next step involves putting in place an action plan to follow up, contact these partners and secure the sources of finance identified[10] . A common challenge at this stage is finding personnel with both sectoral expertise and finance knowledge. In many municipalities, such expertise is often siloed or even absent, making it crucial to build partnerships and tap into new sources of finance.

The engagement strategy will vary depending on the type of funder and should include the following activities:

a. Public finance

- Explore opportunities for financing and co-financing from different public sector departments or agencies (e.g. taxes, user fees, development contributions etc.). For small-scale pilot adaptation projects in public spaces, municipalities can pool funding from different departments, leveraging co-benefits to innovate how public budgets are used. This approach is particularly relevant when implementing NbS. For example:
  - **Health:** given the improvement of air quality or decrease in costs spent with vector-diseases due to flood-management measures.
  - **Environmental:** given the importance of a system of green spaces being interconnected for the biodiversity.
  - **Sports:** develop multi-functional green spaces that can be used for outdoor activities, and at the same time, address surface flooding.

10 Author analysis and Siobhan McQuaid, Centre for Social Innovation, Trinity College Dublin & Isobel Fletcher, Horizon Nua (2021), Financing and Business Models Guidebook, available at: https://connectingnature.eu/sites/default/files/images/inline/Finance.pdf

- **Education:** make use of interventions at school grounds as an opportunity for student learning and benefits to the environment.

  It's ideal to develop and put in place new instruments to stimulate investments in these solutions e.g. through taxes and subsidies.

b. Multilateral and bilateral

Please note that in the context of the scope proposed here, there are limited multilateral and bilateral funding opportunities for small-scale adaptation projects, such as the one proposed in the *CitiesAdapt's* Model Approach. Accessing multilateral and bilateral funding is more feasible for cities when they leverage an aggregation model, allowing them to combine small-scale interventions into larger projects for funding applications. The following activities are relevant for securing multilateral or bilateral financing:

- Identify eligibility criteria and suitability of multilateral or bilateral sources, including programmes and funds.

- Prepare applications/bids for financing. This may include public sector financing e.g. local, national or EU grant financing opportunities or financing from charities and philanthropic organisations.

c. Private sector

- Assess suitability and attractiveness to private sector, including:

- Determine if the action is likely to generate a predictable future revenue stream that can cover the costs and/or generate profit - e.g. green-roofs savings on energy costs from AC - or if the government may consider directly paying private sector investors - e.g. a public–private partnership to fund NbS in public spaces.

- Consider tapping into corporate finance for projects that might fulfil corporate social responsibility obligations or carbon credit schemes.

d. Combination

There are potential options and structures combining private and public sources of finance. For example, Public-Private Partnership (PPP) arrangements comprise a long-term cooperative agreement between the government and a private company to deliver a particular service or infrastructure asset.

Municipalities are able to mobilize additional capital from private sector (PPPs) in order to obtain financial instruments that are cheap, through the combination of different sources allowing to share risk among parties and expand available funding opportunities.

For effective Public-Private Partnership (PPP) agreements, a robust legislative framework governing these arrangements is essential in the country where the project is being implemented. One example of a PPP for the scope proposed here, is a public space intervention or maintenance in exchange for the installation of marketing signs from the private company on the site.

The COMEX partnership in Mexico serves as an excellent illustration of a collaboration focused on fostering resilient communities through NbS. This partnership funds tactical urbanism activities aimed at raising community awareness before the permanent construction of the pilot project in the CitiesAdapt's experience.

Box 4: **COMEX Partnership in Mexico – Example of a private-sector collaboration**

- Private-sector collaboration with COMEX: COMEX, a paint and construction manufacturer, is a partner from the private initiative, investing €50,000 per city as part of collaboration. The PPP intended to create resilient communities through nature-based solutions, via collaboration between SEDATU, GIZ (CitiesAdapt project), COMEX, the city of Merida, and a local implementing partner. The deliverables include a public space intervention with green infrastructure, urban furniture, and painted murals. This project is a result of a co-investment with the private sector to promote the social impact in cities with high climate vulnerability.

Source: Cities Adapt Demonstration Project | Mérida Case Study

Guiding questions

- Which types of finance providers should be prioritized for engagement?
- What funding criteria do these providers require?
- What steps are necessary to access their funding?
- If a project proposal needs to be developed, do the project proponents possess the necessary capacity, resources, and skills?

STEP 6: Consider growth/scale up options

As mentioned earlier, while this approach primarily targets small-scale projects, it also aims for growth and scalability by transitioning from pilot projects to citywide implementation or by collaborating with neighbouring cities. Some approaches are presented below:

Leverage strategic partnerships[11]

There are numerous examples of raising funding through philanthropic contributions, corporate donations, and crowdfunding. Some of these sources may also help leverage additional public or private sources of

11 Author analysis and Siobhan McQuaid, Centre for Social Innovation, Trinity College Dublin & Isobel Fletcher, Horizon Nua (2021), Financing and Business Models Guidebook, available at: https://connectingnature.eu/sites/default/files/images/inline/Finance.pdf

financing. A key consideration to subnational governments is **'blended finance'**, in the form of instruments that can leverage and catalyse private sector funding. Although blended finance is a significant source of climate finance, the available disbursement does not match the investment needs.

Considering that blending approaches are more accessible towards larger public-sector project investments, cities would need to use an aggregation model to meet the minimum criteria for blended finance requirements.

Guiding questions

- Is there potential among key partners and beneficiaries to co-invest in the capital costs?
- Do any elements of the project align with different sources of capital investment funding opportunities at regional, national or international levels?
- Are alternative sources of financing an option e.g. crowd-financing, CSR grants, third sector funding programmes?
- If there are ambitions and opportunities to scale up, is there an interest in exploring external sources of financing e.g. blended financing options or green bonds?

Make use of Project Preparation Facilities (PPFs)

Project Preparation Facilities (PPFs) are well placed in helping municipal governments and other public sector entities in small and intermediary cities unlock greater access to finance for climate projects [12] in larger scale and higher impact. They offer support to bridge gaps in municipal capacity, skills, and financial access through capacity development activities and the creation of studies that identify feasible, bankable climate action projects.

To address the issue of poor creditworthiness in cities, PPFs can help design blended finance and risk mitigation tools, develop public-private partnership (PPP) projects that do not necessitate municipal borrowing, and facilitate borrowing from national or regional development banks.

- Minimum requirements for PPF applications: A minimum requirement for municipal governments to qualify for these facilities would be to have a small plan and proposal prepared for the aggregation model with the minimum neighbourhood-level or city-level scale and use the implemented pilot project as a strategy to frame its feasibility and business case.
- This is because PPFs look for projects with higher impact, and due to scale constraints, a single pilot project in a public space doesn't fit the minimum criteria. Nevertheless, making use of an implemented pilot can help to make the case for the application. Additionally, the initial proposal that is submitted by the city to PPFs applications should already provide a clear identification of the project (scale, interventions, area) and partners involved (e.g., combination of possible cities). The quality of

12 Cities Climate Finance (2023), Supporting Access to Climate Finance for Small and Intermediary Cities: A Guide for Project Preparation Facilities, available at: PPAG-Small-Cities-Bankability-Guide.pdf

information demonstrated in the proposal will determine the application's acceptance by a PPF.

Examples of PPFs that fit into the project scope of urban infrastructure and NbS are C40 Cities Finance Facility and the City Climate Finance Gap Fund.

Guiding questions

- Which PPFs can be accessed?
- Is the country/city eligible to apply?
- What support do they provide?
- How can support be accessed?

Consider pooling/aggregation options

National Development Banks (NDBs) usually have the mandate and availability to pool different types of funding in blended finance structures to catalyse private sector investment. A wide range of aggregation approaches are available. These include pooled procurement, which allow local governments to increase their bargaining power and reduce transaction costs. Aggregation Platforms support the bundling and potential securitisation of multiple small investments. Aggregation can also be achieved by setting up city-focused funds or facilities or structuring bonds or other asset-backed instruments that can help increase transaction sizes [13] . Pooling projects can also facilitate access to larger funding options such as through the Green Climate Fund.

Guiding questions

- Is a pooling arrangement something the municipality would like to explore?
- What are the costs vs benefits?
- Who would be able to lead on the aggregation?
- Are there National Development Banks that have this capability?
- Are there other similar projects that can be aggregated?

Set up a local climate fund

National, regional, and municipal funds are mutual investment vehicles, where contributions are pooled together to purchase debt securities issued by states, cities, municipalities, and other government entities. These investments finance infrastructure construction, improvements, and repairs. One of the most impactful instruments within this group is the 'revolving fund'. Whilst highly beneficial given financing can be reutilised for other projects, the beneficiary requires a high degree of bankability [14] .

13 Further information available at:
https://citiesclimatefinance.org/publications/financial-aggregation-blueprints-for-urban-climate- infrastructure/
https://citiesclimatefinance.org/wp-content/uploads/2022/06/Financial-Aggregation-for-Cities.pdf
14 Further information available at: https://citiesclimatefinance.org/wp-content/uploads/2022/03/FMDV-factsheet-Local-Climate- Funds-1.pdf

Guiding questions

- Are there opportunities to set up a dedicated climate fund?
- What characteristics would it have? What sectors, projects, instruments?
- Who would be able to establish and finance it?

Greening city budgets

Given the large gap in financing at the urban level especially for small-scale adaptation projects, municipalities need to ensure that their budgets are aligned with their climate goals. Reframing how public funds are allocated to prioritize budget for climate resilience, goes beyond simply allocating money for "green" projects. To achieve these objectives, efforts should be placed in embedding sustainability principles into the structure of a city's financial and operational system.

It might be necessary for cities to introduce new processes for collaboration that break down silos across departments and invest in human resources to build capacity and skills for green budgeting, among other efforts [15] .When it comes to considering climate and resilience topics in financial frameworks and policies, a practical example could be evaluating an infrastructure project of a flood-resistant measure, not only on cost of utility, but also on the carbon footprint and the potential to withstand climate impact.

Guiding questions

- Are municipal or national budgets already aligned?
- If so, can more budget be allocated to the project or other similar projects?
- If not, what can be done to further green the budget(s)?

15 Further information available at: https://citiesclimatefinance.org/wp-content/uploads/2022/03/Greening-City-Budgets-Practical- Approaches.pdf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Access to **Finance** for **Adaptation Measures** at the **Hyper-local** Level Guide

— as part of the **CitiesAdapt's**

Future-Proofing Our Neighbourhoods: Your How-to Guide on Hyper- Local Climate Adaptation Measures