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EVALUATION OF THE GEF SUSTAINABLE CITIES PROGRAM

(Prepared by the Independent Evaluation Office of the GEF)

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QUICK SCAN

1. The Sustainable Cities program supports cities in developing countries through a systems-based approach that addresses planning, governance, financing, and institutional barriers to urban sustainability. Launched during GEF-6, the program has provided \$480 million in GEF financing and leveraged \$6.0 billion in cofinancing, supporting sustainability initiatives in over 90 cities across 33 countries. The GEF Independent Evaluation Office (IEO) conducted an evaluation to assess the program's design, implementation, and results.

Main Findings

Relevance

2. **The program is consistently aligned with key Multilateral Environmental Agreements.** All child projects address greenhouse gas mitigation or climate adaptation, demonstrating strong alignment with the United Nations Framework Convention on Climate Change and the Paris Agreement. Alignment with the Convention on Biological Diversity and the United Nations Convention to Combat Desertification has strengthened over successive cycles, with GEF-8 evidencing the most explicit alignment. The program is also well aligned with SDG 11 and the Sendai Framework for Disaster Risk Reduction.

3. **The program has strengthened its focus on socio-economic objectives across cycles.** The share of projects targeting such benefits increased from 39 percent in GEF-6 to 69 percent in GEF-8. Livelihood gains include formal employment for recyclers in Paraguay and the formalization of 3,000 drivers in Benin. Skill development efforts include training 100 female sanitary workers as electric vehicle drivers in Guntur, India, and building women's capacities in solar technologies in Brazil. Social inclusion outcomes are reflected in the deliberate siting of infrastructure in underserved neighborhoods in Recife and the required inclusion of Indigenous women's organizations in territorial planning processes in Guatemala.

Coherence

4. **External coherence is strong, with the program aligning well with global agreements and national policies.** On climate, the program evolved from general alignment with Intended Nationally Determined Contributions in GEF-6 to explicit support for their implementation under the Paris Agreement from GEF-7 onward. Alignment with the Convention on Biological Diversity has also deepened from broad normative references to explicit integration of the Kunming-Montreal Global Biodiversity Framework, particularly Target 12 in GEF-8, with a focus on urban green and blue spaces. Results are strongest where child projects are anchored in national policy processes, most notably in China through its Five-Year Plans and dual-carbon goals, and in India through the Swachh Bharat Mission and Smart Cities Mission.

5. **Project designs demonstrate strong integrative intent, but gaps in execution persist in some areas.** Most projects achieve alignment from national to local levels and maintain coherence across sectors and ministries. However, integrated urban planning and targeted pilot investments often proceed on parallel tracks, with inadequate attention to broader adoption. Support from the Global Platform is also frequently misaligned with project timelines and local contexts.

Efficiency

6. **Child project preparation is relatively efficient, but implementation is slower than similar standalone urban projects.** SCP child projects take a median of 51 months from CEO endorsement to mid-term review, compared to 47 months for similar standalone urban projects, and 89 months from start to completion versus 76 months for those projects. These delays are largely driven by start-up and procurement challenges, complex project designs, political transitions, and staff turnover — issues that are particularly pronounced in Peru, Mexico, and South Africa.

7. **Resource mobilization has been a strength of the program.** The cumulative committed cofinancing ratio of 13.7 across GEF-6 to GEF-8 substantially exceeds the GEF portfolio average of 7.6 over the same period. However, this ratio has declined from 17.6 in GEF-6 to 10.6 in GEF-8, reflecting increased participation by Least Developed Countries and Small Island Developing States, which have limited capacity to provide cofinancing, as well as a reduced share of projects implemented by Multilateral Development Banks. Private sector cofinancing has risen from 1 percent in GEF-6 to 7 percent in GEF-8, although it remains modest in absolute terms.

Effectiveness

8. **The program is an effective catalytic entry point for urban transformation, but it has not consistently achieved transformation at scale across the portfolio.** In several cases, GEF grants have unlocked larger investment flows and supported broader adoption of promoted approaches: transit-oriented development (TOD) principles were incorporated into municipal regulations in China and in national legislation in Peru; an electric vehicle model for waste collection was scaled statewide in Andhra Pradesh, India; and in Paraguay, project methodologies informed a subsequent World Bank urban resilience loan and a Green Climate Fund initiative. However, in other cases — including Peru, Mexico, and Malaysia — technically sound plans were not implemented due to constraints within public investment systems, and results did not extend beyond what standalone projects might have achieved. Private sector engagement also remains a structural challenge: GEF project timelines often do not align with private sector decision cycles, and cities frequently lack the pre-investment pipelines needed to attract private investment.

9. **Targeted pilot investments are the main vehicles through which the Sustainable Cities Program achieves environmental results.** Satellite imagery confirmed that open water coverage at Kadapakkam Lake in Chennai increased from 34 percent to 88 percent as a result of the GEF intervention; in Dakar, Senegal, flooded areas were reduced from 11.74 km² to 1.44 km²; and projects in Paraguay and Brazil recorded increases in migratory bird species. In China, Transit Oriented Development (TOD) principles developed under the program have been incorporated into municipal regulations, with modelled projections of 87.8 million tCO₂e in greenhouse gas abatement — benefits expected to be realized over a decade after project completion. Of the eight core indicators reported across six completed projects, ex-ante targets were available for six. Aggregate results met or exceeded targets for three of these six indicators.

Sustainability and Transformation

10. **The sustainability of results is shaped by three interrelated factors: institutional anchoring, follow-on financing, and management of recurrent operational costs.** Results are most durable where program outputs are embedded in formal government policies, budgets, or regulatory systems. In China, TOD diagnostic tools have been applied in the renovation and expansion of public transit systems in pilot cities and beyond; in India, the Swachh Bharat Portal developed under the GEF project was subsequently expanded by the government and is now used for waste management planning and operations across levels of governance. Where such anchoring is absent, results are more at risk. For example, the Cleaning Brigade, a high-performing waste collection initiative in Paraguay, ceased operations after project closure due to a lack of follow-on funding. Projects that proactively address recurrent costs, such as a sewage treatment plant in Jaipur that integrated solar PV and biogas to reduce long-term operating costs, demonstrate stronger prospects for sustainability.

11. **Broader adoption is more evident where interventions are tangible and operationally straightforward.** The electric vehicle waste collection model piloted in Guntur was scaled statewide, and filtering gardens in Recife have attracted national-level interest as a model for replication. GEF investments have also catalyzed follow-on financing: for example, in Paraguay, project methodologies informed a subsequent World Bank urban resilience loan and a Green Climate Fund initiative. However, scaling from successful pilots to city-wide or national levels remains a central challenge. In Peru and Mexico, technically sound plans remained largely unimplemented due to constraints within public investment systems and the absence of pre-investment pipelines. A persistent "mayor gap", where technical officials remain engaged but high-level political commitment from elected leaders is difficult to sustain, has further constrained scaling prospects, particularly in Global Platform activities.

12. **While the program has generated meaningful advances at the city scale, current evidence is insufficient to determine whether these are translating into sustained, system-level**

transformation. Regulatory frameworks have been strengthened, nature-based solutions demonstrated and replicated, and institutional roles embedded within municipal structures; in some cases supported policies and regulations are also being implemented at the national level. However, current results frameworks remain largely output-focused, and do not include indicators to assess whether urban systems are on a trajectory toward durable transformation, for example, through institutionalized planning processes or sustained shifts in investment patterns. They also tend to underrepresent institutional and policy-driven outcomes, which are critical to long-term urban transformation. While projects in more recent cycles are beginning to address design gaps related to investment readiness and replication, it is still too early for these improvements to be reflected in results.

Main Conclusions

13. **The Sustainable Cities Program is a relevant and distinctive programmatic modality.** The program enables the integration of environmental and socio-economic dimensions in ways that standalone projects typically cannot achieve. Its two-tier architecture, linking global knowledge with national policy engagement and city-level demonstration, is well aligned with the complexity of urban sustainability challenges.

14. **The Global Platform is effective in facilitating knowledge sharing but is not sufficiently tailored to the operational needs of country child projects.** The GPSC and UrbanShift have generated a substantial body of knowledge products and provided strong convening value. However, country-level project teams, consistently report that these offerings are not well aligned with their operational needs or project decision points, a gap the program has yet to fully address.

15. **The program's environmental results are most evident in targeted pilot investments, while outcomes from planning and policy support remain slower to materialize.** Where GEF financing supports tangible pilots, results are verifiable and sufficiently credible to attract replication and follow-on investment. By contrast, planning frameworks and regulatory pathways require longer timeframes to yield and demonstrate measurable environmental results; translating investment readiness into funded urban sustainability actions remains an unresolved challenge for the program.

16. **Institutional anchoring is the decisive factor for sustainability.** The sustainability of results depends less on the type, scale or sector of the intervention than on whether program outputs are embedded in authoritative government structures. Where anchoring is strong, results are sustained and are more likely to be replicated; where it is weak or absent, results are at risk. While technical officials are consistently engaged, political leadership, particularly mayors and senior elected officials, has been more intermittent, constraining prospects for scaling and replication beyond individual project cycles.

17. **The program is catalytic, but not yet systematically synergistic.** The Sustainable Cities Program functions effectively as an entry point for urban transformation, and its cofinancing performance significantly exceeds the GEF average. However, the full added value of the programmatic modality, in terms of synergies across projects, sectors, and scales, has not been consistently realized. In many contexts, planning and investment streams continue to operate in parallel. Synergy is greatest, however, where pilot investments are thematically connected and mutually reinforcing, rather than implemented as standalone activities within a project.

18. **M&E arrangements are not yet well suited to measuring transformation.** Current results frameworks focus on outputs and intermediate outcomes but lack indicators to assess whether urban systems are on a trajectory toward durable, long-term change, such as through institutionalized planning processes or sustained shifts in investment patterns. Important achievements, including legal and regulatory instruments, are also systematically underrepresented in core indicators, meaning the framework captures only part of the program's contribution to transformation reflected in practice than the evidence on the ground suggests.

Recommendations

19. **Recommendation 1. Strengthen the focus on investments and support the replication of investment pilots.** The Lead Agency and Implementing Agencies should prioritize investment readiness within child projects, including the development of bankable pipelines, appropriate financing instruments, and early engagement with International Financial Institutions (IFIs) and private sector actors, with targeted support for LDCs and SIDS. The Global Platform should also systematically identify, package, and disseminate successful investment pilots to facilitate replication across cities, rather than relying primarily on informal peer learning.

20. **Recommendation 2. Address gaps in the global platform's coordination with, and support to, child projects while sustaining its knowledge and convening functions.** The GEF Secretariat should develop a clear action plan to strengthen the platform's collaboration with child projects, including more timely design support, improved access to global expertise, stronger inter-project connectivity, and enhanced program-level results reporting. The platform's results framework should also incorporate indicators to assess its effectiveness in delivering these functions.

21. **Recommendation 3. Measure and track system-level transformation over time, consistent with the program's strategic directions.** The GEF Secretariat should ensure that program and project results frameworks incorporate a stable set of indicators capturing both the enabling conditions for, and the achievement of, long-term urban system transformation. This would enable cumulative assessment across GEF cycles, support testing of Theory of Change assumptions, and inform the design of future programs.

1 INTRODUCTION

1. Cities account for an estimated 71–76 percent of global greenhouse gas emissions (IPCC, 2022), host 55 percent of the world’s population (UN, 2018), and generate roughly 80 percent of global GDP (World Bank, 2016a). Many cities—particularly in developing countries—face persistent challenges in providing adequate infrastructure and services, while the concentration of people, assets, and economic activity in urban areas can increase exposure to climate and environmental risks, including air pollution and extreme weather, often with disproportionate impacts on low-income and marginalized populations. Rapid urbanization and rising consumption are further expanding cities’ ecological footprints beyond urban boundaries through resource extraction, land conversion, and global supply chains. At the same time, the concentration of people, assets, institutions, and investment in cities makes them critical sites for environmental sustainability related actions — and changes in urban systems can generate environmental and socio-economic effects that extend well beyond city boundaries (Lwasa et al., 2022; World Bank, 2016b).

2. Urban sustainability has consequently gained prominence in global policy frameworks. The Paris Agreement emphasizes strengthened climate action by cities (UNFCCC, 2015), the Kunming–Montreal Global Biodiversity Framework calls for enhancing green and blue spaces in urban areas (CBD, 2022), and SDG 11 seeks to “make cities and human settlements inclusive, safe, resilient and sustainable. Alongside these policy commitments, cities and national governments are increasingly engaging in coordinated action. In parallel, multilateral development banks and international organizations—including the World Bank, regional development banks, UN-Habitat, UNEP, and bilateral development agencies—have expanded financial and technical support for sustainable urban infrastructure, climate resilience, nature-based solutions, and integrated planning.

3. Within this broader landscape of multilevel commitments and development finance, the Global Environment Facility (GEF) has increasingly structured its support to urban sustainability as a programmatic priority. While urban-relevant interventions have been supported since its pilot phase, engagement became more explicitly organized under GEF-6 through the launch of the Sustainable Cities Program.

4. The Sustainable Cities Program supports developing countries and their cities through a systems-based approach that addresses governance, planning, financing, and institutional barriers to sustainability. Cumulatively, the program has covered more than 90 cities across 33 countries—including seven Least Developed Countries and two Small Island Developing States—with total GEF allocations of approximately \$480 million¹ and \$6.0 billion in cofinancing.

¹ Includes GEF project grants, project preparation grants, and fees for project preparation and implementation.

5. The GEF Independent Evaluation Office (IEO) has conducted this evaluation to assess the design, implementation, and results of the Sustainable Cities Program. With a maturing portfolio, the program has reached a stage where performance can be examined across the project cycle. At the same time, its continued prioritization under the GEF-9 Programming Directions underscores the relevance of the evaluation's findings in the current strategic context. The evaluation seeks to inform future GEF engagement on urban sustainability.

1.1. LITERATURE

6. There is sufficient support in scientific literature to support the rationale for the GEF Sustainable Cities Program. Cities are widely conceptualized as complex socio-ecological systems composed of interconnected environmental, socio-political, and economic subsystems that interact through dynamic human–natural processes (Liu et al., 2007; Seto et al., 2014). These dimensions encompass governance and social services, economic structures and infrastructure, and ecological assets such as biodiversity, natural resources, and environmental quality (UN-Habitat, 2016; Bai et al., 2018). Their strong interdependence implies that urban sustainability challenges often require integrated and cross-sectoral approaches (United Nations, 2017; IPCC, 2022; UN-Habitat, 2022).

7. Evidence further shows that urban sustainability investments can generate significant environmental benefits, including reduced emissions through compact planning and low-carbon infrastructure, enhanced resilience to climate risks, and improved biodiversity and ecosystem services through nature-based solutions (Seto et al., 2014; Hallegatte et al., 2013; Ahern, 2011; IPCC, 2022). However, outcomes are often uneven. Implementation gaps frequently arise due to limited resources, fragmented governance, and weak monitoring systems, while some interventions may produce unintended consequences such as maladaptation or inequitable distribution of benefits (Bulkeley & Betsill, 2005; Sharifi, 2016; Satterthwaite et al., 2020; Barnett & O'Neill, 2010; Anguelovski et al., 2019).

8. Equity concerns are particularly prominent in the literature. Urban redevelopment and sustainability initiatives can increase neighbourhood attractiveness and property values, and may lead displacement of lower-income residents, making it necessary to address the displacement risks in the design of these projects (Checker, 2011; Gould & Lewis, 2017; Anguelovski et al., 2019; Zuk et al., 2018) Equity concerns also arise when marginalized and vulnerable groups are insufficiently recognized or involved in planning processes, highlighting the importance of more inclusive and participatory approaches (Shi et al., 2016; Anguelovski et al., 2016).

9. Governance plays a vital role in shaping outcomes. Inclusive and participatory decision-making processes are associated with stronger community ownership, improved legitimacy, and more durable sustainability results (Ostrom, 1996; Anguelovski et al., 2016). Such approaches also help address environmental justice concerns by ensuring meaningful participation and

recognition of marginalized groups (Agyeman et al., 2002; Schlosberg, 2007). More broadly, multi-level governance arrangements facilitate coordination across institutions and enhance effectiveness of urban sustainability initiatives (Bulkeley & Betsill, 2005; IPCC, 2022; Dodman et al., 2022).

10. Measuring urban sustainability remains challenging due to its multidimensional and context-specific nature. Numerous indicator frameworks—such as SDG 11, the Urban Sustainability Framework, the City Resilience Index, System’s Change Lab indicators, and the Reference Framework for Sustainable Cities—seek to operationalize social, economic, environmental, and governance dimensions (Boehm et al., 2025; UN, 2024; World Bank, 2018; Arup, 2015; CEREMA, 2016). However, the literature highlights persistent challenges, including data limitations, inconsistencies in indicators, and difficulties in comparing results across cities, as well as the normative choices embedded in sustainability measurement systems (Mori & Christodoulou, 2012; Sharifi, 2016; Kitchin et al., 2015).

1.2. PREVIOUS GEF IEO EVALUATION FINDINGS

11. The Sustainable Cities Program has been reviewed in several GEF IEO evaluations, primarily with a focus on program design and early implementation. These include the Formative Review of the Integrated Approach Pilot Programs (2018) and the Formative Evaluation of the GEF Integrated Approach to Address Drivers of Environmental Degradation (2022).

12. **The 2018 Formative Review found that the GEF-6 program was efficiently prepared but faced shortcomings in scope alignment, stakeholder engagement, transparency, and results measurement.** The review found small gaps between the Program Framework Document (PFD) and child project activities. While the program focused on climate change mitigation, biodiversity, and chemicals and waste, it was originally intended to include broader synergies such as land degradation, adaptation, international waters, and forest management. Some of these elements appeared in projects but were not formally tracked. Urban resilience was included in several projects despite not being a priority. The review also noted limited transparency in selecting the Lead Agency and countries. Project preparation was relatively efficient, but stakeholder engagement varied and was often limited, especially with cities and civil society. Private sector involvement and gender considerations were emphasized in program design but weakly reflected in project proposals. Finally, the results framework was considered inadequate, focusing mainly on greenhouse gas reduction and not fully capturing broader outcomes.

13. **The 2022 Formative Evaluation found that GEF-7 improved on GEF-6 design and alignment with country priorities but continued to face implementation and monitoring challenges.** It found that during GEF-7 the program had expanded activities from municipal to metropolitan scales, enhanced attention to biodiversity, and more frequently incorporated

nature-based solutions, though integration of land degradation remained limited. The evaluation found GEF-7 activities better aligned with country priorities, supporting both local and global environmental benefits. The evaluation highlighted implementation challenges, including the transition of the Lead Agency from the World Bank to UNEP, weaknesses in monitoring and evaluation design, and disruptions from the COVID-19 pandemic. While the agency shift aimed to increase community-based participation, it led to duplication of knowledge platforms. It also noted inconsistent tracking of GHG abatement results under GEF-6, with achievements mainly reported at the output level, such as urban plans and knowledge exchange activities.

14. Building on earlier reviews, the present evaluation examines the program at a more advanced stage, using accumulated experience to provide deeper analysis of design, implementation, and results, while addressing gaps related to integration, results measurement, and environmental and institutional outcomes.

2 METHODOLOGICAL APPROACH

2.1. SCOPE OF THE EVALUATION

15. This evaluation examines the GEF Sustainable Cities Program (SCP) across three replenishment cycles and at multiple scales.

Replenishment Cycles

- **GEF-6** – Design, implementation performance, and achieved environmental and socio-economic results of completed or near-completed child projects.
- **GEF-7** – Design quality and early implementation progress, with emphasis on adaptive management, and emerging partnerships.
- **GEF-8** – Strategic design and readiness, focusing on innovations, alignment with updated GEF strategies, and conditions for effective future implementation.

Scales

- **Global level:** governance and coordination architecture, quality of partnerships (GEF Agencies, MDBs, UN agencies, private sector), operation and influence of the global knowledge platform, and aggregate program outcomes.
- **National level:** relevance to participating countries' priorities; support for national-level partnerships; progress in policy, regulatory, and institutional reforms; effectiveness of cross-sectoral coordination and capacity-building efforts; and establishment and use of national platforms.
- **City level:** performance of demonstration pilots; breadth and depth of stakeholder collaboration (municipal agencies, civil society, private sector, communities); cross-

sectoral integration; capacity transfer; uptake of knowledge products; and early evidence of environmental, social, and economic benefits.

2.2. KEY QUESTIONS

16. The evaluation seeks to answer the following key questions:

1. *Is the Sustainable Cities Program relevant to recipient countries' needs, GEF objectives, and multilateral environmental conventions?*

Whether the program addresses critical urban sustainability challenges in participating countries and cities. Alignment with guidance from the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD), and the United Nations Convention to Combat Desertification (UNCCD), as reflected in relevant GEF focal areas, and consistency with GEF strategic and programming priorities. Whether program design supports integrative, innovative, and potentially transformative urban sustainability solutions.

2. *Does the program demonstrate internal and external coherence?*

Internal coherence assessed through the consistency of objectives, theory of change, results framework, and implementation arrangements. External coherence assessed based on complementarity with major global and regional urban sustainability initiatives and alignment with national urban development efforts.

3. *How effectively is the program being implemented, and what key factors influence its execution?*

Review of the performance of GEF Agencies in implementing program activities, including child projects. Coordination and collaboration among Agencies at global, country and local levels, key implementation challenges and responses, and performance in program and project preparation, start-up, and output delivery. Engagement with recipient countries, city governments, and civil society organizations is also assessed.

4. *Does the program demonstrate efficiency in resource use?*

Assessment of how financial and non-financial inputs have been converted into outputs within reasonable timeframes, including a comparison of child project delivery timelines with other GEF-supported urban initiatives and factors affecting delivery performance. Has GEF financing leveraged other resources, including from the private sector.

5. *Has the program achieved its intended outcomes, and are they transformative?*

Whether intended outcomes have been achieved at program and child project levels. Whether progress toward system transformation through use of strategic levers and pilot

investments is being sustained, mainstreamed, upscaled, or replicated, along with factors influencing results and sustainability.

6. *How has the program leveraged partnerships to advance GEF's urban sustainability objectives?*

Whether and how the partnerships supported by the program contribute to its objectives. Have they brought complementary expertise, strengthened implementation, and generated synergies.

7. *Have the program and its child projects effectively contributed to knowledge sharing?*

What are the contributions to knowledge sharing, particularly through knowledge platforms. Examine how the global platforms support participating countries and cities in applying evidence-based and integrated urban planning approaches, facilitate learning, promote replication, and address cross-cutting priorities.

8. *How effectively have the program's M&E arrangements supported decision-making and learning?*

Review M&E design, implementation, and use. Examine results framework and indicators. Identify strengths and weaknesses in design and implementation. Assess whether indicator data were systematically collected, aggregated, and used to inform decision-making and learning.

2.3. CONCEPTUAL FRAMEWORK

Theory of Change

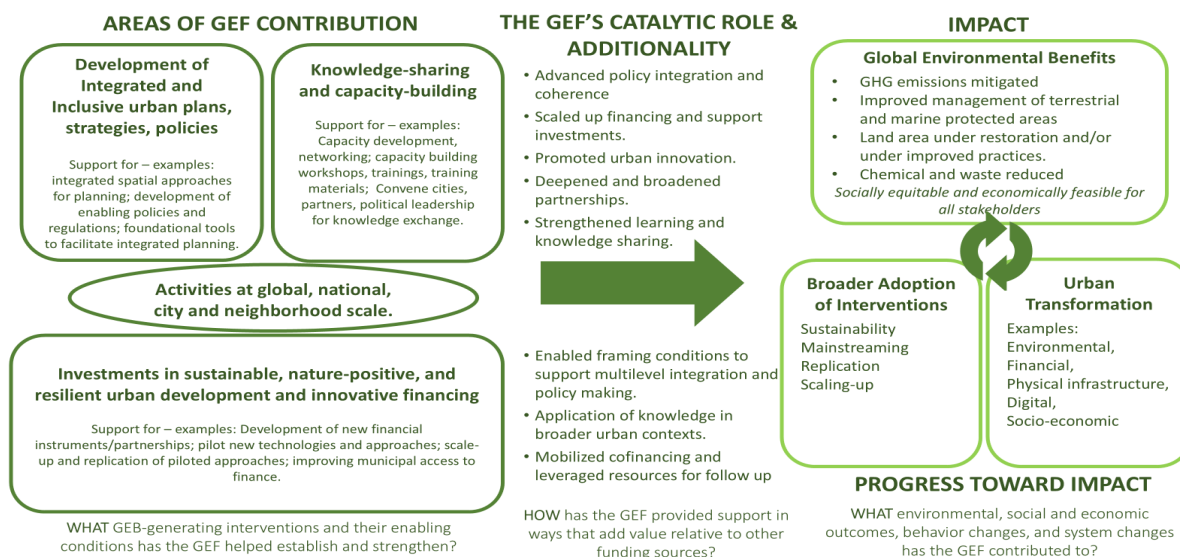
17. Sustainable cities are characterized by the integration of environmental protection, economic development, and social equity — the 'three Es' — a concept reflected in frameworks such as SDG 11 and the World Bank's Urban Sustainability Framework. This lens guides the assessment of integrated urban development. Integration, however, extends beyond the 'three Es' to encompass cross-sectoral coordination, policy coherence, institutional alignment, stakeholder engagement, and systems-level outcomes — perspectives that have equally informed the evaluation's assessment of integration, its results, and related challenges.

18. The SCP in GEF-8 aimed at shifting entrenched high-carbon, resource-intensive, and inequitable urban development patterns by working through five levers: (i) policy integration and coherence; (ii) financing and investment; (iii) urban innovation; (iv) partnerships; (v) and expanding knowledge to increase capacity. All these levers of urban transformation, except urban innovation, are also discussed in the GEF-6 and GEF-7 program framework documents — though not framed as 'levers.' The evaluation developed a program's theory of change incorporating these elements and their causal pathways as an evaluative framework (Figure 1).

19. Direct outputs include adopted integrated plans/policies, measured capacity gains, piloted financial mechanisms and technologies, and operational knowledge platforms. These generate catalytic outcomes – mobilized co-financing, advanced policy integration across sectors and governance levels, replication of urban innovations by non-GEF actors, and expanded institutionalized partnerships – under enabling conditions that include political commitment, supportive legal and regulatory frameworks, financial and institutional capacities of city governments, inclusive stakeholder engagement, and reliable data. Where these enabling conditions are present, cities are better able to move from pilot initiatives and early adoption toward broader replication, institutionalization, and scaled implementation (Lam et al., 2020; Maassen et al., 2026).

20. Impacts are tracked along two pathways: Global Environmental Benefits (e.g. GHG mitigation, waste reduction, land restoration) and socio-economic equity outcomes (improved service access for vulnerable groups, enhanced resilience, displacement risk mitigation). The program’s contribution is assessed against baselines and counterfactuals, with feedback loops that translate monitoring evidence into iterative improvements in plans, capacity programs, finance instruments, and partnerships.

Figure 1: Theory of Change for Sustainable Cities Program by GEF IEO



Source: Based on GEF IEO 2024, GEF 2024.

Note: the TOC has been prepared by the GEF IEO retrospectively to facilitate conduct of this evaluation.

21. The evaluation applies GEF IEO guidelines and OECD criteria — relevance, coherence, effectiveness, efficiency, impact, and sustainability — alongside additional dimensions including additionality, integration, alignment with GEF environmental and social safeguards, and gender equality. Details on the evaluation framework are provided in Annex 1.

22. An equity-focused transition perspective is applied throughout to examine whether environmentally sustainable urban development is pursued in ways that are fair, inclusive, and socially responsive — particularly in terms of how benefits and burdens are distributed and how different groups are engaged in the process.

2.4. DATA SOURCES

23. The evaluation of the Sustainable Cities Program applies a comprehensive mixed-methods approach that integrates large-scale portfolio analysis, detailed document review, stakeholder engagement, field verification, and geospatial analysis to generate robust and triangulated evidence to answer the evaluation questions (Table 1).

24. **AI-Assisted Review.** The evaluation applied an AI-assisted portfolio review to identify urban sustainability focused projects in the GEF portfolio, and then to assess the design features of those selected for detailed review. The process included human oversight to minimize errors of omission and commission, iteratively refine screening and classification criteria, and finalize the approach once results were sufficiently consistent. First, over 4,250 full-size and medium-size GEF projects approved through January 2026 were screened to identify those addressing urban sustainability. This process yielded approximately 455 relevant projects, of which 449 with available documentation were reviewed in detail. These included 282 stand-alone projects, 43 projects under the Sustainable Cities Program, and 124 child projects implemented through other programs. A subset of 224 projects approved during the GEF-6 to GEF-8 cycles—including 43 Sustainable Cities Program projects—was used for comparative analysis. Project designs were systematically analyzed using a structured analytical instrument that classified activities into 8 categories and 84 subcategories to track changes in design approaches over time (Annex 2).

25. **Manual Review.** This review included Program Framework Documents, programming directions for GEF-6 through GEF-8, and a wide range of project-level materials such as implementation reports, mid-term reviews, and terminal evaluations. It covered 43 child projects CEO-endorsed through March 2026, of which documents for 40 country child projects were reviewed to assess activities supported in recipient countries. These documents were used to assess program design, implementation progress, and emerging results. The evaluation also reviewed relevant multilateral environmental agreements and global frameworks, including guidance from the UNFCCC, CBD, and UNCCD, as well as nationally determined contributions (NDCs) and the SDGs, to assess alignment with global environmental priorities.

26. **GEF Portal Datasets.** Quantitative data from the GEF Portal provided an additional layer of analysis. These datasets include information on key project milestones—such as approval, disbursement, mid-term review, completion, and financial closure—as well as data on resource use, cofinancing, and achievement of results based on core indicators. This information was used to assess implementation progress, efficiency, and delivery performance across the program.

Table 1: Data Sources and Question Coverage

Source	Review Method	Questions Covered
Manual Document Review	Manual	Q1 Relevance, Q2 Coherence, Q3 Implementation, Q4 Efficiency, Q5 Outcomes, Q6 Partnerships, Q7 Knowledge Sharing, Q8 M&E
AI-Assisted Review	AI-Assisted	Q2 Coherence
GEF Portal Data	Manual	Q2.Coherence, Q1 Relevance, Q4 Efficiency, Q5 Outcomes
Interviews	Manual	Q1 Relevance, Q2 Coherence, Q3 Implementation, Q4 Efficiency, Q5 Outcomes, Q6 Partnerships, Q7 Knowledge Sharing, Q8 M&E
Field Observation	Manual	Q3 Implementation, Q5 Outcomes
Remote Sensing	Manual	Q5 Outcomes
Global Platform Datasets	Manual / AI-assisted	Q6 Partnerships, Q7 Knowledge Sharing

Source: Evaluation of the GEF Sustainable Cities Program.

Note: 'Manual' in this context means non-AI assisted review.

27. **Global Platform Datasets.** These include datasets from the Global Platform for Sustainable Cities (GPSC) and UrbanShift. These datasets covered events, publications, participating stakeholders, and partner contributions. Where data gaps existed—particularly in participant characteristics—AI-assisted methods and manual verification were used to complete missing information where feasible. This analysis supported assessment of the program’s knowledge-sharing functions, stakeholder reach, and engagement with diverse partners.

28. **Key Informant Interviews.** Primary data collection was conducted through purposive key informant interviews with a broad range of stakeholders. These included representatives from the GEF Secretariat, implementing agencies, global and regional partners, executing agencies, and beneficiaries. Interviews provided insights into program design, implementation challenges, coordination mechanisms, and factors influencing results.

29. **Field Verification.** Field verification and observation formed another critical component of the methodology. The evaluation covered 11 projects across 8 countries and 20 cities in Latin America, Asia, and Africa, reflecting the regional distribution of program funding. Coverage focused on GEF-6 and GEF-7 projects, as these had progressed sufficiently to allow meaningful assessment of implementation and results. The sample included projects implemented by a range of agencies, capturing diverse operational models and partnership arrangements. Field visits enabled direct observation of project activities, validation of reported results, and engagement with local stakeholders.

30. **Remote Sensing and GIS.** In addition, the evaluation incorporated a remote sensing analysis of environmental changes at Kadapakkam Lake in Chennai, India, where restoration activities were implemented under a GEF-supported project. Using Sentinel-2 satellite imagery, the analysis compared pre- and post-intervention conditions, focusing on indicators such as

surface water extent and vegetation coverage. The geospatial analysis provided independent, objective evidence of changes in environmental status and was triangulated with field observations and stakeholder input.

Limitations

31. Despite the rigor of the methodology, several limitations were identified. At the time of the evaluation, several GEF-6 projects were still under implementation, limiting the availability of results data from completed projects. This was addressed by covering both completed and ongoing projects through field observations, and manual review of completion reports, mid-term reviews, implementation reports, and interview insights. Additionally, datasets on participation in knowledge platform activities contained gaps, which were partially mitigated through AI-assisted data completion and manual validation.

3 RELEVANCE AND COHERENCE

3.1. RELEVANCE

3.1.1. Multilateral Environmental Agreements

32. **The program's relevance to the UNFCCC is the strongest and most consistently substantiated across all three cycles.** In GEF-6, the program referenced Decisions 1/CP.16, 2/CP.17, and 1/CP.19, the latter explicitly requesting the GEF to support countries in developing their Intended Nationally Determined Contributions (INDCs). This alignment was further consolidated in GEF-7 through explicit reference to Decision 1/CP.21, adopting the Paris Agreement. In GEF-8, alignment with the UNFCCC was further strengthened through the integration of Nature-based Solutions (NbS) and resilience as co-benefits of mitigation investments, including reference to Article 5 of the Paris Agreement on carbon sinks. Across all three cycles, all 40 country child projects include GHG mitigation targets, underscoring climate change as the most consistent anchor of the program's environmental relevance.

33. **Relevance to the Convention on Biological Diversity (CBD) has evolved from normative reference to explicit strategic alignment.** In GEF-6, the program drew on CBD Decisions IX/28 and X/22, which recognized cities as key actors in biodiversity implementation and encouraged the development of local biodiversity strategies aligned with national action plans. GEF-7 integrated ecosystem values and biodiversity into spatial planning frameworks, with reference to the Aichi Targets. GEF-8 provides the most specific biodiversity framing to date, explicitly aligning the program with Target 12 of the Kunming-Montreal Global Biodiversity Framework, which calls for improved green and blue spaces in urban areas. The share of child projects targeting landscapes to benefit biodiversity (Core Indicator 4.1) rose from 36 percent in GEF-6 to 67 percent in GEF-7 and 85 percent in GEF-8.

34. **The program’s relevance to the UNCCD has evolved progressively across replenishment cycles, becoming more explicit and conceptually grounded over time.** In GEF-6, the programs relevance to UNCCD was established through migration and rural–urban dynamics linked to land degradation, though connection to outcomes beyond city boundaries remained partly articulated. GEF-7 introduced Land Degradation Neutrality (LDN) and the rural–urban interface as explicit reference points. GEF-8 advanced alignment further through actions to prevent urban sprawl and integrated spatial planning as pathways to achieving LDN, with 45 percent of child projects including restoration targets.

35. **Relevance to the Stockholm Convention on Persistent Organic Pollutants (POPs) and the Minamata Convention on Mercury have remained less prominent of program’s MEA linkages, though these have become more specific across cycles.** GEF-6 and GEF-7 referenced Article 6 (Stockholm) and Article 11 (Minamata) on sound waste management without substantive reflection in project design – formal POPs reduction targets were absent in GEF-6 and appeared in only 27 percent of GEF-7 projects. GEF-8 addressed this gap by introducing core indicators for chemicals and waste for first time, with measurable targets for POPs disposal, mercury reduction, and landfill management.

3.1.2. Country Participation

36. **The participation of countries and cities in the program broadly reflects GEF strategic priorities articulated in the program framework.** Of the 144 countries eligible for GEF STAR allocations, 33 have participated in the program. In GEF-6 and GEF-7, participation was concentrated in a relatively small group of large, rapidly urbanizing middle-income countries— 11 countries in GEF-6 and 9 in GEF-7, including China, India, Brazil, and South Africa—reflecting program’s focus on scale and implementation capacity. In GEF-8, participation expanded to 20 countries, 16 of them new to the program, with a marked shift toward Least Developed Countries (LDCs) and Small Island Developing States (SIDS). This broadened the program’s relevance to underserved contexts, but also introduced trade-offs, including smaller grant sizes and contextual challenges to sustainability.

37. **Country participation has generally aligned with urbanization dynamics.** Participating countries tend to exhibit higher urban population growth and, in earlier cycles, higher per capita income growth than non-participants. This pattern shifts in GEF-8, where participants show higher urban growth but lower income growth, reflecting the program’s transition toward lower-capacity contexts and a greater emphasis on equity.

38. **City participation has been broad and demand-driven, with a shift toward national capitals in GEF-8.** Across three cycles, 94 cities have participated — 22 national capitals, 41 provincial or regional capitals, and 31 other cities. Provincial and regional capitals dominated earlier cycles (54–59%), but GEF-8 saw a shift toward national capitals (rising from 5 in GEF-7 to

14), consistent with expansion into smaller economies where institutional capacity is concentrated in the capital. Demand from cities has consistently exceeded the program's capacity to support them, reflecting strong perceived relevance at the local level.

39. **Overall, participation patterns reflect the program's evolving priorities — from scale and implementation capacity in earlier cycles to equity and breadth in GEF-8 — while supply-side constraints have persisted throughout.** National governments value the program primarily for its multi-sectoral approach and metropolitan scale, which they see as addressing a clear institutional gap. Global platform stakeholders — including WRI, ICLEI, C40, the World Bank, and UNEP — emphasize its broader systemic value as an integrated urban sustainability initiative. The gap between these perspectives points to a recurring mismatch between global-level ambitions and country-level design and implementation, a theme developed further in Chapter 8.

3.2. COHERENCE

3.2.1. External Coherence

40. **External coherence has strengthened progressively across cycles, with the program demonstrating increasingly explicit alignment with international frameworks and, in some cases, strong integration with national policy processes.** At the international level, the program's framing evolved from a largely pre-Paris orientation in GEF-6—referencing NAMAs and signaling intent to align with the Paris Agreement and SDG 11—to more explicit and structured alignment from GEF-7 onwards, anchored. This alignment was anchored in the Paris Agreement and NDC implementation, SDG 11, the New Urban Agenda, and the Sendai Framework for Disaster Risk Reduction. GEF-8 provides the most precise articulation to date, with explicit alignment with Targets 1 and 12 of the Kunming-Montreal Global Biodiversity Framework alongside the Paris Agreement and the SDGs.

41. **At the national level, coherence is strongest where child projects are deliberately embedded in ongoing policy frameworks and forward-looking planning processes.** In China, projects across all three cycles align closely with Five-Year Plans, the dual-carbon goals, and the ecological civilization agenda, with design choices—such as the GEF-7 project in Ningbo spanning planning cycles—intended to inform policy implementation. In India, alignment with flagship national initiatives such as the *Swachh Bharat Mission* and the Smart Cities Mission provided a clear operational anchor. In Peru, coherence is most evident through alignment with NDC development processes, although project design also reflected institutional positioning. However, coherence is not uniform across countries. In some cases, project design expanded beyond initial government priorities. In Paraguay (GEF-6), the project originated in a government interest in electric mobility and expanded scope to include waste, biodiversity, and land-use planning, resulting in components that, while consistent with GEF objectives, were not equally grounded in articulated national demand. These patterns are consistent with the wider literature,

which emphasizes that urban climate and sustainability initiatives are more effective when they are integrated into multilevel governance systems, aligned with higher-level policy frameworks, and connected to national planning processes and intergovernmental coordination (Betsill and Bulkeley, 2006; Fuhr, Hickmann and Kern, 2018; Shah Naidoo et al., 2024).

3.2.2. Internal Coherence

42. The Sustainable Cities Program maintains a consistent overarching objective across cycles, but coherence is uneven in how that objective is operationalized and measured. The program broadly aims to address the drivers of environmentally unsustainable urbanization and generate global environmental benefits across focal areas, including climate change, biodiversity, land degradation, and chemicals. However, coherence is weaker in how this objective is operationalized. The most significant gaps are in the translation of integrated plans into aligned investments, the connection between global knowledge products and local implementation, and the measurement of progress at the program level.

43. Project design is broadly aligned with program priorities, although the uptake of cycle-specific priorities varies. All 40 country child projects meet minimum alignment criteria. However, the extent to which new priorities are reflected in project design varies. Compared to GEF-6, projects from GEF-7 demonstrate stronger uptake of decarbonizing urbanization — both in planning (83 percent vs. 73 percent) and investment activities (49 percent vs. 29 percent) — and of financing solutions in investment activities (39 percent vs. 18 percent). In GEF-8, integration of nature into urban development increases significantly (from 23 percent in GEF-6 to 75 percent in planning and from 13 percent to 58 percent in investments), and integrated, systems-based approaches also show a steady rise in planning coverage. By contrast, circular economy and innovative financing show only marginal uptake despite their prominence in GEF-8 programming directions (Annex 3).

44. Some gaps are evident in how the program addresses the pathway from delivered outputs to the long-term impacts it pursues. Planning activities produce integrated strategies while pilot investments are selected and implemented independently. Similarly, the expectation that non-participating cities will replicate approaches through exposure to global platform knowledge has not been supported by dedicated follow-on mechanisms. While GEF-8 introduces blended finance instruments and private sector engagement frameworks, it remains uncertain whether these will sufficiently bridge the gap between knowledge sharing and investable action, particularly in LDCs and SIDS.

45. The connection between global platform activities and country-level implementation has improved, though some misalignment persists. The program depends on global platform knowledge to inform child project implementation, yet country stakeholders often find these products too general or insufficiently aligned with project timelines and local needs. GEF-7

introduced regional coordinators to help translate global knowledge into country-level support, and GEF-8 added more demand-driven, clinic-style assistance aligned with project timelines. While these adjustments have improved usability, the underlying mismatch between globally produced knowledge and locally embedded implementation remains.

46. Institutional arrangements have, at times, affected coherence, particularly during periods of transition. The concurrent operation of two global platforms between 2020 and 2024 led to fragmentation of knowledge products, duplication of efforts, and the division of partnerships across institutions. GEF-8 has sought to address these issues through an integrated web-based platform to consolidate information, although some fragmentation effects persist.

47. Monitoring and evaluation systems have strengthened over time, though limitations remain in capturing longer-term outcomes. GEF-6 had limited program-level M&E, while GEF-7 introduced proxy indicators but remained largely dependent on child project data. GEF-8 represents a significant improvement, with dual-level reporting (global platform and project level), a dedicated M&E budget, country focal points, and defined global environmental benefit targets. However, the system still primarily captures outputs and intermediate results, with limited attention to the transformative changes expected to result from GEF support to integrated urban planning, investment patterns, regulatory development, or governance systems.

48. The program's approach to gender has become more consistent, although outcomes continue to depend on broader contexts. In GEF-6 and GEF-7, gender was identified as a cross-cutting priority but was not meaningfully reflected in results frameworks, resulting in limited tracking of outcomes. GEF-8 addresses this through a Gender Action Plan and the integration of sex-disaggregated indicators into monitoring systems, allowing participation and benefits to be more systematically tracked. Nonetheless, outcomes related to women's participation continue to be shaped by national political and institutional contexts.

Child Projects and Programmatic Priorities

49. There is increasing clarity in the GEF Programming Directions on how it seeks to achieve urban transformation. The GEF-6 Programming Directions do not provide a clear articulation of urban sustainability themes that its projects will address. The GEF-7 Programming Directions introduce four categories of interventions: integrated urban planning, decarbonizing urbanization, building deep resilience, and cascading financing solutions. GEF-8 Programming Directions expand this further to five strategic entry points: advancing integrated and systems-based interventions; integrating nature in urban development and regional planning; decarbonizing the built environment; adopting circular economy approaches; and promoting innovative financing. The evaluation assessed the extent to which country child projects were aligned with these priorities. All 40 country child projects meet this minimum bar.

50. **Country child projects from GEF-7 and GEF-8 cycles broadly reflect the thematic priorities of their respective cycles, though substantial differences from other cycles are evident in only a few instances.** GEF-7 projects show meaningfully higher coverage than the GEF-6 baseline for decarbonizing urbanization — both in planning and investment activities — and for cascading financing solutions in investment activities. However, for evidence-based spatial planning, GEF-7 projects actually show lower planning coverage and for building deep resilience, coverage across planning and investment activities is essentially flat. For GEF-8 projects, the clearest evidence of GEF-8 cycle-specific alignment comes from integrating nature in urban development, where planning coverage rises sharply from 23 percent in GEF-6 to 75 percent in GEF-8, and investment coverage from 13 percent to 58 percent. Advancing integrated and systems-based interventions also shows a progressive increase across cycles in planning activities, with GEF-8 investment coverage higher than the GEF-6 baseline (18 percent), though notably lower than GEF-7 (67 percent), an anomaly (Table 2).

Table 2: Average Share of Thematic Sub-Priorities Addressed per Project – by Cycle (Percent)

Thematic priorities	Planning activities			Investment activities		
	GEF-6 (n = 11)	GEF-7 (n = 9)	GEF-8 (n = 20)	GEF-6 (n = 11)	GEF-7 (n = 9)	GEF-8 (n = 20)
GEF-7 Priorities						
Evidence-based spatial planning by projects	89%	78%	88%	n.a.	n.a.	n.a.
Decarbonizing urbanization with infrastructure integration	73%	83%	73%	29%	49%	38%
Building deep resilience with smart systems and slum solutions	40%	43%	41%	17%	24%	23%
Cascade financing solutions for urban sustainability	27%	28%	33%	18%	39%	38%
GEF-8 Priorities						
Advancing integrated and systems-based interventions	74%	82%	88%	18%	67%	55%
Integrating nature in urban development and regional planning	23%	61%	75%	13%	42%	58%
Decarbonizing the built environment	38%	57%	53%	17%	29%	34%
Adopting circular economy approaches	30%	43%	38%	13%	23%	24%
Promoting innovative financing	27%	28%	33%	18%	39%	38%

Source: GEF IEO review of project proposals for 40 country child projects of the Sustainable Cities Program.

Notes: Each cell shows the average percentage of sub-priorities within a given thematic dimension that projects in that cycle addressed in their design. GEF-6 projects serve as a natural baseline, as explicit thematic priorities were not articulated in the

GEF-6 Programming Directions. Evidence-based spatial planning pertains exclusively to planning activities; investment activities are therefore not applicable (n.a.). Sub-priorities used to assess each dimension are listed in Annex 3.

Global Platform and Child Project Needs

51. **The knowledge platform has consistently struggled to translate its global knowledge offer into products that are useful to participating countries and cities.** Country and city stakeholders have regularly found platform knowledge products too globally oriented to be directly useful locally. GEF-7 introduced regional coordinators to bridge this gap; GEF-8 added clinic-style support aligned with child project timelines. These adjustments have not fully resolved the misalignment. The detailed analysis of platform functioning is taken up in the global platform chapter; the coherence finding here is that the program's internal logic depends on the platform producing knowledge that child projects can use, and this linkage has remained imperfect.

4. DESIGN OF CHILD PROJECTS: A COMPARATIVE PERSPECTIVE

4.1. THE GEF URBAN SUSTAINABILITY PORTFOLIO

52. **Urban sustainability projects account for just over 10 percent of the GEF portfolio and perform comparably to other projects, with a modest advantage in sustainability.** Of the 4,250 GEF projects screened, 449 were identified as focused on urban sustainability, accounting for 10 percent of GEF projects and funding — a share that has remained relatively stable across replenishment cycles. Completed urban projects perform comparably to non-urban projects across most dimensions, though they show a modest advantage in sustainability — 71 percent rated likely compared to 64 percent for non-urban projects. The reasons for this difference are not yet well understood.

53. **The urban sustainability portfolio is primarily supported through the climate change focal area, with other focal areas accounting for a smaller share.** Of the 449 projects focused on urban sustainability, 65 percent were financed from the climate change focal area envelope, with a smaller share accounted for by chemicals and waste (6 percent), international waters (5 percent), biodiversity (1 percent), and land degradation (less than 1 percent). Multi-focal area projects account for 22 percent and have become more prominent since GEF-6, most commonly combining climate change and biodiversity.

54. **The portfolio has evolved significantly over time, shifting from technically focused, sector-specific interventions toward more integrated and cross-cutting approaches.** Comparing projects across three generational groups — early cycles (Pilot Phase to GEF-2), middle cycles (GEF-3 to GEF-5), and recent cycles (GEF-6 to GEF-8) — illustrates this shift clearly. Projects approved in recent cycles show a marked increase in the share of tracked activity types included within each category, compared to early cycles. Gains are evident across regulatory and policy

development (rising from 14 to 26 percent of tracked activity types), planning and strategy development (21 to 36 percent), knowledge sharing (53 to 72 percent), and socio-economic benefits (12–14 to 26 percent). Looking at specific activities within these broader categories, the share of projects seeking women's participation and youth engagement rose markedly, from 7 to 91 percent, as did those incorporating private sector partnerships (32 to 71 percent), knowledge platforms (38 to 91 percent), and urban strategy development (5 to 46 percent). In contrast, several technical activities have declined in prevalence, including engineering design (45 to 16 percent) and energy efficiency strategies (39 to 15 percent). Amid these shifts, training and workshops, awareness raising, and piloting approaches have remained consistently central across all cycles (Annex 4).

4.2. SUSTAINABLE CITIES PROGRAM CHILD PROJECTS

4.2.1. Comparison of Child Projects with Stand-alone Projects

55. **SCP child projects exhibit a substantially broader scope than standalone urban sustainability projects.** On average, they include approximately 4.5 more distinct activity types per project. This broader profile is driven by a significantly higher incidence of urban development strategies (52 percentage points higher), as well as physical investments — including green infrastructure (42 percentage points), transportation infrastructure (43 percentage points), mitigation infrastructure (26 percentage points), and land restoration (35 percentage points), and knowledge sharing through communities of practice (35 percentage points) (Table 3).

Table 3: Sustainable Cities Projects vs Other Child Projects and Stand-alone Projects

Category	Activity	Difference (Cities- SA; N=43, 82)		Difference (Cities- other child; N=43, 99)	
		p-value	p-value	p-value	p-value
Regulatory	adopting policies	0.000	0.998	-0.243	0.005
	banning products	-0.091	0.002	-0.146	0.000
	creating enabling environments	0.241	0.007	0.092	0.321
	developing codes standards	-0.142	0.101	-0.222	0.014
	developing fiscal regulations	0.063	0.455	-0.260	0.004
	developing policies	0.241	0.002	0.045	0.537
	developing regulations	-0.071	0.433	-0.282	0.002
	harmonizing standards	-0.078	0.043	-0.111	0.013
	implementing regulatory frameworks	-0.143	0.041	-0.287	0.000
	reviewing policies	-0.063	0.408	-0.218	0.010
	reviewing regulations	-0.039	0.572	-0.215	0.006
	revising fiscal regulations	-0.051	0.023	-0.232	0.000
	revising laws	-0.061	0.013	-0.098	0.004
	revising regulations	-0.055	0.372	-0.164	0.020
	strengthening regulatory frameworks	-0.129	0.142	-0.223	0.015
Planning	developing energy efficiency strategy	-0.249	0.000	-0.050	0.178

Category	Activity	Difference (Cities- SA; N=43, 82)	p-value	Difference (Cities- other child; N=43, 99)	p-value
	developing engineering design	0.041	0.592	0.147	0.042
	developing gender strategy	0.063	0.408	-0.148	0.030
	developing mobility transport strategy	0.193	0.024	-0.068	0.464
	developing urban development strategy	0.519	0.000	0.734	0.000
Investment	building energy infrastructure	0.160	0.060	0.311	0.000
	building green infrastructure	0.417	0.000	0.546	0.000
	building mitigation infrastructure	0.261	0.001	0.311	0.000
	building public buildings	-0.013	0.863	0.173	0.009
	building residential infrastructure	0.082	0.192	0.163	0.004
	building transportation infrastructure	0.434	0.000	0.376	0.000
	building waste infrastructure	0.159	0.074	0.198	0.029
	conducting enforcement activities	-0.157	0.041	-0.204	0.012
	piloting demonstrating	-0.092	0.139	-0.138	0.020
	restoring land	0.353	0.000	0.462	0.000
Capacity	establishing business incubator	-0.071	0.007	-0.146	0.000
	establishing training center	-0.071	0.007	-0.037	0.080
Knowledge	creating communities of practice	0.348	0.000	0.115	0.211
Monitoring	developing GHG inventory	0.112	0.065	0.151	0.010
	monitoring biodiversity	0.185	0.010	0.195	0.007
	monitoring land cover	0.199	0.002	0.161	0.017
Socio-economic	improving living conditions	0.086	0.313	0.202	0.015
	improving public transport access	0.174	0.031	-0.016	0.858
	improving sanitation	0.177	0.032	0.251	0.002
	improving water security	0.104	0.170	0.183	0.013
	reducing traffic	0.105	0.110	0.137	0.034

Source: GEF IEO's AI-assisted review of 4,250 FSP and MSP that received CEO approval or endorsement through February 12, 2026.

Notes: The analysis pertains to 449 urban sustainability focused projects. Of the 84 activity categories, only those are shown for which the differences between Sustainable Cities Program projects and standalone projects or child projects from other programs are statistically significant at the 5% level. Green-shaded values indicate positive difference for Sustainable Cities Program projects, while red-shaded values indicate negative difference.

56. Compared to stand alone projects, Sustainable Cities Program projects show a lower incidence of several activities. For example, lower incidence of energy efficiency strategies (25 percentage points lower), implementation of regulatory frameworks (14 percentage points), enforcement activities (16 percentage points), and the establishment of business incubators and training centers (7 percentage points).

4.2.2. Comparison with Other Programmatic Projects

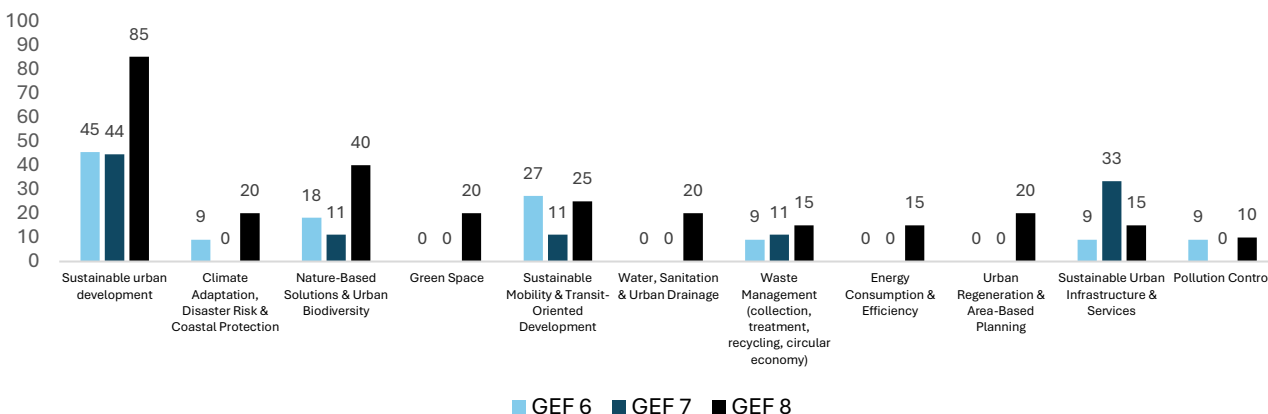
57. When compared to child projects of other GEF programs addressing urban sustainability, SCP projects are broadly similar in scope but distinct in the composition of activities they support. In terms of breadth, SCP projects include on average 1.3 more activity types than other programmatic child projects, though this difference is not statistically significant, suggesting that

a broader activity scope is associated with programmatic approaches in general rather than being specific to the SCP. The distinction lies more in emphasis: SCP projects place greater weight on urban planning, physical investments, green infrastructure, and land restoration — reflected in a much higher incidence of urban development strategies (73 percentage points higher than other programmatic child projects) and green infrastructure investments (55 percentage points higher). Child projects of other programs, by contrast, more frequently incorporate regulatory activities and enforcement mechanisms, with implementation of regulatory frameworks (29 percentage points higher) and strengthening of regulatory frameworks (22 percentage points higher) being more common.

4.3. PROGRAMMATIC PRIORITIES AND DESIGN

58. **Nearly all country child projects under the Sustainable Cities program — 90 percent across all cycles — include activities to support the development of laws, policies, and regulations.** GEF-8 saw the highest coverage, with all projects incorporating support for legal, policy, and regulatory frameworks, compared to 82 percent in GEF-6 and 78 percent in GEF-7. In GEF-8, this support extended across a broader range of areas — including nature-based solutions, climate adaptation, and urban regeneration — compared to preceding cycles (Figure 2).

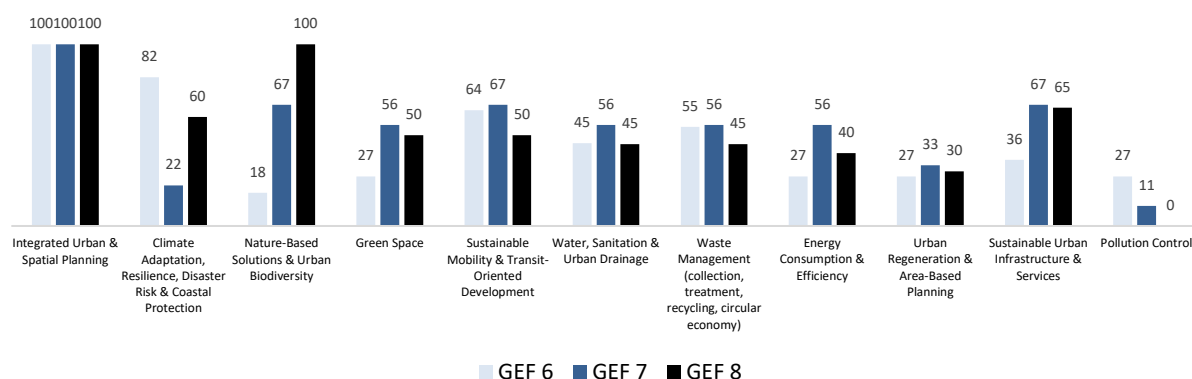
Figure 2: GEF Support for Development of Legal, Policy and Regulatory Frameworks



Source: GEF IEO based on a review of project documentation at the design stage.

Thematic focus shifted across cycles. GEF-6 emphasized climate adaptation, waste, and mobility; GEF-7 moved toward urban infrastructure, mobility, and urban biodiversity; and GEF-8 prioritized nature-based solutions and urban biodiversity (Figure 3).

Figure 3: GEF Support for Urban Planning – Focus of Action Plans



Source: GEF IEO based on a review of project documentation at the design stage.

59. **Capacity development, knowledge sharing, and stakeholder engagement are consistently embedded across all Sustainable Cities child projects, though their delivery modalities vary.** All projects include provisions for stakeholder engagement, with dedicated approaches to involving diverse actors in both design and implementation. Capacity development is similarly universal, typically delivered through trainings, workshops, and peer exchanges. Knowledge sharing is also a standard feature, implemented through dedicated knowledge platforms at the national level or through the global program platform (SCIP/UrbanShift). One exception is Paraguay’s GEF-6 project, which developed a platform to support planning and budget management.

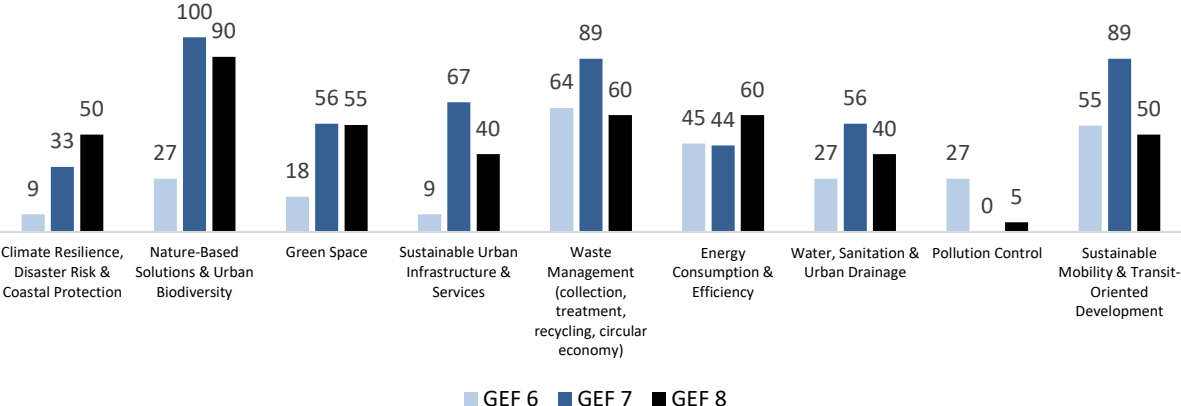
60. **In contrast, more durable institutional coordination mechanisms are less consistently embedded and show variation across cycles.** The establishment of new institutions increased from 9 percent of projects in GEF-6 and none in GEF-7 to 45 percent in GEF-8, while efforts to strengthen existing institutions rose more modestly, from 9 percent to 20 percent over the same period. Examples include Paraguay’s planned metropolitan association (AMUAMA), Côte d’Ivoire’s urban observatory, Rwanda’s community upgrading committees, and, in GEF-8, Serbia’s Sustainable City Partnership Initiative and Guatemala’s multi-level coordination roundtable.

61. **Activities to develop financing strategies, instruments, and mechanisms have expanded across GEF cycles, increasing from 64 percent of projects in GEF-6 to 89 percent in GEF-7 and 90 percent in GEF-8.** GEF-6 focused on business models, strategy development, and fiscal reform, with examples such as Vietnam’s green city financing mechanism and Peru’s public investment profiles. GEF-7 saw broader uptake of funds and mechanisms, with projects in China, Morocco, and Costa Rica targeting private sector mobilization and municipal creditworthiness. GEF-8 reflects the widest range of instruments and more explicit gender-responsive financing, including

Guatemala’s Biodiversity and Urban Forests Fund with dedicated windows for women-led initiatives, and projects in Algeria and Chile targeting women, youth, and vulnerable groups.

62. **All projects included pilot investments, though their focus shifted across cycles.** GEF-6 emphasized waste management, energy efficiency, and mobility; GEF-7 expanded toward nature-based solutions and sustainable infrastructure; GEF-8 places greater emphasis on nature-based solutions and urban biodiversity (Figure 4).

Figure 4: GEF Support for Urban Sustainability – Focus of Pilot Investments



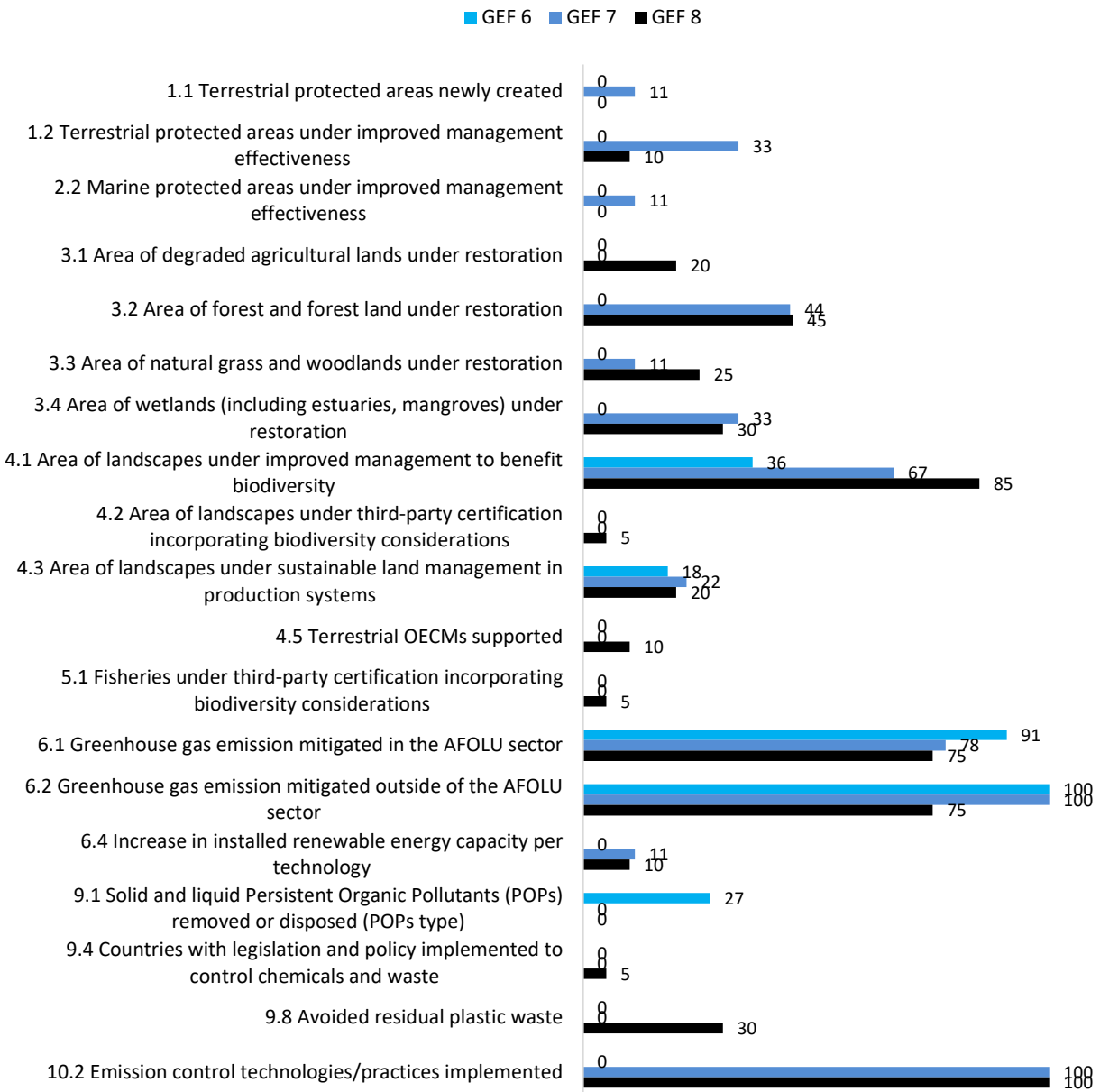
Source: GEF IEO based on a review of project documentation at the design stage.

63. **All SCP country child projects pilot new approaches or technologies within their respective countries and cities, though approaches entirely new to the field are rare.** Innovation is predominantly context-specific, spanning innovative financing mechanisms, nature-based solutions, integrated urban planning, and clean technology demonstrations. Kenya's GEF-8 project, for instance, is piloting the first climate and biodiversity-aligned urban planning model in Nairobi integrating land use, buildings, transport, waste, energy, and ecosystem services into a single neighborhood design framework. China's GEF-7 project broke new ground by addressing climate change and biodiversity in an integrated manner at the city level.

64. **The SCP portfolio shows a higher innovation risk appetite than other urban sustainability-focused projects, driven primarily by its ambition in institutional and policy transformation.** In aggregate, 24 percent of SCP projects are rated High or Substantial for innovation risk, compared to 21 percent of standalone urban-focused projects and 12 percent of child projects in other GEF urban sustainability programs. This gap is largely explained by SCP child projects’ greater willingness to undertake institutional and policy risks. In contrast, standalone urban-focused projects present higher technological and financial and business model risk ratings— consistent with the SCP's reliance on proven technologies adapted to local contexts and financing approaches that, while creative, are grounded in established mechanisms.

65. **The environmental benefits pursued by SCP child projects have shifted over time, reflecting both the program's evolving thematic priorities and the broadening of its environmental agenda.** These changes are evident when the core global environmental benefits indicators – environmental indicators tracked by the GEF at the corporate level – addressed by the country child projects are assessed. Assessment shows that GHG emission mitigation has been the most consistently pursued environmental benefit across cycles. Biodiversity-related benefits — particularly area of landscapes under improved management — have increased markedly, rising from 36 percent of projects in GEF-6 to 85 percent in GEF-8, reflecting the program's growing cross-cutting ambition. Restoration activities, including degraded agricultural lands and natural grasslands and woodlands, were absent in GEF-6 but are included in a substantial share of GEF-7 and GEF-8 projects. In contrast, removal of persistent organic pollutants, a focus for several projects in GEF-6, is absent from more recent projects. Several indicators — including terrestrial and marine protected areas — peaked in GEF-7 before declining in GEF-8. Wetlands restoration has remained relatively stable across cycles. New priorities such as avoided residual plastic waste appeared for the first time in GEF-8, signaling an expanding environmental agenda (Figure 5).

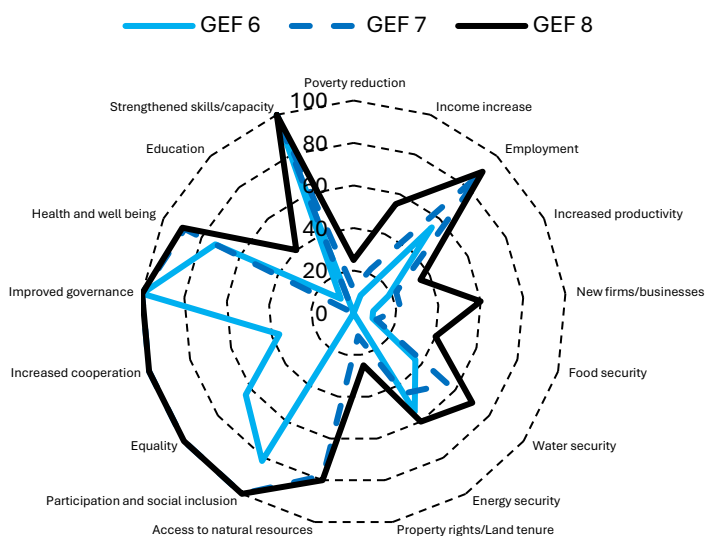
Figure 5: Environmental Results - Percentage of Projects Including a Target for the Core Indicator



Source: GEF IEO review of CEO endorsement documents.

66. **There is a clear increasing trend across cycles in the range of socio-economic outcomes targeted.** Of the 17 types of socio-economic benefits tracked in this analysis, GEF-6 projects included 39 percent, GEF-7 projects included 56 percent, and GEF-8 projects included 69 percent. GEF-8 projects address the widest range of outcomes, consistently including governance, equality, and social inclusion alongside health and employment (Figure 6).

Figure 6: Socio-Economic Benefit Activities in Sustainable Cities Projects, by GEF Cycle



Source: GEF IEO based on a review of project documentation at the design stage.

67. **Across the 40 country child projects reviewed, five include components explicitly targeting socio-economic outcomes:** one in GEF-6 and four in GEF-8. In South Africa, the project supported the City of Johannesburg in adopting gender-sensitive and resource-efficient guidelines to enhance the sustainability and inclusiveness of social housing. In Zimbabwe, Integrated Sustainable Waste Management Plans focus on improving working conditions and expanding economic opportunities for women in informal organic and plastic waste collection. In Belize, blue-economy initiatives aim to strengthen livelihoods and socio-economic resilience through sustainable use of marine and coastal resources. In Congo, planned infrastructure upgrades target improved access to urban services in vulnerable neighborhoods, while in Benin, urban mobility interventions aim to formalize 3,000 drivers.

68. **Attention to inclusive planning has strengthened across cycles.** Projects with only general references to community groups in urban planning activities declined to zero by GEF-8, while those with targeted outputs aligned with livelihood objectives increased from 9 percent in GEF-6 to 45 percent in GEF-8. Examples include gender-sensitive planning in Brazil (GEF-6), inclusive transit-oriented development in India (GEF-7), and mandatory inclusion of Indigenous women's organizations in local territorial plans in Guatemala (GEF-8). Over half of projects combine inclusive processes with concrete outputs, such as gender-sensitive waste strategies (Senegal, GEF-6) and inclusive planning frameworks (Malaysia, GEF-8).

69. **Pilot investments show the strongest integration of inclusive outcomes, with nearly two-thirds of projects incorporating job creation, income support, or formalization**—rising from 45 percent in GEF-6 to 70 percent in GEF-8. Examples include formal employment for urban recyclers

(Paraguay, GEF-6), improved conditions for traders (Sierra Leone, GEF-7), and support for women- and youth-led enterprises (Belize, GEF-8).

70. **Capacity development shows the clearest shift toward targeted approaches.** While nearly all projects include capacity building, those designed for specific groups increased from 18 percent in GEF-6 to 60 percent in GEF-8. Examples include training women in solar technologies (Brazil, GEF-6), support to informal workers (Kenya, GEF-8), and programs for youth and students (China GEF-8, Guatemala GEF-8).

71. **Inclusion of women among beneficiaries most consistently tracked (98 percent of projects), with increasing attention to youth and broader vulnerable populations.** Other groups—such as informal workers and the urban poor—are moderately represented, while references to Indigenous Peoples, migrants, and ethnic minorities remain more limited and context-specific. Low percentages for these groups reflect context-specificity rather than program failure.

4.4. INTEGRATION

72. **Cross-sectoral integration is strong across cycles and strongest in GEF-8.** Cross-sectoral integration is assessed through the inclusion of cross-sectoral planning, policies and regulations, and pilot investments. Overall, integration is strong across cycles. Approximately 90 percent of projects incorporate cross-sectoral planning and, separately, 90 percent incorporating cross-sectoral pilot investments, though policy and regulatory integration is less common at 73 percent. Cross-sectoral integration has strengthened across cycles, rising from 70 percent of projects in GEF-6 to 93 percent in GEF-8 (Table 4). Examples illustrate the variety of forms cross-sectoral integration takes: Paraguay (GEF-6) integrates sustainable and resilient land-use planning, as well as transport, waste, chemicals, and biodiversity through sustainable investment strategies; Rwanda (GEF-7) combines waste management policies with housing and environmental planning; and Zimbabwe (GEF-8) links reforestation, nature-based solutions, food systems, and climate-resilient urban planning through integrated investments in Bulawayo.

Table 4: Integration in GEF Sustainable Cities Projects –Indicators Addressed in Design as Percentage of Number of Indicators Assessed in the Dimension

Type of integration	Number of indicators	GEF-6	GEF-7	GEF-8	All cycles
Observations		11	9	20	40
Cross-sectoral	3	70	81	93	84
Coherence	2	91	94	95	94
Institutional	2	100	100	95	98

Stakeholders	12	68	91	93	86
Systems outcomes	2	95	100	100	99

Source: GEF IEO based on a review of project documentation at the design stage.

73. Policy coherence is a defining feature of Sustainable Cities Program projects, with consistently high percentage of projects across cycles supporting vertical and horizontal coherence. Most projects address both **vertical coherence**—alignment across national, subnational, and local levels of government—and **horizontal coherence**—coordination across sectoral ministries and government entities at the same level—with 98 percent addressing the former and 90 percent the latter, often combining national–local coordination with intersectoral integration (OECD, 2018). Several examples illustrate how project include activities that support policy coherence: India (GEF-6) established city-level steering committees to link national and local actors, while Argentina (GEF-7) integrated provincial and federal systems to support metropolitan planning. More recent projects, such as Chile and Cuba (GEF-8), further expand this approach through multi-level, multi-stakeholder coordination platforms.

74. Institutional and stakeholder integration are also widely embedded, though they have evolved over time. All projects support stakeholder collaboration, and most include indicators to track coordination outcomes. Approaches range from strengthening existing networks, such as Vietnam’s Sustainable Cities Cluster, to creating new participatory structures like Rwanda’s (GEF-6) community upgrading committees and Mali’s (GEF-8) public–private–civil society platform. GEF-8 projects seek to involve nearly all major groups—including government, private sector, civil society, and vulnerable populations—compared to a more limited set in earlier cycles.

75. Projects also demonstrate strong integration of systems outcomes, linking environmental interventions with social and economic benefits while incorporating mechanisms to manage trade-offs. For instance, Benin (GEF-8) combines nature-based solutions with job creation, air quality improvements, and support for women and youth, while China (GEF-6) and Costa Rica (GEF-7) link urban interventions to economic and public health gains. Trade-offs are typically addressed through risk management tools such as Environmental and Social Management Plans, and, in some cases, more targeted approaches like Brazil’s ecological zoning.

5. RESOURCE MOBILIZATION AND PRIVATE SECTOR ENGAGEMENT

5.1. RESOURCE MOBILIZATION

76. As per the GEF Cofinancing Policy, GEF seeks to mobilize resources to enhance the overall effectiveness and impact of its activities, support the long-term sustainability by broadening stakeholder commitment beyond what GEF could achieve with its own resources alone, and strengthen partnerships (GEF Cofinancing Policy, 2018). Within the GEF Sustainable Cities Program, this has involved mobilizing resources from participating country and city governments,

with particular attention to MDB loans and private sector co-financing. The GEF-8 strategy calls for long-term partnerships with a broad range of resource providers and repositioning the private sector from a co-financing target to a co-creator of urban sustainability solutions.

77. The program has so far mobilized commitments of \$6.0 billion against cumulative GEF project financing of \$436 million², a cofinancing ratio of 13.7. While this exceeds the cofinancing ratio of 7.6 recorded for the overall GEF portfolio of full-size projects during the GEF-6 to GEF-8 period, the program's cofinancing ratio has been declining — from 17.6 under GEF-6 to 10.6 under GEF-8. Two factors explain this trend: greater participation of LDCs and SIDS, where the leverage ratio is 6.1 compared to 13.9 for the rest of the portfolio; and a declining share of MDB-implemented resources — from 67 percent in GEF-6 to 28 percent in GEF-8 — compounded by declining cofinancing ratios even within MDB-implemented projects, which nonetheless remain higher than those for other agency types.

78. Recipient country governments account for 62 percent of cofinancing commitments overall, declining to 45 percent in GEF-8. The share of cofinancing from donor agencies increased across cycles. Private sector co-financing also increased — from 1 percent in GEF-6 to 7 percent in GEF-8, for an overall share of 3 percent — modest relative to the program's stated priority of private sector mobilization, though substantial given the low GEF-6 baseline.

79. Co-financing in the GEF Sustainable Cities Program is concentrated in activities with direct investment and socio-economic dimensions, consistent with GEF's intended role as a catalyst and the GEF-6 Programming Directions' intent that GEF resources not be directed toward investments directly. Pilot investments and activities generating socio-economic benefits attract the highest co-financing, with cofinancing ratios of 23–24 and accounting for 52 percent and 15 percent of total co-financing commitments, respectively. Other activity types generate lower but still substantial leverage ratios of 3 to 9.

5.2. PRIVATE SECTOR ENGAGEMENT

Instruments for private sector engagement

80. At the program level, the instruments for private sector engagement have evolved from largely foundational to increasingly operational. Under GEF-6, the global platform provided support on municipal finance and creditworthiness through training on municipal finance and through Creditworthiness Academy to attract private financing, but direct engagement with private sector remained limited. Under GEF-7, UrbanShift operationalized engagement more concretely — integrating C40's City-Business Climate Alliance workshops, organizing City-Business Collaboration Accelerator (CiBiX) workshops in Chengdu, Teresina, and Johannesburg, convening investor roundtables that brought cities and private financiers together, and using the

² Includes only GEF project grant at CEO Endorsement.

Transformative Actions Program to move city projects closer to investment readiness. GEF-8 continues collaboration with C40 and embeds private sector engagement as a structural design requirement, including demonstrated ability to leverage private capital as an explicit city selection criterion. It also deepens collaboration with the International Finance Corporation (IFC) to develop a pipeline of investment ready projects.

81. At the project level, the most reliable instrument for securing private sector engagement has been the PPP arrangement, particularly where private sector entities assume operational and financial responsibilities for infrastructure or services with a clear purpose and a defined revenue stream. In India (GEF-6), a build-and-operate PPP for a sewage treatment plant in Jaipur concentrated construction and operational risk with a contractor under defined performance guarantees, designed to address the accountability failures of an earlier arrangement that had resulted in chronic supply shortfalls and financial penalties on the municipality. Government officials credited the project with building institutional capacity to structure PPP contracts, suggesting GEF's contribution extended beyond the investment to enabling conditions for private engagement. In Mexico (GEF-6), solar photovoltaic installations in La Paz were implemented through public procurement contracts with private sector participation.

82. The program has catalyzed private action through enabling conditions and replicable standards: in Paraguay (GEF-6), a standardized bus shelter design led a contracted firm to win a follow-on municipal contract using the same standard. Similarly, the waste segregation at source campaign began as a partnership with one company and, in later editions, expanded to others, strengthening collaboration among the private and public sectors, vulnerable groups such as urban recyclers, and civil society; In Senegal, technical assistance to ten industrial enterprises motivated these to invest USD 2.29 million of their own funds for energy efficiency, with enterprise heads shifting their view of ISO certifications from a compliance burden to a competitive advantage.

Barriers to private sector engagement

83. Private sector cofinancing has grown across cycles but remains constrained by persistent structural barriers. Private sector cofinancing commitments were 1 percent of total co-financing commitments under GEF-6, 2 percent under GEF-7, and 7 percent under GEF-8. Three barriers explain this. First, GEF process length and complexity deter private firms whose decision cycles require speed: private sector actors in Ningbo, China (GEF-6 and GEF-7) and Mexico (GEF-6) independently noted that few firms are configured to absorb one-to-five year government timelines. Second, scope changes undermine commitments: in Brazil, BYD co-financing did not materialize after electric vehicles were removed as a planned activity (GEF IEO, 2022). Third, cities frequently lack the investment-ready pipelines private investors require, with Peru, India, Malaysia, and Johannesburg all lacking investment-ready pipelines. Where engagement has

worked, pre-existing government-private relationships have been a consistent enabler — evidenced in Paraguay (Mesa del Aire, Luque PPP), India (Bhopal and Mysuru), and Mexico (All in Baja) — significantly lowering transaction costs and accelerating commitment.

Indirect Pathways of Private Sector Engagement

84. **The program has engaged the private sector through pathways that extend beyond direct co-financing commitments.** Co-financing figures, while informative, do not fully capture the reach of private sector engagement supported by the program. Beyond direct financial commitments, the program's work on regulatory and policy frameworks has in several instances changed private sector behavior and unlocked investment beyond the project cycle — as illustrated in Ningbo, China (GEF-7), where a GEF-supported carbon-neutrality roadmap guided medium-term corporate investment decisions by Oriental Cable Company. These indirect pathways, operating over longer time horizons than the project cycle, point to a broader contribution that standard co-financing metrics do not reflect — and suggest that the program's influence on private sector engagement may be more substantive than the figures alone indicate.

6. PROGRAM IMPLEMENTATION AND EFFICIENCY

6.1. IMPLEMENTATION ARRANGEMENTS

6.1.1. Program-Level Governance and Coordination

85. **The SCP operates through a multi-level governance structure spanning global oversight, platform management, and country-level implementation.** At the highest level of program governance, program steering committees have been the main mechanism for oversight and coordination across cycles. The global platform—led by the World Bank in GEF-6 and GEF-8, and UNEP in GEF-7—supports knowledge exchange, while child projects are implemented by GEF agencies typically through project management units with national ministries and city governments as executing partners.

86. **Lead Agency transitions have influenced continuity and efficiency across cycles.** The World Bank led in GEF-6 and GEF-8, while UNEP led in GEF-7 following a breakdown in governance negotiations between the GEF Secretariat and the World Bank. As discussed in Chapter 3, this transition contributed to duplicated knowledge platforms and coordination challenges. GEF-8 sought to restore continuity by returning leadership to the World Bank while retaining key partners such as UNEP, WRI, C40, and ICLEI.

87. **Governance arrangements have become more structured, reflecting learning across cycles.** During GEF-6, strategic direction for the GPSC was provided through regular high-level meetings between the GEF CEO and the World Bank Global Director. Meetings with

Implementing Agencies and global partners — including WRI, C40, and ICLEI — were held for information sharing and coordination. GEF-7 introduced a more formal structure with a Partnership Engagement Group and Steering Committee to guide strategic decisions. GEF-8 further expands this with a Multi-Stakeholder Group and advisory support, aiming to strengthen oversight and inclusiveness.

88. Coordination mechanisms have progressively intensified, improving operational alignment. GEF-6 featured limited coordination, while GEF-7's periodic meetings supported strategic decisions but left gaps in day-to-day alignment. GEF-8 addresses this through more frequent inter-agency coordination to improve operational alignment.

89. A consensus-based model remains a key strength but also a constraint. Without formal authority over implementing agencies, the lead agency relies on convening and consensus. This approach enables flexibility and partnership, but its effectiveness depends on agency engagement and individual leadership. Where commitment is strong – for example country child projects implemented by the Lead Agency of the global program – coordination is effective; where it is uneven, progress can be constrained.

6.1.2. Country-Level Implementation Arrangements

90. Country-level implementation has largely followed a standardized model, centered on GEF agencies working with national and city counterparts. Across the three cycles, 11 GEF agencies have participated. Project management units typically handle day-to-day operations, including procurement, stakeholder coordination, and fiduciary compliance. Of the 40 country child projects, 35 are implemented by a single agency, while 5 involve joint implementation. As discussed later, joint implementation often introduced additional coordination challenges that, in many cases, worked against integration objectives.

91. Implementation arrangements vary by agency type and institutional context. Multilateral development bank (MDB)-led projects generally rely on existing fiduciary systems linked to investment operations, while UN agency-led projects follow separate public sector procedures. In practice, responsibility for infrastructure planning and delivery often lies with national or provincial authorities rather than city governments, reflecting the limited mandates of municipalities and the importance of higher-level institutions in enabling city-level actions.

92. Coordination structures varied by context. Projects have adopted a range of coordination mechanisms, including tripartite agreements (Morocco), city-level coordination groups (Pune and Surat in India), cabinet-level executive committees (Argentina), and multi-tier governance bodies such as boards and technical committees (Costa Rica).

93. Mechanisms to link global and country levels have become more formalized over time. In GEF-7, Country Child Project Focal Points and City Focal Points were introduced to facilitate

coordination with the global platform and partner organizations. GEF-8 builds on this by requiring each project to designate a Country Focal Point to engage with the Multi-Stakeholder Group and participate in global coordination processes.

6.2. PROJECT CYCLE EFFICIENCY

94. **SCP child projects perform efficiently in early project cycle stages but require more time to complete implementation than comparator projects.** From PIF approval through CEO endorsement and first disbursement, SCP projects perform as well as or better than comparator categories, suggesting effective preparation and launch. However, implementation phases tend to take longer: the median time from CEO endorsement to midterm review is higher for SCP projects (51 months) than for comparators (47–48 months), and the time from project start to completion is also longer (89 months), exceeding all comparator categories. This pattern likely reflects the complexity of multi-level, multi-stakeholder arrangements inherent to urban sustainability interventions (Table 5; Annex 5).

Table 5: Efficiency of Project Cycle: Median Time Taken by Full Size Projects Between Steps in Months

Project category	Urban Sustainability Focused Projects			Other GEF projects	
	SCP	Other programs	Standalone	Other programs	Standalone projects
PIF approval to CEO endorsement	18	18	21	18	21
CEO endorsement to Project start	4.5	5.5	7	6	6
CEO endorsement to first disbursement	10.5	14	16.5	11	12
CEO endorsement to mid-term review	51	—	47	48	48
Project start to project completion	89	—	76	78	86.5

Source: GEF IEO based on GEF Portal data.

Notes: For approvals from GEF-6 through GEF-8. Achievement of next stage tracked for various lengths of time. Approval to CEO Endorsement tracked for at least 21 months; CEO Endorsement to Project Start and to First Disbursement tracked for at least 24 months; CEO Endorsement to Mid-Term Review tracked for at least 51 months; and CEO Endorsement to implementation completion tracked for at least 90 months.

95. **Upstream engagement with project proponents has improved.** In GEF-6, preparation was largely driven by agencies and countries with limited coordination support, as the global platform was established after project approval. In GEF-7 and GEF-8, more intensive engagement between the GEF Secretariat, agencies, and countries during the PPG phase helped identify gaps early and reduce revisions. For example, in Peru, early review led to a joint project between IUCN and IDB

to strengthen delivery capacity. In GEF-8, structured guidance and review processes further improved alignment and reduced preparation time.

96. Preparation-stage decisions have had lasting implications for implementation performance. In China (GEF-6), embedding project management units within influential government bodies enabled effective coordination and policy uptake. Peru (GEF-6) offers a contrasting case: insufficient attention to executing agency capacity and budget contributed to delays following agency withdrawal and rehiring. In India (GEF-6), delayed startup compressed implementation timelines and reinforced institutional silos by limiting the project team's ability to foster integration across activities.

97. Project startup has faced challenges in establishing institutional arrangements in some cases. Despite generally efficient preparation, several projects experienced delays at startup due to the complexity of formalizing institutional and contractual arrangements. Examples include delays resulting from national approval processes in Brazil (GEF-6), approval processes for fund flow mechanisms in India (GEF-6), and agency transitions in Peru (GEF-6). In Malaysia (GEF-6), a long delay between approval and disbursement led to obsolescence of the approved design, requiring adjustments from the outset. In India (GEF-6), a two-year delay in signing the project document — resulting from protracted negotiations over execution modalities — meant that city planning and investment components proceeded in tandem rather than sequentially, undermining the original project design logic.

98. Implementation challenges have stemmed from a range of factors across country child projects. In several cases, executing agencies lacked the mandate or capacity required, leading to delays. For example, in South Africa (GEF-6), identifying a suitable executing agency required multiple transitions. In Malaysia (GEF-6), MIGHT's limited authority to coordinate across federal, state, and local government levels constrained stakeholder engagement. Staffing constraints and workload pressures also affected implementation in countries such as Brazil (GEF-6) and Vietnam (GEF-6). In Mexico (GEF-6), the executing agency BANOBRAS was responsible for preparation of knowledge products based on project pilots; however, institutional procurement constraints — specifically its limited ability to hire consultants for knowledge products — prevented it from fulfilling this role effectively. At BANOBRAS's request, responsibility was subsequently transferred to IDB, the implementing agency.

99. Implementation performance has been supported by institutional anchoring and government ownership. Institutional anchoring within government structures supported delivery continuity — as seen in China (GEF-6) and South Africa (GEF-6) — while high-level governance arrangements facilitated coordination in Morocco (GEF-6) and Malaysia (GEF-6). In contrast, the absence of such structures, as in Peru (GEF-6), limited institutional ownership and sustainability.

100. Adaptive management has helped maintain progress, though responses have varied. Several projects adjusted implementation in response to changing conditions. In China (GEF-6), digital coordination supported delivery during COVID-19, while Costa Rica (GEF-7) and Paraguay (GEF-6) adapted project activities related to bus routing and stops, and bicycle networks, to maintain outputs despite cancellation of the metro bus project. However, in some cases, as in Malaysia (GEF-6), regulatory rigidity was a hindrance to scaling up of the pilot locally. These differences suggest that the enabling environment for adaptive management — whether shaped by institutional structure, regulatory frameworks, or agency practice — is a significant determinant of implementation outcomes.

101. Continuity of teams and sustained supervision have contributed to implementation stability. Stable technical teams and consistent agency engagement supported implementation in several projects. In Senegal (GEF-6) and Costa Rica (GEF-7), continuity of core teams enabled steady progress, while in Brazil (GEF-6), civil society partners helped maintain delivery despite government turnover. Sustained supervision, as seen in China (GEF-6) also contributed to effective implementation.

102. Stakeholder engagement and local ownership have supported smoother implementation where well established. Projects with strong stakeholder engagement mechanisms experienced fewer coordination challenges. In Paraguay (GEF-6), participatory working groups facilitated joint ownership and reduced implementation burdens, while in India and Brazil (GEF-6), structured coordination mechanisms and local engagement helped maintain alignment and relevance throughout implementation.

6.2.1. Implementation Challenges

103. Political transitions, policy reversals, and staff turnover have been recurring sources of implementation disruption across country child projects. While not unique to development projects generally, these factors appear to have affected child projects with greater frequency and intensity than standalone projects. Political transitions frequently led to loss of institutional memory, personnel turnover, and delays in approvals: in Peru and Mexico (GEF-6), government changes reduced ownership and institutional continuity; in Malaysia (GEF-6), three changes in national government delayed activities requiring ministerial sign-off; and in Argentina (GEF-7), the downgrading of the Ministry of Environment imposed administrative constraints and halted co-financing flows. Where projects depended on major public investments, policy reversals had immediate consequences: in Paraguay (GEF-6), cancellation of the Metrobus project removed 98.9 percent of expected co-financing and undermined the core mobility component; and in Costa Rica (GEF-7), termination of the electric train project eliminated a central delivery pathway for transport-oriented development activities. Staff turnover compounded these disruptions — in India (GEF-7), regular rotation of senior officials limited sustained oversight and placed greater

responsibility on mid-level staff, while in South Africa (GEF-6), the absence of a project manager for nearly two years weakened procurement oversight and halted steering committee meetings.

104. Procurement challenges — arising from regulatory complexity, market conditions, and execution risks — have been the most consistently reported implementation constraint, with several proving foreseeable but inadequately addressed at the design stage. In Vietnam (GEF-6), compliance with both ADB and national procedures combined with centralized processing delayed procurement; in South Africa (GEF-6), regulatory requirements imposed lengthy approval chains; and in China, unfamiliarity with procurement systems slowed early processes. Market volatility further contributed to delays, with repeated tender failures in Mexico and South Africa (GEF-6) due to rising costs and limited bidder interest. Several of these delays stemmed from risks identified but not addressed during preparation: in Peru (GEF-6), limited familiarity with procurement procedures was recognized but not resolved before implementation because the executing agency changed; and in India (GEF-6), reliance on lowest-cost selection led to weak technical performance, requiring additional support. Mexico's experience suggests that adapting procurement approaches to market conditions — such as emphasizing performance-based specifications — can reduce these risks.

105. Technical and contractual challenges further contributed to delays. In some cases, design and contracting issues created implementation bottlenecks. In Mexico (GEF-6), a contract lacked key technical specifications and was tendered under the wrong legal framework — as an acquisition rather than under Public Works Law — causing administrative complications. In South Africa (GEF-6), bundled work packages had to be restructured after failing to attract bidders. In Malaysia (GEF-6), subcontractors lacked the authority to mobilize participation from government stakeholders, compounding delays.

106. Waste management and waste-to-energy infrastructure components proved particularly difficult to implement. These components showed a higher incidence of delay, redesign, or cancellation due to technical complexity, market dependence, and political sensitivity. In India (GEF-6), bio-methanation plans were scaled back following feasibility and financing challenges. In South Africa (GEF-6), repeated tender failures and escalating costs delayed implementation, while in Mexico (GEF-6), biodigester procurement was abandoned after multiple failed tenders and political changes. Similar challenges in Côte d'Ivoire (GEF-6) and Sierra Leone (GEF-7) illustrate the vulnerability of such investments to site decisions, market conditions, and policy shifts.

107. Financial constraints and external shocks further affected implementation. In Brazil (GEF-6), unanticipated taxation reduced available resources of key partners, while in Vietnam (GEF-6), funds were reallocated when a planned pilot could not proceed. The COVID-19 pandemic disrupted 75 percent of projects under implementation, delaying procurement and stakeholder engagement and, in cases such as Malaysia (GEF-6) and Mexico (GEF-6), compounding existing

delays. Additional shocks — including the Al Haouz earthquake in Morocco and macroeconomic pressures in South Africa (GEF-6) and Rwanda (GEF-7) — further affected timelines and costs.

108. Joint implementation introduced coordination challenges where not clearly structured. In Senegal (GEF-6) and India (GEF-7), separate workstreams and limited interaction among implementing agencies resulted in parallel rather than integrated delivery. In contrast, South Africa (GEF-6) demonstrated more effective collaboration, with complementary roles, joint reporting, and some cross-component linkages between UNEP and DBSA. Overall, where coordination arrangements were not clearly established early on, joint implementation tended to reinforce fragmentation rather than integration.

6.2.2. Executing Agencies

109. Institutional stability within executing agencies has been a key factor in effective implementation. Projects with stable institutional arrangements and continuity of technical teams were better able to sustain delivery. In Senegal (GEF-6), the Agency for Municipal Development maintained the same coordination team despite ministerial changes and exceeded targets across multiple indicators, including beneficiaries, flood protection, and staff training. In China (GEF-6), city-level Project Management Offices embedded within authoritative government structures ensured continuity and integration of project outputs into formal planning frameworks. In Johannesburg, project positions were absorbed into government structures, similarly supporting continuity. In Paraguay (GEF-6), sustained engagement of technical focal points enabled delivery beyond targets, including expanded management of green areas, development of national waste plans, and multiple regulatory approvals.

110. Sub-national ownership has supported implementation, particularly where local institutions were actively engaged. City-level actors often demonstrated strong ownership, sometimes compensating for constraints at the national level. In Argentina (GEF-7), cities such as Buenos Aires and Mendoza provided co-financing despite delays in national-level fund flows, with Mendoza integrating project activities into its existing Municipal Climate Change Committee. In Mar del Plata, collaboration across municipal departments helped overcome administrative silos. In Sierra Leone (GEF-7), the Freetown City Council leveraged project platforms to mobilize additional funding, significantly expanding tree planting and land restoration outcomes.

111. Technical partnerships contributed to stronger delivery and institutional uptake. In Brazil (GEF-6), ARIES delivered pilot investments and strengthened its role as a municipal strategic partner, while Brasília's SEMA developed a widely used spatial information platform integrated into city planning. In China (GEF-6), collaboration with the China Academy of Urban Planning and Design enabled the development of an advanced city-level data platform for transit-oriented development.

112. **Cross-departmental coordination has remained a challenge in the absence of strong overarching authority.** Where responsibilities were fragmented across institutions without clear coordination mechanisms, implementation proved more difficult. In India (GEF-6), divided responsibilities between municipal and state entities limited integration and led to sequencing challenges. In Brazil (GEF-6), the absence of an inter-ministerial steering committee meant that partners pursued separate agendas and that knowledge platforms developed under one component had no systematic connection to urban interventions under another. These cases highlight a recurring pattern: without structured coordination mechanisms, implementation tends toward fragmented rather than integrated delivery.

7. RESULTS

7.1. CONTRIBUTIONS TO CORPORATE RESULTS

113. **The performance of completed projects across eight core indicators reveals a mixed picture.** The evidence base, however, remains limited: of the 40 country child projects, only six have been completed and reported results against the GEF Core Indicators, representing just over half of the 11 GEF-6 projects, and caution is therefore warranted in drawing broader conclusions. At an aggregate level, completed projects met or exceeded ex-ante targets on three of the six indicators for which targets had been set, fell below target on the remaining three, and reported achievements on two further indicators for which no ex-ante targets had been established — these having been incorporated into the corporate results framework retroactively (Table 6). Performance on the two main GHG mitigation indicators (6.1 and 6.2) is heavily influenced by a small number of projects — most notably China, which reports 87.8 million tCO₂e based on modelled long-term emissions reductions through 2036 under continued policy implementation. This estimate reflects projected impacts rather than verified emissions reductions at project closure. Excluding China's modelled contribution, the combined GHG results of the remaining projects are comparatively modest.

Table 6: Aggregate Achievements of Six Completed Projects – by Core Indicator

Indicator Name	Unit	No. of Projects	Target at CEO Endorsement	Achievement at completion
Terrestrial protected areas created or under improved management	Hectares	2	378	1,024
Area of land and ecosystems under restoration	Hectares	1	40	22
Area of landscapes under improved practices (excl. protected areas)	Hectares	3	125,347	10,872.4
GHG emission mitigated in the AFOLU sector ¹	tCO ₂ e	2	2,776,891	972,232

GHG emission mitigated outside of the AFOLU sector ¹	tCO ₂ e	4	70,376,220	95,602,109
Increase in installed renewable energy capacity	MWh	1	34,043	78,908
Energy saved	MJ	1	121,617,000	17,971.5
Level of national/local reforms and inter-ministerial participation	Rating	1	—	1
People benefiting from GEF-financed investments	Number	3	—	719,187

Source: GEF Portal and terminal evaluations.

Notes: Figures for achievement at completion include anticipated results rooted in actual project outputs. 1/ GHG emission mitigation related benefits at a project’s completion also include future benefit streams from the achieved outputs till the end of its economic life (benefits over baseline) – normally up to 10 to 20 years after activity completion.

114. Project results reveal a consistent contrast between investment-focused and policy-focused approaches.

A consistent pattern across the six completed child projects is the contrast between projects that financed physical investments and those focused on policy and planning. Brazil, Malaysia, and Senegal—each investing in infrastructure such as solar PV, flood drainage, waste management, and ecosystem restoration—largely met or exceeded their core indicator targets. By contrast, Peru, which emphasized planning frameworks, legal instruments, and institutional platforms, reported limited measurable environmental outcomes at completion. This reflects implementation constraints—such as complex approval systems, staff turnover, and weak institutional ownership. Significant policy achievements were realized but are not captured by core indicators, pointing to a structural limitation: the results framework favors quantifiable, asset-based outputs and underrepresents institutional and policy-driven outcomes. This also reflects a tendency in proposals to overstate expected physical results at completion for projects whose primary pathways are regulatory and capacity-based — contexts in which environmental results typically materialize beyond the project cycle and cannot reasonably be observed at closure.

115. Project-level results are sensitive to the performance of individual interventions.

Where a single activity carries a large share of a target, its cancellation or underperformance can distort overall results. In Paraguay, cancellation of the Metrobus project led to achieving less than 2 percent of its non-AFOLU GHG target, despite exceeding landscape management targets and meeting AFOLU-related outcomes. In Malaysia, strong performance in solar PV was offset by underdelivery in an electric vehicle component that accounted for a larger share of emissions reductions, lowering overall results. These cases highlight a design vulnerability: reliance on single, high-weight interventions can misrepresent broader project performance, particularly in programs aimed at piloting and demonstrating approaches (Annex 6).

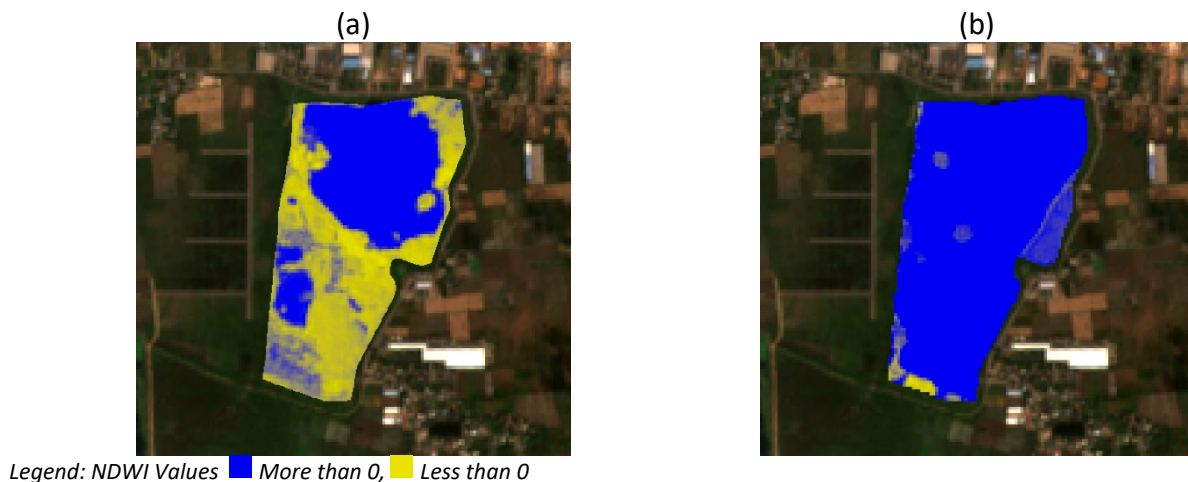
7.2. ENVIRONMENTAL RESULTS

7.2.1. Green Infrastructure, Urban Biodiversity, and Ecosystems

116. **Habitat management and biodiversity restoration yielded particularly clear results.** In Paraguay, protected-area status was secured for Parque Guasú, management plans were implemented for previously unmanaged sites, and approximately 22 of a targeted 40 hectares in the Bay of Asunción were restored. Management was improved across 9,344 hectares—well above the 5,793-hectare target—and monitoring confirmed increases in populations of five migratory bird species. In Brazil, 80 hectares of Permanent Preservation Areas were restored in the Paranoá and Descoberto river basins, and landscape management targets were significantly exceeded (1,428 hectares achieved versus 415 targeted).

117. **Nature-based solutions demonstrated measurable environmental improvements when implemented as infrastructure, however, wider replication may face site-specific challenges.** In Recife, Brazil, filtering gardens—constructed wetlands treating polluted effluent before discharge into the Capibaribe River—have operated effectively over several years, improving water quality, enhancing biodiversity, eliminating odors, and creating public green space. Independent monitoring confirms sustained improvements. Similarly, restoration of Kadapakkam Lake in Chennai under the India (GEF-7) project led to significant ecological change. Interventions included removal of invasive species, desilting, dredging, and embankment strengthening. Satellite imagery shows open water coverage increasing from 34 percent to 88 percent, while invasive vegetation declined sharply, indicating a rapid transition to a healthier aquatic system within two years (Figure 7). Field visits confirm that Kadapakkam was selected partly because it had minimal encroachments compared to other urban lakes in Chennai — a condition that facilitated implementation but that cannot be assumed at the 30 other lakes and ponds identified as potential replication sites.

Figure 7. NDWI for Kadapakkam Lake, Chennai



Source: GEF IEO based on analysis of Sentinel-2C satellite imagery at 10 m spatial resolution obtained from the Copernicus Data Space Ecosystem.

Notes: NDWI classification results indicate a substantial increase in detectable open water surface area between 2024 and 2026. In 2024, approximately 34% of the lake area was classified as water (NDWI > 0), while 66% was classified as non-water surfaces. By 2026, the proportion of water-covered area increased to 88%, with non-water surfaces declining to 12%.

7.2.2. GHG Emission Mitigation Through Low-Carbon Transport and Energy

118. The strength of GEF’s contribution to GHG results depends largely on the degree of direct financing and control over interventions. Results are strongest and most verifiable where the GEF directly financed physical assets, more uncertain where outcomes depend on long-term policy implementation, and weakest where results were contingent on external investments that were delayed or cancelled.

119. The clearest evidence of GEF contribution comes from renewable energy and energy efficiency investments directly financed by projects. In Malaysia, solar PV installations reduced emissions by 45,089 tCO₂e annually, while in Senegal, industrial renewable energy investments avoided 35,184 tCO₂e—both grounded in measurable outputs linked to GEF-supported assets. In China (Ningbo), building retrofits achieved a 12 percent reduction in energy consumption based on monitored data. In these cases, the causal link between GEF support and emissions reductions is direct and observable.

120. By contrast, the largest reported GHG results are based on modelled projections with more indirect GEF attribution. China’s transit-oriented development (TOD) activities contributed to increased ridership and improved urban transport systems, but the associated emissions reductions are projected over time and depend on sustained policy implementation. Physical investments—such as metro upgrades in Tianjin—were largely financed through parallel World Bank loans and municipal funding, with GEF support contributing primarily to planning and enabling conditions. Field visits confirmed that the TOD approach has been effectively institutionalized, but value capture — the financial mechanism underpinning long-term TOD investment — has been constrained by a general slowdown in China's real estate market, with stakeholders in Shijiazhuang and Tianjin both noting that stagnating property prices limit returns and reduce developer appetite for integrated station-area development in the near term.

121. Projects that relied on major external investments outside GEF control faced the greatest risks to achieving GHG targets. As noted in Section 7.1, projects in Paraguay, Malaysia, and Mexico illustrate a recurring design vulnerability: when GHG targets depend on interventions beyond direct project control, results become susceptible to shortfalls.

7.2.3. Wastewater Treatment and Water Resource Management

122. Direct investments in water and flood management infrastructure have generated the most tangible environmental results. By contrast, projects focused solely on water management

modelling tools without physical investments did not produce observable environmental results by completion.

123. Sewage treatment infrastructure delivered measurable improvements in effluent quality, often integrating energy recovery into design. In India, the Jaipur facility (215 ML/day) incorporated biodigesters for bio-CNG generation and solar PV, with 70 percent of energy needs met on-site. In Vijayawada, plant upgrades expanded capacity, improved sludge management, and enhanced effluent quality, contributing directly to improved river and canal health. However, in Jaipur, plans for industrial reuse of treated water remained unresolved due to financing gaps and limited commercial uptake.

124. Urban flood management infrastructure produced the most verifiable large-scale outcomes. In Senegal, drainage investments reduced flooded areas across 21 communes from 11.74 km² to 1.44 km², exceeding targets and providing flood protection for 900 hectares. Associated reductions in groundwater levels also generated sanitation co-benefits by lowering the frequency and cost of septic tank emptying.

7.2.4. Waste Management and Circular Economy

125. Waste-related results varied across the portfolio, with more innovative circular economy approaches piloted in India. In Guntur, 220 electric vehicles for waste collection were paired with a 500 KW floating solar plant, making operations effectively carbon neutral and linking to a 15 MW waste-to-energy facility. In Bhopal, 250 bio-CNG vehicles are being procured for waste collection, with the municipality committed to purchasing half the bio-CNG output from a separately financed wet-waste plant — a circular economy design linking waste processing directly to vehicle fuel, though the plant had not yet been commissioned at the time of the field visit. In Jaipur, a comparable model integrates biogas and solar PV at the sewage treatment plant (see wastewater section above). In other countries, circular economy-related outcomes were more limited. In Senegal (GEF-6), cleaner production interventions achieved substantial POPs emissions reductions — 5,400 µg TEQ against a target of 93 µg TEQ — through technology adoption in industrial enterprises; however, planned pilots in animal product processing did not proceed due to company closures and licensing constraints, highlighting the sensitivity of results to private sector continuity. In Brazil, progress in reducing activity at the Estrutural dumpsite in Brasília reached 53 percent against a 75 percent target, though full closure had not been achieved within the project period.

7.3. SOCIO-ECONOMIC BENEFITS

126. Sustainable Cities Program projects have generated a range of socio-economic benefits through multiple pathways, with outcomes shaped by both design and implementation dynamics. Across the portfolio, benefits emerged through four main channels: inclusive

employment and livelihoods, public space and social equity, improved mobility and accessibility, and environmental health and food security. While some of these outcomes were built into project design, others emerged through adaptation during implementation.

127. Inclusive employment and livelihoods were among some of the most direct and tangible benefits delivered. In Guntur, the electric vehicles fleet led to an unplanned but significant gender outcome, with 100 female sanitary workers trained as drivers due to ease of vehicle operation, without displacing male workers. In Paraguay, recycling activities created income opportunities for informal workers, with some beneficiaries reporting improved economic stability. However, not all initiatives were sustained: the Cleaning Brigade community program ended after project completion due to lack of funding, despite continued local demand.

128. Public space investments were used to address spatial inequality and improve social inclusion. In Recife (Brazil), interventions along the Capibaribe River—including filtering gardens—were deliberately located in underserved areas, reflecting an explicit equity focus. When a planned solar boat crossing proved unfeasible, the project adapted by launching a national design competition, resulting in the “Travessias” – pedestrian and cyclist bridges – co-financed by the municipality and significantly leveraging GEF resources. In Ningbo (China, GEF-7), neighborhood upgrades included accessible public spaces and community facilities, though evidence of use remains limited as implementation is ongoing.

129. Mobility and accessibility improvements enhanced access to services and urban connectivity, with mixed uptake. In China, TOD guidelines in Shijiazhuang established targets for compact urban development and improved service access within walking distance of transit. In Ningbo, infrastructure upgrades incorporated accessibility features for diverse user groups. In Paraguay, approximately 29 km of bicycle lanes were constructed; however, usage varies, with stronger uptake in areas connected to residential zones and public transport, and lower use elsewhere due to limited cycling culture.

130. Environmental interventions also generated co-benefits for health and food security. In Paraguay, air quality monitoring systems are being linked to public health data to assess respiratory impacts, extending the value of project investments beyond environmental monitoring. In Belém (Brazil, GEF-7), agroforestry pilots and payment for ecosystem services schemes aim to strengthen food security and resilience for local communities, with plans for scaling.

131. Across the portfolio, designed benefits were most consistently realized when linked to physical investments with clear beneficiary groups. At the same time, some of the most innovative outcomes — such as gender-inclusive employment in Guntur and adaptive design solutions in Recife — emerged from adjustments made during implementation, highlighting the importance of flexibility and responsive institutional decision-making.

7.4. LEGAL, POLICY, AND REGULATORY FRAMEWORK DEVELOPMENT

132. **The program has made substantive contributions to policy and regulatory frameworks, though the extent of formal adoption and enforceability varies across contexts.** Across the portfolio, the transition from development to adoption has been shaped by three main factors: the extent to which outputs were embedded in formal legislative or regulatory processes, the presence of a committed institutional champion with authority over the agenda, and the sequencing of regulatory development relative to investment planning.

133. **In China, TOD principles were integrated into binding regulatory instruments across participating cities, ensuring alignment with statutory planning frameworks.** In Peru, TOD was incorporated into national Law 31313 on Sustainable Urban Development — embedding project-supported approaches into a legally binding national framework — with the Ministry of Housing continuing to use project approaches and cases to develop land-use regulations beyond project closure.

134. **At the subnational level, several projects achieved formal adoption with demonstrable effects.** In Paraguay, the Revive waste separation campaign was enacted by executive decree, eight waste and chemical management regulations were formally approved, and the Green Infrastructure Manual was incorporated into the Ministry of Urbanism, Housing and Habitat and municipal ordinances, including binding design requirements. In Brazil, the Federal District adopted its Climate Act Regulation through Decree 43.403 (2022), established a legal framework for distributed photovoltaic generation across public institutions, and advanced eligibility for REDD+ financing through compliance with UNFCCC safeguards, while municipalities such as Francisco Morato enacted legislation to ensure continuity of sustainability initiatives beyond electoral cycles. In Senegal, ONAS was formally designated by regulation as the authority responsible for stormwater management, the National Urban Code was updated, and the inter-municipal Association of Saint-Louis Local Governments was established as a legal entity, strengthening institutional coordination.

135. **In other cases, policy instruments were developed but not fully adopted by project closure.** In Malaysia, a Smart Grid Regulatory Framework was produced and disseminated nationally, with over 155 cities encouraged to develop smart city frameworks based on the Melaka model; however, key documents were produced only in English, limiting parliamentary engagement and formal adoption, and the sequencing of regulatory development ahead of demonstration weakened the link between evidence and regulation. In Senegal, a POPs and hazardous waste management strategy and a NAMA report for Diamniadio were developed but remained pending approval at completion.

7.5. PLAN AND STRATEGY DEVELOPMENT

136. **Plans and strategies have been a central pathway for translating project outputs into policy and regulatory systems, though their impact varies widely.** Across the portfolio, the Sustainable Cities Program supported the development of plans and strategies spanning climate action, biodiversity, mobility, waste, water, and integrated urban development. Their contribution ranges from instruments embedded in binding frameworks and actively implemented, to those formally adopted but unevenly applied, to those developed but not adopted at project closure.

137. **The most effective plans were those embedded in formal systems with financial support for follow-up.** In China and Peru, transit-oriented development (TOD) guidelines were incorporated into statutory city plans and national legislation, respectively. In Paraguay, the Metropolitan Strategy was formally approved and used as a guideline to develop local and land-use plans across ten cities, with associated regulations protecting water bodies and parks. National solid and hazardous waste plans were also developed and taken up at the municipal level, with cities such as Luque operationalizing them through local plans tied to recycling and awareness programs. A common feature in these cases is co-production between project teams and implementing institutions, which supported ownership and follow-through.

138. **Formal adoption did not always translate into implementation.** In Malaysia, the Smart Melaka Blueprint 2035 was completed and supported by a governance structure, and replicated in over 155 cities, but lacked a clear implementation mechanism independent of state or external financing.

139. **Where adoption was incomplete, the gap between technical outputs and institutional uptake remained more pronounced.** In Senegal, a NAMA, GHG inventory, and a strategy for POPs and hazardous waste management were developed but not formally adopted at project completion. In Peru, the Local Climate Change Plan and several related instruments—such as coastal adaptation and biodiversity strategies—were developed and are informing planning processes; however, implementation has been uneven, as they were not formally approved given the country’s complex public investment system.

7.6. CAPACITY DEVELOPMENT

140. **Capacity development produced the most durable results where it was built through practice and embedded in substantive technical work, rather than delivered through standalone training.** All projects included capacity development activities targeting government officials, technical institutions, private sector actors, and frontline workers. The most durable gains occurred where capacity building was embedded in substantive technical work — allowing institutions to develop skills through practice — and where outputs remained within institutions in the form of tools, data, methodologies, or new organizational structures. In China, capacity

building was integral to the preparation of TOD plans, with cross-agency collaboration and peer learning across seven cities reinforcing institutional capacity. In Paraguay, training linked to project methodologies strengthened the Secretariat of Technical Planning, with skills continuing to be applied beyond the project. In Peru, capacity development was co-designed with local authorities, with firms contractually required to transfer knowledge during delivery, ensuring practical uptake. By contrast, standalone training events with limited follow-through produced weaker institutional outcomes, despite meeting participation targets.

141. **Whether capacity gains endured depended significantly on whether they were anchored in functioning systems** and structures. In Senegal, local flood management committees provided a lasting institutional base for skills developed during implementation. In Brazil, capacity building linked to the SISDIA platform became embedded in government operations through widespread use and continuous engagement. Where such anchoring was absent, gains were more limited: in Malaysia, despite extensive training and certification, staff turnover and limited practical application constrained results, and training materials produced exclusively in English further restricted uptake among local counterparts. In Brazil, capacity development linked to systems that were not operationally adopted — such as Recife's Integrated Management System — did not translate into lasting institutional gains.

142. **Beyond institutional anchoring, staff retention shaped whether individual-level gains were applied in practice.** In Peru, more experienced staff with longer tenure were better able to apply project outputs. In India, stakeholders noted that skills gained could transfer across roles, though their impact depended on continued relevance within institutional structures. Staff rotation emerged as a cross-cutting constraint on the durability of individual-level capacity gains across the portfolio.

7.7. KNOWLEDGE MANAGEMENT

143. **Design and implementation constraints limit the reach and effectiveness of knowledge sharing.** In several projects, knowledge dissemination was delayed until late implementation stages, reducing its impact, as seen in Peru and Mexico. Language barriers also constrained uptake, notably in Malaysia where materials were produced only in English. In Senegal (GEF-6), the absence of early replication strategies limited the use of knowledge outputs. These constraints point to a recurring issue: without early planning for dissemination and institutional uptake, knowledge products are less likely to translate into broader impact.

144. **Peer learning is most effective when linked to practical tools and institutional use.** Inter-city exchanges generated tangible replication where supported by usable tools. In China, TOD diagnostic tools developed through extensive exchanges were applied in non-pilot cities. In Peru, climate planning guidelines and GHG inventory tools began to be adopted by additional

municipalities. In both cases, replication was driven by practical, tested tools tied to institutional mandates.

145. Institutionally anchored platforms have produced the most sustainable knowledge-sharing outcomes. In Brazil, the Observatory for Innovation in Sustainable Cities, anchored in MCTI, integrated hundreds of solutions and case studies and linked to a national SDG index covering over 5,500 municipalities. Paraguay's GIS platform, hosted by the Vice Ministry of Economy, continued to expand post-project, while India's Swachh Bharat Portal became a central national system used by over 4,500 urban local bodies, with built-in government incentives through performance-linked grants.

146. Platforms without institutional ownership were underused or discontinued despite strong technical content. In Peru, a platform with high-quality geospatial data remained underutilized due to lack of stewardship, interoperability and limited functionality. In Malaysia, the MyICSC portal was no longer operational at project end, illustrating the risk of platform discontinuity once project funding ends.

147. Some platforms extended impact by linking national systems with broader knowledge networks. China's national TOD platform, managed by MoHURD, supported benchmarking and inter-city learning and was applied beyond pilot cities, contributing to national assessment systems. Brazil's platforms were partially integrated to improve access and continuity across program phases. In Peru, intended integration across institutions was not fully realized due to financial and technical constraints, limiting the platform's role to project-level information sharing.

7.8. PROSPECTS FOR SUSTAINABILITY

148. Several recurring risks constrain long-term sustainability and point to systemic challenges. A persistent gap exists between planning outputs and investment implementation. In Peru and Mexico, technically sound plans and studies remain unimplemented due to constraints in public investment systems, fiscal limitations, and competing priorities. This highlights the limits of project influence where follow-on financing decisions lie outside project control.

149. Political and institutional instability further affect continuity. Frequent changes in leadership disrupted momentum in several countries, including Peru and Mexico, where project progress often depended on sustained engagement by specific individuals. In some cases, no institution assumed responsibility after project closure, underscoring the importance of establishing durable institutional homes for project outputs.

150. Operational and financial sustainability remains uneven across projects. Projects often underestimated the recurrent costs associated with maintaining assets and services. In Paraguay,

the Cleaning Brigade, a high-performing waste collection initiative, ceased after closure due to funding constraints. By contrast, India's Jaipur sewage treatment plant illustrates how sustainability can be designed into infrastructure through integrated energy systems that reduce operating costs.

151. The most robust sustainability outcomes are observed where governments adopted, funded, and operationalized project outputs. In China, transit-oriented development (TOD) principles were embedded in statutory plans and national standards, with projects such as the Life Science Park renewal financed and implemented through municipal systems. In India, the Swachh Bharat Portal demonstrates sustained use through fiscal incentives tied to government grants, ensuring continued relevance beyond project closure. In South Africa, the City of Johannesburg internalized project-supported roles into its municipal structure and formalized regulatory standards. These cases reflect a transition from project-supported outputs to government-owned systems with clear operational purpose.

152. GEF support has also acted as a catalyst for larger-scale investments beyond the project lifecycle. In several instances, GEF interventions provided the technical and conceptual foundation for subsequent financing. In China, Ningbo allocated municipal resources and mobilized additional funding through bonds to implement biodiversity strategies developed under the project. In Paraguay, planning methodologies informed both a major GCF REDD+ initiative and a World Bank urban resilience loan. These cases illustrate how GEF support can extend its influence when deliberately linked to larger financing mechanisms and municipal investment programs.

153. Demonstration effects have supported replication, particularly for visible and practical interventions. In Brazil, Recife's filtering gardens attracted national-level interest and became a reference model for nature-based urban water management. In Malaysia, Melaka's experience as a demonstration city generated demand-driven interest from cities seeking to replicate the approach — a dynamic that subsequently informed regulatory uptake across the country (see Section 7.3). In India, Guntur's electric vehicles model was scaled statewide in Andhra Pradesh, significantly expanding its reach. These examples suggest that tangible, operational solutions are more likely to diffuse than less visible or more technical interventions.

154. Scaling from pilot to broader adoption remains a central and unresolved challenge. While GEF projects have been effective in demonstrating innovative approaches and reducing perceived risks, securing transition financing for scale-up is less consistent. In Malaysia, replication of smart grid approaches is constrained by lack of demonstration funding, while in South Africa and Mexico, pilot initiatives remain limited relative to demand. Across the portfolio, a consistent pattern emerges: the program has been effective at innovation and demonstration, but pathways to scale are not always clearly defined or financed. This pattern is consistent with the wider literature, which notes that moving from successful pilots to broader scale-up is often

difficult, particularly where financing, institutional support, and other enabling conditions for sustained expansion are insufficient (Lam et al., 2020; Maassen et al., 2026).

8. GLOBAL PLATFORM

155. **Global and regional platforms are a central feature of the GEF's integrated programming model, introduced under the Integrated Approach Pilots in GEF-6 and standardized across subsequent programs.** Within the program model, the platform serves as a core mechanism intended to support knowledge diffusion, norm-setting, and finance readiness, and thereby extend impact beyond participating cities. Institutional arrangements, resourcing, and thematic priorities have evolved across cycles, with resources nearly doubling from \$9.0 million in GEF-6 to \$17.9 million in GEF-8. The platform's approach shifted from foundational tools in GEF-6 toward innovation and structured monitoring in GEF-7, and toward more demand-driven, gender-sensitive support in GEF-8.

8.1. PLATFORM DESIGN

156. **The Global Platform is designed as the central mechanism for translating integrated urban planning into implementation and for knowledge sharing.** It aims to catalyze urban sustainability action by supporting investments, knowledge sharing, capacity development, and peer learning through evolving tools and data systems. Across GEF cycles, its mandate has consistently focused on linking integrated planning to action—through solutions, financing pathways, and coordinated delivery.

157. **Core functions of the platform have remained consistent, while delivery modalities and emphasis have evolved.** Recurring functions include knowledge generation and dissemination, capacity development for cities, peer learning, and support for investment mobilization, delivered through child projects and partner institutions. Foundational workstreams in integrated planning and knowledge management have persisted across cycles.

158. In GEF-6, the platform focused on foundational tools and a distinct urban finance workstream, supporting a broad agenda of integrated planning and investment. In GEF-7, emphasis shifted toward innovation and transformation, with stronger partnerships, broader stakeholder engagement, dynamic data systems, and the formalization of monitoring and evaluation as a core function. **In GEF-8, the platform's role is more targeted and operationally aligned with project delivery.** The focus is on knowledge generation, partnership building, and promoting integrated, climate-resilient and nature-positive urban development. Delivery approaches include clinic-style engagement aligned with child project timelines, as discussed in Chapter 3. Monitoring systems have been strengthened, with greater attention to gender tracking and disaggregated data, alongside more structured partnership management and higher-level political engagement.

159. **The platform’s evolution reflects both continuity in purpose and shifts in emphasis.** Past recommendations from the GEF IEO, through its formative review (GEF IEO, 2018) and formative evaluation (GEF IEO, 2022) covering the Sustainable Cities Program alongside other integrated programs, have shaped some of these shifts. While integrated planning and coordination remain central, thematic priorities have broadened and delivery has become more flexible. At the same time, explicit framing around social and economic co-benefits and transformation has become less prominent in formal documentation, even as these dimensions continue to be operationalized through monitoring systems and investment support.

8.2. LEAD AGENCY

160. **Changes in the lead agency across GEF cycles reflect strategic shifts in program priorities, but have also affected continuity.** The program’s lead agency transitioned from the World Bank in GEF-6, to UNEP in GEF-7, and back to the World Bank in GEF-8. Each shift corresponded to evolving priorities—broadening engagement with city networks and civil society under UNEP, and strengthening private sector engagement and resource mobilization under the World Bank—reflecting deliberate choices about institutional comparative advantage.

161. **The GEF-7 selection process raised concerns about transparency and competitive neutrality.** Although formally competitive, the process was shaped by governance requirements that emphasized a strong role for city-based organizations. The 2022 Formative Evaluation noted that this narrowed the pool of viable candidates, with some stakeholders questioning whether the process was fully neutral. These concerns were specific to this program but highlight the sensitivity of aligning governance design with agency selection.

162. **The GEF-8 selection process reflects a more explicit alignment between program design, delivery expectations, and agency strengths.** The return to the World Bank as lead agency in GEF-8 was accompanied by a clearer emphasis on investment mobilization, private sector engagement, and scaling—areas closely aligned with the Bank’s comparative advantage and operational model. At the same time, the decision to retain core partners from GEF-7—including UNEP, WRI, ICLEI, and C40— suggests a deliberate effort to preserve institutional memory and avoid the fragmentation observed in the previous transition. Compared to GEF-7, there is less evidence of concerns regarding the structure or perceived neutrality of the selection process, and a stronger alignment between governance arrangements and delivery objectives. However, the extent to which lessons on transparency and competitive processes were formally codified remains unclear.

163. **Transitions between lead agencies introduced operational fragmentation, particularly across overlapping cycles.** The most visible consequence was the parallel operation of two platforms between 2020 and 2024, as GEF-6 projects continued alongside the GEF-7 UrbanShift platform. During 2021–2023, both platforms organized events concurrently, with limited

interoperability of knowledge products. The absence of a unified cross-cycle branding and integration strategy weakened coherence and reduced the visibility of program outputs.

164. **At the same time, agency changes enabled the program to draw on complementary institutional strengths.** The World Bank brought strong capabilities in resource mobilization, private sector engagement, and linkages to large-scale investment operations, as well as convening power with financial institutions. UNEP contributed deeper engagement with city networks, civil society, and community-based organizations, alongside a more partnership-oriented management approach that supported co-design and shared ownership among partners.

165. **Differences in institutional approaches influenced how the platform was experienced by partners.** Interviews consistently highlighted contrasts in management style, with UNEP described as more collaborative and facilitative, and the World Bank as more structured and directive. These differences has implications for the depth of co-creation and partner engagement across cycles.

166. **The benefits of leveraging different institutional strengths of Lead Agencies of the Global Platform came at the cost of reduced continuity.** While agency rotation allowed the program to access a broader range of capabilities, and created competitive incentives for agencies, it also introduced inefficiencies and fragmentation. Whether these benefits outweigh the associated disruptions remains difficult to determine based on available evidence.

8.3. PARTNERSHIPS

167. **The partnership model underpinning the Sustainable Cities Platform has been a central enabler of its delivery and scope.** Across all cycles, the platform has been implemented through a consistent core partnership between the lead agency and WRI, ICLEI, and C40. By combining complementary strengths in knowledge generation, implementation support, and technical expertise, the model enabled the platform to address a wide range of urban sustainability challenges that no single organization could cover alone. Over time, the program increasingly engaged with a broader set of partners, including city networks, finance-related alliances and initiatives such as the CCFLA, the Urban SDG Finance Commission, and the Gap Fund, as well as scientific bodies such as the IPCC and other research institutions. These broader relationships appear to have both widened the platform's reach and deepened its engagement in areas such as urban finance, research, and knowledge exchange. Stakeholders consistently identify this multi-actor configuration as a key source of value.

168. **The effectiveness of the partnership has been strengthened by its ability to operate across scales and expand strategically.** Its multi-scalar design—engaging national governments, cities, and the private sector—allowed the program to work across the full urban governance chain, reducing fragmentation among actors that might otherwise operate in parallel. The

partner ecosystem expanded over time to include geospatial technology providers, regional development banks, and research institutions from developing countries, addressing specific capability gaps. National institutions proved particularly valuable in translating global knowledge into actionable city-level pipelines and bridging local and national action, especially where this function fell outside the core mandates of global partners.

169. The effectiveness of partnership arrangements has varied across GEF phases, with deeper collaboration and co-design yielding stronger results. In GEF-6, there were regular meetings with the global partners for information sharing and coordination, but these were generally transactional and input-based. During GEF-7, this engagement shifted toward co-delivery and shared ownership, with partners coordinating through a shared work plan and contributing on equal footing—an approach widely cited as central to the effectiveness of the UrbanShift model, supported by greater resources for partnership activities. This co-design was supported by increased resources for partnership activities. In GEF-8, the platform returns to a more centralized GPSC model, with partners playing a more limited role in design and implementation. While still better resourced than GEF-6, this shift raises questions about whether the collaborative depth achieved in GEF-7 can be maintained.

170. At the global level, coordination has become more structured and inclusive, though not without limits. Under GPSC (GEF-6), coordination was led by the World Bank, with WRI, C40, and ICLEI functioning as a Resource Team and global meetings serving as the primary convening mechanism. Additional partners such as the European Space Agency, EBRD, and UN-Habitat were engaged selectively. However, coordination across this broad set of actors created complexity, and knowledge partners were not always involved early in city-level activities. Under UrbanShift (GEF-7), more formal structures—such as the Partnership Engagement Group and thematic workstreams—enabled regular coordination and broader engagement with development banks, city networks, and alliances. Attempts to engage more loosely affiliated actors, such as global economic forums, were less successful, highlighting limits to the platform’s reach. In GEF-8, governance shifts back toward a more centralized model with a Program Coordination Committee and a Global Advisory Group, but with less distributed management than in GEF-7.

171. The regional layer was significantly strengthened in GEF-7 but appears less institutionalized in GEF-8. In GEF-6, regional engagement was organized through standalone events such as the Abidjan urban biodiversity workshop and the Ibero-American Summit. GEF-7 introduced dedicated regional and country coordinators covering Africa, Latin America and the Caribbean, and Asia, as well as key countries such as India and China. These coordinators played a critical role in translating global frameworks into context-specific programming, aggregating lessons across countries, and maintaining continuity during political transitions. Regional forums, such as those bringing together African mayors, demonstrated the value of this approach. However, their effectiveness was sometimes constrained by limited control over participation,

as travel funding remained with child projects. In GEF-8, regional engagement shifts toward thematic activities and City Academies without dedicated coordinators, creating a leaner structure whose ability to sustain connectivity remains uncertain.

172. National-level engagement became more structured and outcome-oriented under GEF-7. In GEF-6, national engagement was largely event-based, such as dialogues in Argentina or TOD initiatives in China. GEF-7 introduced National-Local Dialogues as a recurring mechanism, with 14 dialogues held across nine countries. These produced tangible outcomes—for example, contributing to Morocco’s National Circular Economy Roadmap and informing a draft stormwater law in Costa Rica. National institutions such as NIUA in India and Bappenas in Indonesia served as key anchors, linking different levels of government. However, engagement remained vulnerable to political transitions, as seen in Argentina, Brazil, and Rwanda. In GEF-8, the concept of “vertical integration” continues this focus on alignment with national frameworks, but without a clearly defined mechanism equivalent to the dialogues, leaving the operational model less specified.

173. City-level engagement has expanded and become more strategic, though challenges in political engagement persist. City networks evolved from technical support roles in GEF-6 to co-executing partners in GEF-7, delivering peer learning through City Academies, UrbanShift Labs, and exchanges. High-level engagement generated visible outcomes, such as the São Paulo Statement on Urban Sustainability under GPSC and the UrbanShift Africa Forum’s mayoral call for improved access to climate finance, which was signed by 18 mayors at the Forum in February 2025 and expanded to 43 mayors and governors from multiple countries by June 2025. However, a persistent “mayor gap” remained, with technical officials more engaged than political leaders. GEF-8 responds with a dedicated Mayors’ Leadership Forum and expanded coverage to over 46 cities, alongside stronger integration of financial institutions such as ADB, AfDB, EBRD, and IFC to connect cities with investment opportunities.

174. Overall, the partnership model has been a core strength, but its effectiveness depends on maintaining collaborative depth alongside structural evolution. The platform has demonstrated clear value in convening diverse actors and enabling integrated approaches across governance levels. However, shifts toward more centralized and leaner structures in GEF-8 may affect the quality of collaboration that underpinned earlier successes.

8.4. KNOWLEDGE SHARING

175. The global platform has generated a substantial body of knowledge, though its production and orientation vary across cycles. Across GPSC and UrbanShift, knowledge products take two forms: platform-branded outputs and externally produced materials curated on platform repositories, with hosted products dominating in both cases (Annex 7).

176. The composition and orientation of knowledge products shifted toward more practical guidance over time. GPSC placed greater emphasis on policy briefs and technical frameworks—most notably the Urban Sustainability Framework—focusing on domains such as transit-oriented development, municipal finance, and waste management. UrbanShift, by contrast, produced a higher share of guidance-oriented materials, including handbooks, toolkits, and operational guides such as *Multilevel Governance for Integrated Urban Planning* and the *Climate Action Guide for Urban Planners*. It also supported cities through initiatives like the Transformative Actions Program, aimed at developing bankable project pipelines, reflecting a stronger focus on implementation and finance readiness.

177. Thematic priorities evolved from sectoral approaches toward integrated and climate-focused agendas. Under GPSC, knowledge products moved from sector-specific entry points toward multi-benefit urban approaches. UrbanShift consolidated this shift by centering climate resilience, nature-based solutions, biodiversity, and circular development, while elevating financial mobilization as a core theme. GEF-8 further advances this trajectory, with urban nature, waste and food loss, and emerging topics such as AI-enabled governance gaining prominence. **The treatment of climate finance illustrates increasing operational depth across cycles.** GPSC introduced an initial investment lens and partnerships with institutions such as IFC and multilateral development banks. UrbanShift expanded this significantly through finance academies, investor roundtables, the Transformative Actions Program, and linkages to initiatives such as the City Climate Finance Gap Fund, supporting cities in progressing toward bankable projects. GEF-8 aims to embed these finance linkages more systematically into project design, moving beyond ad hoc engagement.

178. Efforts to contextualize knowledge have improved, though products remain predominantly global in orientation. Most knowledge products across both platforms are designed for global audiences. GPSC made initial efforts to localize content, including translating key materials and using local case studies in City Academies. UrbanShift expanded contextualization through regional and country coordinators, co-designed urban planning labs, the Online City Academy, and finance academies tailored to local institutional and fiscal contexts. It also broadened translation efforts and expanded reach. However, branded products remain largely global in scope, with relatively limited city- or country-specific outputs.

179. UrbanShift achieved broader city-level coverage and deeper integration with program geographies. While both platforms covered all participating countries, UrbanShift’s branded products reached more cities—covering 84 compared to 63 under GPSC—and hosted products showed an even larger expansion. Cities such as Kigali and Jakarta featured prominently in UrbanShift branded outputs, compared to Johannesburg and Lima under GPSC. Despite this improvement, the share of in-program cities covered by hosted products remains relatively modest in both cases.

180. Partnership patterns in knowledge production reflect different collaboration models across cycles. GPSC engaged a larger number of institutions (18) in producing branded products, but collaborations were largely episodic, with partners working together infrequently. UrbanShift worked with a smaller group (14 institutions) but with deeper and more sustained collaboration—each partner contributing to multiple products—consistent with its co-delivery model. Hosted products in both platforms reflect broad but shallow networks, with many one-off contributions rather than sustained partnerships.

181. Funding for knowledge products remains concentrated among a small group of donors. Across both platforms, a limited number of bilateral donors—particularly Germany, the United Kingdom, and Sweden—account for most funded hosted products. Private sector contributions are minimal, with only a small number of co-funded products. This concentration highlights both the reliance on a narrow funding base and the limited diversification of financing sources for knowledge generation.

182. Knowledge-sharing events have evolved significantly in format, reach, and purpose. Events have served both technical and political functions: building capacity and peer learning among practitioners, and convening higher-level actors for advocacy and finance mobilization. Delivery modalities shifted from predominantly virtual formats under GPSC to in-person, regionally grounded formats under UrbanShift.

183. UrbanShift’s pivot to in-person and regional delivery strengthened engagement and alignment with program cities. Under GPSC, approximately 85 percent of events were virtual, largely webinars, influenced by COVID-19-related constraints. UrbanShift reversed this pattern, with around 70 percent of events held in person across 19 countries and 33 cities, including 14 in-program cities. This approach was supported by regional coordinators and structured learning pathways, including City Academies, Finance Academies, and National-Local Dialogues. GEF-8, while still at an early stage, shows a more mixed approach, with webinars and advocacy events dominating initial activities.

184. Participation became more diverse under UrbanShift, though some imbalances persist. UrbanShift engaged a broader mix of stakeholders, including higher participation from NGOs (21 percent), academia, and the private sector, reflecting a deliberate shift toward technical and practitioner audiences. Gender representation also improved significantly, with women comprising 48 percent of participants and exceeding representation targets in major events. However, private sector participation remained limited across all cycles, despite being a stated priority.

185. Geographic reach expanded, but regional imbalances remain. UrbanShift engaged participants from 149 countries, far exceeding GPSC coverage, and reached nearly all program countries. However, participation from non-program countries remained concentrated in North

America and Western Europe, with underrepresentation from regions such as Sub-Saharan Africa and Latin America at different points. Language barriers and limited translation resources were cited as constraints affecting broader participation.

186. Overall, the platform’s knowledge and learning functions have strengthened over time but face persistent structural limitations. Progress is evident in the shift toward more practical, context-sensitive knowledge and more inclusive, in-person engagement. However, the continued dominance of globally oriented products, limited localization, concentrated funding sources, and uneven participation patterns constrain the platform’s ability to fully translate knowledge into context-specific action.

8.5. RESULTS AND UTILITY

187. Assessing the results and utility of the global platform is inherently challenging due to its indirect and long-term influence. The platform contributes to environmental and socio-economic outcomes primarily through knowledge sharing, capacity development, and peer learning rather than direct investment. These effects often materialize beyond project timelines, and systematic tracking—particularly in earlier cycles such as GEF-6—has been limited. This assessment therefore draws on multiple sources, including project proposals, evaluations, and stakeholder interviews, each capturing different dimensions of platform influence.

188. There is limited evidence of the platform shaping project design at the proposal stage. Analysis of 29 CEO-endorsed projects under GEF-7 and GEF-8 shows that explicit acknowledgment of platform influence in design is rare. Only one project—the Green and Carbon Neutral Cities Project in China (GEF-7)—directly attributes design elements to platform inputs, specifically citing knowledge exchange through the Ningbo workshop. A small number of projects (21 percent) indicate intentions to use platform knowledge during implementation, such as adapting global tools to local contexts in Brazil or drawing on peer-developed resources in the Philippines. While platform influence may be underreported in project proposals, references to other GEF projects and externally supported platforms as sources of design influence appear more frequently. Overall, the platform’s role in shaping project design appears limited and largely indirect.

189. Actual utilization at the country level has been uneven and often limited to participation rather than application. Evidence from terminal evaluations and mid-term reviews suggests that engagement with the platform has generally taken the form of participation in global events, such as GPSC conferences in New Delhi and São Paulo. While projects frequently presented experiences and attended trainings, there is limited evidence that knowledge gained was systematically applied in project implementation. Another recurring use case is dissemination: countries such as China and Paraguay used the platform to publish their own outputs, indicating its role in knowledge dissemination rather than a source of operational guidance.

190. Country-level perspectives point to a gap between the platform’s global orientation and project-level needs. Interviews consistently describe the platform as operating at a level of abstraction that limits its usefulness for day-to-day project management. Stakeholders valued peer exchanges and in-person events, often recalling specific interactions rather than the platform as an ongoing support mechanism. This suggests that episodic engagement — particularly through events — has had more tangible impact than the platform’s broader knowledge offer.

191. Structural barriers have constrained more effective utilization of platform resources. Timing mismatches between platform activities and project readiness emerged as a recurring issue, as seen in Brazil where early platform outputs did not align with project implementation timelines. Language barriers limited accessibility for local stakeholders, and staff turnover reduced the retention of knowledge gained through platform engagement. The absence of systematic follow-up mechanisms further weakened sustained collaboration, while transitions between lead agencies created uncertainty about roles and reduced continuity in engagement.

192. Perceptions of the platform’s value vary across stakeholder groups, reflecting a mismatch between supply and demand. Implementing agencies tend to value the platform’s global knowledge and convening functions, while executing agencies and national counterparts more often see it as insufficiently tailored to operational needs. This suggests that while the platform is effective at aggregating and disseminating knowledge, it has been less effective in providing demand-driven, context-specific support aligned with the needs of country-level implementation.

8.6. PLATFORM’S ADDED VALUE

193. Direct application of platform tools in project design and implementation has been limited but, where it occurred, demonstrates clear value. The most substantive example is found in India, where both the terminal evaluation and country interviews confirm that the Urban Sustainability Framework and the GPSC Rapid Assessment Methodology were adapted into a national assessment framework and applied across five cities. This represents the clearest case in the portfolio of platform resources directly shaping project methodology. In Malaysia, the executing agency credited World Bank-led diagnostics and workshops in Melaka as informing project design, including drawing on examples of smart grid implementation. Evidence from GEF-7 suggests somewhat stronger linkages: Sierra Leone reported training of civil servants through UrbanShift Academies and Labs, while Argentina referenced the use of platform inputs in a superblock initiative and participation in peer exchanges. However, these instances remain relatively isolated.

194. Platform contributions are more visible in city-level outcomes and catalytic effects than in formal project documentation. Interviews with platform partners highlight impacts that are

not consistently captured in evaluations. The platform’s value was frequently described as its ability to combine complementary capabilities—bringing together technical expertise, data tools, city networks, and governance facilitation into a single support mechanism. This “integrated offer” enabled cities to access a range of resources that would otherwise remain fragmented.

195. Peer learning and targeted technical support have generated tangible, though often indirect, outcomes. Examples cited by partners include Freetown advancing a cable car project from concept to feasibility after exposure to Medellín’s experience, and Teresina developing legislation for ecosystem service payments following platform engagement. Urban planning labs applying geospatial analysis—such as heat vulnerability mapping—were identified as particularly effective in translating knowledge into actionable outputs. These cases suggest that the platform’s most meaningful contributions arise when knowledge is applied through hands-on, context-specific support.

196. In some instances, the platform has demonstrated catalytic reach beyond participating countries and cities. The global platform has engaged with new and potential participants and broader systems. Kenya (GEF-8) joined the program after participating in a platform event, while Brazil planned to integrate C40 courses into its national training platform, extending knowledge dissemination beyond initial project cities. These examples point to the platform’s potential to influence uptake beyond direct participants of the program.

197. Support for finance readiness represents one of the platform’s more structured and evolving contributions. Platform partners described a learning pathway that supports cities from early-stage ideas to investment-ready projects, combining Finance Academies, investor roundtables, and connections to initiatives such as the City Climate Finance Gap Fund and ICLEI’s Transformative Actions Program. While evidence of fully realized investments remains limited, this structured approach reflects a more deliberate effort to link knowledge to financing outcomes.

198. Overall, the platform’s most significant contributions lie in catalytic, context-specific applications rather than systematic integration into project design. Where platform resources were actively applied—particularly through peer exchange, technical labs, and targeted support—they contributed to tangible progress. However, these successes remain uneven and are not consistently embedded across the portfolio.

9. MONITORING AND EVALUATION

199. M&E at the program level has improved across cycles, but key gaps remain. Since 2010, GEF M&E policies have required dedicated, fully budgeted program-level M&E alongside project-level M&E, with responsibility shared between the Lead Agency and Implementing Agencies. The 2019 Evaluation Policy further emphasizes assessment of long-term outcomes and the added

value of programmatic approaches. Program-level M&E was largely absent in GEF-6, became more structured in GEF-7, and has been built into GEF-8 program design from the outset. However, the ability to track longer-term urban system transformation remains limited. At the project level, design weaknesses — particularly weak theories of change, missing baselines, and output-focused indicators — constrain evaluability. Where embedded in management, M&E supports learning; where compliance-driven, it does not. Projects that integrated M&E into decision-making benefited from adaptive management, while others saw limited value beyond reporting requirements.

9.1. PROGRAM RESULTS MEASUREMENT FRAMEWORK

200. M&E for the Sustainable Cities Program was largely underdeveloped in GEF-6, improved only partially in GEF-7. There was no provision for annual reporting on progress and results, no mid-term review, and no program-level evaluation. While the GPSC produced PIRs and a terminal evaluation, these focused on the global platform rather than the program. Individual child projects reported on core indicators through the GEF Portal, but this reflected only project-level results. GEF-7 introduced more structured program-level M&E, with arrangements for annual reporting and aggregation of results across child projects through the PIRs and mid-term review of UrbanShift.

201. GEF-8 design represents a more systematic and structured approach to program-level M&E. The Program Framework Document introduces consolidated reporting across child projects, alongside separate tracking of platform-level indicators. Responsibilities are more clearly defined, with the Global Platform coordinating data collection and country focal points supporting reporting. Reporting is structured through quarterly and annual progress reports, as well as mid-term and completion reviews. Additional elements include a Knowledge Management Chain, an integrated web platform combining GPSC and UrbanShift resources, and a dedicated M&E budget.

202. Despite improvements in M&E arrangements for GEF-8, structural challenges remain unresolved. The system continues to rely on timely project start-up and consistent reporting by child projects, which may be affected by capacity constraints. Attribution of program-level results remains difficult, particularly for global environmental benefits. More fundamentally, while the framework includes aggregate targets, it does not provide indicators to assess whether urban systems are on a trajectory of durable transformation — such as through institutionalized planning processes, policy reform, or sustained shifts in investment.

9.2. M&E IN CHILD PROJECTS

203. Compliance with self-evaluation requirements is generally satisfactory, though timeliness remains uneven. All 20 country child projects from GEF-6 and GEF-7 submitted PIRs

as required, with GEF-6 projects averaging seven reports and GEF-7 around three, reflecting shorter implementation period for the latter. Mid-term reviews are available for 16 projects, though only 45 percent met the four-year benchmark—an improvement over the broader GEF portfolio. All six completed projects have submitted terminal evaluations, indicating that basic compliance requirements are largely met despite delays.

204. Weaknesses in M&E design are widespread and represent a central constraint on evaluability. The absence of a Theory of Change at entry was common across GEF-6 projects, affecting the majority of country portfolios, with several reconstructed only later. While GEF-7 shows improvement, design-stage gaps persisted. A related issue is the lag between design and implementation—sometimes two years or more—which rendered baselines and assumptions outdated before monitoring began. In Paraguay, indicators were misaligned with legal, institutional, and data realities, requiring the project to first establish measurement systems. In several cases, indicators were overly ambitious or poorly specified, focusing on institutional forms rather than functions.

205. Projects that updated M&E frameworks during implementation were better able to operationalize monitoring systems. In India and Malaysia, projects entered implementation with aligned results frameworks and later strengthened them through updated theories of change. In contrast, Mexico experienced what its mid-term review describes as “unintentional mission creep,” where higher-level objectives were replaced by operational outputs in practice, weakening the coherence of monitoring.

206. Output-oriented indicators, baseline gaps, and rigid systems limit the ability to assess outcomes. Across projects in Malaysia, Brazil, Peru, and Mexico, monitoring focused on activities and deliverables rather than results, with baseline data frequently missing, outdated, or poorly specified — in some cases established only mid-implementation. China stands out as an exception with clearly defined baselines. In Paraguay, measurement inconsistencies including mismatched reporting units complicated reporting, and the inability to formally revise unrealistic targets reduced scope for adaptive management.

207. M&E implementation has been affected by external disruptions and institutional instability. COVID-19 disrupted field-based monitoring, particularly in Malaysia and Brazil, exacerbating existing data gaps. Staff turnover—within project teams and among government counterparts—consistently affected continuity, as seen in Brazil and Paraguay, where frequent political changes required repeated reorientation of focal points. In Malaysia, unchanged risk ratings over eight years point to limited engagement with risk monitoring, suggesting a compliance-driven rather than analytical approach.

208. Where embedded in governance, M&E supported adaptive management; where it was not, its influence was limited. In China, M&E informed regular reporting and corrective actions,

including improvements to safeguard integration. Paraguay used mid-term reviews to implement substantive adjustments, including project extensions, staffing changes, and improved tracking systems. In contrast, in Brazil and Malaysia, M&E did not trigger timely corrective action, resulting in underutilized tools or constrained learning. In Peru, the MTR recommended a permanent physical intervention based on one of the project's studies; however, none was implemented due to the project's study-focused design and budget constraints. Achieving higher-level results would therefore have required stronger government commitment and institutional leadership.

209. **Cross-cutting areas such as gender and co-financing highlight further inconsistencies in M&E practice.** Gender tracking was uneven: Senegal and Paraguay demonstrated relatively strong performance, while Malaysia, Brazil, Peru, and South Africa showed weak or absent integration. Morocco's GEF-7 project required mid-course corrections to strengthen gender monitoring. Co-financing tracking was similarly problematic, with discrepancies, under-disbursement, and weak reporting observed in Senegal, Paraguay, Malaysia, Peru, and Mexico.

10. CONCLUSIONS AND RECOMMENDATIONS

10.1. CONCLUSIONS

Relevance and Design

210. **The Sustainable Cities Program represents a distinctive and highly relevant programmatic modality with the potential to generate value beyond the sum of its parts, even if this potential has not been fully realized in all contexts.** The program enables the integration of environmental and socio-economic priorities within urban systems—an effect not typically achieved through standalone projects. The program is strongly anchored in climate mitigation, with growing alignment to biodiversity and land degradation. Over time, participation has expanded toward LDCs and SIDS, while the share of nature-based solutions has increased significantly, reflecting both equity considerations and deepening environmental ambition. The realization of programmatic value depends on enabling conditions, particularly institutional coordination, ownership, and investment readiness, which have varied across contexts.

211. **The program's primary contribution is catalytic, functioning as an entry point for broader urban transformation.** GEF grants typically serve as seed financing that unlocks larger investment flows and institutional change. It operates through two main pathways: integrated urban planning that facilitates coordinated action on sustainability challenges within participating cities, and targeted pilot investments designed to be upscaled, replicated or mainstreamed, in other cities facing similar challenges.

212. **Integration is both the program's defining feature and its most persistent implementation challenge.** While integration is strong at the design stage, it has not consistently

translated into coordinated delivery. In several cases, planning and investment streams have operated in parallel, limiting synergies — with integrated urban plans produced alongside pilot investments that were implemented independently rather than as part of a unified investment pathway. Where projects implemented multiple pilot investments, better results were achieved when pilots were thematically connected or mutually reinforced than when they were implemented in isolation.

213. The integrated planning and investment related support are two prominent tracks of the program, but their connection hasn't been utilized effectively for sustained impact. Projects frequently generate high-quality plans without fully developing pre-investment pipelines. This gap is particularly evident in contexts with limited capacity to structure and finance investments. In practice, this has meant that plans produced during project implementation are often not translated into funded investments within the project timeframe, reducing their immediate impact and delaying downstream benefits.

Delivery Architecture and Support Systems

214. Implementation performance depends heavily on institutional conditions. Stronger results are observed where there is stable governance, clear authority, and sustained engagement. Where political turnover or institutional fragmentation is high, project continuity is more difficult to maintain. Projects that engage both senior decision-makers and technical staff—such as those supporting municipal planning units—have been better able to sustain progress across political cycles.

215. The partnership model is a core strength, combining complementary capabilities across institutions. The program brings together financing, technical expertise, and city networks. In GEF-7, the UrbanShift platform fostered a co-design culture and deeper engagement with cities. Maintaining this collaborative approach is important as the program evolves, particularly to sustain engagement with city-level actors and global partners.

216. The Global Platform is effective in facilitating knowledge sharing but is not sufficiently tailored to the operational needs of country child projects. The GPSC and UrbanShift have generated a substantial body of knowledge products and provided strong convening value. However, country-level project teams, consistently report that these offerings are not well aligned with their operational needs or project decision points, a gap the program has yet to fully address.

217. Child projects have generated nationally significant knowledge assets, with sustainability dependent on institutional ownership. Where ownership was secured — as with Brazil's CITinova platform, China's TOD tools and guidelines, and India's digital platform for the Swachh Bharat Mission — assets continued to be used and remained relevant beyond project

closure. Where it was not, such as digital platforms without designated host institutions, use and relevance declined after closure.

218. Monitoring systems have improved, while remaining limited in capturing transformation. While results frameworks are more structured in recent cycles, they do not yet track whether integrated plans are implemented or whether pilot interventions are scaled. This limits the ability to assess long-term system change.

Results and Sustainability

219. Tangible investments are critical for generating results and sustaining engagement. Projects with visible demonstrations—such as lake restoration in Chennai, filtering gardens in Recife, and electric vehicles in Guntur—have produced stronger results and sustained stakeholder interest. These investments provide immediate benefits and build credibility, increasing the likelihood of replication.

220. Innovation is primarily institutional and contextual, addressing local challenges through approaches not previously tried in those settings. Examples of institutional and contextual innovations include metropolitan coordination mechanisms, integration of biodiversity into urban governance, inclusion of informal actors in waste systems, and linking waste management with related energy requirements through a circular economy approach.

221. The sustainability of project results is shaped primarily by the degree of institutional anchoring achieved during implementation. Where outputs have been embedded in policies, regulations, or budgets — including planning tools and frameworks adopted by governments — they have been sustained beyond project closure. Where institutional anchoring was absent, results faced greater risks: insufficient planning for post-project ownership, combined with inadequate attention to institutional embedding of roles and capacities created during implementation, undermined sustainability.

Contributions to System Transformation

222. The program has advanced transformation through key levers, but progress remains uneven and insufficiently measured. Evidence of transformation is emerging through the scaling of pilots, mobilization of additional financing, and diffusion of practices across cities, though not consistently across countries or project contexts. The program has deployed key levers — policy integration, financing, partnerships, and knowledge — with outcomes shaped by enabling conditions such as institutional ownership, political commitment, and early demonstration of results. However, these outcomes are not systematically tracked, leaving the program's overall contribution to urban system transformation undermeasured.

Realizing the Program’s Synergistic Potential

223. **Individual projects have delivered meaningful results, but the programmatic structure has not yet amplified them beyond what standalone projects would have produced.** The available evidence is drawn primarily from GEF-6 activities, which were designed before the programmatic approach had fully matured. More recent cycles have introduced stronger alignment and mechanisms linking child projects to each other and to the global platform, and connecting planning to investment-readiness. However, results from these cycles are still emerging, making it too early to assess their full impact on program-level outcomes.

10.2. RECOMMENDATIONS

224. **Recommendation 1. Strengthen the focus on investments and support the replication of investment pilots.** The Lead Agency and Implementing Agencies should prioritize investment readiness within child projects, including the development of bankable pipelines, appropriate financing instruments, and early engagement with International Financial Institutions (IFIs) and private sector actors, with targeted support for LDCs and SIDS. The Global Platform should also systematically identify, package, and disseminate successful investment pilots to facilitate replication across cities, rather than relying primarily on informal peer learning.

225. **Recommendation 2. Address gaps in the global platform's coordination with, and support to, child projects while sustaining its knowledge and convening functions.** The GEF Secretariat should develop a clear action plan to strengthen the platform's collaboration with child projects, including more timely design support, improved access to global expertise, stronger inter-project connectivity, and enhanced program-level results reporting. The platform’s results framework should also incorporate indicators to assess its effectiveness in delivering these functions.

226. **Recommendation 3. Measure and track system-level transformation over time, consistent with the program’s strategic directions.** The GEF Secretariat should ensure that program and project results frameworks incorporate a stable set of indicators capturing both the enabling conditions for, and the achievement of, long-term urban system transformation. This would enable cumulative assessment across GEF cycles, support testing of Theory of Change assumptions, and inform the design of future programs.

11. REFERENCES

- Agyeman, J., Bullard, R.D., & Evans, B. (2002). Exploring the nexus: Bringing together sustainability, environmental justice, and equity. *Space and Polity*, 6(1), 77–90.
- Ahern, J. (2011). From fail-safe to safe-to-fail: Sustainability and resilience in the new urban world. *Landscape and Urban Planning*, 100(4), 341–343.
- Anguelovski, I., Connolly, J.J.T., & Brand, A.L. (2019). From landscapes of utopia to the margins of the green urban life: For whom is the new green city? *City*, 23(1), 1–22.
- Anguelovski, I., Shi, L., Chu, E., et al. (2016). Equity impacts of urban land use planning for climate adaptation. *Journal of Planning Education and Research*, 36(3), 333–348.
- Arup. (2015). *City Resilience Index: Understanding and measuring city resilience*. London: Arup.
- Bai, X., Dawson, R.J., Ürge-Vorsatz, D., et al. (2018). Six research priorities for cities and climate change. *Nature Sustainability*, 1, 2–6.
- Barnett, J., & O’Neill, S. (2010). Maladaptation. *Global Environmental Change*, 20(2), 211–213.
- Betsill, M.M. and Bulkeley, H. (2006) ‘Cities and the multilevel governance of global climate change’, *Global Governance*, 12(2), pp. 141–159. Available at: <https://doi.org/10.1163/19426720-01202004>
- Boehm, S., C. Schumer, J. Jaeger, K. Levin, R. Santo, M. Sims, K. Lebling, A. Lee, N. Singh, D. Riedl, N. Chin, N. Grant, A. Majid, S. Cassius, Y. Kirana, Y. Zhang-Billert, M. Petroni, and A. Gangotra. (2025). "Methodology Underpinning the State of Climate Action Series: 2025 Update." World Resources Institute. Available online at: doi.org/10.46830/writn.25.00062.
- Bulkeley, H., & Betsill, M. (2005). Rethinking sustainable cities: Multilevel governance and the “urban” politics of climate change. *Environmental Politics*, 14(1), 42–63.
- Campbell, S. “Green Cities, Growing Cities, Just Cities?: Urban Planning and the Contradictions of Sustainable Development” *Journal of the American Planning Association* 62, no. 3 (1996): 296–312.
- Convention on Biological Diversity (CBD). (2022). Kunming–Montreal GBF, Target 12.
- CEREMA. (2016). *Reference Framework for Sustainable Cities (RFSC): Methodological guide*. Lyon: CEREMA.
- Checker, M. (2011). Wiped out by the “greenwave”: Environmental gentrification and the paradoxical politics of urban sustainability. *City & Society*, 23(2), 210–229.
- Dasgupta, S., Laplante, B., Wang, H., & Wheeler, D. (2002). Confronting the environmental Kuznets curve. *Journal of Economic Perspectives*, 16(1), 147–168.

Dinda, S. (2004). Environmental Kuznets curve hypothesis: A survey. *Ecological Economics*, 49(4), 431–455.

Dodman, D., et al. (2022). Urban systems and other settlements. In: *Climate Change 2022: Mitigation of Climate Change*. IPCC Working Group III Contribution to the Sixth Assessment Report.

Fuhr, H., Hickmann, T. and Kern, K. (2018) 'The role of cities in multi-level climate governance: local climate policies and the 1.5°C target', *Current Opinion in Environmental Sustainability*, 30, pp. 1–6. Available at: <https://doi.org/10.1016/j.cosust.2017.10.004>

Global Environment Facility (GEF). (2014). GEF-6 Programming Directions. GEF/R.6/20/Rev.04.

Global Environment Facility (GEF). (2018). *GEF-7 Programming Directions*. GEF/R.7/19.

Global Environment Facility (GEF). (2020). *The GEF Impact Programs: Delivering Transformational Change*. Washington, DC: Global Environment Facility.

Global Environment Facility (GEF). (2022). GEF-8 Programming Directions. GEF/R.08/29/Rev.01.

Global Environment Facility Independent Evaluation Office (GEF IEO). (2018). Formative Review of the Integrated Approach Pilot Programs, Evaluation Report No. 126, Washington, DC.

Global Environment Facility Independent Evaluation Office (GEF IEO). (2022). GEF Integrated Approach to Address Drivers of Environmental Degradation. Evaluation Report No. 154, Washington, DC.

Global Environment Facility Independent Evaluation Office (GEF IEO). (2023a). Guidelines for Conducting Program Evaluation. Washington, DC.

Global Environment Facility Independent Evaluation Office (GEF IEO). (2023b). Guidelines for Conducting Terminal Evaluations of Full-Size Projects. Washington, DC.

Gould, K.A., & Lewis, T.L. (2017). *Green Gentrification: Urban Sustainability and the Struggle for Environmental Justice*. New York: Routledge.

Grossman, G.M., & Krueger, A.B. (1991). Environmental impacts of a North American free trade agreement. *NBER Working Paper No. 3914*.

Grossman, G.M., & Krueger, A.B. (1995). Economic growth and the environment. *Quarterly Journal of Economics*, 110(2), 353–377.

Hallegatte, S., Green, C., Nicholls, R.J., & Corfee-Morlot, J. (2013). Future flood losses in major coastal cities. *Nature Climate Change*, 3, 802–806.

Heffron, R.J. and McCauley, D. (2018). *What is the "Just Transition"?* *Geoforum*, 88, pp. 74–77. <https://doi.org/10.1016/j.geoforum.2017.11.016>

- Immergluck, D., & Balan, T. (2018). Sustainable for whom? Green urban development, environmental gentrification, and the Atlanta BeltLine. *Urban Geography*, 39(4), 546–562.
- Intergovernmental Panel on Climate Change (IPCC). (2022). *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press.
- International Labour Organization (ILO). (2015). *Guidelines for a Just Transition towards Environmentally Sustainable Economies and Societies for All*. Geneva: ILO.
- Kitchin, R., Lauriault, T., & McArdle, G. (2015). Knowing and governing cities through urban indicators, city benchmarking and real-time dashboards. *Regional Studies, Regional Science*, 2(1), 6–28.
- Lam, D.P.M., Martín-López, B., Wiek, A., Bennett, E.M., Frantzeskaki, N., Horcea-Milcu, A.I. and Lang, D.J. (2020) 'Scaling the impact of sustainability initiatives: a typology of amplification processes', *Urban Transformations*, 2, article 3. Available at: <https://doi.org/10.1186/s42854-020-00007-9>
- Liu, J., Dietz, T., Carpenter, S.R., et al. (2007). Complexity of coupled human and natural systems. *Science*, 317(5844), 1513–1516.
- Lwasa, S., Seto, K.C., Bai, X., Blanco, H., Gurney, K.R., Kilkış, Ş., Lucon, O., Murakami, J., Pan, J., Sharifi, A. and Yamagata, Y. (2022). Urban Systems and Other Settlements. In: *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC)*. Cambridge University Press.
- Maassen, A., Shin, J., French, I. and Ray, M. (2026) *Climate readiness as a driver of urban transformation: Lessons from the WRI Ross Center Prize for Cities cycle 2023–2024*. Working Paper. Washington, DC: World Resources Institute. Available at: <https://doi.org/10.46830/wriwp.25.00116>.
- Mori, K., & Christodoulou, A. (2012). Review of sustainability indices and indicators: Towards a new City Sustainability Index. *Environmental Impact Assessment Review*, 32, 94–106.
- Newell, P. and Mulvaney, D. (2013). *The political economy of the “just transition”*. *The Geographical Journal*, 179(2), pp. 132–140. <https://doi.org/10.1111/geoj.12008>
- Organisation for Economic Co-operation and Development (OECD). (2016). *Better Policies for Sustainable Development 2016: A New Framework for Policy Coherence*. Paris: OECD Publishing.
- Organisation for Economic Co-operation and Development (OECD). (2017). *Policy Coherence for Sustainable Development 2017: Eradicating Poverty and Promoting Prosperity*. Paris: OECD Publishing.

Organisation for Economic Co-operation and Development (OECD). (2018). *Policy Coherence for Sustainable Development 2018: Towards Sustainable and Resilient Societies*. Paris: OECD Publishing.

Organisation for Economic Co-operation and Development (OECD). (2019a). *Greening Development Co-operation: Enhancing the Environmental Focus of Development Assistance*. Paris: OECD Publishing.

Organisation for Economic Co-operation and Development (OECD). (2019b). Better criteria for better evaluation: Revised evaluation criteria definitions and principles for use. OECD/DAC Network on Development Evaluation.

Ostrom, E. (1996). Crossing the great divide: Coproduction, synergy, and development. *World Development*, 24(6), 1073–1087.

Satterthwaite, D., Archer, D., Colenbrander, S., et al. (2020). Building resilience to climate change in urban areas. *Annual Review of Environment and Resources*, 45, 391–416.

Scientific and Technical Advisory Panel (STAP). (2019). Integration: to solve complex environmental problems. Washington, DC.

Schlosberg, D. (2007). *Defining Environmental Justice: Theories, Movements, and Nature*. Oxford: Oxford University Press.

Seto, K.C., Dhakal, S., Bigio, A., et al. (2014). Human settlements, infrastructure, and spatial planning. *Annual Review of Environment and Resources*, 39, 1–31.

Shah Naidoo, N., Sanniti, S., Malhotra, C., Doust, M. and Batra, P. (2024) *Stronger NDCs with cities, states, and regions: Recommendations for national governments*. Working Paper. Washington, DC: World Resources Institute. Available at: <https://doi.org/10.46830/wriwp.24.00038>

Sharifi, A. (2016). A critical review of selected tools for assessing community resilience. *Ecological Indicators*, 69, 629–647.

Shi, L., Chu, E., Anguelovski, I., et al. (2016). Roadmap towards justice in urban climate adaptation. *Nature Climate Change*, 6, 131–137.

Tanguay, G.A., Rajaonson, J., Lefebvre, J.F., & Lanoie, P. (2010). Measuring the sustainability of cities: An analysis of indicators. *Ecological Indicators*, 10(2), 407–418.

United Nations. (2015). *Transforming Our World: The 2030 Agenda for Sustainable Development*. New York: United Nations.

United Nations. (2017). *New Urban Agenda*. New York: United Nations. Available at: <https://habitat3.org/wp-content/uploads/NUA-English-With-Index-1.pdf>

United Nations. (2018). *The World's Cities in 2018—Data Booklet (ST/ESA/SER.A/417)*. Department of Economic and Social Affairs, Population Division, UN Report

United Nations. (2024). *SDG Indicator Framework for Sustainable Development Goal 11*. United Nations.

United Nations Environment Programme (UNEP). (2016). *Integrated Approaches to Sustainable Development Planning and Implementation*. Nairobi: UNEP.

United Nations Environment Programme (UNEP). (2023). *Embracing Just Transitions to Sustainability: Pathways for a Fair and Inclusive Green Economy*. Nairobi: UNEP.

United Nations Framework Convention on Climate Change (UNFCCC) (2015), Decision 1/CP.21, paras 133–136.

United Nations Framework Convention on Climate Change (UNFCCC). (2015). *Paris Agreement*. Bonn: UNFCCC.

United Nations Framework Convention on Climate Change (UNFCCC). (2023). *Decision 3/CMA.5: UAE Just Transition Work Programme*. Report of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its fifth session (Dubai, United Arab Emirates).

UN-Habitat. (2016). *World Cities Report 2016: Urbanization and Development*. Nairobi: UN-Habitat.

UrbanShift. (2025). *Transforming Cities for People and Planet. Annual Report 2024-2025*.

World Bank. (2016a). *Investing in urban resilience: Protecting and promoting development in a changing world*.

World Bank. (2016b). *Over half the world lives in cities. World Bank Data Blog*, 13 October 2016.

World Bank. (2018). *Urban Sustainability Framework*. Washington, DC: World Bank.

Zuk, M., Bierbaum, A.H., Chapple, K., et al. (2018). *Gentrification, displacement, and the role of public investment. Journal of Planning Literature*, 33(1), 31–44.

12. ANNEXES

ANNEX 1. METHODOLOGICAL DETAILS

Conceptual Framework

Defining a Sustainable City

There is no single universally accepted definition of a sustainable city, but different frameworks converge around complementary attributes. An influential conceptual foundation is Campbell's (1996) 'Planner's Triangle,' which frames sustainable urban development as the intersection of three goals — environmental protection, economic development, and social equity, often summarized as the three Es: Environment, Economy, and Equity. This tripartite framing anticipated much of the subsequent policy discourse. Sustainable Development Goal 11 characterizes sustainable cities as inclusive, safe, resilient, and environmentally sustainable (United Nations, 2024), reflecting the equity and environment dimensions of the triangle. Similarly, the World Bank's Urban Sustainability Framework describes cities that balance productivity and innovation with affordability and environmental responsibility, fostering healthy urban environments in which people and nature can thrive (World Bank, 2018) — capturing all three dimensions of economy, environment, and equity respectively. Taken together, these frameworks suggest that while the terminology varies, there is broad agreement that sustainable cities must simultaneously pursue environmental, economic, and social objectives.

For the purposes of this evaluation, the three-Es framework — Environment, Economy, and Equity — provides an analytical lens for examining whether and how the program supports cities in advancing environmentally sustainable and integrated urban development consistent with GEF objectives.

Program Performance

The evaluation adapts the GEF IEO's Guidelines for Conducting Program Evaluation (2023a) to the specific context of the Sustainable Cities Program. In line with these guidelines, the evaluation assesses program performance based on multiple criteria, including OECD's (2019b) evaluation criteria, as well as additional criteria such as additionality, integration, alignment with GEF policies, and just transition.

OECD Evaluation Criteria

The evaluation applies the OECD evaluation criteria of relevance, coherence, effectiveness, efficiency, impact, and sustainability (OECD, 2019b). These criteria are widely used in evaluations conducted by multilateral organizations and are recognized in the GEF IEO's guidelines for program and project evaluations (GEF IEO 2023a, 2023b). The GEF IEO's guidelines explain how these criteria are applied to assess GEF programs.

Additionality

The evaluation assesses the additionality of the Sustainable Cities Program by comparing the benefits of the program to a scenario without the program (GEF IEO, 2023a). For example, areas where GEF support has contributed additional results, uniqueness and innovativeness of the GEF approach and activities on ground. The evaluation will seek to compare benefits of the program to a situation where the GEF support was provided through stand-alone projects, along with a situation where there is neither.

Integration

Use of an integrated approach is central to the Sustainable Cities Program. GEF recognizes that challenges such as climate change, biodiversity loss, land degradation, and pollution arise from interconnected social, economic, and ecological systems and cannot be effectively addressed through isolated sectoral interventions (GEF, 2020). The evaluation therefore assesses whether and how integration has been applied, and with what results.

While integration may be understood as incorporating environmental considerations into development policies and programs (OECD, 2019a), the GEF approach emphasizes addressing systemic drivers and interactions across multiple system components through coordinated solutions (GEF, 2018). This reflects a systems-thinking perspective that defines system boundaries, addresses multiple drivers simultaneously, considers interlinkages across scales, manages risks and vulnerabilities, strengthens resilience, and enables adaptive learning through feedback mechanisms (STAP, 2019; GEF IEO, 2023a).

For the purposes of this evaluation, integrative approaches are understood as program and project designs that address interconnected system components and embed environmental objectives within broader urban development processes. The evaluation examines integration by assessing whether interventions address systemic drivers, promote cross-sectoral and multilevel coordination, and contribute to sustained environmental outcomes consistent with the GEF mandate along with types of integration (Table A1.1).

Table A1.1. Operationalizing Integration for Evaluation

Types	Observable evidence	Conceptual basis
Cross-sectoral	Environmental objectives embedded in transport, land use, housing, waste, energy, or other interventions	Environmental mainstreaming and integrated SDG implementation emphasize embedding environmental concerns across sectors (OECD, 2019a; United Nations, 2015)

Policy coherence	Alignment between city plans, national policies, and environmental commitments	Policy coherence frameworks stress coordination across policy domains and governance levels to manage sustainability trade-offs (OECD, 2016)
Institutional coordination	Joint planning, shared governance structures, or coordinated implementation across agencies, data sharing	Effective sustainability action requires coordination mechanisms enabling joint action across public institutions and levels of government (OECD, 2017; World Bank, 2018)
Stakeholder integration	Partnerships, co-production, and engagement with private sector, civil society, and communities	Integrated development approaches link design and implementation across actors to produce sustained impact (UNDP–UNEP PEI; OECD, 2019a)
Systems outcomes	Synergies achieved or trade-offs avoided across environmental and development objectives	Integrated sustainable development requires managing interactions among economic, social, and environmental systems (United Nations, 2015; World Bank, 2018)

Source: GEF IEO compilation from different sources.

Alignment with GEF Policies

The evaluation assesses the program’s alignment with GEF policies on environmental and social safeguards, gender equality, and stakeholder engagement, which aim to ensure that interventions are equitable, inclusive, and environmentally sustainable while contributing to global environmental benefits.

Consistent with the GEF Policy on Environmental and Social Safeguards, the evaluation examines whether risks were adequately identified and mitigated in project design and implementation, particularly in child projects, including potential adverse impacts on vulnerable and marginalized groups. Urban sustainability interventions may unintentionally exacerbate intra-city inequalities, including displacement or impacts on informal livelihoods, services and settlements. Literature highlights risks such as green gentrification, whereby environmental improvements can increase property values and displace lower-income residents (Anguelovski et al., 2019). The evaluation therefore assesses whether inclusive planning and safeguards were applied to mitigate such risks and ensure equitable distribution of benefits.

Alignment with the GEF Policy on Gender Equality is assessed by examining whether gender analysis informed project design, whether participation and benefits were gender-responsive, and whether gender-disaggregated data were collected and used within monitoring and evaluation systems. Given the differentiated impacts of urban interventions on access to services, mobility, and economic opportunities, the evaluation considers whether projects proactively addressed gender-related barriers.

The evaluation also assesses stakeholder engagement in line with GEF policy requirements, including stakeholder identification, consultation, participation, grievance redress, and ongoing communication. It examines the extent to which government agencies, civil society, private-sector actors, and affected communities were meaningfully engaged during planning and implementation, recognizing evidence that inclusive participation strengthens equity, ownership, and long-term sustainability (Agyeman, Bullard & Evans, 2002; Dodman et al., 2022).

Overall, the assessment examines how effectively the program applied GEF policy requirements to promote inclusive, equitable, and sustainable urban development outcomes.

Data Sources

Document Review

The evaluation drew on multiple forms of document review, combining an AI-assisted, human-managed portfolio review with manual assessment of project and program documentation (Table A1.2).

The AI-supported portfolio review was conducted in two stages. In the first stage, projects addressing urban sustainability were identified from the GEF portfolio of more than 4,250 full-size and medium-size projects approved through January 2026. This screening identified approximately 455 projects addressing urban sustainability concerns, of which 449 projects with relevant documents available were reviewed. Among these 449 reviewed projects, 282 were stand-alone projects, 43 were approved under the Sustainable Cities Program, and 124 were child projects implemented under other programs. Of the 449 reviewed projects, 224 were approved during the GEF-6 to GEF-8 cycles, including 43 Sustainable Cities Program projects, 82 projects under other programs, and 99 stand-alone projects. This subset forms the basis for comparing the features of Sustainable Cities Program projects with those of other urban sustainability projects.

In the second stage, the design of the identified projects was assessed using a structured analytical instrument to classify supported activities. Project activities were classified into 8 distinct categories that were further distinguished into 84 sub-categories (Annex 2). The analysis examined the type of project activities that are financed by GEF to address urban sustainability and changes in activities included in project design from the pilot phase through GEF-8, including shifts types of activities supported and overall design complexity.

A manual review was undertaken for Sustainable Cities Program projects using a detailed assessment instrument that included questions specific to urban sustainability dimensions relevant to the program. Manual review also covered programming directions for GEF-6, GEF-7, and GEF-8. and Program Framework Documents (PFDs). In addition, project implementation

reports, mid-term reviews, and terminal evaluations for coordinating and country child projects were reviewed to assess implementation progress and results.

The evaluation also examined texts of the relevant multilateral environmental agreements, convention decisions, focal area strategies, and external frameworks including nationally determined contributions (NDCs) and the Sustainable Development Goals (SDGs).

Table A1.2. Sources of Information to Answer Key Evaluation Questions

Key Question	Source	Coverage
Is the Sustainable Cities Program relevant to recipient countries' needs, GEF objectives, and multilateral environmental conventions?	<ul style="list-style-type: none"> • Document Review • GEF Portal • Interviews 	<ul style="list-style-type: none"> • UNFCCC, UNCCD, CBD guidance • Program documents (GEF-6 to GEF-8) • Documents for 43 child projects • Key Informants (KIs): GEF Secretariat, Agencies, countries.
Does the program demonstrate internal and external coherence?	<ul style="list-style-type: none"> • Document Review • Interviews 	<ul style="list-style-type: none"> • Program documents (GEF-6 to GEF-8) • Documents for 43 child projects • Documents of 449 GEF projects that address urban sustainability • KIs: GEF Secretariat, Agencies, global partners, countries.
How effectively has the program been implemented, and what key factors have influenced its execution?	<ul style="list-style-type: none"> • Document review • Interviews • Field observation 	<ul style="list-style-type: none"> • Program and Project M&E documents (GEF-6 to GEF-7) • KIs: Agencies, executing partners, and participating countries. • Field observation for 11 projects.
Does the program demonstrate efficiency in resource use?	<ul style="list-style-type: none"> • Document review • Portal data • Interviews 	<ul style="list-style-type: none"> • GEF Portal data on milestones and cofinancing (GEF-6 to GEF- 8). • KIs: GEF Secretariat, Agencies, executing partners, and countries.
Has the program achieved its intended outcomes, and are they sustainable?	<ul style="list-style-type: none"> • Document review • Portal data • Interviews • Field observation • Remote sensing 	<ul style="list-style-type: none"> • Program and Project M&E documents (GEF-6) • Field verification in 8 countries • KIs: GEF Secretariat, Agencies, executing partners, beneficiaries, global partners, and countries.

		<ul style="list-style-type: none"> • Remote sensing based analysis of GEF activities in Kadapakkam Lake, Chennai, India
How has the program leveraged global partnerships to advance in advancing GEF's urban sustainability objectives?	<ul style="list-style-type: none"> • Document review • Interviews • Global Platform Datasets 	<ul style="list-style-type: none"> • Program and Project M&E documents (GEF-6 to GEF-7) • KIs: GEF Secretariat, Agencies, global partners, and executing partners. • Global Platform Datasets
Have the program and its child projects effectively contributed to knowledge sharing?	<ul style="list-style-type: none"> • Document review • Interviews • Global Platform Datasets 	<ul style="list-style-type: none"> • Program and Project M&E documents (GEF-6 to GEF-7) • KIs: GEF Secretariat, Agencies, executing partners, global partners, and countries. • Global Platform Datasets
How effectively have the program's M&E arrangements supported decision-making and learning?	<ul style="list-style-type: none"> • Document review • Interviews 	<ul style="list-style-type: none"> • Program and Project M&E documents (GEF-6 to GEF-7) • KIs: Agencies, executing partners, and participating countries.

Source: GEF IEO.

GEF Portal Datasets

The GEF Portal maintains data on key program and project milestones, such as approval dates, first disbursements, mid-term reviews, project completions, and financial closures. It also provides data on project resource usage, cofinancing realization, and achievement of results as measured by core indicators. These datasets were used to assess the progress of program and project implementation activities. In addition, the Portal is also a repository of project documents that were source material for document reviews that will be conducted as part of this evaluation.

Datasets on Global Platforms

The evaluation team accessed and analyzed datasets related to the activities of the Global Platform for Sustainable Cities (GPSC) and UrbanShift, including information on events organized and publications hosted by these platforms. Available data on event participants, partners engaged through platform activities, and associated publications were compiled and analyzed.

Where information on participant characteristics was incomplete, data gaps were addressed, where feasible, through AI-assisted web searches complemented by manual verification. In addition, datasets on partners contributing to platform publications were developed through a structured manual review of published materials. The details on how these datasets were developed are provided in Annex 7.

These datasets were used to assess the types of activities supported by the global platforms, the profile and reach of participating stakeholders, and the extent to which the Sustainable Cities Program engages diverse partners through its global knowledge and capacity-development mechanisms.

Key Informant Interviews

Key informants (KIs) were interviewed to gather insights related to program design and the factors that affected results and progress in implementation. The evaluation adopts a purposive approach to identify the KIs. Broadly, these KIs included individuals involved in the program's design (GEF Secretariat), those who led its implementation (lead agencies), partners engaged with the GEF program at the global or regional scale, individuals involved in the implementation of child projects on the ground (GEF Agencies), executing partners (executing agencies and their partners), and a few targeted beneficiaries. The interviewees in the recipient countries and projects included individuals from the countries and projects covered through field observations (Annex 8).

Field Verification

Field verification and observation covered 11 projects across 8 countries and 20 cities under the GEF Sustainable Cities Program (Table A1.3). The sample spans Latin America (Paraguay, Brazil, Mexico, Peru), Asia (Malaysia, China, India), and Africa (South Africa), with no sites in Europe and Central Asia because the program has covered only one country in the region (Serbia, GEF-8) so far. Coverage was limited to GEF-6 and GEF-7 because only projects from these cycles have been implemented to date, with greater emphasis on GEF-6 where most projects are complete or nearing completion, allowing for more robust verification of results. This distribution aligns with the regional allocation of GEF grants for country child projects during GEF-6 and GEF-7: Asia and Latin America together accounted for 82 percent of funding (45 percent and 37 percent, respectively), while Africa accounted for 18 percent.

Table A1.3. Project Coverage through Field Observation

GEF ID	Project Name	Country	Cities	Agencies
GEF -6				
9127	Asuncion Green City of the Americas	Paraguay	Asuncion Metro	UNDP
9142	Promoting Sustainable Cities through Integrated Urban Planning and Innovative Technologies	Brazil	Brasilia, Recife	UNEP

9145	Building a Resilient and Resource-efficient Johannesburg	South Africa	Johannesburg	DBSA, UNEP
9147	Sustainable-City Development in Malaysia	Malaysia	Melaka	UNIDO
9223	GEF China Sustainable Cities Integrated Approach Pilot	China	Beijing, Tianjin, Shijiazhuang, Ningbo, Guiyang	World Bank
9323	Sustainable Cities, Integrated Approach Pilot in India	India	Bhopal, Jaipur, Guntur, Vijayawada	UNIDO
9649	Implementation of Projects Prioritized by the Sustainable and Emerging Cities Program	Mexico	La Paz	IADB
9698	National Platform for Sustainable Cities and Climate Change	Peru	Lima Metro	IADB
GEF-7				
10465	Promoting integrated metropolitan planning and innovative urban technology investments	Brazil	Belem	UNEP
10484	Livable Cities in India	India	Surat, Chennai	UNEP, ADB
10822	Green and Carbon Neutral Cities	China	Ningbo	World Bank

Source: GEF IEO.

Agency coverage is diverse—UNEP (four projects, including co-implementations), World Bank (two), UNIDO (two), IADB (two), and single appearances by UNDP, DBSA, and ADB—capturing different operational modalities and partnership models. Notably, five cities were visited under the World Bank’s China project (GEF ID 9223) and one under the Green and Carbon Neutral Cities project (GEF ID 10822), while four cities were field-verified under India’s Sustainable Cities IAP (GEF ID 9323) and two under India’s Livable Cities project (GEF ID 10484). These figures reflect cities visited for field verification and are a subset of the total cities engaged by project activities. The field verification complements the data gathered through interviews, document review, and data set analysis.

Remote Sensing Data – Kadapakkam Lake, Chennai

The evaluation conducted a remote sensing–based analysis of environmental changes at Kadapakkam Lake in Chennai, where restoration activities were supported under the *Livable Cities in India* project (GEF ID 10484; implemented by UNEP and ADB). Project interventions included removal of invasive species, lake deepening to increase storage capacity, and

strengthening of embankments, representing an application of nature-based solutions intended to contribute to flood mitigation, drought resilience, and biodiversity enhancement.

The analysis aimed to generate independent, spatially explicit evidence of physical and ecological changes associated with the intervention. Sentinel-2 satellite imagery was used to compare pre-intervention (2024) and post-intervention (2026) conditions, with particular attention to changes in open water extent and floating vegetation coverage—two indicators relevant to lake restoration outcomes. To enhance temporal comparability and minimize atmospheric effects, imagery was selected from comparable seasonal periods and with minimal cloud cover.

The boundary of Kadapakkam Lake was derived from OpenStreetMap and converted into a polygon shapefile to enable consistent spatial analysis. Changes were assessed using established spectral indices: the Normalized Difference Water Index (NDWI), used to detect variations in surface water extent, and the Normalized Difference Vegetation Index (NDVI), used to assess changes in vegetation coverage. Remote sensing findings were triangulated with field verification to confirm observed on-ground changes.

This analysis complemented document review, stakeholder consultations, and site-level observations by providing objective, independently derived evidence on environmental status changes associated with an urban nature-based intervention.

ANNEX 2. CLASSIFICATION OF URBAN SUSTAINABILITY PROJECTS

Methodology

Based on the Extended General Report dataset from the GEF Portal as of February 12, 2026, there were 4,250 CEO-approved full-size and medium-size projects. This dataset excludes Small Grants Programme projects, Capacity-building Initiative for Transparency (CBIT) projects, and projects that were dropped or cancelled. An additional 10 projects with no documents available in the Portal were also excluded.

To classify projects from GEF-5 to GEF-8 within this set of 4,250 projects as urban sustainability-focused, text from project objectives, components, outcomes, and outputs was reviewed. Keywords related to urban sustainability were identified for each project. A large language model (LLM) was also used to detect the names of urban and rural areas targeted by each project. All projects containing relevant keywords and/or identified urban areas were subsequently reviewed manually. The manual review also helped refine the screening criteria by identifying keywords that were not effective indicators of urban sustainability focus and should therefore be excluded, such as disaster risk reduction, environmental and social impact assessment, flood risk mapping, and population structure.

Two types of urban sustainability projects were identified: (i) projects that are focused solely on an explicitly urban topic, and (ii) projects that focus on a general sustainability topic, but whose interventions take place exclusively in urban areas. Projects containing keywords associated with explicitly urban topics—such as public transportation—were classified as urban sustainability-focused (Table A2.1).

Other potentially relevant projects were manually reviewed and classified as urban sustainability-focused only if they targeted urban areas exclusively. Under this criterion, national projects and projects identifying both urban and rural areas were excluded. Projects focused on the industrial sector or industrial parks were also excluded.

For projects approved before GEF-5, the LLM was used to extract project objectives, as well as the names of urban and rural locations mentioned in the CEO endorsement documents. The same criteria described above were then applied to determine which projects had an urban sustainability focus.

Table A2.1. Keywords Used for Detecting Urban Sustainability Projects

Type of project with keyword	Keyword
All projects containing any of the following keywords are classified as having an urban sustainability focus.	air quality management, BRT, building code standard, bus rapid transit, electric bus, multi modal transport, public transport, transit-oriented development, urban biodiversity, urban green area, urban infrastructure, urban management, urban mobility, urban park, urban sustainability, urban transport, urban upgrading
Projects that contain these keywords and are implemented only in urban areas are classified as having an urban sustainability focus.	circular economy, city, disaster risk management, energy consumption, energy efficiency, energy efficient building, green building, green infrastructure, green space, master plan, municipal, sanitation, sewage treatment, peri-urban, public space, sustainability and resilience, sustainable transport, urban, urban agriculture, urban environment, urban expansion, urban land, urban resilience, urban waste, waste collection, waste management, waste recycling, wastewater management

Source: GEF IEO.

Definitions of Classified Activities

Regulation and policies

1. **Adopting policies** - Whether the project's activities are explicitly adopting policies.
2. **Banning products** - Whether the project's activities are explicitly banning or phasing out specific products or substances.
3. **Creating enabling environments** - Whether the project's activities are explicitly creating enabling regulatory environments.
4. **Developing codes and standards** - Whether the project's activities are explicitly developing or drafting new codes and standards.
5. **Developing fiscal regulations** - Whether the project's activities are explicitly developing or establishing tax, subsidy, tariff regulations, and incentives.
6. **Developing laws** - Whether the project's activities are explicitly developing or drafting new laws, legislation, or legal frameworks.
7. **Developing policies** - Whether the project's activities are explicitly developing new policies or policy frameworks. This does not include strategies or action plans.
8. **Developing regulations** - Whether the project's activities are explicitly developing or drafting new regulations or regulatory frameworks.
9. **Harmonizing laws** - Whether the project's activities are explicitly harmonizing laws and regulations.
10. **Harmonizing standards** - Whether the project's activities are explicitly harmonizing standards.

11. **Implementing regulatory frameworks** - Whether the project's activities are explicitly implementing regulatory frameworks including standards, codes, rules, laws, legislation, regulations, and their frameworks.
12. **Monitoring compliance** - Whether the project's activities are explicitly monitoring and supervising compliance and adherence to laws and regulations.
13. **Reviewing codes and standards** - Whether the project's activities are explicitly reviewing existing codes or standards and their gaps.
14. **Reviewing laws** - Whether the project's activities are explicitly reviewing existing laws or legislation and their gaps.
15. **Reviewing policies** - Whether the project's activities are explicitly reviewing existing policies and their gaps.
16. **Reviewing regulations** - Whether the project's activities are explicitly reviewing existing rules or regulations.
17. **Revising codes and standards** - Whether the project's activities are explicitly revising and updating codes or standards.
18. **Revising fiscal regulations** - Whether the project's activities are explicitly revising fiscal incentives such as taxes, tariffs, and subsidies.
19. **Revising laws** - Whether the project's activities are explicitly revising laws, legislation, or legal frameworks.
20. **Revising policies** - Whether the project's activities are explicitly revising policies.
21. **Revising regulations** - Whether the project's activities are explicitly revising and updating regulations.
22. **Strengthening regulatory frameworks** - Whether the project's activities are explicitly strengthening regulatory frameworks such as standards, codes, rules, laws, legislation, regulations, and their frameworks.

Action plan and strategies

23. **Developing business model** - Whether the project's activities are explicitly designing a business model.
24. **Developing national plan** - Whether the project's activities are explicitly establishing a national plan or national development plan.
25. **Developing energy efficiency strategy** - Whether the project's activities are explicitly establishing an energy efficiency strategy.
26. **Developing engineering design** - Whether the project's activities are explicitly establishing an engineering design or blueprint.
27. **Developing gender strategy** - Whether the project's activities are explicitly establishing a gender-responsive or gender-sensitive strategy.
28. **Developing maintenance plan** - Whether the project's activities are explicitly establishing a maintenance plan such as how to maintain infrastructure after the project ends.
29. **Developing mobility and transport strategy** - Whether the project's activities are explicitly establishing a mobility (such as walking or biking), electric mobility, or urban transport strategy.
30. **Developing replication strategy** - Whether the project's activities are explicitly establishing a replication or scaling strategy.
31. **Developing risk mitigation plan** - Whether the project's activities are explicitly establishing a risk mitigation plan.
32. **Developing roadmap** - Whether the project's activities are explicitly establishing a roadmap.
33. **Developing strategic action plan** - Whether the project's activities are explicitly establishing a strategic action plan or action plan.

- 34. **Developing urban development strategy** - Whether the project's activities are explicitly establishing an urban development plan, city plan, or strategy.
- 35. **Developing waste management strategy** - Whether the project's activities are explicitly establishing a waste management strategy such as a waste management system.

Governance and collaboration

- 36. **Establishing new agencies** - Whether the project's activities are explicitly establishing new agencies, units, departments, and organizational bodies. Do not include agencies that are set up as part of the project implementation itself, such as project implementation units (PIU) or project steering committees (PSC). Only include agencies that will last after the project ends.
- 37. **Developing standard operating procedures and guidelines** - Whether the project's activities are explicitly developing a system, standard operating procedures, or guidelines such as those that will manage waste or traffic. This includes the process for monitoring and enforcement mechanisms, and technical standards.
- 38. **Establishing market platforms** - Whether the project's activities are explicitly forming a market platform or transaction mechanism such as carbon trading or payment for ecosystem services. Only include platforms that will last after the project ends.
- 39. **Building public-private partnerships** - Whether the project's activities are explicitly building public-private partnerships (PPPs).
- 40. **Reducing trade-offs** - Whether the project's activities are explicitly reducing or mitigating trade-offs.
- 41. **Removing barriers** - Whether the project's activities are explicitly removing barriers, obstacles or resistance to environmental integration.

Investments to achieve direct benefits

- 42. **Conducting enforcement activities** - Whether the project's activities are explicitly enforcing laws, regulations, standards, or codes, or developing an enforcement mechanism. This includes developing an enforcement protocol, enforcement mechanism or enforcement agency
- 43. **Piloting and demonstrating** - Whether the project's activities are explicitly piloting and demonstrating projects.
- 44. **Building energy infrastructure** - Whether the project's activities are explicitly constructing or physically improving energy infrastructure such as street lighting, solar water heaters, solar PV systems, geothermal energy systems, wind generators, or biomass heaters.
- 45. **Building green infrastructure** - Whether the project's activities are explicitly constructing or physically improving green infrastructure such as parks, green roofs, plant nurseries, or urban forests.
- 46. **Restoring land** - Whether the project's activities are physically restoring land or cleaning up contaminated sites.
- 47. **Building mitigation infrastructure** - Whether the project's activities are explicitly constructing or physically improving mitigation infrastructure that reduces risks such as flood barriers, drainage systems, retaining walls, or reforestation for landslide prevention.
- 48. **Building public buildings** - Whether the project's activities are explicitly constructing or physically improving public buildings such as schools or hospitals.
- 49. **Building residential infrastructure** - Whether the project's activities are explicitly constructing or physically improving residential infrastructure.
- 50. **Building transportation infrastructure** - Whether the project's activities are explicitly constructing or physically improving transportation infrastructure such as buses, trains, bike lanes, or pedestrian walkways.

51. **Building waste infrastructure** - Whether the project's activities are explicitly constructing or physically improving waste management infrastructure such as landfills, treatment facilities, or sewerage systems.

Monitor environmental status

52. **Establishing early warning system** - Whether the project's activities are explicitly establishing an early warning system such as fire or flood risk warning that will continue after project completion.
53. **Developing GHG inventory** - Whether the project's activities are explicitly establishing a GHG inventory or monitoring CO2 emissions that will continue after project completion.
54. **Monitoring air quality** - Whether the project's activities are explicitly monitoring air quality that will continue after project completion.
55. **Monitoring biodiversity** - Whether the project's activities are explicitly monitoring biodiversity that will continue after project completion.
56. **Building monitoring capacity** - Whether the project's activities are explicitly conducting capacity building for monitoring systems.
57. **Monitoring land cover** - Whether the project's activities are explicitly monitoring land cover changes that will continue after project completion.
58. **Monitoring water quality** - Whether the project's activities are explicitly monitoring water quality that will continue after project completion.

Capacity building **Implementing capacity building program** - Whether the project's activities are explicitly developing a capacity building program, courses, manuals, or curriculum.

59. **Providing technical assistance** - Whether the project's activities are explicitly providing technical assistance.
60. **Establishing training center** - Whether the project's activities are explicitly constructing a training center.
61. **Conducting workshops and training** - Whether the project's activities are explicitly providing workshops or training to stakeholders.
62. **Establishing business incubator** - Whether the project's activities are explicitly establishing a business incubator.
63. **Implementing leadership program** - Whether the project's activities are explicitly developing a leadership program.

Knowledge management

65. **Building awareness** - Whether the project's activities are explicitly building awareness.
66. **Creating communities of practice** - Whether the project's activities are explicitly developing communities of practice or knowledge exchange networks.
67. **Developing platforms** - Whether the project's activities are explicitly developing a knowledge management platform such as a website or repository that shares information.
68. **Promoting technology adoption** - Whether the project's activities are explicitly promoting the adoption of a technology.

Socio-economic benefits

69. **Creating employment opportunities** - Whether the project's activities are EXPLICITLY increasing employment opportunities.
70. **Improving household income** - Whether the project's activities are EXPLICITLY improving income for households including farmers or the community. Do not include increase in revenue to companies or investors.
71. **Reducing household costs** - Whether the project's activities are EXPLICITLY decreasing costs for households including losses from extreme events.

72. **Improving living conditions** - Whether the project's activities are EXPLICITLY improving living conditions.
73. **Providing micro credit access** - Whether the project's activities are EXPLICITLY increasing access to micro credit.
74. **Improving public health** - Whether the project's activities are EXPLICITLY improving public health and healthcare facilities.
75. **Improving public transport access** - Whether the project's activities are EXPLICITLY increasing access to public transport.
76. **Improving sanitation** - Whether the project's activities are EXPLICITLY improving sanitation systems.
77. **Reducing traffic** - Whether the project's activities are EXPLICITLY reducing traffic.
78. **Supporting women jobs/businesses** - Whether the project's activities are EXPLICITLY increasing number of women's jobs or businesses.
79. **Promoting women participation** - Whether the project's activities are EXPLICITLY increasing participation of women.
80. **Providing clean water** - Whether the project's activities are EXPLICITLY providing clean or filtered water.
81. **Improving water security** - Whether the project's activities are EXPLICITLY providing water security and storage.
82. **Improving food nutrition** - Whether the project's activities are EXPLICITLY improving food security or nutrition.
83. **Improving schooling** - Whether the text identifies an increased opportunities for children to receive an education or improve the quality of schools.
84. **Promoting youth participation** - Whether the project's activities are EXPLICITLY encourages youth participation or establishing youth organizations.

ANNEX 3. CHILD PROJECTS ALIGNMENT WITH PROGRAMMING DIRECTIONS

Table A3.1. Percentage of Projects Addressing Program Priorities through Planning Activities

Programming Directions	GEF 6 (n=11)	GEF 7 (n=9)	GEF 8 (n=20)
GEF7_1_Evidence-based Spatial Planning: National, Regional, Local	89%	78%	88%
GEF7_1.1_Databases/Inventories	73%	78%	80%
GEF7_1.2_Planning Tools (including GIS systems)	100%	89%	95%
GEF7_1.3_Platforms to support planning	82%	67%	95%
GEF7_1.4_Indicators	100%	78%	80%
GEF7_2_Decarbonizing Urbanization with Infrastructure Integration at National, Regional, and Local Scales	73%	83%	73%
GEF7_2.1_Innovation in Urban transport and connectivity	64%	67%	50%
GEF7_2.2_Coordinating inter-city infrastructure (If at least one major urban center targeted then 1, if emerging urban center then 0)	82%	100%	95%
GEF7_3_Building Deep Resilience with smart systems and slum solutions	40%	43%	41%
GEF7_3.1_Energy Consumption & Efficiency	27%	56%	40%
GEF7_3.2_Green Space	27%	56%	50%
GEF7_3.3_Waste Management (collection, treatment, recycling, circular economy)	55%	56%	45%
GEF7_3.4_Pollution Control	27%	11%	0%
GEF7_3.5_Sustainable Urban Infrastructure & Services	36%	67%	65%
GEF7_3.6_Urban Regeneration & Area-Based Planning	27%	33%	30%
GEF7_3.7_Climate Adaptation, Resilience, Disaster Risk & Coastal Protection	82%	22%	60%
GEF7_4_Cascade Financing Solutions for Urban Sustainability	27%	28%	33%
GEF7_4.1_Report/Strategy Development for financing	45%	11%	35%
GEF7_4.2_Capacity building for financing	9%	44%	30%
GEF8_1_Advancing integrated and systems-based interventions	74%	82%	88%

Programming Directions	GEF 6 (n=11)	GEF 7 (n=9)	GEF 8 (n=20)
GEF8_1.1_More than three broad thematic area covered (above average no of broad thematic areas present in all 40 projects)	45%	67%	55%
GEF8_1.2_Databases/Inventories	73%	78%	80%
GEF8_1.3_Planning Tools (including GIS systems)	100%	89%	95%
GEF8_1.4_Platforms to support planning	82%	67%	95%
GEF8_1.5_Indicators	100%	78%	80%
GEF8_1.6_Institutional integration - Vertical	100%	100%	100%
GEF8_1.7_Institutional integration - Horizontal	82%	89%	95%
GEF8_1.8_Stakeholder Engagement	9%	89%	100%
GEF8_2_Integrating nature in urban development and regional planning	23%	61%	75%
GEF8_2.1_Nature-Based Solutions & Urban Biodiversity	18%	67%	100%
GEF8_2.2_Green Space	27%	56%	50%
GEF8_3_Decarbonizing the built environment	38%	57%	53%
GEF8_3.1_Sustainable Mobility & Transit-Oriented Development	64%	67%	50%
GEF8_3.2_Waste Management (collection, treatment, recycling, circular economy)	55%	56%	45%
GEF8_3.3_Sustainable Urban Infrastructure & Services	36%	67%	65%
GEF8_3.4_Energy Consumption & Efficiency	27%	56%	40%
GEF8_3.5_Urban Regeneration & Area-Based Planning	27%	33%	30%
GEF8_3.6_Water, Sanitation & Urban Drainage	45%	56%	45%
GEF8_3.7_Green Space	27%	56%	50%
GEF8_3.8_Nature-Based Solutions & Urban Biodiversity	18%	67%	100%
GEF8_4_Adopting circular economy approaches	30%	43%	38%
GEF8_4.1_Overrides (I did a recheck for presence of circular economy in projects by going through the CEO Documents. If there was a presence I had marked as 1.)	18%	22%	20%
GEF8_4.2_Waste Management (collection, treatment, recycling, circular economy)	55%	56%	45%
GEF8_4.3_Pollution Control	27%	11%	0%

Programming Directions	GEF 6 (n=11)	GEF 7 (n=9)	GEF 8 (n=20)
GEF8_4.4_Green Space	27%	56%	50%
GEF8_4.5_Water, Sanitation & Urban Drainage	45%	56%	45%
GEF8_4.6_Sustainable Urban Infrastructure & Services	36%	67%	65%
GEF8_4.7_Circular Economy principles explicitly mentioned to be incorporated	0%	33%	40%
GEF8_5_Promoting innovative financing	27%	28%	33%
GEF8_5.1_Report/Strategy Development for financing (Activities focused on producing analytical reports, strategies, or financial plans to guide investment decisions/policy reforms)	45%	11%	35%
GEF8_5.2_Capacity building for financing (Training/technical support to strengthen capacity for innovative financing & investment management)	9%	44%	30%

Source: GEF IEO review of project proposals for 40 country child projects of the Sustainable Cities Program.

Notes: The thematic priority figures represent the average percentage of sub-priorities within each thematic dimension that projects in a given cycle addressed in their design. GEF-6 projects serve as a natural baseline, as explicit thematic priorities were not articulated in the GEF-6 Programming Directions.

Table A3.2. Percentage of Projects Addressing Program Priorities through Investment Activities

Programming Directions	GEF 6 (n=11)	GEF 7 (n=9)	GEF 8 (n=20)
GEF7_Evidence-based Spatial Planning: National, Regional, Local	n.a.	n.a.	n.a.
GEF7_1_Decarbonizing Urbanization with Infrastructure Integration at National, Regional, and Local Scales	29%	49%	38%
GEF7_1.1_Public transport systems (metro, BRT, buses)	9%	22%	20%
GEF7_1.2_Transit-Oriented Development (TOD)	27%	22%	10%
GEF7_1.3_Non-motorized transport (NMT)	0%	67%	25%
GEF7_1.4_Low-emission vehicles & charging	27%	33%	40%
GEF7_1.5_Coordinating inter-city infrastructure (Coordinating inter-city infrastructure (If at least one major urban center targeted then 1, if emerging urban center then 0)	82%	100%	95%

Programming Directions	GEF 6 (n=11)	GEF 7 (n=9)	GEF 8 (n=20)
GEF7_2_Building Deep Resilience with smart systems and slum solutions	17%	24%	23%
GEF7_2.1_Efficient energy integration & management	18%	11%	15%
GEF7_2.2_Urban agriculture & productive green landscapes	18%	33%	35%
GEF7_2.3_Municipal solid waste systems	27%	44%	25%
GEF7_2.4_Recycling & materials recovery	18%	33%	20%
GEF7_2.5_Organic waste treatment & waste-to-energy	36%	0%	25%
GEF7_2.6_Dumpsite remediation & circular economy transition	18%	56%	45%
GEF7_2.7_Persistent Organic Pollutants (POP) reduction	27%	0%	0%
GEF7_2.8_Industrial and urban pollution mitigation	9%	0%	5%
GEF7_2.9_Energy-efficient systems	9%	44%	40%
GEF7_2.10_Urban regeneration / district upgrading	0%	33%	10%
GEF7_2.11_Climate-resilient infrastructure	0%	11%	35%
GEF7_3_Cascade Financing Solutions for Urban Sustainability	18%	39%	38%
GEF7_3.1_Fund/Mechanism Establishment	9%	78%	50%
GEF7_3.2_Business Model Creation	27%	11%	25%
GEF7_3.3_Fiscal Reform/Revenue Mobilization	18%	56%	35%
GEF7_3.4_Investment Proposal/Portfolio Development	18%	11%	40%
GEF8_1_Advancing integrated and systems-based interventions	18%	67%	55%
GEF8_1.1_More than three broad thematic area covered (above average no of broad thematic areas present in all 40 projects)	18%	67%	55%
GEF8_2_Integrating nature in urban development and regional planning	13%	42%	58%
GEF8_2.1_Urban green infrastructure (engineered NbS)	18%	44%	85%
GEF8_2.2_Ecosystem restoration (wetlands, rivers)	27%	78%	70%
GEF8_2.3_Urban forestry & tree planting	0%	22%	50%
GEF8_2.4_Urban agriculture & productive green landscapes	18%	33%	35%
GEF8_2.5_Parks, open space & non-engineered green areas	0%	33%	50%

Programming Directions	GEF 6 (n=11)	GEF 7 (n=9)	GEF 8 (n=20)
GEF8_3_Decarbonizing the built environment	17%	29%	34%
GEF8_3.1_ Investments for Restoring Land	18%	56%	80%
GEF8_3.2_ Investments for Climate Mitigation Infrastructure	9%	22%	65%
GEF8_3.3_ Urban regeneration / district upgrading	0%	33%	10%
GEF8_3.4_ Recycling & materials recovery	18%	33%	20%
GEF8_3.5_ Dumpsite remediation & circular economy transition	18%	56%	45%
GEF8_3.6_ Energy-efficient systems	9%	44%	40%
GEF8_3.7_ Renewable energy generation	36%	33%	45%
GEF8_3.8_ Efficient energy integration & management	18%	11%	15%
GEF8_3.9_ Transit-Oriented Development (TOD)	27%	22%	10%
GEF8_3.10_ Public transport systems (metro, BRT, buses)	9%	22%	20%
GEF8_3.11_ Industrial and urban pollution mitigation	9%	0%	5%
GEF8_3.12_ Urban green infrastructure (engineered NbS)	18%	44%	85%
GEF8_3.13_ Persistent Organic Pollutants (POP) reduction	27%	0%	0%
GEF8_4_Adopting circular economy approaches	13%	23%	24%
GEF8_4.1_ Overrides (I did a recheck for presence of circular economy in projects by going through the CEO Documents. If there was a presence I had marked as 1.)	0%	11%	25%
GEF8_4.2_ Recycling & materials recovery	18%	33%	20%
GEF8_4.3_ Organic waste treatment & waste-to-energy	36%	0%	25%
GEF8_4.4_ Dumpsite remediation & circular economy transition	18%	56%	45%
GEF8_4.5_ Persistent Organic Pollutants (POP) reduction	27%	0%	0%
GEF8_4.6_ Industrial and urban pollution mitigation	9%	0%	5%
GEF8_4.7_ Urban agriculture & productive green landscapes	18%	33%	35%
GEF8_4.8_ Wastewater treatment & sewage systems	18%	22%	20%
GEF8_4.9_ Water quality monitoring & remediation	0%	11%	5%

Programming Directions	GEF 6 (n=11)	GEF 7 (n=9)	GEF 8 (n=20)
GEF8_4.10_Urban regeneration / district upgrading	0%	33%	10%
GEF8_4.11_Circular Economy principles explicitly mentioned to be incorporated	0%	56%	70%
GEF8_5_Promoting innovative financing	18%	39%	38%
GEF8_5.1_Fund/Mechanism Establishment (Setting up dedicated financing mechanisms, funds, or modalities to channel investments into sustainable urban solutions)	9%	78%	50%
GEF8_5.2_Business Model Creation (Designing and piloting new business models to attract investment, engage the private sector, or scale up innovative practices)	27%	56%	35%
GEF8_5.3_Fiscal Reform/Revenue Mobilization (Innovative reforms to municipal budgets, tax systems, or revenue mobilization strategies to increase funding for sustainable investments)	18%	11%	25%
GEF8_5.4_Investment Proposal/Portfolio Development (Preparation of investment profiles, proposals, or business cases to facilitate access to finance, including for nature-based solutions or infrastructure)	18%	11%	40%

Source: GEF IEO review of project proposals for 40 country child projects of the Sustainable Cities Program.

Notes: The thematic priority figures represent the average percentage of sub-priorities within each thematic dimension that projects in a given cycle addressed in their design. GEF-6 projects serve as a natural baseline, as explicit thematic priorities were not articulated in the GEF-6 Programming Directions. Evidence-based spatial planning pertains exclusively to planning activities; investment activities are therefore not applicable (n.a.).

ANNEX 4. ACTIVITIES IN URBAN SUSTAINABILITY PROJECTS

Annex A4.1. Activity Categories in Urban Sustainability Focused Projects

Components	Activities tracked	Percentage of tracked activities included in projects		
		Pilot to GEF-2 (n=56)	GEF-3 to GEF-5 (n=169)	GEF-6 to GEF-8 (n=224)
Regulatory	22	14	19	26
Planning	13	21	25	36
Governance	6	32	32	37
Investment	10	26	26	27
Capacity	6	41	44	45
Knowledge	4	53	57	72
Monitoring	7	11	9	12
Socio-economic	16	14	12	26

Source: GEF IEO's AI-assisted review of 4,250 FSP and MSP that received CEO approval or endorsement through February 12, 2026. Data is presented for 449 urban sustainability projects.

Note: Percentage indicates average rate of inclusion of activities of that activity category.

Annex A4.2. Percentage of Urban Sustainability Projects that Include an Activity

Category	Activity	Early phase (Pilot to GEF2) (n=56)	Middle Phase (GEF3 to GEF5) (n=169)	Recent Phase (GEF6 to GEF8) (n=224)
Regulatory	adopting policies	9	30	32
	banning products	4	8	9
	creating enabling environments	16	27	46
	developing codes standards	41	38	45
	developing fiscal regulations	14	18	39
	developing laws	14	14	17
	developing policies	36	53	71
	developing regulations	39	59	67
	harmonizing laws	9	1	1
	harmonizing standards	9	4	10
	implementing regulatory frameworks	11	26	31
	monitoring compliance	25	27	21
	reviewing codes standards	7	10	4
	reviewing laws	9	5	10
	reviewing policies	9	12	32
	reviewing regulations	16	14	26
	revising codes standards	9	18	7
	revising fiscal regulations	9	2	11
	revising laws	4	7	6
	revising policies	2	7	18
revising regulations	4	11	20	
strengthening regulatory frameworks	13	37	46	
Planning	developing business model	34	23	50
	developing energy efficiency strategy	39	49	15
	developing engineering design	45	33	16
	developing gender strategy	2	11	82

Category	Activity	Early phase	Middle Phase	Recent Phase
		(Pilot to GEF2) (n=56)	(GEF3 to GEF5) (n=169)	(GEF6 to GEF8) (n=224)
	developing maintenance plan	25	15	10
	developing mobility transport strategy	9	27	34
	developing national plan	11	12	29
	developing replication strategy	55	59	49
	developing risk mitigation plan	7	9	8
	developing roadmap	0	18	47
	developing strategic action plan	23	34	48
	developing urban development strategy	5	23	46
	developing waste management strategy	14	14	42
Governance	establishing agencies	41	29	22
	developing sop guidelines	45	60	63
	establishing market platform	2	6	8
	establishing private partnerships	32	41	71
	reducing tradeoffs	4	1	6
	removing barriers	73	54	51
Investment	conducting enforcement activities	50	60	33
	piloting demonstrating	91	84	93
	building energy infrastructure	34	15	19
	building green infrastructure	2	7	17
	restoring land	4	8	21
	building mitigation infrastructure	4	8	14
	building public buildings	23	22	15
	building residential infrastructure	23	17	6.7
	building transportation infrastructure	9	25	21
	building waste infrastructure	21	15	30
Monitoring	establishing early warning system	2	5	10
	developing GHG inventory	9	7	6
	monitoring air quality	14	7	10
	monitoring biodiversity	7	7	10
	monitoring capacity building	21	26	28
	monitoring land cover	2	3	6
	monitoring water quality	20	10	12
Capacity	implementing capacity building program	55	73	82
	providing technical assistance	88	81	69
	establishing training center	11	11	5
	conducting workshops training	91	95	98
	establishing business incubator	0	1	9
	implementing leadership program	0	1	9
Knowledge	building awareness	95	94	95
	creating communities of practice	0	7	46
	developing platform	38	56	91
	promoting technology adoption	79	69	57
Socio-economic	creating employment opportunities	29	27	53
	improving household income	13	7	18
	reducing household costs	39	18	11
	improving living conditions	29	23	24
	providing micro credit access	20	4	12
	improving public health	30	23	32
	improving public transport access	14	27	25

Category	Activity	Early phase	Middle Phase	Recent Phase
		(Pilot to GEF2) (n=56)	(GEF3 to GEF5) (n=169)	(GEF6 to GEF8) (n=224)
	improving sanitation	20	13	18
	reducing traffic	11	21	9
	supporting women jobs businesses	4	4	50
	promoting women participation	7	12	91
	providing clean water	2	4	5
	improving water security	2	8	14
	improving food nutrition	2	1	16
	improving schooling	4	2	5
	promoting youth participation	5	1	32

Source: GEF IEO's AI-assisted review of 4,250 FSP and MSP that received CEO approval or endorsement through February 12, 2026. Data is presented for 449 urban sustainability projects.

ANNEX 5. EFFICIENCY OF PROJECT CYCLE

Table A5.1. Efficiency of Project Cycle: Median Time Taken by Full Size Projects between Key Milestones (in months)

Project category	Urban Sustainability Focused Projects			Other GEF projects	
	Sustainable Cities Program	Other programs	Standalone	Other programs	Standalone projects
PIF approval to CEO endorsement					
Observations	40	43	64	347	676
Time taken	18	18	21	18	21
CEO endorsement to Project start					
Observations	22	14	50	201	550
Time taken	4.5	5.5	7	6	6
CEO endorsement to first disbursement					
Observations	22	14	50	201	550
Time taken	10.5	14	16.5	11	12
CEO endorsement to mid-term review					
Observations	14	4	25	95	267
Time taken	51	—	47	48	48
Project start to project completion					
Observations	11	1	17	59	142
Time taken	89	—	76	78	86.5

Source: GEF IEO based on GEF Portal data.

Notes: For approvals from GEF-6 through GEF-8. Achievement of next stage tracked for various lengths of time: Approval to CEO Endorsement tracked for at least 21 months; CEO Endorsement to Project Start and to First Disbursement tracked for at least 24 months; CEO Endorsement to Mid-Term Review tracked for at least 51 months; and CEO Endorsement to implementation completion tracked for at least 90 months.

ANNEX 6. CORE INDICATORS

Table A6.1. Target Achievement at Completion Measured through Core Indicators – For Completed Country Child Projects

Code	Indicator Name	Indicator Unit	Target at CEO Endors.	Reported actual at Comp.
9123 - Sustainable Cities Initiative, Senegal, WBG/UNIDO				
1	Terrestrial protected areas created or under improved management	Hectares		900
4.1	CO2e mitigated – Direct	Tons CO2e	26,953	-
4.2	CO2e mitigated – Indirect	Tons CO2e	107,812 to 720,000	-
11	Direct project beneficiaries	Number	-	167,000
9127 - Asuncion Green City of the Americas – Pathways to Sustainability, Paraguay, UNDP				
1	Terrestrial protected areas created or under improved management	Hectares	378	124
3	Area of land and ecosystems under restoration	Hectares	40	22
4	Area of landscapes under improved practices (excluding protected areas)	Hectares	5,793	9,344.4
6.1	Greenhouse gas emission mitigated in the AFOLU sector	Tons CO2e	972,232	972,232
6.2	Greenhouse gas emission mitigated outside of the AFOLU sector	Tons CO2e	225,210	3,721
11	People benefiting from GEF-financed investments	Number		552,108
9142 - Sustainable Cities in Brazil through Integrated Urban Planning and Innovative Technologies, Brazil, UNEP				
4	Area of landscapes under improved practices (excluding PAs)	Hectares	495	1,528
6.2	Greenhouse gas emission mitigated outside of the AFOLU sector	Tons CO2e	3,802,710	3,813,048
9147 - Sustainable-City Development in Malaysia, Malaysia, UNIDO				
6.2	Greenhouse gas emission mitigated outside of the AFOLU	Tons CO2e	4,348,300	3,955,533
6.3	Energy Saved	MJ	121,617,000	17,971.5
6.4	Increase in Installed Renewable Energy Capacity/Technology	MW	34,043	78,908
9223 – China Sustainable Cities Integrated Approach Pilot, China, WBG				
6.2	Greenhouse gas emission mitigated outside of the AFOLU	Tons CO2e	62,000,000	87,829,807
9698 - National Platform for Sustainable Cities and Climate Change, Peru, IADB				
4	Area of landscapes under improved practices (excluding PAs)	Hectares	119,059	-
6.1	Greenhouse gas emission mitigated in the AFOLU sector	Tons CO2e	1,804,659	-
7.3	Level of National/Local reforms and active participation of Inter-Ministerial Committees – Nos. of consultive committees	Number	-	1
11	People benefiting from GEF-financed investments	Number	-	79

Source: GEF IEO based on a review of Terminal evaluations and GEF Portal data.

Notes: Figures for achievement at completion include anticipated results rooted in actual project outputs

ANNEX 7. GLOBAL PLATFORM EVENTS AND KNOWLEDGE PRODUCTS ANALYSIS

Methodology

The findings presented in this annex are based on analysis of two main datasets: (i) events and participant data from lead agencies, and (ii) knowledge products published on platform websites.

Events and Participant Datasets from Lead Agencies

The Lead Agencies of the Sustainable City global platforms, World Bank for the Global Platform for Sustainable Cities (GPSC) (GEF-6 and GEF-8) and UNEP which led UrbanShift (GEF-7) provided data on key partners, location, date, and individual participants. The Lead Agencies also shared data on events conducted, and participant-level data on some of the events. World Bank provided data for 90 events; however, it provided participant-level data for only 4 of 71 events under GEF-6 and 9 of 19 events under GEF-8 (14 percent of total events). UNEP provided data for 71 UrbanShift events, with participant-level information available for 52 of those events (73 percent). Data on Peer Exchanges, City-Business Collaboration Accelerator (CiBiX) workshops, and City-Business Climate Alliance (CBCA) workshops were not included in the information shared by UrbanShift.

Overall, available participant data did not appear to be drawn from a random sample of events, rather reflect where participant tracking information was available.³ To enhance analytical consistency and comparability, the evaluation team cleaned and harmonized the datasets. This process focused on correcting country name inconsistencies and addressing gaps in participant sector information. Participants sector data were unavailable for 509 observations (50 percent) in the GPSC dataset and for 4,795 observations (58%) in the UrbanShift dataset. In addition, where sector information was available, classifications were not standardized across platforms. To address these issues, the GEF IEO reclassified participant sectors based on names of organizations using AI-based methods. Sector categories included Academia; International Organization; NGO/CSO; Private Sector; Public – National Government; Public – Local Government; and Other. Where names of organizations were unavailable, sector information reported in the original datasets was used. All classifications were subsequently reviewed through manual verification. Using this approach, the evaluation team identified sector information for 88% of GPSC participants and 69% of UrbanShift participants.

³ In the GPSC dataset, participant data from advocacy-oriented events, forums, working groups, and expert meetings appear to be overrepresented relative to the total number of reported events, while webinars are substantially underrepresented. In the UrbanShift dataset, though to a lesser extent, advocacy events are underrepresented, whereas webinars and training activities—such as Labs and the Finance Academy—appear to be overrepresented.

Knowledge Products Published on Platform Websites

The GEF IEO conducted a desk review of knowledge products available on the GPSC and UrbanShift websites between December 2025 and mid-January 2026. The review therefore reflects only those materials that were publicly accessible during that period. Data extraction and analysis were guided by a standardized coding protocol designed to ensure consistency and comparability across reviewed knowledge products.

For GPSC, the review covered documents listed in the *Knowledge Products* section under the “Sector” categorization.⁴ For UrbanShift, it covered products available in the *Resource Library* section.⁵ In both cases, the review was limited to knowledge products for which the hyperlinks to the underlying documents were functional at the time of data collection. For GPSC, documents were accessible for 128 of the 150 knowledge products listed on the website (90 percent). For UrbanShift, documents were accessible for 92 of the 100 listed knowledge products.

From the set of accessible documents, the analysis focused on knowledge products published during the implementation periods of the GEF-6 and GEF-7 global coordination projects.⁶ After applying these criteria, the analysis included 100 knowledge products for the GPSC and 79 knowledge products for UrbanShift. Given the recent approval of the GEF-8 coordination project,⁷ only one related knowledge product had been published on the GPSC website at the time of the review; consequently, GEF-8-related products were excluded from the analysis.

In addition to producing descriptive statistics from the resulting dataset, the evaluation team applied network analysis to examine patterns of collaboration among institutions and their relationships with funding partners across the reviewed documents.

Limitations

The dataset on events conducted and event participants is not complete. Because the data coverage on events also varies across platforms, there are challenges in comparing participation in events conducted by GPSC and UrbanShift and generalizing the findings. Many of the gaps on characteristics of the participants were addressed using AI-based methods and subsequently validated through manual review. However, some gaps may not have been fully addressed.

⁴ GPSC (2026). Knowledge Products. Available at: <https://www.thegpsc.org/knowledge-products>

⁵ UrbanShift (2026). Resource Library. Available at: <https://www.shiftcities.org/resource-library>

⁶ For GEF-6, this period spans from December 7, 2016, when the project was CEO-endorsed, to May 1, 2024, when it was closed. For GEF-7, the implementation period began with CEO endorsement on August 19, 2020, and remains ongoing.

⁷ The GEF-8 global coordination project was CEO-endorsed on May 15, 2025.

Despite these limitations, the cleaned dataset allows for broad comparisons and offers insights into the content of, and participation in, activities of the global platforms.

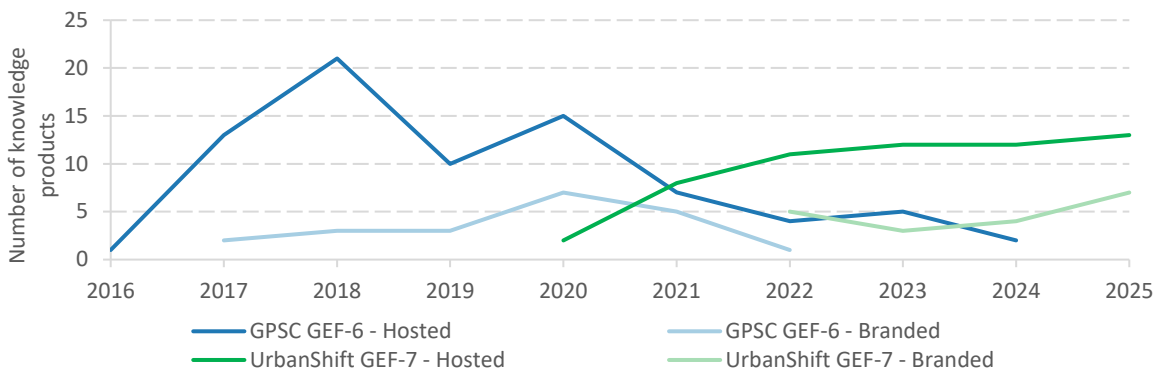
Similarly, the desk review of knowledge products may not be fully exhaustive. The identification of GPSC products relied on the sector classification available on the platform’s website, which may not have captured all products. 100 GPSC products and 79 UrbanShift products were covered. This sample provides a sufficient basis for identifying overall patterns and trends and for enabling meaningful comparisons.

The network analysis draws on information reported in the reviewed documents and captures only institutions and donors that are explicitly mentioned, which may underrepresent existing collaboration or funding relationships. As a result, the networks should be interpreted as indicative patterns of reported partnerships and institutional visibility, rather than a complete picture of collaboration or financial flows.

Summary of Findings

This section presents the main results in graphical and tabular form.

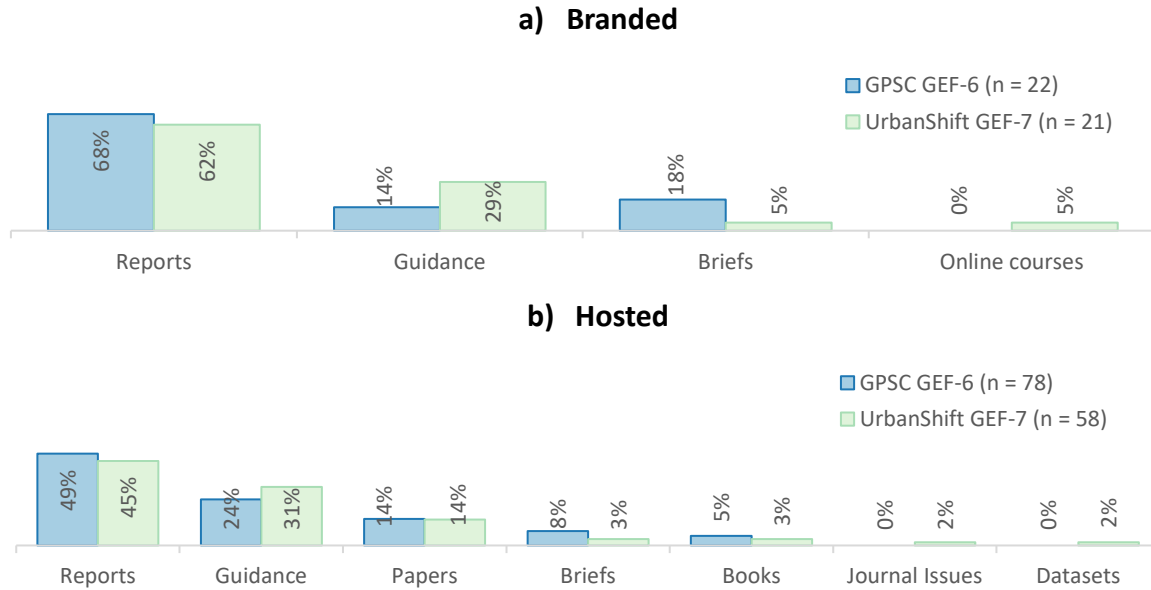
Figure A7.1. Platform-Branded and Hosted Knowledge Products



Source: GEF IEO based on a review of knowledge products published on platform websites.

Notes: Branded products are those carrying the GEF and/or global platform brand.

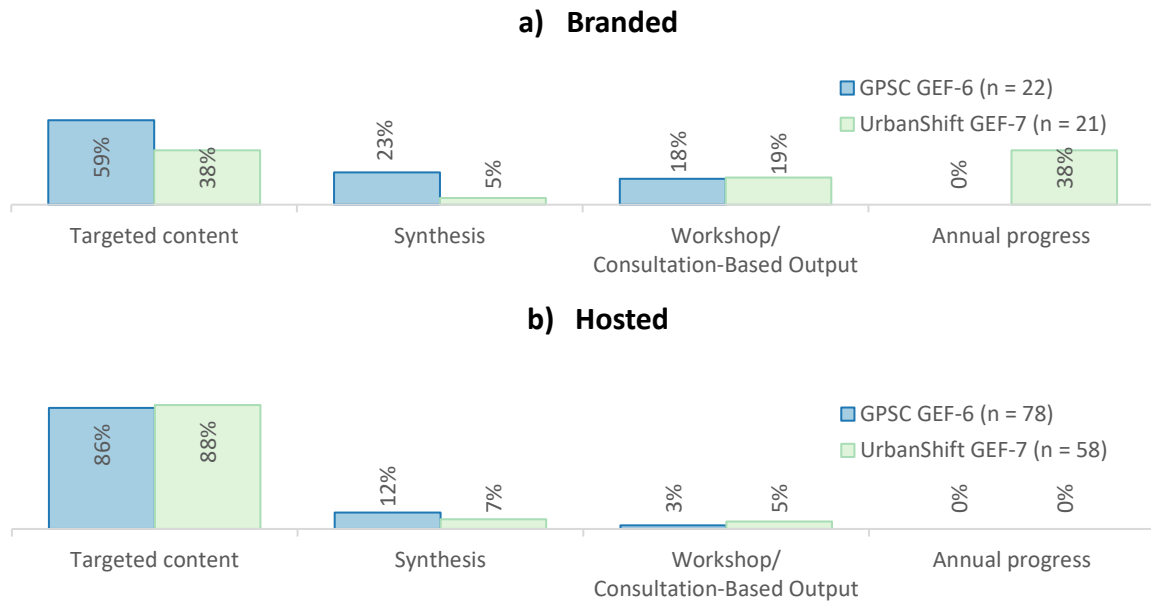
Figure A7.2. Knowledge Product by Type



Source: GEF IEO based on a review of knowledge products published on platform websites.

Notes: Briefs include notes, infographics, policy briefings, and statements. Guidance includes guides, handbooks, toolkits, and strategies. Online courses exclude City Academy courses. Papers include working paper, background papers, research papers, technical papers, and white papers.

Figure A7.3. Knowledge Products by Type of Content



Source: GEF IEO based on a review of knowledge products published on platform websites.

Notes: Synthesis includes evidence synthesis, literature reviews and edited books.

Table A7.1. Knowledge Products by Geographical Scope

Global Platform	Audience Scope	Branded	Hosted	Total
GPSC GEF-6	City	0	3	3
	National	0	12	12
	Regional	1	3	4
	Global	21	60	81
	Total	22	78	100
UrbanShift GEF-7	City	2	0	2
	National	1	3	4
	Regional	0	5	5
	Global	18	50	68
	Total	21	58	79

Source: GEF IEO based on a review of knowledge products published on platform websites.

Table A7.2. Country and City Coverage

Global Platform	Branded				Hosted			
	Covered	In-program			Covered	In-program		
		GEF-6	GEF-7	GEF-8 ^a		GEF-6	GEF-7	GEF-8 ^a
Countries								
GPSC GEF-6	32	11	6	6	91	10	7	15
UrbanShift GEF-7	39	8	9	8	85	8	8	13
Cities								
GPSC GEF-6	63	28	3	4	86	2	4	4
UrbanShift GEF-7	84	9	23	5	152	5	10	6

Source: GEF IEO based on a review of knowledge products published on platform websites.

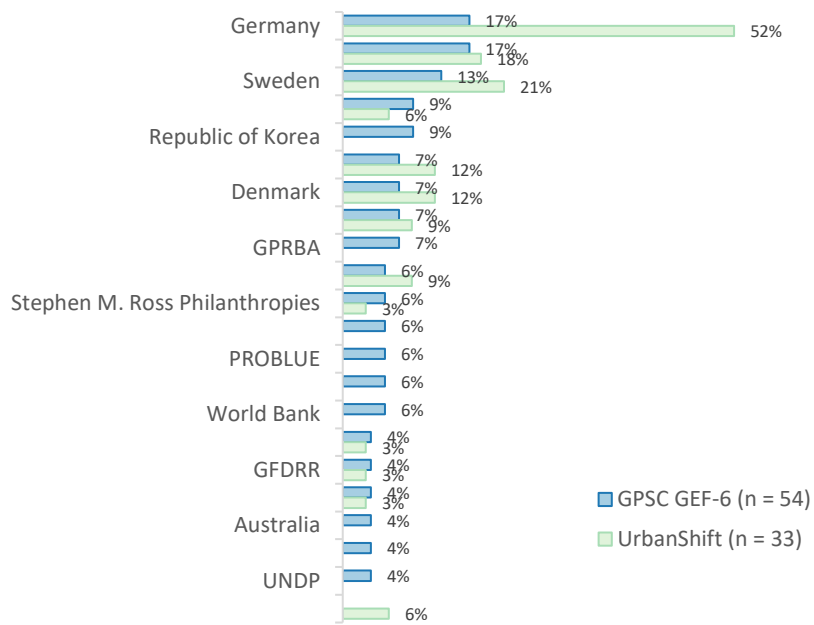
Notes: ^aGEF-8 platform still under implementation.

Table A7.3. Comparison of Institutional Collaboration Networks

Network	Number of collaborating institutions (nodes)	Number of institutional pairings (edges)	Interconnectedness (density)	Average repeat collaboration (mean tie strength)
UrbanShift GEF-7 - Branded	14	53	58.24%	8.08
GPSC GEF-6 - Branded	18	89	58.17%	1.93
UrbanShift GEF-7 - Hosted	63	109	5.58%	1.06
GPSC GEF-6 - Hosted	87	188	5.03%	1.16

Source: GEF IEO based on a review of knowledge products published on platform websites.

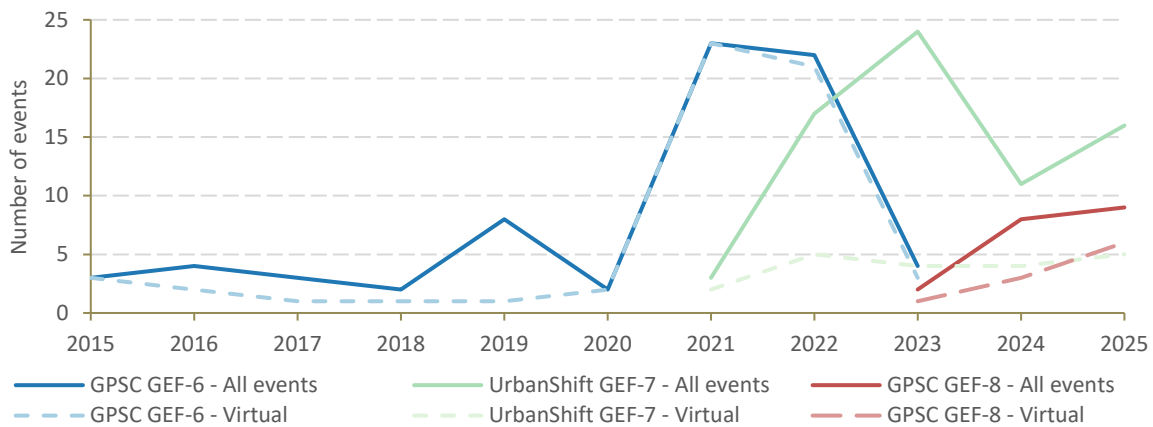
Figure A7.4. Top 20 Funding Partners for Hosted Knowledge Products



Source: GEF IEO based on a review of knowledge products published on platform websites.

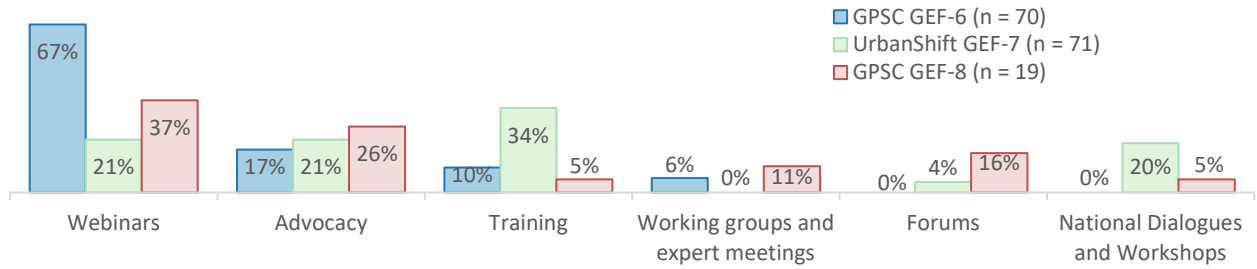
Notes: Includes only knowledge products for which funding sources could be identified. Percentages do not sum to 100%, as individual products may receive support from multiple funding partners. GPRBA = Global Partnership for Results-Based Approaches; GFDRR = Global Facility for Disaster Reduction and Recovery.

Figure A7.5. Global Platform Events and Delivery Modality



Source: GEF IEO based on events and participation data shared by global platform lead agencies.

Figure A7.6. Global Platform Events by Type



Source: GEF IEO based on events and participation data shared by global platform lead agencies.

Notes: Event type information is available for 70 of the 71 GPSC GEF-6 events and for all UrbanShift and GPSC GEF-8 events. Training includes City Academy, Finance Academy, Labs, and Deep-dive learnings. The UrbanShift dataset provided by the lead agency did not include information on Peer Exchanges or CiBix (City-Business Collaboration Accelerator) workshops.

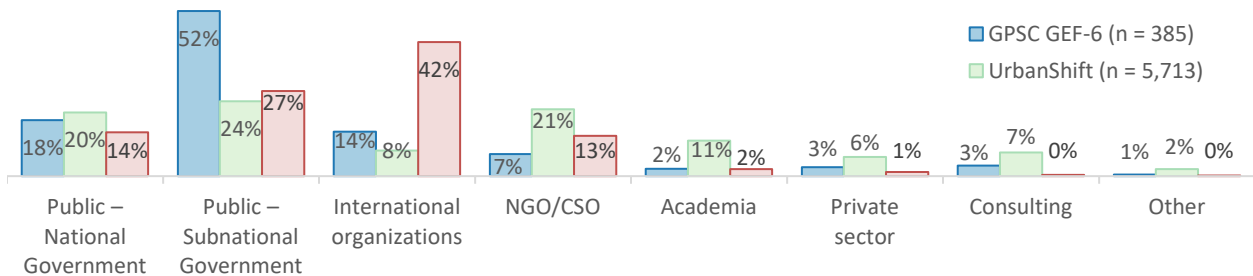
Table A7.4. Global Platform In-person Events Location

Global Platform	Events		Hosts of In-Person Events			
			All hosts		In-program	
	Total	In-person	Countries	Cities	Countries	Cities
GPSC GEF-6	71	11 (15%)	5	5	2	0
UrbanShift GEF-7	71	50 (70%)	19	33	9	14
GPSC GEF-8	19	9 (47%)	7	9	1	0

Source: GEF IEO based on events and participation data shared by global platform lead agencies.

Notes: In-program countries and cities refer to those participating in the corresponding GEF phase of each platform.

Figure A7.7. Global Platform Participants by Sector



Source: GEF IEO based on events and participation data shared by global platform lead agencies.

Notes: Participant figures reflect available data. UrbanShift participant data are available for 52 of 72 events, while GPS data cover 4 of 71 events under GEF-6 and 9 of 19 events under GEF-8. Sector information was available for 88% of GPSC participants and 69% of UrbanShift participants. Consulting includes private consulting firms and independent consultants. NGO/CSO includes non-profit networks and coalitions, such as international city networks. Subnational government includes government authorities below the national level, including regional and local governments.

Table A7.5. Distribution of Event Participants from Non-Program Countries

Sub-regions	GPSC GEF-6	UrbanShift GEF-7	GPSC GEF-8
Northern America	22%	26%	25%
Western Europe	16%	17%	16%
Northern Europe	14%	11%	7%
Latin America and the Caribbean	12%	6%	25%
Southern Europe	9%	7%	0%
Sub-Saharan Africa	9%	14%	6%
Eastern Asia	6%	2%	0%
Western Asia	4%	3%	6%
Eastern Europe	3%	2%	4%
South-eastern Asia	2%	2%	1%
Southern Asia	1%	5%	7%
Australia and New Zealand	1%	1%	0%
Melanesia	1%	0%	0%
Northern Africa	1%	1%	0%
Central Asia	0%	1%	0%
All sub-regions	100%	100%	100%
Number of participants	161	2,987	67

Source: GEF IEO based on events and participation data shared by global platform lead agencies.

Notes: Country data are based on participant self-reporting at the time of registration and may reflect current location rather than country of origin or nationality. Sub-regional classification according to the UN Statistics Division.

ANNEX 8. LIST OF KEY INFORMANTS INTERVIEWED

Name	Title	Organization
Brazil		
Asher Lessels	Head, Global Funds Mitigation and Transparency, Climate Change Division	UNEP
Angelica Griesinger	Technical Coordinator CitiNova	UNEP
Natália Lima Maia	Technical Coordinator	UNEP
Regina Cavini	Programme Officer	UNDP
Márcia Barbosa	Secretary of Policy and Strategic Programs	Ministry of Science, Technology, and Innovation (MCTI)
Mariana Pontes	CEO	ARIES
Ciro Pedrosa	Project Manager	Filtration Garden
Felipe Ribeiro	Project Analyst	Filtration Garden
Nazara Soares	Executive Coordinator for CITinova I in the Federal District	Secretariat of Environment
Márcia Coura	Deputy Secretary for Strategic Affairs	Secretariat of Environment and Animal Protection, Federal District
Patrícia Andrade	Technical Advisor	CGEE
Renata Sêne	Mayor	Francisco Morato
Jorge Abrahão	Director-President	Instituto Cidades Sustentáveis /PCS
Oswaldo Luiz Leal de Moraes	Director of Climate and Sustainability	Ministry of Science, Technology, and Innovation (MCTI)
China		
LI Ke	Director, Project Management Office	Beijing Municipal Commission of Housing and Urban-Rural Development
PAN Yichen	Project Steering Committee, Management Staff	Beijing Municipal Finance Bureau
XUE Hui	Project Management Office Member Unit, Management Staff	Beijing Municipal Commission of Planning and Natural Resources
ZHANG Nan	Project Management Office Member Unit, Senior Manager	Beijing Infrastructure Investment Co., Ltd.
LI Huixuan	Project Leader	Beijing Institute of City Planning & Design
PENG Yanbin	Technical Director, Beijing Branch	Beijing Urban Construction Design & Development Group Co., Ltd.
MA Ran	Deputy Director	Shijiazhuang Municipal Development and Reform Commission
WEI Jia	Section Chief, Foreign Investment Section	Shijiazhuang Municipal Development and Reform Commission
MENG Xiantao	Deputy General Manager	Shijiazhuang Rail Transit and Real Estate Group
WANG Sen	GEF-6 Shijiazhuang TOD city level lead	China Academy of Urban Planning and Design
WANG Jiangyan	GEF-6 Shijiazhuang TOD city level lead	Yuheng Sustainable Transport Research Center
FENG Huan	GEF-6 Shijiazhuang TOD station level lead	Shenzhen Planning Institute

Name	Title	Organization
LI Shasha	Director	Shijiazhuang Urban Planning Institute
JIA Shiyong	Manager	Shijiazhuang Rail Transit Group
WANG Xu	Tianjin PMO Manager	Tianjin Municipal Housing and Urban-Rural Development Commission Green Building Center
Guo Yizhe	Tianjin PMO staff	Tianjin Municipal Housing and Urban-Rural Development Commission Green Building Center
JIANG Yang	GEF-6 Tianjin TOD Component 2 Lead	Yuheng Sustainable Transport Research Center
ZHOU Huining	Ningbo PMO Manager	Ningbo Municipal Bureau of Housing and Urban-Rural Development
LI Dejian	Director	Ningbo Municipal Finance Bureau
LU Zichuan	Director	Ningbo Municipal Bureau of Ecology and Environment
XU Luyan	Management staff	Yinzhou Branch, Ningbo Municipal Bureau of Ecology and Environment
MA Dingling	Director	Ningbo Development Planning Research Institute
WU Tao	Professor	University of Nottingham, Ningbo campus
LI Zhilei	CEO	Zhejiang Huacong Construction Digital Technology Co., Ltd.
YIN Jinge	Project Lead	Zhejiang Huacong Construction Digital Technology Co., Ltd.
WANG Yufen	Manager	Oriental Cable Company
LI Yonggang	Director	Cicheng Town Department of Urban Development
YAN Shiwu	Resident/Beneficiary	Wangjing Community, Cicheng Town
WANG Yongmei	Resident/Beneficiary	Wangjing Community, Cicheng Town
India		
Nand Pal Singh	Senior Technical Advisor	UNIDO
B R Mishra	Urban Technology & Investment Specialist	UNIDO
Venkata Ramana Rao Perkari	Site Manager	UNIDO
Sameer Saraswat	Urban Technology and Investment Specialist	UNIDO
Mahmood Akthar	Chief Technology Officer	Indicsoft Technologies Private Limited
Mansi Sachdev	Senior Urban Planner	UN Habitat
Parul Agarwala	Country Programme Manager	UN Habitat
Ankit Kashmiri Gupta	Urban Planning Consultant	UN-Habitat
Binay Kumar Jha	Director	Ministry of Housing and Urban Affairs (MoHUA)
Paramita Dutta Dey	Head Resources and Water	National Institute of Urban Affairs
Anil Kumar Singhal	Chief Engineer	Jaipur Municipal Corporation

Name	Title	Organization
Mahendra Soni	Commissioner	Jaipur Municipal Corporation
K.V.S. Choudary	Commissioner	Bhopal Municipal Corporation
Keerthi Chekuri	Commissioner	Guntur Municipal Corporation
M. V. Chary	President, Operations	Indal Urban Waste Management Guntur
Frank Noble	Commissioner	Bhopal Municipal Corporation
Sudhir Sharma	Officer Climate Change Mitigation Team	UNEP
Sarika Chakravarty	Team Lead Urban Shift Country Project	National Institute of Urban Affairs (NIUA)
Varsha Singh	Specialist - Knowledge Management and Communications	National Institute of Urban Affairs (NIUA)
Dhvani Trivedi	Urban Designer	National Institute of Urban Affairs (NIUA)
R. Nelson	Team Leader (Consultant)	Greater Chennai Corporation
R. Govindarasu	Zonal officer	Greater Chennai Corporation
K Devendiran	Executive Engineer	Greater Chennai Corporation
P. Shridhar	Project Engineer	Greater Chennai Corporation
S. Baskaran	Superintending Engineer, Storm Water Drain Department	Greater Chennai Corporation
Nisha Priya Mani	Sustainable Cities Specialist Chennai (ADB-GEF Consultant)	Greater Chennai Corporation
V. Sivakrishnamurthy	Deputy Commissioner	Greater Chennai Corporation
Shri P. Jawahar (IAS)	Secretary to Government	Technology & Environment and Local Administration Puducherry
Shri R. Kesavan (IAS)	Secretary to Government	Town & Country Planning Department Puducherry
Shri Arulrajan P. (IFS)	Conservator of Forests cum Chief Wildlife Warden	Puducherry
Shri A. Kulothungan (IAS)	District Collector - cum - District Magistrate	Puducherry
Shri V. Bhuvaneshwaran	Member Secretary	Town & Country Planning Department Puducherry
Shri A. J. Pandya	City Engineer	Surat Municipal Corporation
Smt. Meet Gandhi	Executive Engineer	Surat Municipal Corporation
Shri Nilesh Taylor	Deputy Engineer	Surat Municipal Corporation
Shri Maulik Rao	Executive Engineer	Surat Municipal Corporation
Sourabh Warrior	Senior Transport Planner (Team Lead)	IBI Group
Malaysia		
Zulkiflee Mohamad	Senior Principal Analyst I	Malaysian Industry-Government Group for High Technology (MIGHT)
Anusha Magendram	Senior Principal Analyst II	Malaysian Industry-Government Group for High Technology (MIGHT)
Fatin Asmida Asman	Research Analyst II	Malaysian Industry-Government Group for High Technology (MIGHT)
Kamarul Ariff Omar	Research Analyst II	Malaysian Industry-Government Group for High Technology (MIGHT)

Name	Title	Organization
Muhammad Rusyaidi Razali	Research Analyst II	Malaysian Industry-Government Group for High Technology (MIGHT)
Norshahida Razali	Research Analyst II	Malaysian Industry-Government Group for High Technology (MIGHT)
Nurulain Binti Bachok	Senior Principal Assistant Secretary	Ministry of Local Government Development (KPKT)
Afza Binti Said	Senior Assistant Secretary	Ministry of Local Government Development (KPKT)
Norliza Hashim	Chief Executive	Urbaince Malaysia
Mohd Hafizam Mustaffa	Assistant State Secretary	Melaka Planning Unit
Rohzaina Binti Zainal	Assistant Director	City Planning Department
Faiqah Nadhirah Faizol	Engineer Energy Division	Melaka Green Technology Corporation (PTHM)
Nadirah Binti Ahmad	Assistant Engineer City and Building Division	Melaka Green Technology Corporation (PTHM)
Mexico		
Alexandra Ortega	GEF Coordination Team Specialist CSD/CCS	IADB
Michaela Seelig	GEF Coordination Team Specialist CSD/CCS	IADB
Ricardo Sandoval Minero	Consultant	IADB
Ricardo Martinez Lagunes	Consultant	IADB
Rodrigo Riquelme	Senior Specialist, Water Sanitation and Solid Waste	IADB
Carolina Alcalá Juárez	Consultant	IADB
Fátima Alejandra Lopez Solana	Consultant	IADB
Andres Blanco	Water and Sanitation Specialist	IADB
Uriel Cervantes Gonzalez	International Cooperation and Sustainability Manager	Banobras
Itzel Xanath Sanchez	International Cooperation and Sustainability Deputy Manager	Banobras
Álvaro Gutiérrez Castro	General Director	Commission of Drinking Water and Sewerage of the State of Campeche (CAPAE)
Roberto Ignacio Avilés Rocha	General Director	Secretariat of Urban Planning, Infrastructure, Mobility, Environment and Natural Resources (SEPUIMM)
Zulleth Tejas	Energy and Telecommunications Director	SEPUIMM
Jesimar Talamantes Geraldo	Engineer	SEPUIMM
Denisse Martínez Avilés	Architect	SEPUIMM
Alejandro Flores	CEO	All in Baja
Paraguay		
Alejandra Kemper	Project Manager	UNDP

Name	Title	Organization
Cecilia Vuyk	Sustainable and Inclusive Development Programme Analyst	UNDP
Veronique Gerard	Previous Sustainable Development Portfolio Manager	UNDP (virtual)
Gilda Torres	Director General of Air	Ministry of Environment and Sustainable Development (MADES)
Juan José Rolón	Project Director	Viceministry of Transport
Rosalý Aguilera	Municipal Officer of the Environmental Management Directorate	Municipality of Luque
Alberto Pérez	Recycler	Municipality of Luque
María Luz Centurión	Director General of Territorial Development	Ministry of Economy and Finance
Jorge Bosch	Viceminister of Urbanism and Habitat	Ministry of Urbanism, Housing and Habitat (MUVH)
Hugo Piccinini	Director of Interinstitutional Relations	Ministry of Environment and Sustainable Development (MADES)
Peru		
Alexandra Ortega	GEF Coordination Team Specialist CSD/CCS	IADB
Michaela Seelig	GEF Coordination Team Specialist CSD/CCS	IADB
Sebastian Lew	Housing and Urban Development Sector Specialist	IADB
Hernan Tello	Housing and Urban Development Sector Consultant	IADB
Jaime Fernández-Baca	Sector Specialist CSD/CCS	IADB (Virtual)
Joyce Miguel	Procurement Specialist	WWF
Gonzalo Llosa	Project Coordinator	WWF
José García Calderón	Urban Specialist	WWF
Jesus Flores	Deputy Manager of Territorial Planning	Ministry of Environment (MINAM)
Arturo Tinoco	Territorial Planning Specialist	MINAM
Alicia Chang	Cooperation Affairs Specialist and OFP representative	MINAM
Carlos Arana Vivar	Urban Development Manager	Municipality of Callao
Fiorella Alfaro	Urban Planning and Cadaster Deputy Manager	Municipality of Callao
Elmer Linares	Environmental Management Deputy Manager	Municipality of Lima
Stefany Aroni	Climate Change Office Chief	Municipality of Lima
Patricia Alata	Knowledge Director	Lima Como Vamos
Elisabet Olivares	Architecture Lecturer	UICN – PUCP
Mariela Canepa	Former WWF Policy Manager and former Natural Resources Deputy Minister at MINAM	Ciudad Viva
South Africa		
Julien Lheureux	Task Manager	UNEP

Name	Title	Organization
Mookho Mathaba	Climate Finance Specialist	DBSA
Thandeka Mlaza-Lloyd	Director of Spatial Transformation Projects	City of Johannesburg
Kholiwe Maziya	Project Manager	Johannesburg Social Housing Company (JOSHCO)
Global Platform		
Andrea Fernández	Managing Director	C40 Cities
Matheus Ortega	Head of Urban Planning Implementation	C40 Cities
Maryke van Staden	Director of ICLEI's carbonn Climate Center and Director of Business Development	ICLEI
Karishma Asarpota	Senior Officer Climate Action	ICLEI
Elsa Lefevre	Programme Manager Cities Unit	UNEP
Katarina Barunica	Programme Management Officer	UNEP
Xueman Wang	Senior Urban Specialist	World Bank
Mariana Orloff	Senior Manager Ross Center for Sustainable Cities	WRI
John-Rob Pool	Senior Manager Ross Center for Sustainable Cities	WRI
Other		
Aloke Barnwal	Senior Climate Change Specialist	GEF Secretariat
Mateo Salomon	Head of Climate Change Mitigation	UNDP

Source: GEF IEO.

Note: The list includes interviewees for whom complete contact information (full name, position, and organization) was available at the time of data collection. In some cases, interviews were conducted but full biographical details were not recorded in field notes and could not be subsequently verified through available sources. These individuals are not listed but were included in the consultations informing this evaluation.