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ROOTED IN NATURE:

Advancing Nature-Based Solutions from National Policy to Local Action Across NDCs, NAPs and NBSAPs

FACTSHEET

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Executive Summary

Escalating climate-related extremes and slow-onset processes indicate that the global climate system is facing increasing risks driven by human-induced warming. Global average temperatures between 2023 and 2025 exceeded 1.5°C above pre-industrial levels for the first time in any consecutive three-year period. These global signals are now felt acutely in cities through unprecedented heatwaves, floods, and climate-related disasters, placing increasing pressure on urban systems and practitioners' ability to manage risks.

Against this backdrop, the need for multilateral climate action at the local municipal level, targeted at the benefits of socioeconomic development, biodiversity and climate resilience, is ever pressing.

Cities, home to over half the world's population and major contributors to global greenhouse gas emissions, are increasingly vulnerable to the impacts of climate change. Yet their density, economic weight, and governance capacity make them critical leverage points for advancing national climate ambition and translating Nationally Determined Contributions (NDCs) into tangible action on the ground.

The NDCs submitted ahead of COP 30 in Belém, Brazil, in November 2025, pointed to a growing inclusion of urban responses and vulnerabilities into countries' ambitions. This shift is echoed by local municipal governments around the world that are pioneering mitigation, adaptation and resilience efforts. However, implementation delivery is not taking place at the speed needed, and delivery and policy coordination across national to local municipal domains remains largely inconsistent when it comes to climate and biodiversity agendas.

Nature-based solutions (NbS) offer a powerful pathway for addressing these challenges. Urban NbS can reduce heat stress, regulate temperatures, enhance stormwater management and mitigate floods. They improve air and water quality, restore habitats and ecological connectivity, and create social and health co-benefits, from better urban well-being and public spaces to stronger community engagement. When well designed and locally grounded, NbS help cities build resilience while contributing to national mitigation and adaptation targets.

This Factsheet demonstrates how multilevel governance can unlock this potential, based on tried and tested approaches developed by several cities around the world. The information and tools presented in this Guide aim to support practitioners both at the national and local municipal levels:

For national governments, it offers steps to embed urban NbS within climate and biodiversity strategies, align regulatory, legislative and fiscal instruments, and strengthen enabling environments that reduce risk and mobilise investment, thus presenting concrete ways that NbS can be mainstreamed into NDCs, National Adaptation Plans (NAPs), and National Biodiversity Strategies and Action Plans (NBSAPs).

For local municipal governments, it presents approaches and tools to integrate NbS into urban plans and strategies, develop credible project pipelines and leverage different types of soft and hard policy instruments when prioritising nature in urban areas.

Key Messages

1. **Multilevel governance is a ladder for ambition and implementation of national climate priorities:** The relevance of the synergies between municipal and national ambition, as put forward by countries' NDCs, NAPs, and NBSAPs is essential, given that a complementary approach across NDCs, NAPs, and NBSAPs can drive and guide more coherent national to local municipal strategies that support sustainable development within cities and at a broader regional level. Aligned efforts can strengthen transparency and budgetary prioritisation, supporting finance and institutional arrangements that support nature and help address multiple societal challenges.

2. **Addressing policy gaps to secure financing is key:** Cities are better positioned to scale and attract finance for NbS when national systems provide business-friendly investment environments, eligibility rules and de-risking instruments. Embedding financial approaches for NbS into fiscal, regulatory and economic frameworks is a powerful tool to accelerate NbS implementation at the national, regional and municipal levels. Policy-based strategies for NbS enhance recognition of the economic contribution made by nature, as shown by local tax incentives, payments for ecosystem services and environmental subsidies. These tools help make urban NbS a central part of urban infrastructure finance, complement private co-financing and support sustainable project implementation over the long term.

3. **Instruments for municipal mainstreaming of urban NbS are complementary and span from soft to harder policy measures:** Evidence from cities shows that no single instrument is sufficient on its own; regulations provide direction, fiscal tools unlock investments, cooperative agreements mobilise communities and institutions, and knowledge systems strengthen design, monitoring and adaptive management. Rolling out and testing real-life proof of concepts is essential for securing municipal buy-in and successfully mainstreaming urban NbS into planning. Insights gained from replicable pilots attract funding and inform and strengthen regulations, creating a positive feedback loop where evidence from practice drives policy, and policy, in turn, supports wider implementation.

4. **Local Municipal Proof Drives National Change: Pilots Become Policy When Cities Lead on NbS:** Case studies from the United Nations Environment Programme's (UNEP) projects show how technical feasibility, community buy-in and measurable climate benefits translate into reforms at scale. Rolling out and testing real-life proof of concepts are key to enabling the local municipal buy-in for urban NbS practices and their successful mainstreaming in urban planning. Replicable pilots can further attract funding and support learning and the institutionalisation of urban NbS.

How to Link Municipal Implementation of NbS to National Climate and Biodiversity Strategies

The interplay between local and national policies is central to effective climate and biodiversity action.

National frameworks often set the overall direction and priorities, shaping the policy environment within which local governments operate.

At the same time, cities and regions play a critical role in driving ambition forward, with local innovation and implementation helping to inform and strengthen national agendas.

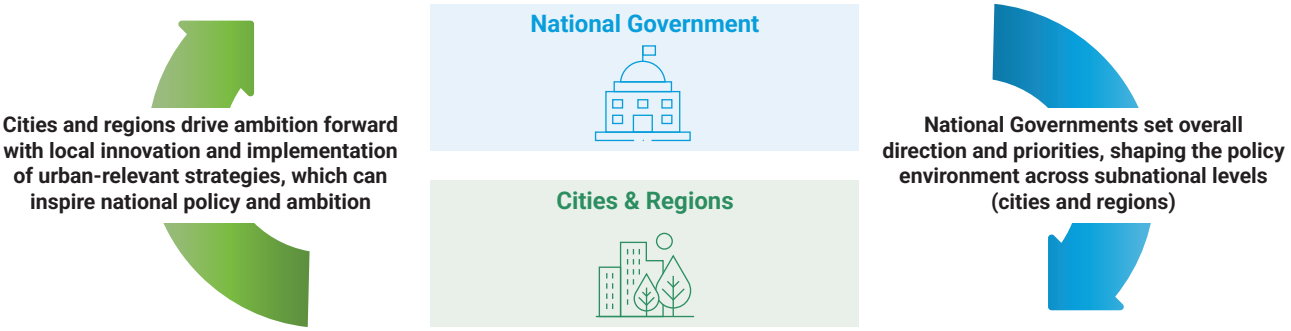
This way, policymaking is not linear but iterative, with national and local levels continuously influencing one another (see Box 1 on multilevel governance and its links to global climate and biodiversity agendas).

Recognising and actively fostering this synergy is essential.

- When national and local policies are aligned, they can reinforce each other, enabling more coherent strategies that support sustainable development both within cities and at broader scales.
- Such alignment also improves transparency and helps prioritise public spending, creating more favourable conditions for financing and institutional arrangements that support nature-positive approaches.

Nature-based Solutions (NbS) play a particularly important role in bridging national and local climate policies. By addressing mitigation, adaptation, and biodiversity objectives simultaneously, NbS offer a practical entry point for integrated action. This role has become increasingly visible in recent global policy developments.

- The 2025 round of Nationally Determined Contributions (NDC 3.0), submitted to the United Nations Framework Convention on Climate Change ahead of COP30 in Belém, demonstrates a stronger and more targeted focus on urban challenges and implementation (UN Habitat 2025).
- These updated NDCs increasingly adopt a sectoral perspective, with notable links to infrastructure, ecosystems and biodiversity, and water management.
- More broadly, they reflect a growing shift towards multilevel governance approaches that seek to better connect national, regional, and municipal actors in a cohesive and aligned manner. (Ibid)
- This direction is further reinforced by international frameworks such as the Sendai Framework and the Convention on Biological Diversity, which call for the mainstreaming of ecosystem-based approaches across all levels of governance. (NAP Global Network 2020; United Nations University 2024).



Recent updates to the NDCs also signal growing support for NbS, alongside more concrete efforts to embed them within National Adaptation Plans (NAPs) and National Biodiversity Strategies and Action Plans (NBSAPs). (Cook *et al.* 2025; United Nations Development Programme 2025).

Across these national policy instruments, countries are increasingly using ecosystem restoration and green infrastructure to reduce emissions, strengthen resilience to climate hazards, and enhance biodiversity protection. However, important gaps remain. For example, reviews of climate risk assessments within NAPs indicate that urban ecosystems continue to receive significantly less attention than other ecosystem types, pointing to a clear opportunity to strengthen ambition and integration in urban contexts (Terton, Qi and Jang 2024).

Recent advances in climate policy reveal how cities and regions actively reach for NbS to address local challenges, while mainstreaming in broader national directions (Diep et al. 2025; Mosisa et al. 2025; UNEP-CCC 2025a). For example:

In Denmark, the city of Copenhagen applies cloudburst parks, green streets and multifunctional public spaces to manage extreme rainfall, core components of Denmark's nationally guided climate adaptation framework (City of Copenhagen 2011; Ministry of Environment of Denmark 2023).

In Medellin, Colombia, the city has implemented its "Green Corridors" initiative to reduce heat and improve air quality, aligning with Colombia's previous national NDC commitments to expand urban green infrastructure (UNEP 2019). The City now has 26 green corridors covering over 92,000 m² of urban gardens, with new additions completed in 2024-2025 under its development plans (Alcadia de Medellin 2026).

Together, these examples illustrate how stronger integration of NbS across governance levels can help translate national ambitions into tangible local outcomes, while ensuring that local innovation continues to inform and elevate national policy.

Copenhagen, Denmark © UNEP-CCC

BOX 1

What is Multilevel Governance, and How Does It Apply to the Global Climate and Biodiversity Agendas?

Multilevel governance refers to coordinated action across national, regional and local governments, ensuring that national goals, regional strategies, and local implementation reinforce one another (UN-HABITAT 2025). It helps translate national ambition into local results by strengthening shared authority, accountability and trust.

For global climate and biodiversity frameworks, this coordination is essential. Under the Paris Agreement, national climate commitments rely heavily on local implementation, especially for adaptation, land-use planning and resilience-building. Cities and regions also contribute to national reporting and transparency processes.

Likewise, the Kunming-Montreal Global Biodiversity Framework (GBF) acknowledges that while targets are set nationally, outcomes depend on local action. Effective vertical coordination ensures that national policies, regulations, and finance enable local governments to conserve ecosystems, expand green–blue infrastructure, and manage nature-related risks.

Multilevel governance enhances climate and biodiversity outcomes by:

- Aligning national policy signals with local mitigation, adaptation, and restoration actions.
- Supporting collaboration among institutions and non-state actors.
- Enabling cooperation across jurisdictions, such as shared watershed or cross-border city initiatives (United Nations Department of Economic and Social Affairs 2024).
- Building local capacity to deploy NbS that reduce climate risks and support biodiversity.

For urban NbS, this coordination is especially important. While the GBF does not impose obligations on cities, it stresses the need for national frameworks that empower local governments to integrate NbS into urban planning and deliver resilient, inclusive urban development.

Multilevel governance is at the centre of a well-coordinated approach related to national and municipal alignment regarding urban NbS. Pioneering national and local governments are taking concrete steps to align local and national ambition and implementation, demonstrating possible pathways to transform this alignment into concrete opportunities for socioeconomic development and human well-being. Visit Chapter 5 to learn of concrete ways cities are advancing multilevel governance and mainstreaming NbS into plans and strategies.

Local climate action at the municipal level can be leveraged to support national climate ambition and implementation under member states' submissions to the United Nations Framework Convention on Climate Change (UNFCCC) and to the Convention on Biological Diversity (CBD). Under these two conventions, the relevant entry points are the NDCs, NAPs, and NBSAPs, as discussed above. Given their relevance for setting the tone for national strategies and sectoral plans and for providing lighthouse guidance related to climate finance, capacity building mechanisms, transparency and institutional arrangements, the NDCs, NAPs, and NBSAPs are fundamental entry points for local climate action, where urban NbS can play a significant role (Figure 1).

FIGURE 1 | **CONNECTING GLOBAL CONVENTIONS TO LOCAL ACTION – ENTRY POINTS FOR MUNICIPAL ENGAGEMENT IN NDCS, NAPS, AND NBSAPS**

CONVENTIONS

United Nations Framework Convention on Climate Change (UNFCCC)

Convention on Biological Diversity (CBD)

FRAMEWORKS

Paris Agreement

Time of establishment:
Adopted by 195 parties during COP 21 in Paris in 2016

What it is:
The main objective of the Paris Agreement is "to hold the increase in the global average temperature to well below 2°C above pre-industrial levels, and pursue efforts "to limit the temperature increase to 1.5°C above pre-industrial levels" (UNFCCC 2015)

Party Expectations:
The Paris Agreement follows a five-year cycle in which member states are expected to submit increasingly ambitious national climate plans known as NDCs
(UNFCCC 2015).

Global Biodiversity Framework (GBF)/The Kunming-Montreal Global Biodiversity Framework

Time of establishment:
Adopted by parties during the CBD at its COP15 meeting in Montreal, Canada, in 2022.

What it is:
The Framework establishes a direct link between biodiversity protection, ecosystem restoration, human wellbeing, particularly that of indigenous peoples, and local communities. It includes four concrete goals for the year 2050 and 23 targets for 2020 (CBD 2022).

Party Expectations:
By adopting the Kunming-Montreal Global Biodiversity Framework, all Parties agreed to establish national targets to support its implementation. Meanwhile, other stakeholders have been encouraged to create and share their own commitments (CBD 2022).

Nationally Determined Contributions (NDCs)

What they are:
NDCs are the official climate action plans submitted by each country under the Paris Agreement. They present how countries will reduce GHG and adapt to climate change.

Timeline:
NDCs run with a five-year update cycle. Countries are required to submit new, more ambitious plans every five years. The most recent major update, referred to as NDC 3.0, was due in 2025 and sets climate action targets for 2035.

National Adaptation Plans (NAPs)

What they are:
The main rationale of NAPs is to support member states' medium- to long-term planning with regard to the impacts of climate change. NAPs have two primary objectives:

(a) To reduce vulnerability to the impacts of climate change by building adaptive capacity and resilience, and

(b) to facilitate the integration of climate change adaptation into relevant new and existing policies, programmes and activities coherently, in particular development planning processes and strategies, within all relevant sectors and at different levels, as appropriate. (See UNFCCC 2023, decision 5/CP.17, par. 1)

Timeline:
The UNFCCC has established a timeline for NAPs, where developing nations should have their plans completed by 2025. By 2030, member states are expected to demonstrate substantial advancement in implementing their NAPs. (See UNFCCC 2023, decision 7/CMA.3)

This timeline is designed to strengthen countries' capacities to manage the effects of climate change and enhance long-term resilience.

National Biodiversity Strategies and Action Plans (NBSAPs)

What they are:
Aligned with the GBF, NBSAPs describe how member states intend to conserve and restore their natural environment and biodiversity (CBD n.d). These strategies play a vital role in driving collective efforts and obtaining financial support for biodiversity restoration.

Timeline:
NBSAPs have no fixed cycle to be updated by parties; instead, they are expected to follow the CBD strategic shifts.

New or revised NBSAPs were due in 2024, following the adoption of the Kunming-Montreal GBF.

2024-2025 (currently ongoing): Member states are working on completing and submitting their revised NBSAPs, facing challenges like funding shortages, administrative delays, and political changes.

2026: The first global review of progress under the GBF will take place, drawing on data from updated NBSAPs and national biodiversity reports

SUBNATIONAL ENTRY POINTS AND URBAN NBS LINKAGES

NDCs

The NDCs are increasingly taking multi-level governance into account, setting a solid framework for the development of local climate plans for mitigation and adaptation (UN-HABITAT 2025). Subnational actors (cities, regions, provinces) are critical for delivering emission reductions and building resilience. (UN-HABITAT 2023).

Climate Adaptation
Subnational governments have better access to granular data related to urban climate risks and impacts, which can inform the development of the adaptation component of the NDCs (UNEP 2022). By examining how cities respond to climate impacts, it becomes possible to identify the resources, capacities, and support mechanisms needed to implement adaptation measures, including NbS (Ibid).

Climate Mitigation
Subnational governments are key agents in advancing agendas for decarbonization and can play a prominent role in sectoral greenhouse gas (GHG) emissions decrease (e.g., in the transport sector, buildings, energy, and others) (UNEP 2018). Taking a sectoral lens into account, urban NbS fit well into several sector priorities for GHG reduction, and at the urban level, the integration of NbS can sustain important national and urban agendas, including water management and climate-smart water strategies that can address human vulnerability and GHG emissions (UN-HABITAT 2023; UN-HABITAT 2024d).

NAPs

Strong NAP processes rely on deliberate coordination between national and subnational levels to ensure local realities inform planning and that national frameworks support local implementation, with local authorities and civil society playing key roles in delivering adaptation outcomes (Terton, Qi and Jang 2024). Urban NbS can feature in the three main phases on the NAP process: planning, implementation, and monitoring, evaluation and learning (MEL), particularly given that each phase provides distinct opportunities to integrate ecosystem-based approaches, align adaptation priorities, allocate resources effectively, and track performance and outcomes to inform continuous learning and adaptive management at the national and subnational levels (United Nations University 2023).

NBSAPs

On the biodiversity side, NBSAPs are the result of national priorities that are heavily built on local realities related to environmental degradation and biodiversity loss.

In some countries, the development of subnational strategies and action plans enhances the reach of NBSAPs at the local level and fosters the development of relevant institutional arrangements for addressing biodiversity priorities.

Urban NbS fit particularly well in the CBD's Plan of Action on Subnational Governments, Cities and Other Local Authorities for Biodiversity (2011–2020) and in the **Subnational and Local Biodiversity Strategies and Action Plans (BSAPs)** (CBD 2022), which play a significant but underexplored role in bridging biodiversity strategies at the city level.

How to Use National Processes to Scale Urban NbS

As established, nationally driven processes play a prominent role in creating an enabling environment for local climate action, which includes the uptake of NbS to support and strengthen various pressing urban agendas, including for example, food security (Asamoah *et al.* 2025; Mashanye *et al.* 2025; United Nations Economic Commission for Europe 2025), water security (Abera *et al.* 2025), urban cooling (Soltanifard and Amani-Beni 2025; UNEP 2025; World Bank 2022), human health (Cissé *et al.* 2022; Vora *et al.* 2024), and social cohesion, which are agendas where NbS have a strong and scalable potential to mitigate risks (Carvalho *et al.* 2022). Moreover, evidence from the World Bank and recent Intergovernmental Panel on Climate Change (IPCC) assessments demonstrates that these domains are where national governments see the clearest economic and social benefits from climate-resilient urban planning (Dodman *et al.* 2022; World Bank 2022).

National processes become even more relevant when nationally defined priorities and ambitions guide local municipal action across climate, biodiversity, sustainable development and disaster risk reduction. However, local municipal ambition can also be a powerful tool to inspire action at the national level, as some examples in this chapter will demonstrate. Noting that multilevel governance is highly context-dependent and requires collaboration among multiple local and national stakeholders, it is important to keep in mind that there is no single recipe for perfecting synergies across national to local municipal domains and for leveraging national mechanisms to mainstream NbS into city-led plans and priorities.

As such, the recommendations in this part of the Guide have been developed to allow for initial first steps related to the possible synergies at hand across institutional arrangements, legislative and regulatory frameworks, and finance mechanisms. Where relevant, these first steps can also be sequenced to support a stronger pipeline approach, moving from early pilots to portfolios of bankable projects supported by national platforms, standards and blended finance structures.

To unlock the full potential of national-to-municipal coordination on urban NbS, the barriers that hinder effective local implementation must be removed. Table 2 outlines how national stakeholders can turn these barriers into policy levers that accelerate sustainable urban NbS. It presents targeted actions for the executive branch, government agencies and regulators, public financial institutions, state-owned enterprises, and the legislative branch, each aimed at overcoming well-known institutional, financial and regulatory obstacles. These policy levers also strengthen the conditions for climate finance for NbS by reducing policy uncertainty, improving Monitoring, Evaluation and Learning (MEL) systems, disclosure processes, and enabling more standardised project preparation, ultimately lowering perceived risk and helping mobilise capital.

City of Iloilo, Philippines – A UNEP Generation Restoration Role Model City @ Unsplash

TABLE 1 | **PUBLIC INSTITUTIONAL BARRIERS AND OPPORTUNITY PATHWAYS FOR SCALING URBAN NBS**

National Stakeholder	Barrier	Levers
 **Executive Branch** Examples: Office of the President/Prime Minister; Cabinet; Line Ministries (Environment, Housing, Energy, etc.)	Limited awareness and understanding of national–local interlinkages of urban NbS and the multiple public-interest co-benefits, for example, health, disaster risk reduction, biodiversity, liveability, etc. (UNEP-CCC 2025a; BiodiversaPlus 2023)	Strengthen the capacity of top decision-makers to understand cost implications, long-term savings, resource-efficiency gains, and cross-sectoral co-benefits of urban NbS. Enable leaders to compare NbS with grey alternatives and identify national priority areas for investment. This comparison supports clearer funding priorities and coherence across ministries. (Martin *et al.* 2025; UNEP-CCC 2025a).
 **Government Agencies and Regulators** Examples: Environmental Protection Agencies; National Statistics Offices; Public Service Commissions; Energy/Electricity Regulators; National Climate or Environment Councils	Fragmented inter-agency coordination, scattered mandates, limited staff and technical resources, and procurement rules that may unintentionally exclude NbS (Toxopeus and Polzin 2021; International Institute for Applied Systems Analysis 2023; UNDP 2025, UNEP-CCC 2025a).	Establish or strengthen legal and procedural frameworks that enable cross-agency collaboration, shared budget lines, and pooled technical expertise. Ensure procurement policies explicitly allow for, encourage or require NbS where relevant, so NbS are not excluded by default (UNDP 2025; UNEP-CCC 2025a).
 **Public Financial Institutions (PFIs)** Examples: National Central Banks; National/ Local Development Banks; Sovereign Wealth Funds; Housing & Urban Development Finance Corporations; State-Owned Enterprises with financial functions	PFIs face distinct barriers depending on their mandate: ▶ **Central Banks:** prudential and regulatory constraints, limited capacity to recognise NbS-related assets and absence of standardised risk-assessment approaches for NbS. ▶ **Development Banks, Sovereign Wealth Funds, Housing Finance Institutions, SOEs:** high perceived risks, insufficient pipelines of bankable NbS projects, lack of metrics to evaluate NbS performance, and procurement processes that may exclude NbS. Toxopeus and Polzin 2021; Karun 2025; UNEP-CCC 2025a; UNEP-CCC 2025b).	Develop and adopt NbS investment guidelines; integrate NbS into institutional strategies; introduce risk-sharing facilities for urban NbS; help develop viable business models; create standards for measurement, reporting, and verification; and revise internal procurement rules to enable NbS. These actions make NbS more attractive for public and blended finance (NetworkNature, 2024, UNEP-CCC 2025b).
 **State-Owned Enterprises (SOEs)** Examples: Renewable Energy Agencies; National Utility Companies; National Forestry Services	SOEs are central to scaling NbS because of their sectoral reach, but often have mandates focused narrowly on service delivery, entrenched preferences for grey infrastructure, and insufficient internal capacity or finance to support NbS (EIB 2023, UNEP-CCC 2025a, UNEP- CCC 2025b).	Extend SOE mandates to include ecosystem protection, resilience, and hybrid infrastructure solutions. Integrate NbS into SOE planning guidelines and long-term investment strategies. Build staff capacity and establish partnerships with technical experts. Revise procurement policies to enable NbS (NetworkNature 2024; UNEP-CCC 2025b)

National Stakeholder	Barrier	Levers
Legislative Branch Examples: Parliaments; Parliamentary Committees; Senates; Congresses	Limited awareness of the potential of urban NbS and their co-benefits, which restricts legislative innovation and the adoption of enabling laws (NetworkNature, 2024).	Raise awareness among lawmakers and leverage their legislative authority to codify NbS in planning statutes, zoning codes, procurement rules, environmental assessments, and fiscal incentive frameworks. Embed NbS and ecosystem-based adaptation requirements into territorial plans and infrastructure standards. Engage external experts to ensure technical robustness and feasibility for local implementation (NetworkNature, 2024; European Bank for Reconstruction and Development n.d.; World Bank 2025; WWF 2025).

To unlock the full potential of the levers outlined above in Table 2, public government stakeholders (national and municipal) can utilise a wide array of mechanisms to successfully drive a national-to-local motion towards urban climate action, where NbS can play a vital role.

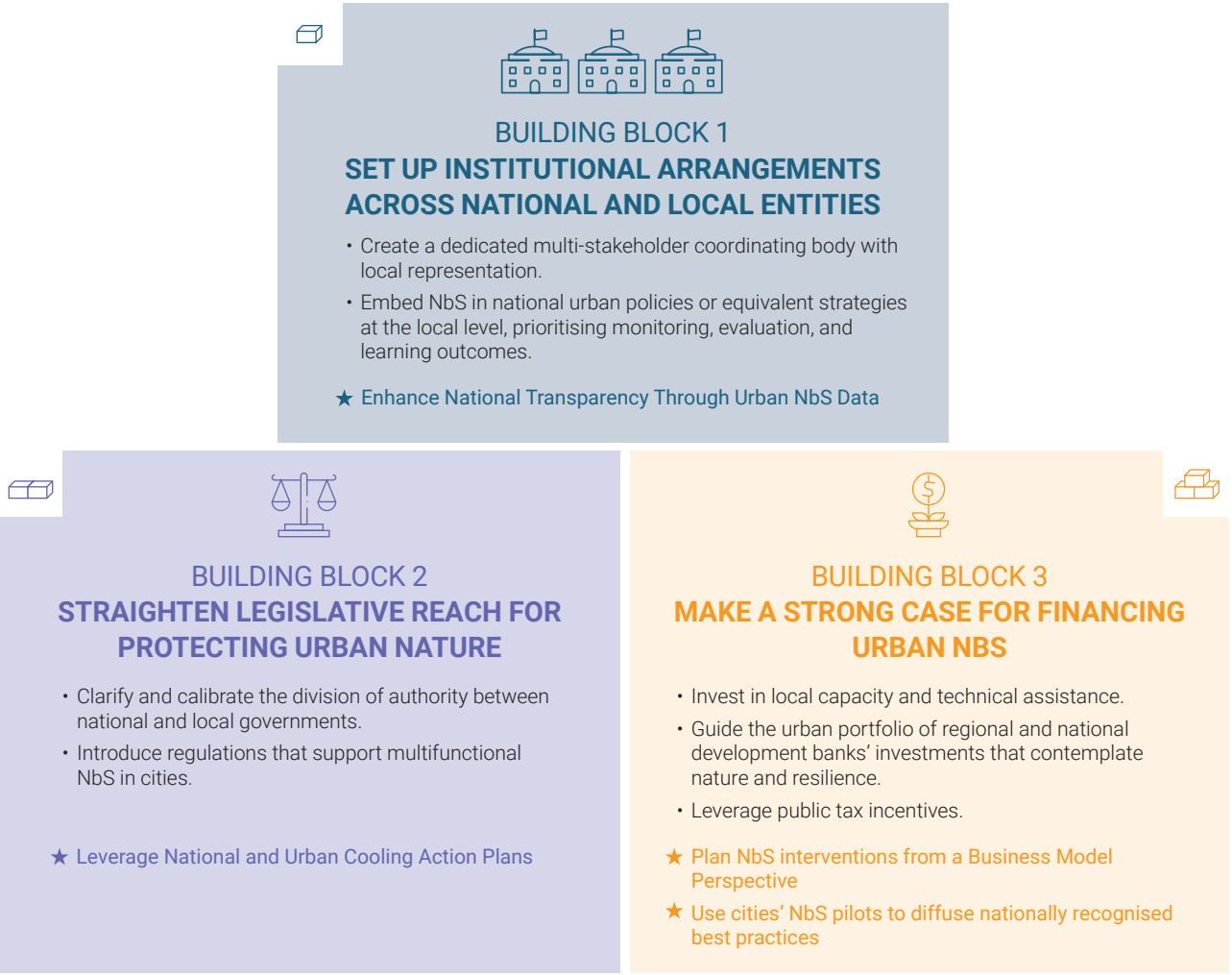
The sections below introduce three overarching building blocks that together form the basis for strengthening national mechanisms to support local uptake of NbS. Each block details the institutional, regulatory and financial elements involved and provides guiding steps for national and local stakeholders.

Across these building blocks, a central finance objective is to move from fragmented pilots toward credible, scalable NbS investment pipelines that can attract public, private and blended sources of climate finance. Transitioning from isolated pilot projects to systemic adoption requires robust enabling environments characterised by strong governance, strategic planning, innovative funding, and participatory processes[1].

1 Dorst 2022.

City of São Paulo, Brazil – A UNEP Generation Restauration Role Model City © UNEP-CCC

FIGURE 2 | **BUILDING BLOCKS FOR SETTING UP, PROTECTING, AND SUPPORTING URBAN NBS**



BUILDING BLOCK 1 | SET UP INSTITUTIONAL ARRANGEMENTS ACROSS NATIONAL AND LOCAL ENTITIES

Well-coordinated institutional arrangements enable better alignment between national priorities and city-level action. When these systems work in tandem, cities are better equipped to scale NbS that deliver multiple benefits, from flood protection to urban cooling and biodiversity restoration (UNEP-CCC 2025a; UNEP-CCC 2025b; UNEP 2024a; van der Jagt *et al.* 2023). However, achieving such a goal remains a challenge. The following steps can be a useful point of departure for national stakeholders:

Create a dedicated multi-stakeholder coordinating body with local representation.

By establishing, for example, an inter-ministerial or inter-agency council overseeing urban development and urban nature, or a dedicated NbS unit in a relevant Ministry (e.g., Ministry of Environment or Ministry of Cities), and allowing for local representation (including municipal authorities, civil society, academia, and financial institutions), the government can ensure that policy dialogues and coordination on urban matters take place. It can also better ensure that relevant stakeholders start developing a common understanding and strategy for expanding the coverage of urban NbS consistently (World Bank 2021; Venuti 2025). Such a coordinating body can also help align national and local finance priorities, coordinate project preparation support, and facilitate access to climate funds and development finance by clarifying roles, pipelines, and reporting responsibilities. Importantly, coordinated governance of this kind also reduces the risk of maladaptation by enabling stakeholders to assess trade-offs jointly, anticipate unintended consequences, and ensure that NbS interventions are context-appropriate, equitable, and climate-robust.

Embed NbS in national urban policies or equivalent strategies at the local level, prioritising monitoring, evaluation, and learning outcomes.

Integrating and institutionalising NbS in national frameworks for urban strategic planning and in relevant biodiversity and climate strategies and objectives sets an overall policy tone favourable to urban NbS (UN-HABITAT 2025). For example, making urban NbS a measurable objective in national urban policies and in urban cross-sectoral strategies (such as water management, transport, infrastructure, and housing) can support effective MEL mechanisms and strengthen replicability across cities and contexts (UN-Habitat 2024c).

BONUS

Enhance National Transparency Through Urban NbS Data

Under the national transparency framework of the Paris Agreement, countries are required to submit Biennial Transparency Reports (BTRs). These reports are intended to give a comprehensive picture of each country's climate actions, including GHG emissions, support provided and received, and, importantly, **progress on adaptation.**

Urban NbS can play a valuable role in this process. When countries include subnational municipal data on urban NbS, such as city-level climate risks, adaptation measures, and results, BTRs become more accurate and more useful. This information helps:

Strengthen national understanding of climate impacts: Local data provides a more detailed picture of where vulnerabilities lie and how cities are responding.

Improve the global picture of climate action: Including local data allows the global stocktake to capture better the scale and diversity of adaptation responses, many of which occur in cities.

Support more effective planning and coordination: When adaptation efforts from cities are reflected in national reporting, it becomes easier to align strategies and avoid duplication.

Although not mandatory, Article 13.8 of the Paris Agreement encourages countries to report on climate impacts and adaptation every two years. The article creates several entry points for featuring local data on planning, implementation, and results, essentially opening the door for governments to feature city-level information on:

- Climate risks and vulnerabilities
- Adaptation plans and policies
- Implementation progress
- Observed results or outcomes

Featuring city-level information can strengthen coordination between national and local actors and improve countries' abilities to access climate finance. Linking BTR reporting with MEL systems, and with finance narratives such as readiness, pipelines and performance indicators, can further help countries justify and mobilise domestic and international finance for urban NbS.

One of the main barriers hindering the uptake of urban NbS is the lack of supportive enabling conditions at the national level, especially where legal and regulatory frameworks create hurdles for practitioners (UNEP-CCC 2025a) by not being conducive to urban NbS. Strengthening the national legislative foundation for urban nature is therefore essential for creating a predictable and coherent enabling environment for urban NbS.

To guide this process, the following steps can support a streamlined national approach:

Clarify and calibrate the division of authority between national and local governments.

Rather than full decentralisation or centralisation, effective delivery of urban NbS typically requires a balanced approach. National governments set the overarching standards, objectives, and legal mandates, while regional and local municipal authorities are granted the necessary powers to adapt and implement these within their specific geographic, land-use and socioeconomic contexts (Venuti 2025). This combination preserves coherence at the national scale while providing flexibility when urban NbS must be delivered in urban and peri-urban areas.

National-level rules, laws and directives, such as those on land-use planning, environmental protection or urban development, provide a shared foundation that aligns local municipal actions with national development visions, climate goals, and land-use priorities. Such alignment is particularly important in densely developed cities experiencing both limited physical space for expansion and intensifying climate impacts (UN-Habitat 2024b; UNEP 2022). Clear national frameworks help "normalise" how urban planning integrates NbS by setting mandatory or recommended approaches for land allocation and multifunctional land use and for safeguarding ecological assets, issues that cities often cannot resolve alone when space is constrained.

From a finance perspective, coherent national legislation also reduces regulatory uncertainty for investors and lenders, while establishing the basis for fiscal transfers, conditional grants, and credit-enhancement mechanisms that can enable local municipal governments to scale urban NbS.

Introduce regulations that support multifunctional NbS in cities.

There are several opportunities for more robust legislation concerning the built urban environment, particularly given the speed of urbanisation in low- and middle-income countries, the lack of spaces in cities, and the need to consider the well-being of natural environments and biodiversity. When NbS for climate adaptation is woven into territorial planning and infrastructure standards, legislators support mandatory frameworks that drive their systematic implementation. A powerful and well-documented example of policy areas where urban NbS can be successfully mainstreamed relates to tackling urban heat and the impacts of the Urban Heat Islands (UHI) effect in cities. For instance, the revision of building codes to allow for passive cooling strategies with NbS (such as green vertical walls and green roofs) can support energy efficiency in buildings, while enhancing a cooling effect in areas prone to exacerbated urban heat. In Quezon City, NbS initiatives are synergistically linked to the local Green Building Code, which mandates climate-smart construction practices, such as passive cooling and rainwater harvesting (Quezon City Government 2025). Strategies such as these have the added value of incentivising the wider uptake of energy-efficient building design (Qi *et al.* 2024; UNEP 2024a; International Council for Local Environmental Initiatives [ICLEI] 2025). Regulatory reform can also be paired with well-designed incentives, such as rebates, tax credits or expedited permitting, to reduce upfront costs and improve the financial viability of retrofits that incorporate NbS. In addition, public procurement processes can act both as an incentive and as a regulatory mechanism by encouraging, or where appropriate requiring the consideration of NbS as a complementary or alternative solution.

BONUS
Leverage National and Urban Cooling Action Plans

Efforts related to the enhancement of building codes, supported by city-wide urban cooling action plans, mean that the implementation of other urban NbS can be planned to increase urban cooling strategically via the implementation of natural water bodies for natural cooling, shading via the planting of tree corridors and absorptive pavement materials, and others, as has been done in the city of Can Tho, Viet Nam, via UNEP, UNEP Cool Coalition and the Green Growth Institute's support to the Department of Climate Change and the Ministry of Agriculture and Environment of Viet Nam (Department of Climate Change 2025).

Worldwide, financial investments remain disproportionately concentrated in activities that degrade nature, threatening ecosystems, economies and human well-being (UNEP 2026). This concentration persists even though nearly half of global economic output depends on nature, even as governments, businesses and financial systems continue to draw down the planet's natural capital. In this context, strong public investment from national governments is essential to build a solid foundation for urban NbS and to catalyse additional sources of finance.

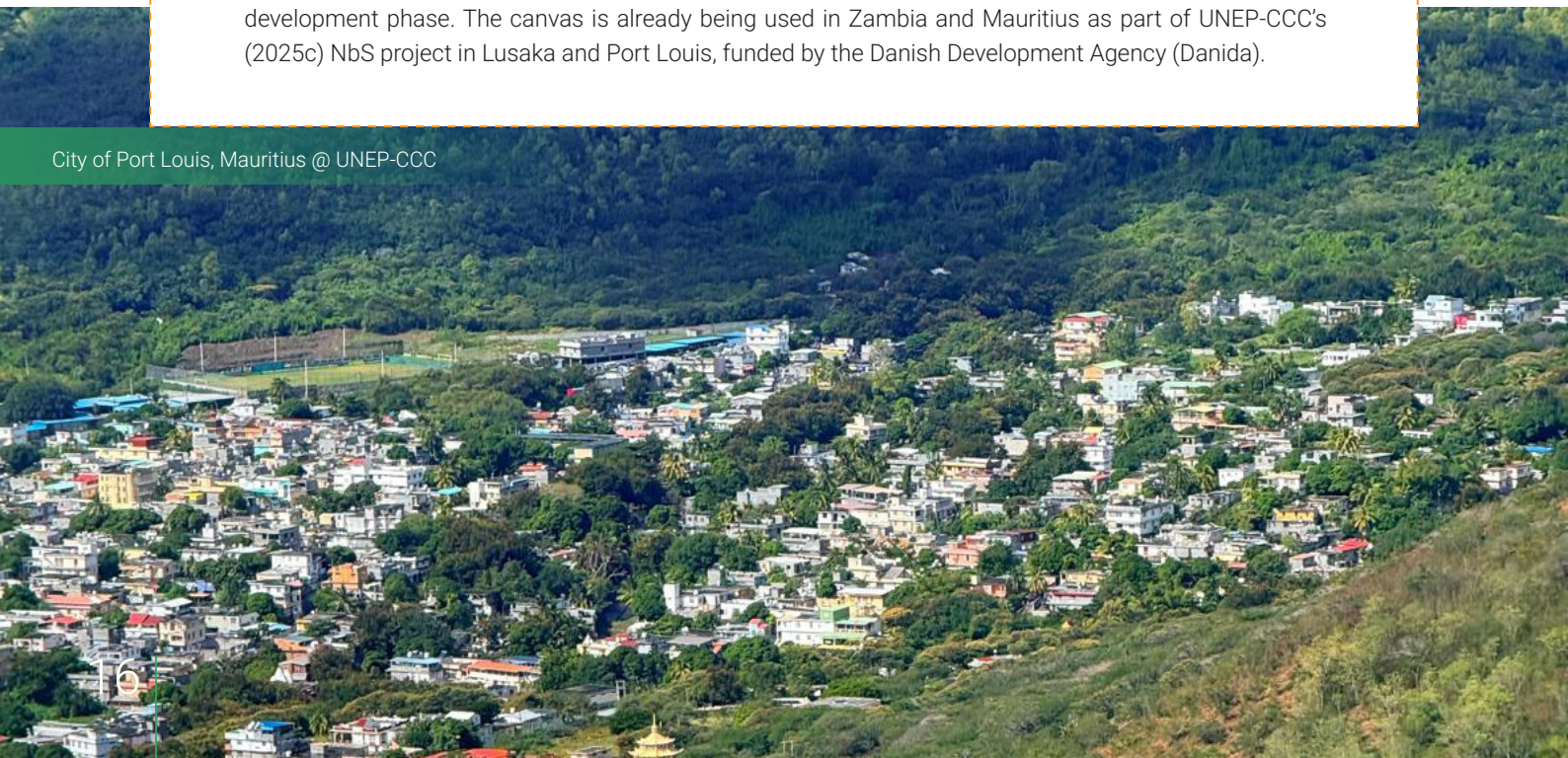
Public funding currently plays a central role in the financing of urban NbS, with local governments typically leading both financing and implementing urban NbS (UNEP-CCC 2025b). However, with local government having several competing priorities for funding basic services, access to additional financing for NbS in urban areas through international and national government funding and co-funding mechanisms remains a critical issue (UNEP 2022; UNEP 2023; UNEP 2024a; UNEP 2024b; UNEP-CCC 2025a). Channelling national finance flows to cities related to NbS can also provide a strong signal to the private sector and financial institutions and can promote the establishment of public-private partnerships. Government institutions can strengthen the uptake of urban NbS by aligning fiscal policy with climate, biodiversity and resilience objectives, and by creating dedicated funding mechanisms that lower investment risks (UNEP 2021; UNEP-FI 2024). These measures help bridge the substantial finance gap for NbS, ensuring cities have predictable resources to plan, scale and sustain nature-based investments. Bridging the gap can be strengthened through clearer national definitions of eligible NbS expenditure, the development of NbS investment criteria, and alignment with sustainable finance taxonomies and disclosure frameworks, which can help crowd-in institutional investors and domestic financial intermediaries.

Although efforts exist to value the benefits of urban NbS, comprehensive and context-specific economic assessments remain limited at the local level, partly because such analyses are complex, time-consuming and often require translating long-term or hard-to-monetise benefits into economic terms. These gaps can reduce investor confidence and hinder scaling. Framing urban NbS through a cost-effective business-model lens can help demonstrate long-term value and attract private and public investment

BONUS

Plan NbS interventions from a Business Model Perspective

Effective NbS project development demands strategic planning to unlock the full range of benefits, mobilise public investment and private investment through innovative financing, establish clear and capable governance arrangements, and build durable stakeholder support to ensure long-term sustainability while recognising opportunities for scale-up and managing potential investment risks (UNEP-CCC 2025b). The UNEP-CCC's Business Model Canvas offers a comprehensive approach for the development of implementable NbS business models that can guide local agents and NbS practitioners during the project development phase. The canvas is already being used in Zambia and Mauritius as part of UNEP-CCC's (2025c) NbS project in Lusaka and Port Louis, funded by the Danish Development Agency (Danida).



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Invest in local capacity and technical assistance.

National governments have a key role to play when it comes to providing finance streams that regional and local entities can access to build and strengthen capacities related to urban resilience and development. The enhancement of technical assistance, coupled with designated finance channels for urban resilience strategies, can also be targeted at supporting local stakeholders' capacity related to fundraising for urban NbS projects, particularly in smaller and medium-sized cities in the Global South that often grapple with institutional capacities (UNEP-CCC 2025a; ICLEI – Local Governments for Sustainability 2023). In this regard, the funding of smaller pilot projects (via, e.g., grants, green and conservation bonds, credit facilities and blended finance mechanisms) can be meaningful in the development of a portfolio of living labs for NbS that provide case examples on implementable and replicable approaches. Here, the engagement with financial institutions and the private sector is key, and national and regional governments have a vital role to play, particularly in the articulation of budgetary priorities connected with the development of capacities aligned with national agendas for development and climate. In addition, targeted technical assistance can support project preparation (feasibility studies, cost-benefit analysis, safeguards, and monitoring, reporting, and verification [MRV] plans), aggregation projects into portfolios, and the development of revenue and maintenance strategies that increase long-term bankability.

BONUS

Use cities' NbS pilots to diffuse nationally recognised best practices

National governments' investment in pilot and scalable urban NbS can catalyse additional funding sources while also helping to generate and subsequently diffuse national standards for NbS in urban contexts. This relationship can work in both directions: early pilot projects can inform the development of nationally endorsed best practices (e.g., participatory design, inclusive consultation with civil society, and the use of native or endemic species), while emerging national guidance can, in turn, strengthen the design and implementation quality of new pilots. These pilots then act as "proof points" for financiers by generating early performance data, validating methodologies and demonstrating delivery capacity, all of which are key ingredients for scaling through climate funds, development finance, and private capital.

Guide the urban portfolio of regional and national development banks' investments that contemplate nature and resilience.

National development banks (NDBs) and regional banks play a leading role in financing climate-resilient and sustainable cities. Beyond traditional lending, they can help municipalities design and scale projects that integrate NbS into urban systems. Multilateral and NDBs are narrowing the urban financing gap by providing concessional loans, guarantees, and blended finance to reduce investment risks and attract private capital (UNEP-CCC 2025b).

Their national influence allows NDBs to effectively channel climate finance into urban NbS action and enable large-scale private investments. An additional advantage is that NDBs can eliminate environmentally harmful investments through steering finance into nature-friendly assets, which again can set incentives across financial markets. NDBs can thereby directly contribute to implementing and advancing national strategies and policies such as NAPs and NBSAPs (UNEP-FI 2024). Beyond bond issuance, NDBs can operationalise NbS finance through credit lines dedicated to municipalities, guarantee facilities, and co-investment platforms that blend public capital with private finance, while using standardised NbS eligibility and MRV frameworks to ensure integrity and comparability.

In addition, NDBs and commercial banks could consider the issuance of climate-related green bonds. An exemplary approach has been taken by Colombia: In 2024, the country issued the first biodiversity bond in cooperation with the International Finance Corporation (IFC). The aim is to reinvest the proceeds into projects that focus on preventing biodiversity loss (IFC 2024).

Leverage public tax incentives.

National governments can accelerate urban NbS uptake by deploying targeted tax and fiscal incentives that lower investment barriers and mobilise public and private capital (UNEP-CCC 2025b). A range of established instruments can be adapted to support city-level nature action:

- Tax credits that reduce a taxpayer's liability in proportion to certified NbS investments (e.g., green roofs, wetland restoration, permeable surface retrofits), making projects financially viable for households, developers, and businesses (OECD 2025; UNEP-CCC 2025b).
- Tax deductions allowing expenses on NbS-related activities (e.g., rainwater management, ecological restoration) to reduce taxable income, encouraging sustained investment (as recognised in economic incentives that support NbS uptake) (Trinomics and International Union for Conservation of Nature [IUCN] 2019).
- Reduced tax rates on revenues or activities linked to nature-positive development, which shift incentives away from harmful practices and toward sustainable practices (aligned with global calls to scale biodiversity-positive incentives) (OECD 2025).
- Partial or full tax exemptions for land dedicated to conservation or ecosystem services, lowering ongoing costs for landowners and encouraging long-term stewardship of urban natural assets (documented in European examples of tax relief to promote ecological land management) (Trinomics and IUCN 2019).

These fiscal tools can help cities overcome persistent barriers such as high upfront costs, uncertain returns, and limited access to capital by making NbS investments cost-effective and attractive (UNEP-CCC 2025b).

BOX 2

From Pilots to Policy: Early NbS Pilots Creating Pathways for Implementation at Scale and Policymaking in Mauritius and Zambia

Via the funding from the Danish Ministry of Foreign Affairs, the UNEP Copenhagen Climate Centre is supporting Lusaka and Port Louis to design early NbS pilots that address urban flooding and heat stress. These efforts demonstrate how country-led approaches, aligned with national policy priorities, can convert NbS commitments in NDC 3.0 processes into practical, finance-ready interventions.

Lusaka, Zambia:
Strengthening Local Ownership and Evidence for Scale

In Lusaka, pilot development centres on regenerating urban green spaces and integrating NbS into urban planning to reduce heat and manage flood risk. UNEP-CCC has supported the creation of an Urban NbS Technical Working Group, establishing an inter-agency coordination model owned by Zambia's authorities. These insights provide an important basis for embedding urban NbS in Zambia's national planning, and for structuring business models that can attract private finance.

Port Louis, Mauritius:
Informing National NbS Ambition Through Practice

In the urban context of Port Louis, UNEP-CCC is supporting the planning of nature-based drainage improvements and targeted greening to address rainwater runoff, and flooding. Pilot preparation helps the Government to assess maintenance needs, hybrid design options, and financial viability, all of which are crucial for scaling and attracting private investment.

Across both countries, early NbS pilots are acting as:

- Country-led proof points that NbS are viable and aligned with national and municipal priorities.
- Evidence generators demonstrating climate adaptation and socioeconomic gains.
- Inputs to NDC 3.0 processes, informing standards, investment plans, and enabling environments.
- Platforms for business-model development, helping attract private finance by clarifying costs, benefits, and revenue pathways.
- Spaces for participation, strengthening local stewardship and long-term sustainability of NbS interventions.

Contextualizing a positive shift: UNEP's Generation Restoration Cities

Source: UNEP 2026 (upcoming)

Urban nature-based solutions offer substantial benefits for cities. They enhance liveability, support sustainable development, and contribute directly to global goals such as the Paris Agreement and the Global Biodiversity Framework, advancing coherence between municipal action and national commitments.

Experiences from around the world highlight effective approaches for embedding NbS into climate-resilient urban planning and design. In particular, **UNEP's Generation Restoration Cities**[2] initiative showcases diverse urban NbS that address multiple challenges simultaneously, including:

- Limited access to public green space
- Declining urban biodiversity, including insufficient pollinator-friendly habitats
- Weak or vulnerable coastal protection
- Degraded or polluted waterways
- Increasing urban drought risk
- Low public awareness and engagement around NbS
- Food insecurity in urban neighborhoods
- Intensifying urban heat island effects

A distinguishing feature of the Generation Restoration Cities initiative is its strong policy backing and the effective integration of NbS into municipal agendas. This approach strengthens the long-term sustainability of interventions while ensuring alignment between local implementation and broader policy frameworks.

These examples share several core elements, notably the leadership of local governments, active community engagement, and a clear identification of the specific challenges that NbS is intended to address.

2 The Generation Restoration Cities project (2023–2025) is dedicated to reversing the tide of ecological degradation in urban areas. UNEP, together with global experts, has handpicked 24 Generation Restoration cities: 14 cities are receiving direct funding and technical assistance to implement innovative pilot projects to scale up the implementation of urban NbS and restore their urban ecosystems, and a growing number of role models are set to accompany and support them as champions of restoration. The project is financed by the German Ministry for Economic Cooperation and Development (BMZ) and implemented by UNEP with the support of and in coordination with the UN Decade Secretariat and ICLEI Cities Biodiversity Center. For more information about UNEP's Generation Restoration project, visit: https://www.decadeonrestoration.org/cities.

TABLE 2 | **UNEP'S GENERATION RESTORATION CITIES DISAGGREGATE BY CLIMATE FOCUS AS RELATED TO URBAN NBS AND FORESEEN FUTURE CO-BENEFITS**

UNEP Generation Restoration Pilot Cities Pilot cities receive direct grants and technical support from UNEP to implement innovative pilot projects to catalyse restoration through NbS tailored to their local urban ecosystems. The description below provides an overview of the pilot project in each city.			
City and Country	**UNEP's support**	**Climate focus of the NbS Intervention** Mitigation, Adaptation, or Cross-Cutting	**Potential co-benefits** *Such co-benefits are envisioned should the cities' restoration effort via the project be sustained and further scaled systematically*
Dakar-Plateau & Theis, Senegal	**Objective(s)** Facilitate the development of a blue-green infrastructure network and a multifunctional greenbelt to control urban sprawl, support ecosystem connectivity and enhance local stakeholder collaboration for biodiversity protection across the Dakar Metropolitan Area. **Key achievements:** ► Successful establishment of a unique, multisectoral governance team consisting of members from diverse government institutions (environment and urban planning ministries), academia and civil society to oversee the proposed greenbelt and blue-green infrastructure project. ► Propagation at multiple scales and sectors of the concept and necessity of a multifunctional green belt in and around the Dakar/Thiès region as a means to control the direction of urban growth, protect existing green spaces, create new green spaces, and provide job opportunities for a green economy. ► Five priority "patches" of the future green wall were selected and co-designed through an iterative process by a team of Senegalese national experts and interdisciplinary researchers (national and international), specialists in urban planning and landscape architects, together with local populations from these areas.	**Adaptation**	► Clean air ► Clean water ► Cooling and thermal comfort in cities ► Habitat provision for local biodiversity
Dakar-Plateau & Theis, Senegal	► A prospectus was produced and is available to support the operationalisation of these plans, meaning the search for new partners and funding opportunities is moving forward. ► At the national level, significant headway has been made in achieving high-level political buy-in for the need to develop an ambitious and inclusive Dakar greenbelt that would guide environmentally friendly urban growth through the restoration and creation of blue-green infrastructure at the micro and macroscales.	**Adaptation**	► Clean air ► Clean water ► Cooling and thermal comfort in cities ► Habitat provision for local biodiversity

Douala, Cameroon	**Objective:** Enhance and rehabilitate mangrove ecosystems. Strengthen mangrove protection and restoration in Douala IV through improved planning, governance, financing, and community capacity-building to enhance biodiversity and reduce climate risks. **Key achievements:** ▶ 7,000 mangroves planted on a 3-hectare pilot site. ▶ More than 30,000 people were reached through awareness-raising and capacity-building activities with local community members. ▶ Development of a legal and institutional framework for participatory governance of mangroves ▶ A thorough diagnostic was carried out, and an action plan was put in place. ▶ 10,250 mangrove trees planted on a 3-hectare pilot site. ▶ More than 40,000 people were reached through awareness-raising and capacity-building activities with local community members. ▶ Development of a legal and institutional framework for participatory governance of mangroves	**Crosscutting**	▶ Coastal resilience ▶ Habitat provision for local biodiversity ▶ Provision of short-term employment for residents.
Kisumu, Kenya	**Objective:** Initiate ecosystem restoration along the river Auji for improvement of its habitat, protection of local species and breeding sites, and urban communities' wellbeing **Key achievements:** ▶ Development of a strategy for the Auji River cleanup ▶ Invasive species clearance. ▶ Plastic pollution clean-up. ▶ Planting of 140 trees and napier grass along a 3-kilometre stretch of the river. ▶ Establishment of a tree nursery and composting centre. ▶ 40,000 seedlings in the nursery. ▶ Engagement of over 350 community members. ▶ Training of 30 county staff	**Adaptation**	▶ Cooling and thermal comfort in cities ▶ Clean water ▶ Habitat provision for local biodiversity ▶ Provision of short-term employment for residents.

Kochi, India	**Objective(s):** Facilitate the ecological restoration of the Thevara–Perandoor (TP) canal, through community engagement and mainstreaming of NbS in existing funding, investment, and policy pipelines in the«city. **Key achievements:** ► Generation of a detailed restoration plan and essential diagnostic and baseline data informing project design. ► 55 schools participated in a "Know Your Canal" educational campaign ► Increased awareness and capacity building at local schools. ► Strengthened local community awareness on restoration practices	**Adaptation**	► Urban cooling ► Clean water ► Habitat provision for local biodiversity ► Human wellbeing ► Increase cultural value.
Manaus, Brazil	**Objective:** Strengthen coordination, governance and community engagement in urban ecosystem restoration through advancing urban agriculture using NbS. **Key achievements:** ► Development of an NbS and decision-support tool, the Municipal Urban Agriculture Application, which maps initiatives and identifies potential areas for new interventions. ► Female-majority, 29-member urban agriculture working group forming the basis of future governance, bringing together public administration, research, and civil society. ► Capacity building programme reaches over 200 community members and local leaders. ► Policy recommendations (Agricultura Urbana e Restauração de Ecossistemas em Manaus-Am 2025) to advance the urban and peri-urban agriculture (UPA) agenda in the city	**Adaptation**	► Strengthening of urban and peri agriculture systems ► Food security ► Human wellbeing ► Increase cultural value ► Urban cooling and thermal comfort
Mendoza, Argentina	**Objective:** Improve ecological connectivity and ecosystem restoration through two pilot sites, one for ecosystem restoration and one for the creation of a biological corridor. **Key achievements:** ► Establishment of a pilot restoration site at the Mountain Sports Park, and the creation of a biological corridor. ► Preliminary restoration work for both pilot sites, including detailed diagnostics, planning, small-scale planting, and invasive species removal, as well as monitoring and follow-up plans. ► Capacity building among local community members and county staff with over 2,000 residents engaged through workshops, planting events and citizen-science activities. ► Project integrated ecological restoration with social participation, showing how local governments, researchers, and communities can co-produce solutions	**Adaptation**	► Habitat provision for local biodiversity ► Human wellbeing ► Increase cultural value ► Provision of short-term employment for residents

Mexico City, Mexico	**Objective:** Enable ecosystem restoration by strengthening the implementation **Key achievements:** ► Establishment of two restoration operational centres that house tools and resources. ► Enabled two tequios, which are community service events centred on ecosystem restoration activities. ► Increased awareness and capacity building among local community members via training workshops. ► Creation of a dedicated website for the project served to increase visibility and expand the project's reach.	**Adaptation**	► Habitat provision for local biodiversity ► Human wellbeing ► Strengthening social cohesion ► Increase cultural value
Overstrand, South Africa	**Objective(s):** Rehabilitate and restore the Onrus wetland and set up conditions for broader restoration in the Onrus catchment area to enhance the preparedness and capacity of the municipality to mitigate against future climate change impacts on biodiversity, economy and society **Key achievements:** ► Actionable roadmap for restoring the Onrus system, including the estuary and wetland. ► Developed a replication guideline and innovative blended finance model to enable other municipalities to adopt similar approaches. ► Engaged local communities, landowners and NGOs through stakeholder workshops and awareness activities.	**Adaptation**	► Clean water ► Increase cultural value ► Habitat provision for local biodiversity ► Human wellbeing
Quezon City, Philippines	**Objective(s):** Enhance Quezon City's readiness and capacity to plan, implement and monitor NbS for biodiversity enhancement and climate resilience, and facilitate replication across cities in the Philippines **Key achievements:** ► Drafted a Biodiversity and Urban Ecosystem Restoration Masterplan to advance NbS throughout Quezon City. ► Identification and establishment of a restoration pilot site at the Payatas Controlled Disposal Facility. ► Developed training and communications materials on restoration among diverse populations. ► Increased awareness and capacity building among local community members and municipal staff on restoration practices	**Adaptation**	► Clean air ► Urban cooling and thermal comfort ► Habitat provision for local biodiversity

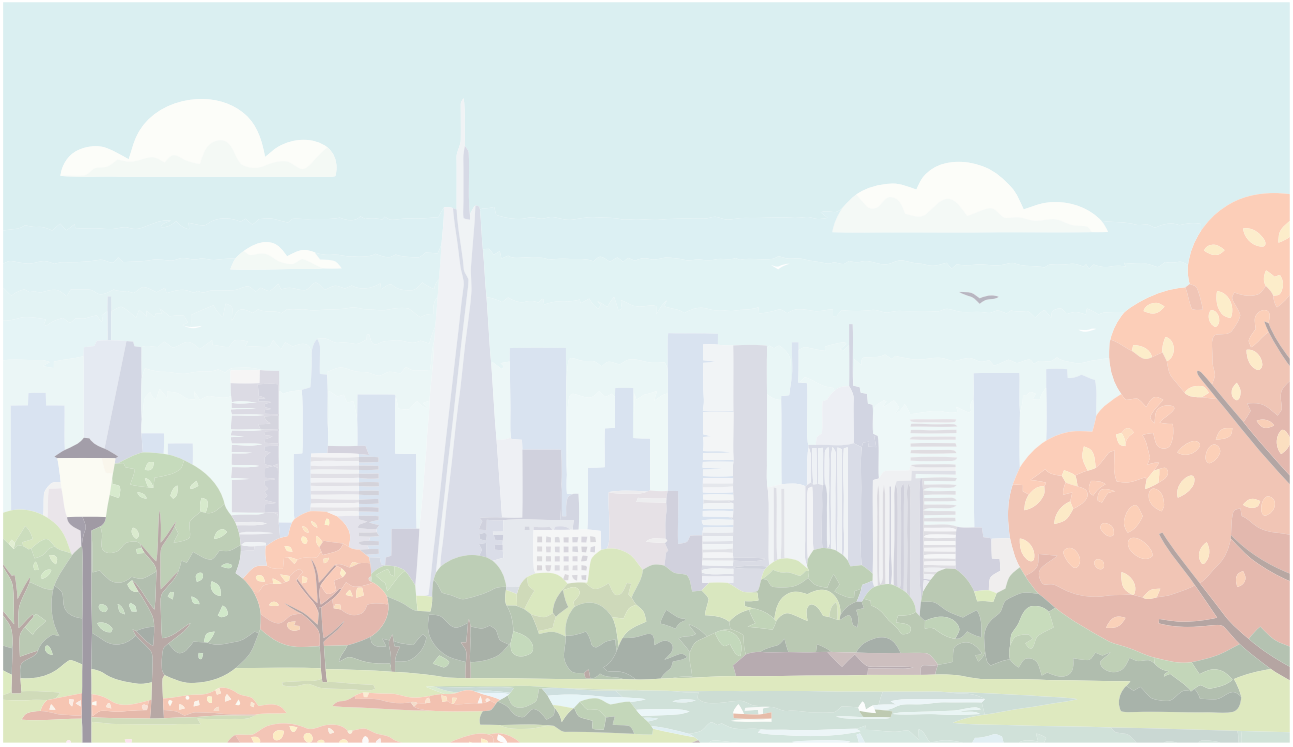
Samborondón, Ecuador	**Objective:** Restore mangrove ecosystems and provide policy recommendations for mangrove restoration. **Key achievements:** ► 6.000 mangroves planted on a hectare pilot site. ► Three workshops on mangrove restoration with 83 total participants were held. ► An additional 155.8 hectares were identified for future restoration work. ► Produced a legal and policy framework recommending the declaration of the Samborondón Historical Park as a protected municipal conservation area. ► Increased awareness and capacity building among local community members in mangrove conservation	**Adaptation**	► Habitat provision for local biodiversity ► Increase cultural value ► Coastal resilience ► Clean water
Sirajganj, Bangladesh	**Objective(s):** Create and maintain a river-side green corridor along the Katakhali Canal to provide recreational spaces for citizens, reduce urban heat and promote habitat for urban wildlife **Key achievements:** ► Development of a phased intervention plan to restore Sirajganj's Katakhali Canal ► Over 150 participants attended four feedback workshops to validate the intervention plan ► Two restoration workshops engaged more than 80 community members with hands-on restoration practices ► A horizontal exchange workshop promoted peer learning among participants from five municipalities. ► Public facing awareness programme on the importance of ecosystem conservation and restoration	**Adaptation**	► Clean water ► Increase cultural value ► Habitat provision for local biodiversity ► Urban cooling and thermal comfort

UNEP Generation Restoration Role Model Cities			
Role Model Cities are cities already with a strong track record of NbS and ecosystem restoration. They are selected to share their experience, innovations and lessons with the broader network of cities acting as champions of restoration. They help guide and inspire pilot cities, advocate for restoration action and strengthen global learning. The description below provides an overview of key achievements in NbS and ecosystem restoration of the role model cities.			
Cape Town, South Africa	**Objectives:** Cape Town has proven itself to be a leader in restoration, particularly in its advancement of innovative biodiversity strategies integrating nature conservation into city planning. Some examples are: ▶ Implementing tree planting and urban greening programmes to decrease urban temperatures. ▶ Removal of invasive species from water catchment areas to support the city's water security. ▶ Rehabilitation and restoration of the city's rivers and wetlands. ▶ The first municipality in South Africa to implement a spatial biodiversity plan. ▶ A policy framework to enhance, protect and manage Cape Town's natural and cultural resources for long-term prosperity. ▶ The Green Infrastructure Programme, which is a cross-departmental framework aimed at mainstreaming ecosystem services in urban development ▶ The Livable Urban Waterways project, which is rehabilitating waterways across Cape Town, using water-sensitive design, NbS and green infrastructure.	**Crosscutting**	▶ Habitat provision for local biodiversity ▶ Cooling and thermal comfort in cities ▶ Clean water and increased water security ▶ Increased cultural value
Glasgow, Scotland	**Objectives:** Glasgow leads in restoration through its numerous strategies and programmes that centre on NbS, embedding nature into city governance at multiple levels, including: ▶ Aiming to increase the level of tree canopy cover in the city to 20 per cent by 2034 ▶ Glasgow's Open Space Strategy sets out clear standards for open space provision and identifies where green areas are most needed. ▶ Advancing urban NbS through innovative planning tools like the Glasgow Environmental Digital Twin project ▶ The GALLANT project is to use Glasgow as a living lab to trial new sustainable solutions throughout the city ▶ Every Tree Tells a Story project seeks to foster a deeper connection between people and nature by collecting, recording and sharing stories about trees around Glasgow and other places.	**Adaptation**	▶ Cooling and thermal comfort in cities ▶ Habitat provision for local biodiversity ▶ Human wellbeing

Iloilo, Philippines	**Objectives:** Iloilo City is a leader at the forefront of ecosystem restoration through its management of coastal and marine ecosystems, including: ► Extending its mangrove protection efforts to about 80 hectares of riverside land. ► Since 2010, the city has planted more than 100,000 mangroves in various locations along the Iloilo River, covering about 70 hectares, and developed the 12 km-long Iloilo River Esplanade Corridor. ► The Iloilo River Esplanade Corridor restoration project involved targeted actions to reduce water pollution, support mangrove health, and improve access to green space	**Crosscutting**	► Clean water and increased water security ► Habitat provision for local biodiversity ► Human wellbeing
Kanazawa, Japan	**Objectives:** Kanazawa is a national pioneer in conservation policy, having conservation and restoration projects such as: ► The first city in Japan to enact a landscape conservation ordinance in 1968. ► Has implemented programmes to preserve degraded aged broadleaf and bamboo forests, using techniques such as wood thinning. ► Numerous efforts to rehabilitate the canal network, develop clean transportation services and promote sustainable tourism ► Restoring traditional Japanese gardens throughout the city, many of which were abandoned, destroyed or had fallen into disrepair.	**Adaptation**	► Increased cultural value ► Urban cooling and thermal comfort ► Clean water ► Groundwater recharge ► Habitat provision for local biodiversity
Montréal, Canada	**Objectives:** Montréal is a leader in restoration through its robust portfolio of restoration initiatives, including: ► Large-scale tree planting, which includes the planting and maintenance of 500,000 new trees by 2030, accompanied by a demineralization program to transform paved spaces for tree planting ► Implementation and maintenance of close to 50 microforest sites ► Restoration of 10 kilometres of riverbanks in various waterfront areas throughout the city ► "Sponge city" infrastructure to capture and absorb stormwater ► Soil remediation and phytotechnology demonstrations ► Major invasive species control programs, accompanied by seeding and planting of native plants ► Development of two large parks, one through the restoration of a decommissioned landfill site, and the second through the conservation and connection of a large nature area	**Crosscutting**	► Clean water ► Clean air ► Habitat provision for local biodiversity ► Cooling and thermal comfort in cities ► Human wellbeing

Paris, France	**Objectives:** Paris is proving itself to be a leader in building a vibrant and sustainable city with policies and initiatives such as: ► Over one third of Paris' area is composed of vegetation, including over 500 parks and over 600,000 trees, resulting in 23.58 per cent canopy cover ► The Paris Climate Action Plan 2024-2030, which outlines a strategy for carbon neutrality by 2050 ► Its 2025-2030 Biodiversity Plan provides key steps for biodiversity enhancement throughout the city ► Its OASIS programme aims to address extreme heat in Paris by creating green "oases" in over 130 schools throughout the city.	**Crosscutting**	► Groundwater recharge ► Cooling and thermal comfort in cities ► Habitat provision for local biodiversity ► Human wellbeing
São Paulo, Brazil	**Objectives:** São Paulo leads in restoration through extensive environmental protection and restoration of green spaces around the city, including: ► Major land acquisition effort designating 26 per cent of São Paulo's territory for environmental preservation ► São Paulo planted more than 310,000 trees between 2019 and 2024 ► As of 2024, there were 114 parks in the city, including 84 urban parks, 24 linear parks and 6 natural parks. ► Created over 300 rain gardens ► São Paulo has one of the world's largest payments for ecosystem services schemes	**Crosscutting**	► Habitat provision for local biodiversity ► Cooling and thermal comfort in cities ► Human wellbeing ► Groundwater recharge ► Job creation and employment
Seattle, United States of America	**Objectives:** The Green Seattle Partnerships model has transformed how Seattle Parks and Recreation approaches both ecological restoration and community programming. Efforts include: ► Restoration sites are located across 230 parks, ranging in size from less than an acre to over 500 acres. ► Provides paid job skills training for youth that integrates social and emotional curriculum, peer-to-peer learning, and ecological restoration skills building. ► Working extensively in local schools to introduce environmental stewardship programmes. ► The partnership supports Native livelihoods and culture alongside ecological restoration efforts.	**Adaptation**	► Clean air ► Urban cooling and thermal comfort ► Human wellbeing ► Job creation and employment ► Increased cultural value ► Social cohesion ► Habitat provision for local biodiversity

Toronto, Canada	**Objectives:** Toronto stands out as a Role Model City for its extensive restoration record and the way it has embedded ecological restoration into its urban planning frameworks. A few examples are: ► Its Pollinator Protection Strategy, which has the goal of protecting the more than 360 species of bees and over 100 species of butterflies and other pollinators within Toronto. ► A target to achieve 40 per cent canopy cover ► Toronto is engaged in various notable restoration projects, including the Don Valley Brick Works Park, the Humber Bay Butterfly Habitat, the Tommy Thompson Park, Beare Hill Park and the Meadoway	**Adaptation**	► Clean air ► Urban cooling and thermal comfort ► Habitat provision for local biodiversity ► Cooling and thermal comfort in cities ► Human wellbeing ► Groundwater recharge
Yangzhou, China	**Objectives:** Yangzhou leads in restoration through a variety of projects that centre on NbS, such as: ► Restoring 15.33 km2 of wetlands, ► In 2020, the natural wetland protection rate reached over 60 per cent. ► Adopting the "sponge city" model, which focuses on absorbing floodwater like a sponge. ► Transforming a former industrial waste site into the 1,013,000-square-meter ecological park called Sanwan Wetland Park ► The Maoshan landfill restoration project, which transformed a landfill site into a sports park and pet market.	**Adaptation**	► Clean water ► Clean air ► Urban cooling and thermal comfort ► Groundwater recharge ► Floodwater retention ► Human wellbeing ► Habitat provision for local biodiversity



UNEP Generation Restoration Role Model and Pilot Cities Four Cities were selected as both pilot and role model. The description below provides an overview of key achievements of each city in NbS and urban ecosystem restoration, as well as of the pilot projects supported by UNEP.			
Barranquilla, Colombia	Barranquilla has implemented a host of restoration projects in recent decades, showcasing their leadership, including: ► Rehabilitation work in Mallorquín Swamp and Puerto Mocho Urban Beach, planting 250,000 trees. ► Advanced the recovery of 16 kilometres of urban canal and channels network to reduce flooding, revive ecosystems and improve the city's microclimate. ► Planted more than 1.2 million trees, increasing vegetation cover by 15 per cent. ► Rehabilitated more than 250 public spaces through initiatives such as Todos al Parque. **Objective for pilot:** Initiate measures to conserve and restore León Creek, leveraging NbS to sustainably preserve and restore León Creek **Key achievements for pilot:** ► Developed a guide for implementing NbS in León Creek. ► Robust community engagement with 65 per cent women participants. ► Conditions, hydrological and hydraulic dynamics, and risk factors in a León Creek area, including topographic and bathymetric surveys, rainfall modelling, and community-informed flood studies. ► Developed a protection and conservation strategy for the remaining natural creek edges.	**Adaptation**	► Habitat provision for local biodiversity ► Urban Cooling and thermal comfort in cities ► Floodwater retention ► Clean water ► Clean air ► Human wellbeing ► Social cohesion
Curitiba, Brazil	Curitiba has implemented various noteworthy restoration projects, including: ► A robust urban and peri-urban agriculture programme, which has 208 vegetable gardens across the city. ► Planting of 550,000 trees with an annual target of 125,000 trees. ► Supporting green and hybrid infrastructure solutions such as green roofs, rain gardens, and permeable pavements. ► The ongoing restoration of the Reserva Hídrica do Futuro (Water Reserve of the Future). **Objective(s) for pilot:** Mobilise finance to restore urban ecosystems. Establish the foundations for innovative financing mechanisms and planning tools that connect local restoration initiatives to new sources of environmental revenue by strengthening urban and peri-urban agriculture.	**Crosscutting**	► Habitat provision for local biodiversity ► Cooling and thermal comfort in cities ► Floodwater retention ► Groundwater recharge ► Clean water ► Human wellbeing ► Job creation

Curitiba, Brazil	**Key achievements for pilot:** ► Detailed roadmaps for environmental asset projects in Curitiba ► A proposal for an updated and improved Biodiversity Index for Curitiba ► Mapping of degraded land in Curitiba ► Advanced innovative financing and planning tools	**Crosscutting**	► Habitat provision for local biodiversity ► Cooling and thermal comfort in cities ► Floodwater retention ► Groundwater recharge ► Clean water ► Human wellbeing ► Job creation
Istanbul, Türkiye	Istanbul has proved itself to be a leader in restoration, with decades of urban ecosystem restoration planning and experience, including: ► The city masterplan, Istanbul Vision 2050, which includes climate resilience, nature conservation, inclusive mobility, improved infrastructure and a more inclusive society. ► Development of an Urban Ecological Corridor Network. ► Several large-scale waterway and basin rehabilitation efforts, such as the Golden Horn Estuary, the Ayamama River, the Riva River, the Kurbağalıdere restorations and the Küçükçekmece Lake Restoration. ► Integrating garden infrastructure into urban planning through the creation of urban gardens and agricultural parks. **Objective for pilot:** Enhance the conservation of migratory bird species and improve ecological connectivity. **Key achievements for pilot:** ► A comprehensive overview of Istanbul's avifauna in a detailed report, including birds' functions in local ecosystems, emphasising the importance of Istanbul for migratory birds, and design recommendations for bird-friendly cities. ► Selection of three pilot area locations at Büyük Çamlıca Grove, Atatürk Urban Forest, and Yıldız Grove, and two indicator species.	**Adaptation**	► Floodwater retention ► Clean water ► Human wellbeing ► Groundwater recharge ► Habitat provision for local biodiversity

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