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Global Platform for Sustainable Cities

GEF-6 SUSTAINABLE CITIES INTEGRATED APPROACH PILOT (IAP) PROGRAM

EMERGING LESSONS FROM THE GLOBAL PARTNERSHIP FOR SUSTAINABLE CITIES

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C40 CITIES

ICLEI
Local Governments for Sustainability

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LIST OF ACRONYMS

ADB	Asian Development Bank
AfDB	African Development Bank
C40	Cities Climate Leadership Group
DBSA	Development Bank of Southern Africa
EE	Executing Entity
GPSC	Global Platform for Sustainable Cities
GPURL	Global Practice for Urban, Disaster Risk Management, Resilience, and Land
IAP	Integrated Approach Pilot
ICLEI	Local Governments for Sustainability
IDB	Inter-American Development Bank
IUCN	International Union for Conservation of Nature
MDB	Multilateral Development Bank
MSP	Medium Size Project
PFD	Program Framework Document
PMU	Project Management Unit
PPP	Public-Private Partnership
RETF	Recipient-executed Trust Fund
SCCF	Special Climate Change Fund
STAP	Scientific and Technical Advisory Panel
TNC	The Nature Conservancy
TOD	Transit-Oriented Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
USF	Urban Sustainability Framework
WRI	World Resources Institute

EXECUTIVE SUMMARY

The Sustainable Cities Integrated Approach Pilot program (SC-IAP) funded by the GEF is part of the integrated approach programming strategy of GEF-6 which aims to promote the integration of environmental sustainability in planning and management initiatives for cities. The Integrated Approach Pilot (IAP) program operates through two interrelated and complementary components: (i) direct investments in innovative sustainability solutions in 28 cities across 11 countries; and (ii) a Global Platform for Sustainable Cities (GPSC) as a global convening space for developing and sharing knowledge to promote integrated urban planning. At this implementation stage, more than half of the SC-IAP child projects have completed their Mid-Term Reviews and offer useful insights regarding project implementation, the process of advancing integrated approaches, and on the GEF's engagement in the urban space.

Multilateral development banks, a national bank, and UN agencies are engaged through the SC-IAP as core GEF implementing agencies, along with a suite of collaborating partners, including city-based organizations, academic think tanks, specialized technical agencies, developed-world cities, and various non-profit organizations. The World Bank provides overall coordination in terms of knowledge and strategy by leading the GPSC. At the country and city level, the SC-IAP supported a varied implementation structure. In some countries the projects are led by one GEF agency, either a multilateral development bank (MDB) or a UN agency, and in other countries a joint implementation mechanism has also been adopted to build on complementary strengths. The global project, or the GPSC, has engaged a number of partners, including a Resource Team (comprised of WRI, C40, and ICLEI) through a separate sub-project to expand engagement with cities in the program and beyond.

Overall, the governance arrangement for the SC-IAP adopted a knowledge and partnership-based approach and offers useful insights on its role in fostering integration across projects and systemic urban sustainability challenges.

The emerging lessons from the program are captured below against the key principles that underpin the IAP programming of GEF-6:

1. GEF VALUE-ADD

Through the program, the GEF introduced a multi-sectoral and integrated approach for urban sustainability, building on its rich country engagement experience and convening power to mobilize partners from diverse backgrounds. The program design, which focuses on knowledge and partnership, also builds on the important GEF values of knowledge and learning for achieving large-scale global environmental benefits and systems change. Finally, the GEF's value-add also came from focused, reliable, and flexible funding for cities and its partner agencies that enabled them to think beyond sectoral silos and adopt a more comprehensive and multi-sectoral approach for urban sustainability.

2. PROGRAM ADDITIONALITY

The SC-IAP's two-track approach is premised upon the program's concept of the whole being greater than the sum of its parts. The GPSC ties together the individual country/city projects into a greater whole by bringing together a cohort of countries and cities willing to adopt integrated approaches for urban sustainability. It attempts to do so by creating an institutional framework for stakeholder collaboration both at the national and

global levels. The added value is created by way of developing common approaches for sustainability and integration and useful knowledge on key urban issues in participating cities. While the programmatic approach in this pilot phase assumed its maturity a bit later over the course of implementation, it was able to contribute to the rising global importance of cities in achieving climate goals and Sustainable Development Goals (SDGs). It laid a good foundation for integration approaches for urban sustainability and the need for a collaborative approach to address complex challenges facing the cities.

3. INSTITUTIONAL FRAMEWORK

The GPSC is becoming an important global forum grounded upon a collaborative institutional framework. Led by the World Bank and the program's implementing agencies, this framework brings together not only city participants, but also International Financial Institutions (i.e. multilateral, regional, and national development banks), technical organizations (at the international, national, and domestic levels), and even city-level governments (i.e. Mayors and City Halls). In addition, the GPSC engaged with the Resource Team (C40, ICLEI, and WRI) through a separate GEF Medium-Sized Project to engage cities. While this was useful in the dissemination of knowledge and peer exchange between cities, it also added administrative complexity in project management. At the country level, having more than one implementing agency in some instances brought a comparative advantage for the agencies, but has added extra complexity to the governance structure. For example, having two implementing agencies involved in a child project has required additional coordination for reporting of outputs for the child project. Clearer reporting channels and communication modalities are acknowledged as key requirements in such cases.

4. DEALING WITH COMPLEXITY

By spanning 28 cities in 11 countries around the world, the SC-IAP is inherently complex. Cities are typically complex in the way they are planned and governed. This complexity varies across geographies and are multi-dimensional, linking environmental challenges with socio-economic challenges. Recognizing these challenges and opportunities, while also realizing the unique window of opportunity that comes with rapid urbanization, the SC-IAP adopted a two-track approach—the GPSC for coordination and knowledge sharing and country projects for activities on the ground. While country projects tackle each city's priority urban sustainability problems, the GPSC acts as a platform for partners to share knowledge and experiences. Overall, these efforts seek to promote the SC-IAP's creation and implementation of comprehensive integrated approaches and management initiatives with solid learning opportunities. The GPSC is primarily designed for sharing knowledge to support local strategic planning processes and implementation efforts in the cities. Connecting cities and sharing knowledge is key to advancing the integrated approach under such complex circumstances. An important aspect is that child projects have opportunities to take lessons from other cities and countries tackling similar sets of problem, yet perhaps in different contexts. During the typical implementation of a development project, there are limited opportunities to learn from others that may be encountering similar problems. Leveraging this opportunity presented by the IAP is the genesis of GPSC's knowledge sharing. For example, the Resource Team project was designed specifically to provide additional capacity building for project participants as well as participants from a broader audience. In terms of urban sustainability, connections are used as the main tool to overcome complexity. To the maximum extent possible, local challenges addressed by this work are linked to global challenges through the GEF's financing windows, such as climate change, biodiversity loss, degradation of land and water resources, and chemicals and waste. At the child project level, complexities are dealt with through coordination units that facilitate communication across sectors,

both at high-level steering committees or at the working level, such as project management units and technical advisory panels.

5. ACHIEVING RESULTS BY PROMOTING SYSTEMIC SHIFTS

Recognizing the unique window of opportunity for global environmental benefits that comes with rapid urbanization, the SC-IAP seeks to promote the creation and implementation of comprehensive sustainability planning and management initiatives. The systemic shift towards urban sustainability is catalyzed by the program through support to cities in adopting integrated urban planning approaches using derived frameworks and knowledge products, building their capacity on adopting these approaches at the city level, and leveraging broader relationships and networks to uncover comparable lessons and feasible solutions. The GPSC and its network partners are also contributing to global discourse on urban sustainability through global events led by GPSC, participation in the UN Climate Change Conference of the Parties, and other urban forums.

6. LEVERAGING THE PRIVATE SECTOR

Engagement with the private sector is critical to create opportunities for systems shift in the planning of cities, financing for development, integrated management, and resource utility. The SC-IAP program acknowledges the importance of the private sector and through knowledge and capacity building activities aims to create an enabling environment for public-private partnership (PPP) approaches. So far, the country child projects have indicated their work has mobilized almost $3.5 million in private sector investment. The GPSC's *Municipal Public-private Partnerships Framework* has been quite relevant in this context, and it has also been rolled out to capacity developing training events. In terms of innovation and scaling-up activities through private sector engagement, GPSC includes private sector companies, such as planning consultancy firms, in order to inform the development of transit-oriented development tools with the insights of private sector stakeholders in infrastructure and land development. At the national level, cities in India, Brazil, and Malaysia have adopted PPP models for implementation of sustainability solutions such as waste management.

7. MAINSTREAMING GENDER

Cities have traditionally reinforced and exacerbated existing gender inequities. A significant reason for this is because of the absence of women, girls, and sexual and gender minorities as stakeholders in the planning and design of the built environment. Gender mainstreaming must work in tandem with the other systems of integration to achieve sustainability and leverage global environmental benefits. While the Program Framework Document (PFD) mentions gender and such aspects will be tracked in some child project results frameworks, a program-level gender-specific index, following the GEF's subsequent gender policy to guide and track during design and implementation, was not set up. Nevertheless, some country projects (e.g. Viet Nam, Cote d'Ivoire, and Senegal) are demonstrating through their implementation status that gender is being considered in a number of ways, utilizing a range of frameworks, assessments, and indicators. Future programs would benefit from lessons learned from the pilot as well as recently published guidelines on gender-inclusive urban development that were not available during the design phase of country child projects.

8. INTEGRATING SYSTEMS RESILIENCE

Urban resilience describes the ability of cities, under the impact of shocks and stresses, to continue to function so that the people who live and work there—especially the poor and the vulnerable—survive and prosper. Since the SC-IAP was designed and the PFD was submitted to the GEF in 2015, climate change and necessary climate resilience actions, such as resilience to urban flooding,

have become even more critical and important considerations in seeking global environmental benefits. However, resilience considerations in urban settings should be considered in broader sense—such as considering resilience to shocks such as the recent COVID-19 pandemic and its socio-economic effects on cities. While the global platform has not specifically focused on resilience, the concept has been ingrained as an emphasis in each of its three pillars of knowledge (integrated urban planning and management, municipal finance, and sustainability indicators and tools). In terms of how resilience is incorporated into the planning pillar, an example is how climate resilience principles are integrated into cities' plans and social resilience principles are ingrained in affordable housing activities. Fiscal resilience is a critical aspect conveyed through all work in the municipal finance pillar. GPSC's Urban Sustainability Framework,), which guides cities on how to develop sustainability initiatives and track their progress through a system of indicators, includes a specific dimension on resilience. A number of country projects have adopted resilience in their planning by focusing on flood risk management.

9. KNOWLEDGE MANAGEMENT AND LEARNING

Overall, the knowledge management and learning aspects of the Sustainable Cities IAP have been a success in demonstrating how individual projects can combine their experiences and build mutual capacities. As of October 2020, the IAP notably held at least 446 events and capacity development workshops, created 490 knowledge products, and published 83 program documents. The pilot is perhaps the first international development project linking multi-focal urban strategy and knowledge with a network of local investment projects. The SC-IAP so far has presented opportunities to scale up knowledge management and learning through (i) the broad range of child project activities to identify key cross cutting knowledge themes; (ii) global reach of the SC-IAP's country child projects and potential for regional clustering; (iii) investment in child project funding for participation in knowledge sharing; and (iv) linking national platforms and the global initiatives. The differences in start and end dates of different child projects to some extent impacted the knowledge management and learning activities. In future program iterations, creating a method to harmonize project schedules as much as possible would greatly benefit the effectiveness of knowledge management and learning activities. A concrete, long-term knowledge management and learning schedule could also enhance effectiveness of knowledge management. However, due to complexities of gathering participants on topics and ensuring country child project participation, developing a schedule has been a difficult task. COVID-19 has also unexpectedly impacted knowledge exchange events world-wide.

To synthesize the rich emerging lessons of the IAP programs, SC-IAP stakeholders participated in the GEF's IAP Technical Workshop in May 2020. The following three key takeaways were presented by World Bank on behalf of the program and are relevant in highlighting the current most important considerations for the program:

An Integrated Approach to Urban Sustainability is the Way Forward

The GEF Sustainable Cities IAP program promotes a multi-sectoral approach and opens new opportunities for integrating environment, climate change. and biodiversity considerations into urban planning and development strategies. This is the way forward for a sustainable future. Such an integrated approach builds a foundation for transformational change, however challenges must be overcome, such as: many cities' governance structures tend to be organized in a "silo" arrangement; GEF programs are traditionally anchored within environmental agencies that have limited connections to urban planning agencies; and at the project level for the IAP, there is a limited understanding on what actually constitutes an "integrated approach." To overcome these challenges, GPSC has, for

instance, piloted frameworks such as providing the *Urban Sustainability Framework* to cities which brings together multiple dimensions of urban sustainability, and leveraging indicators to support cities' sustainability benchmarking efforts. GPSC is also providing policy guidance and intellectual leadership through good practice compendiums on integrated approaches and producing analytical reports, such as Greater Than Parts: A Metropolitan Opportunity, which WRI contributed to, analyses nine case studies to draw conclusions on how metropolitan areas harness integrative approaches to reap global environmental benefits. At the child project level, SC-IAP has supported the transition from single sectoral interventions to integrated approaches. This has happened through promoting strategies such as transit-oriented development (TOD) and integrating land-use planning into climate action by providing modeling tools for cities to understand the implication of urban expansion on their greenhouse gas emissions, and supporting the integration of urban biodiversity considerations and nature-based solutions into urban ecological plans, as another example. All of these efforts are supported by a data-driven approach, encouraging the use of evidence-based planning and where possible providing geospatial knowledge and tools to support the work.

Reflecting on the work promoting integrative approaches, the process is ongoing and SC-IAP is piloting various approaches. It is very much a learning-by-doing process and there is positive momentum on the ground that the IAP is bringing by convening different agencies and national/city stakeholders for project implementation. The increasingly common phrase, "the battle for sustainable development will be won or lost in cities," emphasizes the importance of the SC-IAP's work. The world's growing cities are truly at the leading edge of the global sustainability agenda. How cities choose to respond to sustainability challenges can greatly influence the prosperity and quality of life of their residents.

Importance of Promoting Peer-to-Peer Learning and Building a Broad Partnership to Support Cities

Many cities value the opportunities for regular and systematic learning and sharing through SC-IAP's global network and events. GPSC convenes a worldwide network of development partners and leverages their resources, expertise, and their own connections to bring cutting-edge knowledge to cities. Since the work in cities covers multiple urban knowledge areas, there is added importance on drawing a broad array of expertise. Furthermore, GPSC has experienced that having a range of activities at different scales (global, regional, and national) is important to incorporate global knowledge, while having content contextually relevant to specific locations.

Reflecting on the importance of learning and partnership, coordination between the different stakeholders of the global platform is complex, but builds a stronger and more impactful program. The combination of political engagement with city leaders and urban practitioners incorporating systematic and targeted in-depth training generates political momentum supported by a technical foundation. GPSC's transition to global online events is one example of the agile actions of the program during the COVID-19 pandemic.

Municipal Financing and Leveraging Private Sector Engagement Must be an Integrated Pillar for the Sustainable Cities Program

While sustainability planning must be supported by financing and investment, sound and sustainable municipal financing remains a challenge for many cities. Municipal finance is one of GPSC's three knowledge pillars. The program has provided creditworthiness training to cities and is piloting city self-assessments through the Municipal Public-Private Partnerships Framework and through engagement with the International Finance Corporation. A key reflection for private sector engagement has been the need to build broad private sector engagement and a network comprising both national and global-level stakeholders.

OVERVIEW OF THE SUSTAINABLE CITIES INTEGRATED APPROACH PILOT

1. BUILDING FOR THE FUTURE TOGETHER IN CITIES

The Sustainable Cities Integrated Approach Pilot program (SC-IAP) was funded by the GEF to promote the integration of environmental sustainability in planning and management initiatives for cities. This focus has never been more important. Cities are the engines of the global economy which concentrate more than 50 percent of the world's population, while accounting for over 70 percent of its greenhouse gas (GHG) emissions.[1] By 2050, two-thirds of the world's population will live in cities and nearly all of this urban growth will occur in developing countries.[2] This concentration of people and assets also means that the impacts of stresses and shocks, such as the challenges of climate change and natural disasters, will be even more devastating and especially affect the urban poor. By focusing development efforts on integrated approaches—those that cut across traditional sectors and silos —positive change can be made and global environmental benefits can be gained. If managed well, cities that strive to become compact, resilient, inclusive, and resource-efficient can become the drivers of sustainable development.

The Sustainable Cities program is one of three Integrated Approach Pilot (IAP) programs created to focus on integrative approaches during the GEF-6 funding replenishment cycle. The sister programs to the SC-IAP are the Commodities IAP, which focuses on deforestation and commodity supply in four key landscapes (the Matopiba region in Brazil's extensive tropical savannah known as the Cerrado, Indonesian ecosystems on the islands of Kalimantan and Sumatra, Liberia's biodiversity-rich northwest, and Paraguay's semi-arid Chaco region), and the Food Security IAP, which fosters sustainability and resilience for food security in sub-Saharan Africa. These three IAP programs were developed based upon the GEF2020 strategy which demonstrated a need to support transformational change and achieve impacts on a broader scale. This was operationalized by focusing on drivers of environmental degradation, the importance of supporting coalitions of stakeholders, and leveraging innovative and scalable activities. The IAP programs are designed to:

Address the key drivers of environmental degradation

Promote interventions that focus on the underlying drivers of global environmental degradation and bring together partnerships of stakeholders around complex environmental challenges to provide solutions.

Support innovative and scalable activities

Advance and support innovative methods of doing business and focus on activities that are scalable across multiple boundaries, such as countries, regions, and sectors, through transforming policies, markets, or behaviors.

Cost-effectively deliver the highest impacts

Maximize the global environmental benefits by financing cost-effective solutions to the world's major environmental challenges.

1 Rosenzweig, C. et al. 2018.
2 United Nations. 2019.

The GEF's Sustainable Cities program provides $153 million in financing to promote the global initiatives and implementation of integrated approaches in 11 countries and 28 cities. The Global Platform for Sustainable Cities (GPSC) coordinates the program's urban development knowledge and strategy in order to provides tools, knowledge resources, and support to the program's child projects and their cities. GPSC's Resource Team provided additional knowledge and leveraged its own constituent city networks to inform the platform's activities and city-level child projects. Eight GEF implementing agencies guide the implementation of child projects in the countries. The combination of individual child projects being implemented in a diverse range of cities, while coordinated globally in terms of knowledge and strategy, offers a distinctive advantage to demonstrate approaches that can be scaled up both locally and globally.

The IAP's objective is to promote an approach to urban sustainability guided by evidence- based, multi-dimensional, and broadly inclusive planning processes that balance economic, social, and environmental resource considerations. The IAP consists of the following components:

Enhancing integrated sustainable urban planning and management

Increased scope and depth of integrated urban sustainability management policies and processes, including institutionalization within the local governance structure; national polices and strategies create more favorable conditions for local action to address global and local environmental concerns.

Monitoring local and globally-relevant performance frameworks for improved performance

Core performance framework for local and global environmental benefits implemented at the local level; improved local and global environmental sustainability.

Catalyzing investments in sustainable cities

Increased investment flows to sustainable cities initiatives from national governments, subnational governments, development partners, and the private sector; increased number of innovative financing mechanisms and approaches; enhanced ability at the local level to leverage long-term financing for sustainability initiatives.

Enhancing partnerships for sustainable cities at local, national, and global levels (through knowledge management, capacity building, global coordination)

Contributions by the IAP to global discourse on sustainable urban management, including within the context of multilateral environmental conventions.

2. PROJECT PORTFOLIO

The Sustainable Cities IAP Program adopts a dual approach for implementation through local initiatives and global coordination. It supports the implementation of child project activities in its 11 countries and 28 cities together with a global platform that binds all the country projects together for cross learning and alignment with the IAP objectives. The country child projects have a wide range of global environmental benefits, such as together reducing an estimated 100 million metric tons of CO_2 emissions.

GEF's financing of $153 million for the Sustainable Cities IAP has leveraged more than $2.4 billion in project co-financing. Although all child projects have different timeframe for implementation, all the projects are currently being implemented and a majority are currently in the process of Mid-term review. However, implementation schedules may be affected by the current COVID-19 pandemic.

Table 1 shows the IAP's portfolio of projects, cities, financing, and reporting information. A list of all project summaries that include information regarding their implementation status is found in Annex.

TABLE 1: PROJECT DETAILS

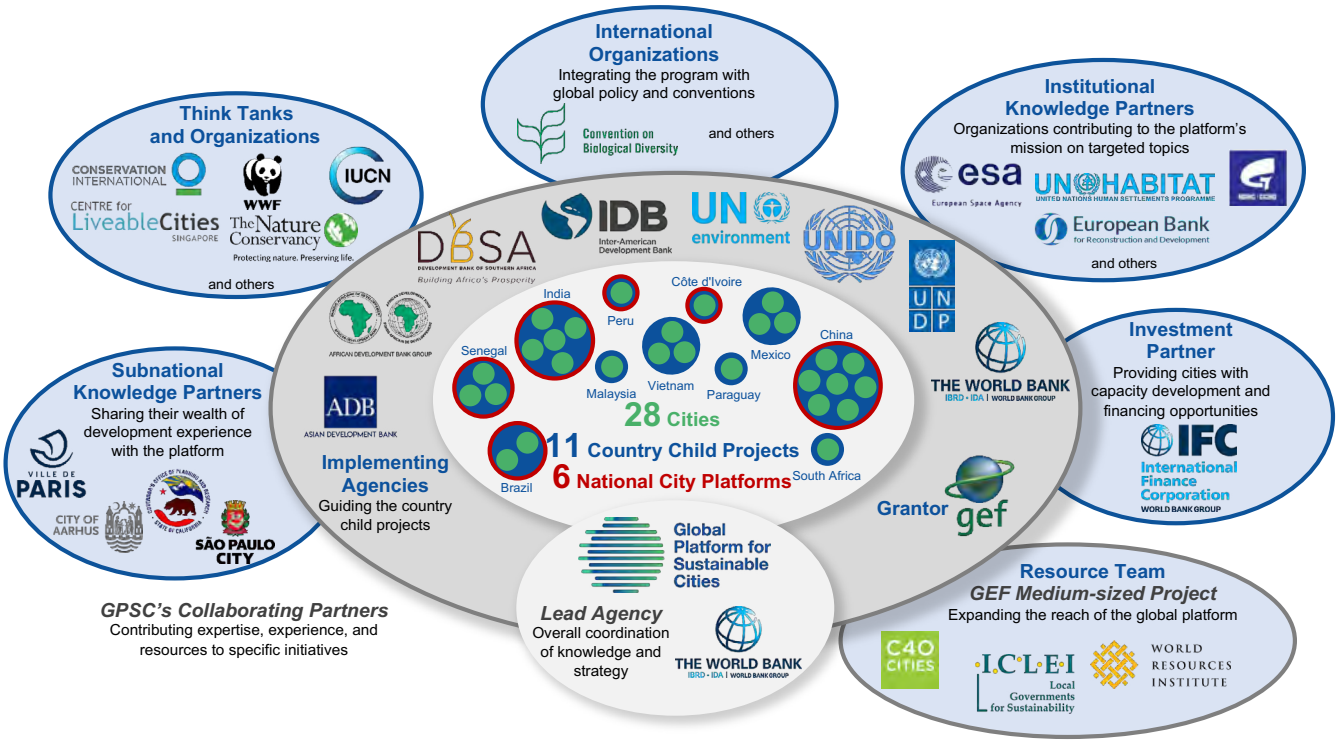
Child Project	Cities	GEF Grant (US$)	Implementing Agency
Global Platform for Sustainable Cities	Global	10,000,000	World Bank
Resource Team	Global	2,000,000	World Bank
Brazil	Brasilia	25,000,00	UNEP
	Recife		
China	Beijing	36,000,000	World Bank
	Guiyang		
	Nanchang		
	Ningbo		
	Shenzhen		
	Shijiazhuang		
	Tianjin		
Cote d'Ivoire	Abidjan	6,000,000	AfDB and UNIDO
India	Bhopal	13,000,000	UNIDO
	Guntur		
	Jaipur		
	Mysore		
	Vijayawada		
Malaysia	Melaka	3,000,000	UNIDO
Mexico	Campeche	15,000,000	IDB
	La Paz		
	Xalapa		
Paraguay	Asunción	8,250,000	UNDP
Peru	Lima	7,500,000	IDB
Senegal	Dakar	9,500,000	World Bank and UNIDO
	Diamniadio		
	Saint Louis		
South Africa	Johannesburg	9,000,000	DBSA and UNEP
Viet Nam	Ha Giang	9,000,000	ADB
	Hue		
	Vinh Yen		

GOVERNANCE FRAMEWORK

The governance structure of the Sustainable Cities IAP follows its dual approach for implementation through local initiatives and global coordination. As shown in Figure 1, the 28 cities and 11 child projects are at the center for the IAP, supported by the surrounding implementing agencies and the GEF as grantor. The World Bank provides overall coordination in terms of knowledge and strategy by leading the GPSC. Surrounding this core group of cities and implementing agencies are the network of collaborating partners who support GPSC's activities, including the Resource Team. While these collaborating partners typically do not have a direct governance relationship with the platform, they add value in sharing their experience, knowledge, and resources to contribute on specific activities.

The following text summarizes the governance structure of the two project scales of the Sustainable Cities IAP – the country child projects, and the GPSC and Resource Team. For further governance information, please refer to the paper *Governance for Implementation of the GEF-6 Integrated Approach Pilot (IAP) Programs: Synthesis of Experiences and Emerging Lessons*.

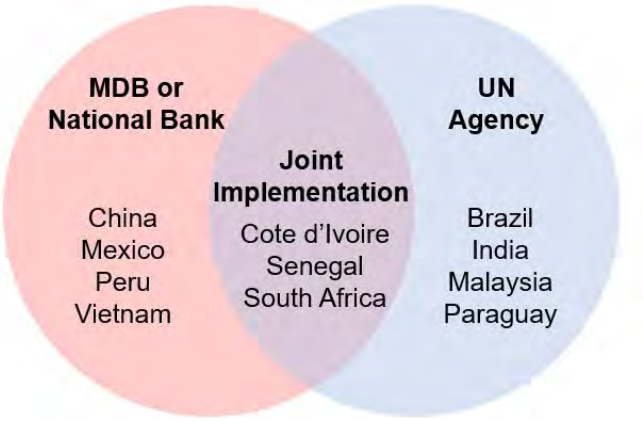
FIGURE 1: SUSTAINABLE CITIES PROGRAM STAKEHOLDERS



1. COUNTRY CHILD PROJECT DELIVERY STRUCTURE

The IAP comprises 11 country child projects that have received $141 million of GEF grants. These projects are directly governed by the GEF's policies and each are led by one or two GEF accredited implementing agencies that are either MDBs, national banks, or UN agencies The Senegal, Cote d'Ivoire, and South Africa child projects are jointly implemented by a bank and a UN agency as shown in Figure 2.

FIGURE 2: IMPLEMENTING AGENCY DIAGRAM



The county child projects also have executing entities (EEs), which are typically national or municipal-level agencies that assist the implementing agencies to carry out the project activities in the country. Nine out of eleven country projects are executed by national EEs, while four projects are executed at both the national and municipal level. Peru's project is executed by a Civil Service Organization. The role of the national EE is important for most country child projects to be able to influence any necessary changes in the national urban policy framework, because city-level governments in most cases cannot influence legislation. Although most country child projects are executed by a national EE, municipal-level governments are also engaged in most child projects, but as stakeholder or beneficiaries.

Typically, the implementing agencies that are MDBs or national banks, such as DBSA, are able to offer additional financing opportunities to leverage the GEF grants. Some projects, such as Viet Nam, also leverage a GEF Special Climate Change Fund tied to an ADB loan package to augment activities.

One project delivery challenge has been regarding the joint implementation of some child projects. Having more implementing agencies involved in child project activities on the ground, and having to coordinate more agencies at the global level, naturally adds complexity to the IAP. The roles and responsibilities of future GEF Impact Programs could consider evaluating the drawbacks and benefits (such as unique expertise) of having jointly implemented projects. In the future, clearer reporting channels for child projects that have multiple implementers could also be defined.

Project management structure of country child projects

For projects having MDBs as the implementing agency, the core project management and governance processes typically follow the existing MDB lending procedures. For the five projects implemented by UN Agencies and the Peru project, project management structures were set up as part of the GEF project activity, which took a few months in either project design/preparation or implementation period. Steering committees have been developed for projects for implementing agencies and EEs. Three projects with joint implementing agencies have separate steering committee under two implementing agencies because MDB projects tend to utilize existing project governance structures from their lending projects.

Several country child projects either comprise more than two cities in the country or aim to expand the dissemination of lessons learned to beyond the cities involved in child projects. Therefore, countries have established different types of national platforms that enable a greater reach for the IAP to promote integrated approaches to urban sustainability. Several examples of national platforms are:

Brazil

In late 2019, the national Sustainable Cities Program (PCS) and the Centre for Strategic Studies and Management launched the beta versions of the Sustainable City Innovation Observatory and Sustainable Cities Platform. Both platforms support the replication and scale-up of sustainable urban development in Brazil. The observatory disseminates innovative urban solutions to Brazilian cities that are contextual to the national territory through typologies of city-regions. The sustainable cities platform helps Brazilian cities monitor their progress to achieve local urban sustainability goals, aligned with the United Nations sustainable development goals, and develop more ambitious goals over time. Currently, 214 Brazilian municipalities are signatories to the Sustainable Cities Program.

China

A National TOD Platform has been launched to share knowledge and boost capacity development between the child project's cities and the wider industry. The active platform publishes a regular newsletter to disseminate knowledge, event summaries, and lessons learned. The newsletter's sixth issue can be found here.

Cote d'Ivoire

A national platform for Sustainable Cities is being implemented in cooperation with the Ministry of the Environment due to the importance of knowledge sharing and dissemination in order to foster synergies for sustainable urban planning in Abidjan. Focus themes being discussed include financial planning, circular economy, and knowledge management among all stakeholders, including civil society.

India

An Indian Platform for Sustainable Cities was launched with the help of UN-Habitat in 2017. The platform is now in the process of being re-developed and re-launched with new project integration.

2. GLOBAL CHILD PROJECT DELIVERY STRUCTURE

The Global Platform on Sustainable Cities is a knowledge and partnership platform that is implemented and executed by the World Bank with a $10 million GEF child project grant.

The GPSC serves two main functions: coordinating the country projects in terms of knowledge and strategy to support the Sustainable Cities IAP program's objectives; providing a space for the IAP's cities to interact and facilitates engagement with a wider network of entities and initiatives operating in the urban development space to leverage their expertise, knowledge, and resources for advancing an integrated approach to urban planning, financing, and measuring sustainability. In this coordination role, the World Bank is also the lead agency of the Sustainable Cities IAP. GPSC is anchored within the World Bank's Global Practice for Urban, Disaster Risk Management, Resilience, and Land (GPURL), which coordinates the global strategy and engagement for the network.

Regarding the project's overall governance structure, a steering committee was formed to guide the project, jointly chaired by the former GEF CEO and a World Bank Director. This guidance has typically occurred bilaterally between the management of both organizations. The World Bank also has an internal committee to guide GPSC in terms of technical knowledge and strategy, made up of GPURL management and Global Leads focusing on specific areas of knowledge.

Under the auspices of the GPSC, the World Bank as Lead Agency for the IAP program periodically organizes virtual meetings to engage with the IAP's key stakeholders. The call agenda typically includes updates from the different partners, a time to propose activities, share lessons learned, and provide implementation status updates to the group.

Regarding the decision-making process of events and knowledge produced by GPSC, they are typically guided by World Bank's organizational

structure and it often collaborates with other entities to bring in specific additional expertise. Global events are held in a wide range of locations to obtain contextual insights from the different cities and institutions involved in terms of technical knowledge, capacity development, and lessons learned. An example was the GPSC African Regional Workshop held at AfDB's headquarters, which was jointly organized by AfDB and the World Bank. Another example was the Working Group Meeting Green Urban Development – Biodiversity, Natural Capital Accounting and Nature-Based Solutions for Cities which was held at World Bank headquarters and co-organized by the World Bank, TNC, and IUCN—these three organizations offering a broad range of technical expertise on the topics discussed. The creation of knowledge products is demand-driven from GPSC's cities and partners, along with being informed by the World Bank's operations and the internal committee's guidance. Typically a need for a knowledge product is determined along with a selection of IAP cities which can benefit from the knowledge, which is rolled out in capacity development events such as city academies.

Regarding challenges encountered, the IAP and its country child projects were developed and approved by the GEF Council before GPSC was created, and this has presented several operational challenges. In terms of the results framework and knowledge sharing and capacity development activities of the child projects, when they were originally formulated the child projects typically did not include an explicit objective to collaborate with the global platform. This is particularly evident in terms of funding allocation, which has sometimes limited the involvement of child projects in the platform's activities. Also, the number of implementing agencies, and the fact that some child projects are jointly implemented, has created additional program coordination complexity.

A number of child projects have also incorporated national cities platforms into their activities with the aim of expanding the dissemination of lessons learned to beyond the cities involved in child projects. This enables a greater reach for the IAP to promote integrated approaches to urban sustainability. Several examples of national platforms include Brazil, China, Cote d'Ivoire, India, and Peru. GPSC's 3rd Global Meeting in Brazil demonstrated excellent knowledge transmission between the global and national platform level. However, the maturity of each platform and the effectiveness of sharing knowledge between the local and global levels varies and can be further strengthened moving forward.

To respond to the ongoing COVID-19 pandemic and the resultant travel restrictions, GPSC has modified its typical knowledge delivery methods and leveraged its wide partnership network to create a global online series titled "Building Back Better: Green, Healthy, and Inclusive Cities." Each week the series brings together a diverse set of stakeholders on a range of topics relevant to cities' recoveries. The events are open for public participation. This is one timely example of how GPSC has amended its typical delivery methods to respond to cities' ongoing needs.

3. RESOURCE TEAM

One GEF Medium-sized Project, known as the Resource Team, was approved subsequent to GPSC to complement and extend its activities and involve a broader range of organizations. The Resource Team project is a $2 million GEF grant that is administered by the World Bank as a Recipient-executed Trust Fund and executed by WRI as the lead grantee responsible for coordination and project delivery, along with C40 and ICLEI as sub-grantees. Together the organizations facilitate peer-to-peer interaction and increase knowledge dissemination.

In terms of governance, the grant specifies a work program comprising a set number of knowledge products and engagement activities that WRI coordinates with C40 and ICLEI. Each organization has predetermined deliverable areas that focus on different aspects of the grant's knowledge and engagement roles. Since the grant is overseen by the World Bank in accordance with their typical procedures, modifications to the work program and changes in component funding, require the consent of the World Bank.

Regarding coordination with the overall IAP, the Resource Team participates in GPSC's agency calls and directly interacts with implementing agencies and the platform's cities. Since the country child projects and GPSC were developed and approved by the GEF Council before the Resource Team was created, the coordination and integration of the Resource Team's work program with GPSC and the IAP child projects has had challenges. Further reflections are included later in this report (Principle 3).

PRINCIPLE 1: DEMONSTRATING VALUE-ADD OF THE GEF

1. MULTI-SECTORAL AND INNOVATIVE APPROACH FOR URBAN SUSTAINABILITY

The Sustainable Cities IAP program promotes multi-sectoral approaches for holistic urban sustainability in target cities and countries. The GEF's distinct role as the financing mechanism and decades of experience tackling climate change, biodiversity loss, and land degradation has allowed it to bring multiple environmental benefits and sectoral solutions under one program to contribute to transformational change. Supported by the *Urban Sustainability Framework*, this multi-sectoral approach benefitted from the GEF's convening power to bring financial institutions, city networks, development agencies, sectoral ministries at country and city level, the private sector, and civil society within one program. The integrated approach further led to innovative urban planning and governance approaches which traditional environmental funds would not have supported. For example, the program supported large scale capacity building and policy influencing in China to adopt Transit-oriented Development (TOD) in cities to address congestion, pollution, and other issues while delivering large scale climate change mitigation benefits. The GEF created a new paradigm to adopt such innovative urban planning and infrastructure solutions with a sustainability perspective.

2. MULTI-LEVEL GOVERNANCE APPROACH BUILDING ON GEF'S RICH COUNTRY ENGAGEMENT EXPERIENCE

The approach to engage national and city governments in an integrated manner has been a distinct value add of the GEF to advance urban sustainability. This engagement moved beyond traditional approaches of either engaging with national governments to influence national policies or approaches that concentrate on city governments for local level solutions. The integrated governance approach that was demonstrated by co-execution of country projects by national and city governments aligned well with the critical interdependency of city and national governments in effective planning, financing, and management of urban sustainability approaches. With stronger ownership of project components by directly engaging city government to each project component, child projects expect to have more continuity and sustainability.

3. FINANCING INTEGRATED APPROACHES OF URBAN SUSTAINABILITY

The GEF's robust financing to support projects at the city level with flexibility to focus on core urban development priorities such as urban planning, governance, and finance in addition to sustainable infrastructure solutions has enabled greater mainstreaming of sustainability and buy-in from national and city governments. This marks a systemic shift in the way the sustainability agenda used to be anchored at country and city levels. With flexible funding to strengthen inter-department coordination, implement pilots on the ground, and provide opportunities for city officials and leaders to participate in global urban forums and capacity building programs, the GEF provides much-needed incentives to move the sustainability agenda to core urban programming and policies. This mainstreaming enabled the GEF to mobilize a massive $2.4 billion in co-financing from governments and MDBs with just $153 million in grant funding. In the absence of GEF fund,

cities would have continued accessing climate and environmental funds to use them for financing siloed sustainability solutions without significant transformative impact.

4. KNOWLEDGE AND LEARNING AT THE CENTER OF INTEGRATION APPROACH

Knowledge is a fundamental asset and driver for the GEF to achieve lasting impact from its strategy and various programs. The GEF's comparative advantage on knowledge sharing through its broad partner relationships, multi-sectoral experiences, and rich experience of more than two decades enables the Sustainable Cities IAP program to have a strong focus on knowledge generation and sharing. The creation of the GPSC as a knowledge platform is built on this principle, and the global knowledge created and disseminated by GPSC through city-to-city learning workshops and dialogues is a testimony of the GEF's commitment to knowledge sharing. While a number of urban platforms currently exist, GPSC is unique in the way it creates global public knowledge to advance integrated urban sustainability approaches through a range of innovative policy frameworks, capacity building modules, and technical guides for cities.

5. CONVENING POWER

As highlighted above, a distinct value GEF has brought to the program was its convening power built on decades of implementation experience, multi-sectoral experiences, and growing partnership base. The Sustainable Cities IAP attracted a wide range of key stakeholders in urban development both internally and externally of the program. Internally, the program engages multilateral development banks, a national bank, and UN agencies as implementing agencies and national and municipal-level government agencies, along with one civil society organization, as executing entities. The city-based organizations (WRI, ICLEI, and C40) involved as the Resource Team and highly specialized technical partners, such as European Space Agency, have enabled cities to benefit from cutting-edge knowledge and technical assistance.

PRINCIPLE 2: DEMONSTRATING PROGRAM ADDITIONALITY

1. PROGRAMMATIC APPROACH FOSTERING COHERENCE AND CONSISTENCY WITHIN THE PROGRAM

Cities are complex but face similar systemic challenges globally due to unplanned expansion and severe environmental degradation. As a system, cities influence the global economy and together can deliver global climate and biodiversity goals. By adopting a programmatic approach, the Sustainable Cities IAP brought together a cohort of countries and cities willing to adopt integrated approaches for urban sustainability by creating an institutional framework for stakeholder collaboration at both national and global levels. The IAP's two-track approach of global urban development knowledge and partnership combined with country child projects in cities is premised upon the project whole being greater than the sum of its parts. Each of the individual 11 country child projects and their 28 cities are tied into a greater whole through the global knowledge and coordination platform. This programmatic partnership involving a diverse set of urban stakeholders enables cities to explore linkages of their individual project-based initiatives with other cities and the global discourse on urban sustainability, thereby helping the program address issues in a diverse yet coherent manner and achieve scalable global environmental benefits.

The two tracks were designed to complement each other with the former playing the coordination function to ensure desired consistency and coherence across the program. Both tracks together have been able to identify clusters of key urban issues that are critical to address immediate city priorities as well as for long term sustainability. These include: (i) ecosystems and biodiversity; (ii) green industries; (iii) low-carbon technology; (iv) solid waste management; (v) urban mobility; and (vi) urban sustainability planning and financing. The programmatic approach and its institutional arrangement allowed cities to exchange their experiences and create useful knowledge to learn from each other.

The GPSC is managed by the World Bank as the lead agency of the Sustainable Cities IAP. The World Bank mobilized its urban development resources and partnered with a range of collaborators including GEF agencies implementing the 11 country level projects to deliver two key functions; first, a coordination function to bring all projects together in one platform, and second, a knowledge function to create valuable knowledge deriving from experiences from participating countries and other collaborators. These two complementary functions and their synergy were critical for coherence as the larger programmatic objectives provided incentives for cities to participate in the program.

At the launch of the pilot phase, the country child projects were conceived before the GPSC was initiated. The GPSC, which embraced the big picture of the IAP, therefore could not sufficiently influence the country projects in the initial design stage to foster coherent approaches. Individual child projects relied on national leadership primarily to prioritize their urban development challenges related to sustainability. While a more constructive role of the global platform would have been ideal, the integration principles were largely adopted by participating countries and cities within child projects. While some countries prioritized their sectoral challenges, integrated urban planning

was indeed an entry point, with some projects emphasizing it more than others.

The early design of country projects restricted cities to envision the importance of participating in the global platform, and therefore insufficient resources were allocated in their respective project designs. However, this gap was acknowledged by the GPSC, which then engaged a Resource Team comprising city-based networks and institutions to engage directly with cities and build their capacity on systemic urban development challenges and sustainability opportunities.

The coordination role, which was critical to bind the project together, has gained significant momentum in the last couple of years with periodic coordination meetings, GPSC flagship global meeting events (New Delhi and Sao Paulo), and knowledge exchange sessions such as city academies and peer exchange workshops. The importance of this coordination was widely acknowledged by all implementation partners and participating cities.

Overall, while the programmatic approach in this pilot phase was not fully mature at the outset, it was able to contribute to the rising global importance of cities in achieving climate goals, SDGs, and biodiversity objectives. It laid a strong foundation for integrative approaches for urban sustainability and the need for a collaborative approach to address complex challenges facing the cities.

2. PROGRAM IMPLEMENTATION FRAMEWORK LEVERAGING OTHER INITIATIVES

The fundamental objective of creating a global platform was to create a convening space to bring partners and stakeholders together and leverage their commitments and resources to advance integrated approaches for urban sustainability. To leverage partnerships and initiatives, the eventual GPSC program identified three central pillars of urban sustainability—planning, financing, and measuring—together with cross-cutting activities to operationalize the knowledge, as shown in Figure 3.

FIGURE 3: KNOWLEDGE PILLARS AND ACTIVITIES MATRIX

The platform plans and implements its activities through different sized dissemination methods which are strategized to offer a range of opportunities for participation and capture the interests of different audiences. GPSC plans its activities sequentially, engaging with partners and experts to produce demand-driven knowledge products that then lead to capacity development training events, or direct expert support for cities. An overview of GPSC's activities framework, including examples of the different activities, is shown in Figure 4.

GPSC has strategically engaged key partners based on the framework for each Pillar. For instance, the European Space Agency (ESA) as knowledge partner provides technical expertise and skills for geospatial analysis on integrated urban planning to the cities. The organizations participating in the Resource Team engage city-level governments for city-to-city peer exchange and add to the platform's capacity development activities. For thematic expertise such as biodiversity conservation in urban sustainability, GPSC engages diverse international and local players such as the Convention on Biological Diversity (CBD), the International Union for Conservation of Nature (IUCN) and international civil societies: The Nature Conservancy (TNC), Conservation International (CI), and World Wildlife Fund (WWF).

FIGURE 4: ACTIVITIES ENGAGEMENT FRAMEWORK

Activities Cross-cutting GPSC's Knowledge Pillars

	Engagement Activities	*Engagement Examples*
Sharing Knowledge	1. Guidance Documents	*Urban Sustainability Framework*
	2. Tools	*GHG-Planning Tool*
	3. Technical Reports	*Greater Than Parts*
	4. Handbooks	*Housing PPP*
	5. Compendiums	*Small-Scale PPP*
Capacity Development	1. Regional Workshops	*Distributed by region*
	2. Learning Journeys	*Paris and IUCN World Congress*
	3. City Academies/ TDDs	*Singapore, Sao Paulo and Paris*
	4. Targeted City-specific Support	*Selected Focal Areas*
	5. Online Communities/ Webinars	*Global Online Series*
Connecting Cities	1. Global Meeting	*Signature GPSC event*
	2. International Conferences	*World Urban Forum*
	3. Partner Events	*ICLEI World Congress*
	4. Website	*Dissemination*
	5. Newsletter	*Dissemination*

Note: GHG = greenhouse gas; TDD = Technical Deep Dive; PPP = Public-Private Partnership

PRINCIPLE 3: CREATING INSTITUTIONAL FRAMEWORK FOR STAKEHOLDER ENGAGEMENT

The overall governance structure of the program and global and country child projects are described in Governance Framework. This section includes high-level reflections on the programmatic institutional framework and stakeholder engagement, challenges, and lessons learned.

1. INSTITUTIONAL ARRANGEMENTS FOR PROJECT DELIVERY AND MANAGEMENT

The Sustainable Cities IAP's two-track approach of global urban development knowledge and strategy combined with country child projects is made possible by a strong institutional framework for stakeholder engagement.

Child projects

At the center of the stakeholder engagement framework are the 28 cities and 11 countries. Eight GEF implementing agencies guide the implementation of child projects in the countries and work with the EEs to carry out the work. These entities are either at the national or municipal levels, and also include one civil service organization. The role of a National EE is critical in most country child projects to incorporate national urban policy framework transformation and/or strengthening because city-level governments are not authorized for legislation in most cases. Although most country child projects are executed by the National EE, municipal-level governments also engaged in most of projects as stakeholders or beneficiaries. To escalate the ownership of municipal-level governments in future Sustainable Cities projects, it might be worthwhile to consider including them as EEs.

For child projects with MDBs as implementing agencies, the GEF grant has been utilized as complementary to their existing lending, except in Peru (implementing agency: IADB). MDBs have utilized the GEF projects to catalyze the integrative approaches and achieve global environmental benefits in the existing urban programs.

Each child project has a different governance structure, but a majority of projects are guided by a higher-level Steering Committee and a Technical Committee at the working-level comprising stakeholders to make and review major decisions, while supported by the Project Management Unit (PMU).

One project delivery challenge witnessed has been regarding the joint implementation of child projects in Senegal, Cote d'Ivoire, and South Africa. Having more than one implementing agency for one child project activities on the ground added complexity to the governance structure. The roles and responsibilities of future GEF programs including GEF-7 Impact Programs may consider evaluating the drawbacks and benefits (such as unique expertise) of having jointly implemented projects. Clearer reporting channels and communication methods are needed for jointly implemented child projects.

Another challenge that has become apparent is that the national stakeholders involved in urban development are not always those that are typically responsible for GEF funding. GEF Political and Operational Focal Points typically sit in a ministry focusing on the environment. In the future, the Sustainable Cities program could have more traction and national government visibility if the national GEF stakeholders have more exposure and oversight in urban development considerations.

Global Platform for Sustainable Cities and Resource Team

Since the IAP and its country child projects were developed and approved by the GEF Council before GPSC was created, this has presented several operational challenges. In terms of the results framework and knowledge sharing and capacity development activities of the child projects, they typically do not include an explicit objective to collaborate with the global platform. This is particularly evident in terms of funding allocation, which has sometimes limited the involvement of child projects in the platform's activities. Also, the number of implementing agencies, and the fact that some child projects are jointly implemented, have created additional program coordination considerations.

Since the country child projects and GPSC were developed and approved by the GEF Council before the Resource Team was created, the coordination and integration of the Resource Team's work program with GPSC and the IAP child projects has been challenging. Most cities in the IAP child projects found the services offered by the Resource Team valuable, but in some cases it was deemed insufficient or untimely. Also, due to the nature of the Resource Team's $2 million Recipient-executed Trust Fund (RETF) grant, a large volume of administrative processes and coordination are necessary to deliver the work program. This results in a relatively high transaction cost for both the grantees and the World Bank.

An important emerging lesson is concerning the complexities of having a grant project with multiple levels of grantees. The World Bank administers the Resource Team's RETF grant through WRI as the primary grantee, which is also reporting for, and administering, the two sub-grantees (C40 and ICLEI). This administrative complexity has significantly increased the burdens on the organizations involved, especially in terms of procurement and financial management. For the World Bank, this administrative structure also increases the challenge of gaining insights into the broad range of activities that each grantee is performing. For the design of such programs in the future, it is worthwhile to consider the feasibility and apparent drawbacks of having multiple levels of grantees.

In future iterations of the program, the global platform should be involved early in the design of the city-level components, so that the programming and learning interests of cities will be better aligned to increase accessibility and effectiveness.

2. EXISTING GOVERNANCE ARRANGEMENTS PROMOTING OPPORTUNITIES FOR SYSTEMS SHIFT AND TRANSFORMATIONAL CHANGE

The Sustainable Cities IAP's program design strategically engaged external stakeholders that are think tanks, international organizations, the private sector, as well as other institutions with specialized expertise. The wider network of GPSC's collaborating partners do not have a direct role or influence on program governance, but instead provide expertise, knowledge, and shared resources on specific activities.

As an example of the challenges engaging within the framework, the Resource Team faced challenges engaging with city-level staff working on the child projects, since in some instances they had been delayed and project teams were not yet established. A peer exchange planned to cover waste management in India was postponed and then cancelled after discussions with the implementing agency revealed the project was significantly delayed. Taking a broader approach to define the beneficiary and intended audience for capacity building activities – considering the local governments as the client – allowed the Resource Team to proceed with key activities despite the implementation delays in child projects. Having technical staff from participating cities as the intended audience for the trainings also increases the sustainability of the project, as such staff tend to be more permanent than staff hired for child project implementation, leading to a more

sustainable approach to embed knowledge in the local government.

As a method of reaching more stakeholders, a number of child projects have incorporated national cities platforms into their activities with the aim of expanding the dissemination of lessons learned beyond the cities involved in child projects. The countries have established different types of national platforms that enable a greater reach for the IAP to promote integrated approaches to urban sustainability in child projects such as Brazil, China, Cote d'Ivoire, India, and Peru. Such participation by more than the program's 28 cities allows the network to draw on the experiences and lessons learned of others. Also propelling the stakeholder framework are GPSC's Knowledge Partners: cities, states, and organizations that find value in contributing to the network's activities and who have signed Memoranda of Agreement with the World Bank.

PRINCIPLE 4: CREATING INSTITUTIONAL FRAMEWORK FOR STAKEHOLDER ENGAGEMENT

1. NATURE OF COMPLEXITY OF URBAN SUSTAINABILITY

Often in practice, siloed sectoral thinking leaves urban policy makers and specialists indifferent to or unaware of the ways their narrow department or engineering fields affect most of the other sectors. These cross-sectoral interactions include both hard infrastructure systems, such as water and waste, and soft systems, like national and local policies, to enable housing and land markets or regulations for ecosystem conservation.

Complexity is added due to different levels of governments in fragmented roles setting goals and targeting Global Environmental Benefits—such as GHG emissions reduction. While nations continue to negotiate the details of climate commitments, cities are acting, but they need stronger national and international frameworks to scale up fragmented efforts.[3]

Three socio-economic mega-trends infuse a sense of urgency into the work of urban planning: rapid population growth, the expansion of the middle-class, and rapid urbanization. These trends are drivers of environmental degradation that are testing the carrying capacity of the earth's natural systems.[4] Further, recent analysis reveals that these three trends are both interdependent and accelerating.

2. INTEGRATED APPROACH AS SOLUTION FOR COMPLEXITY

"Systems thinking" is an approach that examines the relationships between the different parts of a system and considers their interactions across locations, across organizational levels, and across time. The global commons community has adopted integrated planning, inspired by such a systems approach to sustainable development.

In the GEF 2020 Strategy, the GEF adopted integration as a key organizing principle to catalyze action on global sustainability commitments by delivering global environmental benefits. The GEF, in its program rationale, was an early adopter of integrated approaches to solutions as a central tenet—with the intention of jointly achieving environmental and socio-economic development objectives. More recently, the GEF's Scientific and Technical Advisory Panel (STAP) has detailed the rationale and recommended improvements to further integration in the design of future GEF projects.

Greater Than Parts: A Metropolitan Opportunity[5] is a knowledge product developed by GPSC and WRI to break down urban complexity, better understand the rationale for integrative urban planning, and what this means in cities, or more appropriately metropolitan areas. The publication presents four main approaches to integrated planning. First, vertical integration is what occurs when there is alignment across levels of government. Second, horizontal integration refers to arrangements shared between urban systems at the metropolitan scale. Third, natural and human systems integration refers to synergies between the built environment of the city and the natural ecosystem services that the city relies on. Fourth, social integration refers to planning for inclusive cities that bridge systems and services for poor and marginal communities within the city as a whole.

3 Colenbrander, S. et al. 2019.
4 GEF. 2015.
5 Mehrota, S. et al. 2020.

3. DEALING WITH COMPLEXITY—PROGRAM AND PROJECT DESIGN AND DELIVERY

Two-track approach of the Program

The Sustainable Cities IAP adopted a two-track approach: the GPSC for coordination and knowledge sharing; and country-based projects for activities on the ground. While country projects tackling each city and country's priority urban sustainability problems, the GPSC acts as a platform for partners engaged to share knowledge and experience gained from each child project as well as expands to broader sets of stakeholders. The IAP program is unique in that it both has activities at the city-level directly engaging local actors on the ground, while at the same time through collective action as a program it provides a common understanding among cities at the international level.

Capacity building

With the design of the IAP program providing a knowledge sharing platform, each child project has opportunities to glean lessons from other cities and countries tackling similar challenges. As an example of direct peer-to-peer learning, the Senegal project visited the Malaysia project to discuss collaboration for several topics, including flood management. city academies on different topics (e.g. transit-oriented development, geospatial data, and municipal public-private partnerships [PPP]) have provided unique spaces for training on prevalent themes important to urban sustainability.

The Resource Team project was designed specifically to contribute further capacity building expertise for the IAP's activities and cross-pollinate knowledge from broader audiences. The project provides knowledge and networks, promoting peer-to-peer learning opportunities (webinars, one-on-one meetings, workshops, study tours), facilitates access to a diverse range of good practices and connects other cities with relevant experience, and contributes to knowledge management documentation.

Knowledge products

A suite of knowledge products has been produced by GPSC and partners to support the IAP's cities. These include *Transit-oriented Development Implementation Resources and Tools*, the *Municipal Public-private Partnership Framework,* and the *Urban Sustainability Framework,* which is available in four languages. Knowledge products by GPSC are produced based upon demand from participating cities and partners; participants therefore have full support from the platform along the project life cycle.

Comprehensive institutional coordination in child projects

Recognizing horizontal (multi-sectoral) and vertical (multiple layers of national and municipal governments) challenges in urban settings, while also realizing the unique window of opportunity that comes with rapid urbanization, the Sustainable Cities IAP seeks to promote the creation and implementation of urban planning and management, financing, and sustainability measuring initiatives.

At the child project level, coordination units facilitate communication across sectors, both at high-level steering committees and at the working level, such as project management units and technical advisory panels.

PRINCIPLE 5:
ACHIEVING RESULTS BY PROMOTING SYSTEMIC SHIFTS

Recognizing the unique window of opportunity for global environmental benefits that comes with rapid urbanization, the Sustainable Cities IAP seeks to promote the creation and implementation of comprehensive sustainability planning and management initiatives.

1. THEORY OF CHANGE OF THE PROGRAM

The IAP's Theory of Change begins with planning initiatives, then integrated approaches are developed, and then global environmental benefits are achieved. This three-step approach is well suited for addressing the complexity of the program. The ability of the program to bridge boundaries through planning initiatives, both vertically in terms of governance and horizontally in terms of jurisdictions and sectors, shows the power of integrative approaches in cities. This requires a wide range of partners and expertise, both at the local and global levels, to inform the approach and bring together the right expertise and local stakeholders to effect change. The IAP's two tracks, at the global and local child project levels, are well suited to tackle the complexity.

The program's Theory of Change is primarily accomplished by supporting local strategic planning processes and implementation efforts in selected cities and countries through a framework of global knowledge and strategy. The original underlying assumptions incorporated into the Theory of Change remain more important than ever, and the program acts as a catalyst for advances in urban sustainability.

2. UNDERLYING ASSUMPTIONS - LESSONS AND IMPLICATIONS FOR PROMOTING SYSTEMIC SHIFT AND TRANSFORMATIONAL CHANGE

The Theory of Change focuses on leveraging urban planning to create integrated approaches for cities, which can then achieve global environmental benefits. Overall, this process has value and is worthwhile to promote systematic shifts and thinking of the outcomes as being greater than the sum of their parts. Because of the urban context, positive outcomes may be broader than GHGs or global environmental benefits. There are many co-benefits, such as social inclusion and for climate change. The IAP's ability to promote systematic shifts is reflected through the four aspects of the program's Theory of Change and following results as follows:

Comprehensive evidence-based planning through knowledge, capacity development, and enabling urban investments

Although the concept of systems coordination is not new, the knowledge of what integrated approaches for urban development really means is still nascent. The GPSC publication *Greater Than Parts: A Metropolitan Opportunity* (World Bank 2020) is one of the first publications to analyze the concept of integrated urban planning for metropolitan areas. The book presents evidence from nine city case studies of why integrative approaches in cities are necessary and how they can reap global environmental, social, and economic benefits. Important knowledge initiatives such as this should be encouraged by further iterations of the Sustainable Cities program and efforts should be made to involve participating cities in the analysis as much as possible. GPSC has also done a good job of sequencing knowledge products to capacity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development activities in order to influence greater systematic shifts. However, at this point the results of the knowledge disseminated beyond the project are more difficult to track. Further efforts can be made in future iterations of the project to introduce the knowledge and learning to greater audiences, such as the Resource Team's webinars method.

Wide-ranging suite of support services, leveraging different partners with comparative advantage

The wide range of support services offered by the IAP to city stakeholders has demonstrated the diversity in platform partners that is needed to deliver the activities. Due to the implementing agency's important role as an administrative link between the global platform and child projects, it is an worthwhile consideration that such agencies have expertise that can benefit their child projects and also inform the larger IAP to be able to offer the right support and contribute to the overall discourse on activities.

A network approach, which can leverage relationships and draw parallels between distant partners and uncover comparable lessons and feasible solutions

The IAP program has created a systemic shift in thinking that projects are greater than their individual parts. A large number of activities have been carried out through the network approach. However, a significant question throughout the program's life has been whether the cohort's activities and sense of comradery will carry on after the GEF funding concludes. This is especially the case due to the GEF-6 and GEF-7 Lead Agencies being different. A concerted effort should be made to carry on a sense of the Sustainable Cities cohort and onwards into GEF-8.

Contribution to global discourse on urban sustainability

Results from individual child projects have been achieved moderately yet continues to grow. There are many city networks operating in a similar space as GPSC, however few are connected to larger development projects. Cities play a growing role in the climate change dialogue. Example of success in influencing global discourse are the GPSC's three Global Meetings so far, which have each grown in scale. The most recent meeting in Sao Paulo attracted a significant amount of attention. Future iterations of the Sustainable Cities program should focus on concise topics and improve knowledge and branding of those initiatives in order to make the most systematic effect on global discourse.

PRINCIPLE 6: LEVERAGING THE PRIVATE SECTOR

1. PRIVATE SECTOR ENGAGEMENT FOR SYSTEMIC SHIFT AND TRANSFORMATIONAL CHANGE

A wide range of Sustainable Cities IAP child projects are engaging with the private sector in various ways. So far, the country child projects have indicated that their work has mobilized almost $3.5 million in private sector investment. Engagement with the private sector is especially necessary to create opportunities for systemic shift in the planning of cities, financing and development, integrated management, and resource use. The private sector plays a critical role together with the public sector in **financing, innovation and up-scaling**, and is a necessary partner in creating transformational change so that living environments are more inclusive, resilient, and climate-smart.

Financing, public-private partnerships (PPP)

Private sector engagement has a critical role in creating financing opportunities that can bring about large-scale urban transformation. An active private sector can influence large-scale urban transformation with financing options brought by improved access to capital markets.

Innovation and technology

As a driver for innovation towards the sustainable city, the private sector can steer technology development by developing new and innovative solutions for urban sustainability. For instance, the private sector can develop and provide new technology including clean energy, urban mobility, energy and resource efficiency, and waste management systems.

Scale-up and sustainability

Many companies have recognized the importance of sustainability, and the sustainable cities agenda often aligns with private sector interests. Different pilot projects and studies from child projects would enable an environment for private sector actors to test business opportunities to create and scale up new services and build a long-term value chain. As the nature of the private sector is to achieve financial sustainability, it is more likely that the initiatives and piloted projects will be financially sustainable when the private sector is engaged.

2. EMERGING TRENDS ENGAGING THE PRIVATE SECTOR - CASE STUDIES FROM CHILD PROJECTS

Overall, the IAP's private sector engagement has focused predominantly on procurement of goods and services provided by the private sector in child projects, but the global coordination project and some child projects also include the private sector in knowledge sharing, training, and scaling-up activities. The following are several project examples.

GPSC

Municipal finance is one of the three knowledge pillars of GPSC, which seeks to strengthen the capacity of cities for mobilizing innovative financing, such as through PPPs and improved creditworthiness to encourage access to capital markets. Through harnessing the investment of the private sector, cities will be able to better implement the sustainability recommendations. Based upon the private sector engagement focus of PPPs, the platform has developed a series of knowledge products, such as Municipal Public-private Partnerships Framework, which have also been rolled out to capacity

developing training events. These events have included an Investable Project Preparation and PPPs Workshop, a Municipal Finance and Creditworthiness Academy, a Municipal Finance, Bonds, and PPP event, and a Municipal PPPs City Academy. In terms of innovation and scaling-up activities through private sector engagement, GPSC includes companies such as planning consultancy firms, in order to inform the development of transit-oriented development tools with the insights of the infrastructure and land development private sectors. GPSC's knowledge products, such as Transit-oriented Development Implementation Resources and Tools, *2nd Edition* are freely available for the private sector to leverage in their own work and scale up throughout cities.

Brazil

The GEF-6 CITinova Project has ongoing engagement activities with local private sector stakeholders in the associated pilot projects in Brasilia and Recife to encourage innovative practices and offer new alternatives. The scale of the private sector in the two participating cities is local and national, drawing on the multitude of private sector actors in the strong domestic market. For instance, one private sector actor in the Brasilia project component is engaged as a key partner to scale-up the soil remediation and ground-water restoration pilots. The Government of the Federal District of Brasilia will launch a market for solid waste management with technology used for remediation from the pilot through a PPP. In Recife, the private sector is engaged in a solar boats project component, implementing nature-based solutions for supporting riverbank revitalization and developing boat stations.

India

One of major outputs of the child project is to demonstrate and establish a business model with private investment, capacity building, and knowledge transfer. As a form of PPP, the project expects to share risks between the public and private sectors on financing, designing, construction, and operation of public infrastructure and services. A feasibility study of regional waste-to-energy has been completed and the business model has been adopted as a PPP. However, the component has had challenges with the continuity of investment projects for PPP implementation, therefore short-term capital investment plans, varied PPP structures, and third-party contracting will be explored as alternatives.

Malaysia

Smart-grid technology is a new and unique technology in Malaysia and the pilot project actively involves the private sector in the development of the policies and strategies. By doing so, the policy framework and financial mechanisms will be in line with the needs of manufacturers. The project also aims to establish two to three business models for investment projects co-financed by government, banks, and private investors.

PRINCIPLE 7: MAINSTREAMING GENDER

Gender an important consideration in urban areas, which are home to more than half the world's population. According to the World Bank's recent publication on gender-inclusive urban planning design, key issue areas of access, mobility, safety and freedom from violence, health, hygiene, climate resilience, and security of tenure highlight the current realities in different urban environments.[6] These complex relationships create disproportionate burdens on women, girls, and sexual and gender minorities of all ages and abilities. Cities have traditionally reinforced and exacerbated existing gender inequities. A significant reason for this is because of the absence of women, girls, and sexual and gender minorities as stakeholders in the planning and design of the built environment. Gender mainstreaming must work in tandem with the other systems of integration to achieve sustainability and leverage global environmental benefits.[7]

1. GENDER MAINSTREAMING IN THE EARLY DESIGN AND PROGRAM IMPLEMENTATION

The program has not created a program-level, gender-specific index to track outcomes. The Program Framework Document (PFD) mentions that gender will be tracked in the results framework, however it does not specifically define the metrics. For child projects, some CEO endorsement submission documents lack concrete intentions to approach gender and not all include gender analysis or action plans. Nevertheless, some projects are demonstrating through their implementation status that gender is being considered in a number of ways, utilizing a range of frameworks, assessments, and indicators.

2. EMERGING LESSONS ON SUPPORTING AND ADVANCING A COHERENT AND EFFECTIVE GENDER MAINSTREAMING

With some implementing agencies focusing their reporting on the gender statistics of a handful of project office staff, the scale of a programmatic goal and a resulting approach could be much larger. Projects such as Paraguay, which has produced a manual with guidelines requiring gender inclusive service and design principles into its infrastructure projects, have arguably greater long-term impact for a wider audience. Engraining a programmatic emphasis on inclusion or gender, including harmonizing a monitoring and evaluation framework during the design stage through both the global and country-level programming, would allow for better tracking and delivery of outcomes. The following are several child project examples.

Viet Nam

ADB's loan project, Secondary Green City Development Project (SGCDP), is tied to the GEF grant and is classified as having Effective Gender Mainstreaming (EGM). During the preparation of SGCDP, a gender assessment was undertaken for each city, along with a rapid assessment for each priority sub-project. The gender assessment identified the following key issues: access of women to services and opportunities provided under the project; affordability of services; and equal participation of women in decision-making activities at the commune and city levels. Accordingly, a **gender action plan (GAP)** was prepared, which covers both baseline and GEF-supported activities. The GAP provided a systematic framework for ensuring that women

6 Terraza, H. et al. 2020.
7 GEF. 2018.

Photo by Mltz/Shutterstock

participate in and benefit from the activities. The GAP also provides a framework for monitoring gender-specific aspects of the project's impact and the realization of benefits during the implementation phase. In terms of project management, a GAP monitoring table is reviewed and maintained in the project's mission Aide Memoire, in addition to ADB's typical social safeguards processes.

Cote d'Ivoire

The child project's **beneficiaries and stakeholders** perceive gender equality as a top priority of the Sustainable City Program. This component by UNIDO ensures women are represented in the production lines and in the management of the five pilot companies selected. For instance, a woman is responsible for the environmental safety and quality control of one of the pilot companies. Supporting and advancing coherent and effective gender mainstreaming for the component is being achieved by involving women throughout all the planned activities, such as at the decision-making level (e.g. steering committee participation making key decision points for pilot projects) and to benefit from training and awareness workshops. A socio-economic impact study also evaluated the specific level of woman's exposure to project activities. In terms of targets being set, technical capacity-building activities for the Ivorian Antipollution Center (CIAPOL) should include at least 25 percent women participants. CIAPOL, the national air quality monitoring and control agency in Cote d'Ivoire, has therefore

assigned women to technical training and has assigned a woman as national coordinator of the project. But the operators in charge of the monitoring stations are men, for now. During the technical training organized in January 2020 on the use of a monitoring station, 40 percent of the participants (17 out of 42) were women. Women will therefore become qualified workers, who are increasingly needed for the urban sustainability of the city of Abidjan.

South Africa

The project will appoint a **sociologist with gender expertise** to ensure that there is a substantive promotion of gender equality throughout all activities. Tools, such as templates for gathering data for integrating gender issues in the implementation of the project, have already been developed.

Malaysia

Malaysia has included **gender-disaggregated data collection for project results**, such as from capacity building events, and endeavors to include gender-balanced participation across activities with counterparts. This includes balance participation within the project's management structure and project personnel.

Senegal

Energy, resource efficiency, and chemical and waste management interventions for industry in Senegal have not always been gender-neutral. The **increased participation and representation of women in the industrial sector** is considered highly advantageous. The Senegal project actively identifies women and qualified female personnel to take part in its activities, however women's involvement in the industrial sector has been marginal, both at the institutional and enterprise level. The child project tackles these challenges by targeting the participation of at least 30 percent of women in capacity development and other events, which is achieved most of the time. Also for the project, **tools and strategies are developed in a gender-sensitive manner**. One of the two main focal points at the Bureau de Mise à Niveau (BMN), responsible for focusing on business upgrading in Senegal, is a woman, as are focal points at the Agency for the Development and Promotion of Industrial Sites (APROSI). It should also be noted that two focal points of the project, among the four companies that were the subject of a preliminary Resource Efficient and Cleaner Production assessment, are women.

The implementation of the Senegal child project includes several gender aspects built into its activities: **collection of gender-disaggregated baseline data; in-depth gender analysis of country, regional, and sector contexts; mapping of partners, counterparts, and stakeholders; identifying gender focal points, women leadership and/or gender policies and strategies; and inclusion of gender perspectives in the communication strategy/activities**. An emerging lesson for the Senegal project is that gender dimensions need to be considered during the entire project cycle – from design and implementation to monitoring and evaluation. Supporting and advancing coherent and effective gender mainstreaming in the project started early during the project preparatory phase. A preliminary gender analysis of the country context and a preliminary gender assessment project were conducted and the project design was informed of the key gender dimensions in its interventions. This lesson learned from this project will be scaled-up in UNIDO's projects in Senegal, as well as to other national and local contexts.

New guidance material has become available to mainstream gender in city development that will be useful during future iterations of the Sustainable Cities program. Documents such as the World Bank's Handbook for Gender-Inclusive Urban Planning and Design can be used to inform more inclusive implementation processes.

PRINCIPLE 8: INTEGRATING SYSTEMS RESILIENCE

1. RESILIENCE CONSIDERATIONS ACROSS THE PROGRAM

Urban resilience describes the ability of cities, under the impact of shocks and stresses, to continue to function so that the people who live and work there— especially the poor and the vulnerable— survive and prosper. The notion of resilience has helped to bridge the gap between traditional risk reduction policies and those of adaptation to climate change. It goes beyond traditional management, based on specific risk assessments, and accepts the possibility that various disruptive events, including massive migrations, may occur but are not necessarily predictable. Resilience focuses on improving a city's performance against multiple hazards, rather than preventing or mitigating asset loss due to specific events.

Since the Sustainable Cities IAP was designed and the PFD was submitted to the GEF in 2015, climate change and necessary **climate resilience actions** such as resilience to **urban flooding** have become even more critical and important considerations in seeking global environmental benefits. There is significant potential for metropolitan integrated planning to be carried out so that the various decarbonization and deep resilience-building initiatives can be incorporated more systematically and more consistently into city development processes. However, resilience in urban settings should be considered in a broader sense—such as considering resilience to shocks such as the recent COVID-19 pandemic and its socio-economic effects on cities.

2. EMERGING LESSONS ON RESILIENCE - CASE STUDIES FROM PROJECTS

Urban resilience encompasses a wide range of integrated and sustainable development aspects, such as: communities (social networks, livelihoods); infrastructure (buildings, roads, bridges); energy systems (transmission networks, reliable sources); municipal services (water supply, sanitation, healthcare); businesses/industry (jobs); and environment (natural resources, green space). GPSC and the country child projects have ingrained different forms of resilience into their projects.

GPSC

While the global platform has not specifically focused on resilience, the concept has been ingrained as an emphasis in each of its three pillars of knowledge (integrated urban planning and management, municipal finance, and sustainability indicators and tools). In terms of how resilience is incorporated into the planning pillar, an example is how climate resilience principles are integrated into cities' plans and social resilience principles are ingrained in affordable housing activities. Fiscal resilience is a critical aspect conveyed through all work in the municipal finance pillar. Guidance to cities as to how to measure resilience is conveyed through GPSC's work with sustainability indicators and tools, as explained in the first example below.

Urban Sustainability Framework

The Urban Sustainability Framework (USF) was developed by GPSC to guide cities through the steps of how to develop sustainability initiatives and track their progress through a system of indicators. Of the six dimensions of sustainability, the USF's third dimension focuses on resilience and

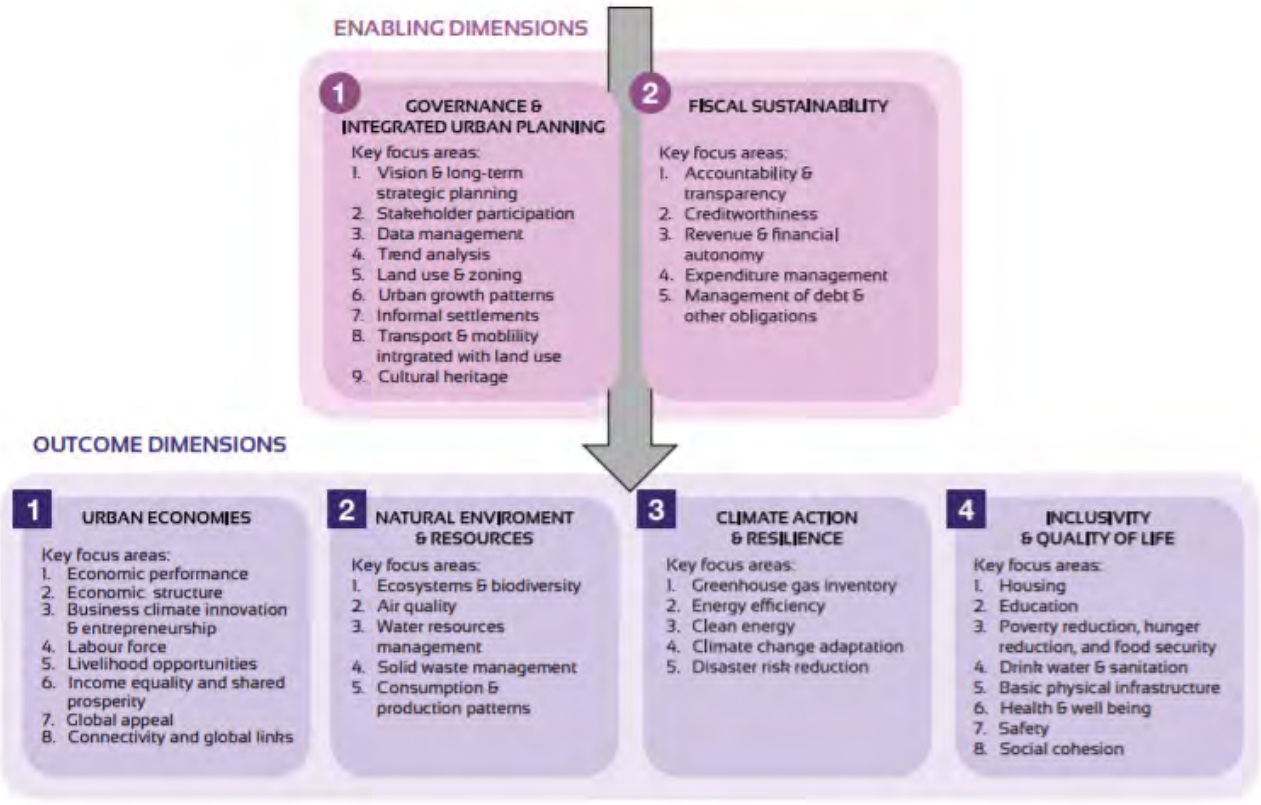
includes five focus areas and 18 indicators (Figure 5). A fundamental urban sustainability concept is that cities must be resilient in their planning, have financial resilience, and be able to measure what resilience means in their own context. The USF has also formed the basis of GPSC's benchmarking framework for cities, of which resilience similarly plays an important role. The benchmarking was first carried out as a pilot for the Malaysia child project.

Senegal

The child project aims to improve stormwater drainage and flood prevention in peri-urban Dakar for the benefit of local residents by improving capacity to plan and implement sustainable city management practices, including climate resilience. A national strategy for integrated urban management and planning addressing flood prevention and climate change impacts has been validated by the project technical committee and adopted by the National Urban Committee under the leadership of the Urban Ministry. The project is expected to develop and adopt tools related to urban resilience, including climate change. At the same time, the project provides training to key stakeholders in flood risk management, urban climate change resilience, and territorial planning. The GEF investment promotes the integration of climate risks in urban planning in addition to the World Bank lending supporting drainage infrastructure and community engagement in urban flood-risk reduction.

Senegal's child project component, led by UNIDO, addresses existing environment and waste issues of industries and cities. The project has conducted the environmental and resilience mapping of greater

FIGURE 5: DIMENSIONS AND KEY FOCUS AREAS OF MEASURING FRAMEWORK



Dakar's existing industries and is identifying prospective target enterprises with opportunities for improvements on resource efficiency and reduced emissions of GHG, hazardous waste, and POPs. To improve the environmental impact of firms that currently operate or will be operating in the industrial park, training sessions are offered on the topic such as GHG emissions, renewable energy, energy efficiency, eco-industrial parks, environmental impact and industrial pollution and support to improve their processes to reduce their environmental impact. In addition, UNIDO has prepared a detailed environmental and social management plan to manage climate change related risks.

Viet Nam

The **Viet Nam** child project is jointly supported by the GEF-6 grant and the **Special Climate Change Fund (SCCF)** to apply resilience components. Many activities have been co-implemented, and many outputs and outcomes will contribute to both the Sustainable Cities IAP and SCCF goals. The GEF-6 grant is linked with the Secondary Green Cities Development Project, implemented by the ADB.

The project aims to mainstream climate change mitigation, resilience, and environmental protection into integrated urban planning in secondary cities in Viet Nam. Three pilot cities (Hue, Ha Giang, and Vinh Yen) have developed Green City Action Plans (GCAP) which include resilience aspects with a climate vulnerability assessment along with an indicator and monitoring framework. In later stages of implementation, the methods will be replicated in six other cities. To demonstrate good examples of climate resilient development, the project will pilot an insurance mechanism for Disaster Risk Financing (DRF) in Hue city and showcase investment in low-impact, low-carbon development with smart lighting systems in Ha Giang City.

South Africa

The South Africa child project is still in the early stage of implementation, but the project has the goal of achieving a more resilient Johannesburg with a lower carbon-consuming infrastructure. Each project component seeks to integrate resilience considerations. The city is developing eco-district models as tools that will test various climate resilience pathways to reduce carbon emissions. This is directly related to the city's climate action plan which outlines key activities/interventions to reduce its carbon emissions and respond to climate adaptation and mitigation. The eco district modelling will provide development and design guidelines to improve Johannesburg's built environment efficiencies within buildings and precincts. A **Social housing** component will create sustainable and resilient human settlements addressing energy and water consumption, stormwater and green space management, and household waste separation, and will promote the use of recycled materials which results in comfortable, safe and healthy living environments as well as being affordable for investors and tenants. In line with Johannesburg's Social Food Resilience Program, an **urban food security** component will pilot urban farming to improve food quality, affordability, financial and environmental sustainability, and gender equality.

Strategic and timely resilience topics, such as the ongoing COVID-19 pandemic, will be closely watched and adapted to in terms of program operations and will also be considered within forthcoming knowledge products and capacity development training curriculum for the IAP.

PRINCIPLE 9: KNOWLEDGE MANAGEMENT AND LEARNING

1. TOOLS AND TECHNIQUES TO GENERATE, CAPTURE AND DISSEMINATE KNOWLEDGE DURING IMPLEMENTATION

The Sustainable Cities IAP integrates a broad range of key knowledge management and learning strategies to promote integrated approaches to urban sustainability. As of October 2020, the project has held more than **446 events and capacity development workshops, created 490 knowledge products, and published 83 program documents**. 10,117 beneficiaries have benefited from training events, not including the China child project's 4,075 person-days of training attended. A selection of opportunities, constraints, and lessons learned have been collected from the child projects in the summaries that follow. These range from how GPSC strategizes and organizes knowledge and activities, along with how individual child projects better achieve their objectives. As GEF's Independent Evaluation Office found in their *Formative Review of the Integrated Approach Pilot Programs*, "IAPs demonstrate interesting, innovative features, including emphasis on knowledge exchange through dedicated platforms for collaborative learning."

Common approaches that are becoming apparent include the development of national platforms in order to disseminate project information to each child projects' cities and beyond to more stakeholders. Senegal is an example child project that has developed a national web-based National Platform for Sustainable Cities in Senegal to facilitate information exchange and knowledge sharing. The GPSC and Paraguay experience has shown the possible value in country-level knowledge focal points to increase knowledge retainment and transfer due to the different contexts in which each country child project operates and the natural change-over of staff. Another approach becoming apparent across the child projects is the utilization of different types of tools to inform the outputs of various project activities. Mexico's child project, for example, is considering the implementation of a blockchain tool, in what would become an important first for the country.

Overall, the knowledge management and learning aspects of the Sustainable Cities IAP have been a success in demonstrating how individual projects can combine their development experiences and build their capacities together. The pilot is perhaps the first international development project linking multi-focal urban strategy and knowledge with a network of local investment projects. Forming a coalition of projects aligned on a complex topic such as urban development is a challenging task. If the approach can build upon the pilot stage and be fine-tuned in later iterations, it can reap even larger rewards.

2. OPPORTUNITIES AND CHALLENGES FACED IN ADVANCING KNOWLEDGE AND LEARNING

The Sustainable Cities IAP so far has presented the following opportunities and challenges related to knowledge management and learning: (i) the broad range of child project activities; (ii) global reach of the Sustainable Cities IAP's country child projects and potential for regional clustering; (iii) investment in child project funding for participation in global activities, knowledge architecture, and the potential for a national knowledge focal point; (iv) closely link the different scales of national platforms and the global initiatives; (v) differences in project start and end dates; and (vi) longer-term schedule of knowledge management and learning activities.

Further information regarding these opportunities and challenges follows.

Broad range of child project activities

Since the Sustainable Cities IAP's country child projects were conceived before the formulation of the GPSC, the city activities were not aligned specifically into consolidated thematic areas. The GPSC publication *Catalyzing Solutions for Sustainable Cities* has clustered those child project activities into the following broad areas: (i) ecosystems and biodiversity; (ii) green industries; (iii) low-carbon technology; (iv) national platform; (v) solid waste management; (vi) urban mobility; and (vii) urban sustainability planning. While the breadth of the child project activities presents an opportunity to cover a large majority of the world's city development topics, future iterations of the program may consider whether consolidating the range of topics to focus on key drivers and multi-sectorial integrated approaches would have greater implementation efficiency and results impact. This breadth affects the ways in which knowledge management and learning activities are carried out.

Because of the scope of the Sustainable Cities IAP, it has not been possible to offer training and support in all of the thematic areas. Having a critical mass of participants at certain technical skill levels for topics has been a challenge. GPSC has focused its activities on three knowledge pillars (planning, financing, and measuring) which are foundationally important to the development of sustainable cities. These three pillars have individual focal areas that are relevant in different ways to the IAP's cities and beyond. One example is the integrative approach of TOD (the combination of land use planning, transport planning, and land value capture), which is a specific focus of the China child project and included in several other child projects. Importantly beyond those selected child projects, the topic has received strong interest and relevance to a majority of GPSC's cities—and a wider group of cities—in terms of knowledge demand and attendance at GPSC's themed events.

Global reach of the Sustainable Cities IAP's country child projects

Diversity of geographical contexts and development trajectories has presented a strong benefit for knowledge. At the same time, this diversity has presented operational challenges in how GPSC and the Resource Team have organized learning activities. One example is the Singapore City Academy held in November 2018 which focused upon Climate Action Planning and TOD over two days of presentations, discussions, and site visits. The 23 city and national participants attending from around the world were generally a good interactive class size for the capacity development event. However, due to the relatively long travel distance for some participants and the diversity of languages, lessons were learned in terms of interpretation cost effectiveness and how to balance the length of the event with the travel time. Such examples have encouraged the organization of a geographical range of events: global events, such as the Global Meetings which are organized on average every one and a half to two years; regional workshops and city academies focusing on topics in a contextual setting; and more localized country-level activities focusing on local participants traveling a short distance. Another lesson has been to plan events as far in advance as possible, so that participants can choose to attend similar events on the schedule which might be geographically closer or more relevant to their cities or technical backgrounds.

To further operationalize the global knowledge and learning benefits of future iterations of the Sustainable Cities program, **regional clustering** for capacity building should be considered for some activities. Clustering opportunities for cities can be effective for knowledge exchange since regional languages are more common and cities share a similar cultural context. The Resource Team for instance found that capacity building events were costly given the mix of participants and number of interpreted languages required. The higher the number of languages needing interpretation,

the greater reduction in the chance of meaningful dialogue and knowledge exchange, as participants cannot freely communicate between each other and messages may be lost in interpretation. Having some events be focused as regional exchanges should be considered in order to have deeper and more relevant participant interaction, such as was done for some of the city academies which were held at the GPSC's 3rd Global Meeting in Brazil.

Investment in child project funding for participation in global activities and knowledge architecture

Since child projects were conceived before GPSC or the Resource Team was formulated, some projects did not have sufficient grant resources set aside to participate in platform activities. For instance, ADB has highlighted that the technical assistance project funded by the GEF grant does not have a special exemption from the implementing agency's standard expenditure rules which prohibit funding travel of developing member country officials to non-member countries. This became an issue for the Vietnamese child project's participation in the 3rd GPSC Global Meeting, which was held in Brazil. A lesson has been that if the program design process and the budget and financial management limitations could have been foreseen earlier, some child projects would potentially be able to participate more in the platform activities.

Generating linkage between national knowledge focal points and national platforms in global level

In terms of how knowledge gained at platform events can be better taken back and disseminated within the country project and its cities, an emerging lesson is that a **national knowledge focal point** for the IAP may be worth considering institutionalizing in future Sustainable Cities programs. This person would actively participate in the platform's determination of knowledge demand on topics and the conceptualization of events for both national and city-level participants. By having a country focal point who is involved in this process, they could also advise their administrations about who would be the best representative to attend events, the optimal technical depth of knowledge to be conveyed, and after the event ensure that knowledge is disseminated to applicable departments and colleagues. Importantly, this focal point would not be a staff member of the implementing agency so as to take local ownership of the knowledge management and learning outcomes, however the role must operate in close coordination of the Implementing Agency staff.

Another consideration regarding knowledge architecture is how information at the global level is relayed to national platforms, and vice versa. Further consideration in the design of future programs may be able to more **closely link the different scales of national platforms and the global initiatives** to maximize knowledge transfer. For further analysis on this linkage, please refer to the GEF's IAP paper, which focuses on program governance.

Long-term strategy for knowledge management and learning activities in program level

The **differences in project start and end dates** has also impacted the knowledge management and learning activities. This impact is expected to increase as projects begin to complete. GPSC became operational in early 2017, however some child projects had not commenced their full activities yet. Similarly, as projects complete their activities, the country-level administrative infrastructure and budget may not be available for them to continue participation in global events. This will mean that participation in global activities will likely gradually diminish and the full duration of program additionality was not optimized. In future program iterations, creating a method to harmonize IAP project schedules as much as possible would greatly benefit the effectiveness of knowledge management and learning activities.

A result of the challenges that have been mentioned is the unpredictability of the IAP's knowledge management and learning schedule for activities. These challenges include the complexities of gathering participants on topics, ensuring country child project participants have travel funding, and event operational logistics. Because of these challenges, planning a concrete, long-term knowledge management and learning schedule has not been possible. While COVID-19 has also unexpectedly impacted events world-wide, the child projects have adjusted their methods where possible to mitigate the impact of the pandemic. GPSC has for instance created a global online series titled "Building Back Better: Green, Healthy, and Inclusive Cities". The weekly series brings together a diverse set of stakeholders on a range of topics relevant to cities' recoveries. Regardless of the pandemic, being able to provide a **longer-term schedule of knowledge management and learning activities** for the Sustainable Cities IAP would greatly improve its knowledge management and learning effectiveness and operational efficiency.

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ANNEX
PROJECT SUMMARIES

GLOBAL PLATFORM FOR SUSTAINABLE CITIES

- ***Child project title:*** *Sustainable Cities Integrative Approach Pilot – Global Platform for Sustainable Cities*
- ***GEF grant:*** *$10 million/ Co-financing $5 million*
- ***Implementing agency:*** *The World Bank*

PROJECT FOCUS

Objective: To promote integrated planning and investments related to urban sustainability that result in environmental, social, and economic benefits at the local and global scales.

Components*:* The child project forms the Global Platform for Sustainable Cities (GPSC) which is the overall global knowledge and strategy coordinator of the GEF-6 Sustainable Cities Integrated Approach Pilot (IAP). The key components of the project are as follows:

- **Integrated urban planning** – Increase the scope and depth of knowledge and capacity for measuring urban sustainability and integrated planning. This includes elements such as: data, sustainability indicators, and tools; planning tools; thematic learning and integration; and engaging partners.
- **Urban finance** – Increasing knowledge on building financial capacity for urban sustainability.
- **Knowledge management platform** – Enhanced connectivity and partnership for sustainable cities at local, national, and global levels.

GPSC is a knowledge platform managed by the World Bank's Global Practice for Urban, Disaster Risk Management, Resilience and Land (GPURL) that functions as the Lead Agency for the Sustainable Cities IAP and coordinates global strategy and engagement through the network. To achieve the project's objective, GPSC enables partnerships and provides knowledge support to cities. This is accomplished through a matrix approach, weaving together three central pillars to urban sustainability—planning, financing, and measuring – together with cross-cutting activities to operationalize the knowledge. A diagram of the matrix is shown within the main document's Figure 3, with GPSC's knowledge focal areas listed within each pillar.

GPSC holds regular agency calls with the Sustainable Cities IAP implementing agencies and key partners to discuss the needs of cities, activity proposals, and coordinate ongoing work and activities. Importantly, the program has not made assumptions about what support cities need to develop sustainably. Instead, GPSC has convened regular dialogues within the network and conducts needs assessments with cities to inform the development of knowledge products and targeted support. This has ensured the platform's efforts are demand-driven and that the right partners are involved.

The platform plans and implements its activities through different sized dissemination methods—large to small – which are strategized to offer a range of opportunities for participation and capture different audiences' interests. GPSC plans its activities sequentially, starting with producing the demand-driven knowledge products, which then lead to capacity development training events, or direct expert support for client cities and other constituent stakeholders. An example of this is the *Transit-oriented Development Implementation Resources and Tools, 2nd Edition* (GPSC, World Bank 2021) knowledge product and website, rolled-out in several city academies, which has also facilitated the sharing of experiences between China (where the topic is more

widely developed) and Latin America. The knowledge product also functions as a guidebook for World Bank operations on the topic.

An overview of GPSC's activities framework, including examples of the different activities, is shown in the main document's Figure 4.

CURRENT IMPLEMENTATION STATUS

Since becoming operational in early 2017, GPSC has developed a strong public brand by convening a wide network of partners and producing a sizeable amount of knowledge tied to capacity development activities. The program maintains the following four advantages: global branding, important partnership network, broad knowledge coverage, wide knowledge dissemination.

Moving forward, GPSC will continue its existing knowledge coverage and its support toward cities, while adding to focus areas. The following topics and activities are ongoing:

Greening Cities: Urban Biodiversity, Natural Capital Accounting and Nature-based Solutions

The global climate change dialogue is now emphasizing the importance of biological diversity while building up to the Convention on Biological Diversity's 15th Conference of Parties (COP15) in Kunming, China. In the context of cities, GPSC is taking a leadership role promoting this area as an important aspect of sustainability, together with the assessment of cities' natural capital and implementation of urban nature-based solutions. GPSC will continue to support cities through knowledge products in this area, such as *Natural Asset and Biodiversity Valuation in Cities*, and work with groups such as the World Bank's Nature-Based Solutions Community of Practice.

Climate-Smart Cities

Low carbon and carbon neutrality are increasingly critical topics in the urban climate change agenda and GPSC has noticed an increase in their cities' interest.

Urban Design and Placemaking

Creating cities that are livable is a large component of sustainability. This new focus will provide cities with knowledge and tools to increase their spatial relationship with residents. More information is available at the Urbanscapes Community on the GPSC website.

Transit-Oriented Development

Urban design and transit-oriented development (TOD) are closely interlinked as strategies that can reduce cities' carbon footprint and boost quality of life. GPSC's *Transit-oriented Development Implementation Resources and Tools* is a guidebook that lays out a framework for TOD projects and provides a cohesive industry-leading survey of the existing work which has been done around the world. Paired with TOD strategies, GPSC cities are interested in creating urban spaces and places that can serve as catalysts to improve their productivity, livability, and inclusion.

Affordable Housing

Housing is the most prevalent built-up land use and is fundamental to ensuring cities are inclusive, safe, resilient, and sustainable. GPSC and the World Bank created two knowledge products, a *Knowledge Note on Public-private Partnerships for Affordable Housing in Emerging Markets,* and an *Urban Land and Housing Market Assessment Toolkit.*

Solid Waste Management

GPSC has supported the World Bank's South Asia Region urban unit to conduct a rapid assessment of the solid waste management (SWM) status of several states in India; organize a conference; and to develop proposals of how the assessed states can be further assisted. SWM is an important urban sustainability area for which many GPSC cities need additional support.

GPSC's next Global Meeting was rescheduled from May 2021 to 2022 due to the COVID-19 pandemic. Unfortunately due to COVID-19 many of GPSC's event activities have been postponed, including: a Technical Deep Dive in Paris, France on the topic of Greening Cities; an event at the IUCN World Conservation Congress is Marseille, France with IUCN Europe and the French Ministry of Ecology; and an event at the Convention on Biological Diversity's COP 15 in Kunming, China.

EMERGING PROJECT DESIGN AND IMPLEMENTATION LESSONS LEARNED

The following key lessons have been learned to date:

Better alignment of the two program tracks

Since the country child projects were conceived before the GPSC was initiated, the city-level component activities were not fully aligned with comprehensive development objectives to deliver outcomes as one integrated program through a global platform. Due to GPSC not being fully envisioned while the country child projects were budgeting their resources, sufficient funds were not allocated by them to participate in the global activities.

Early engagement in project design

In future iterations of the program, the global platform is recommended to be involved early in the design of the city-level components, so that the programming and learning interests of cities will be better aligned to increase accessibility and effectiveness.

Consolidation of the broad range of city-level project activities

While the breadth of the child project activities present an opportunity in that they cover a large majority of the world's city development topics, this also presents a challenge to align the activities in terms of strategies and approaches. Future iterations of the program may consider whether consolidating the range of topics to focus on key drivers and multi-sectorial integrated approaches would have greater implementation efficiency and results impact.

Investment in the program architecture

A two-track program, operating globally in terms of knowledge and strategy and locally with child projects in cities, requires significant technical expertise and an investment in a long-term program architecture.

RESOURCE TEAM

- ***Medium-size project title:*** *Urban Networking to Complement and Extend the Reach of the Sustainable Cities Integrated Approach Pilot*
- ***GEF grant:*** *$2 million/Co-financing $2 million*
- ***Implementing agency:*** *World Bank*
- ***Grantee:*** *World Resources Institute*
- ***Sub-grantees:*** *C40 and ICLEI*

PROJECT FOCUS

Objective: To strengthen GPSC for more integrated and sustainable urban planning and development through city-to-city and network knowledge sharing.

Components: Through a collaborative effort by key technical partners and city networks, and in conjunction with GPSC's activities, the Resource Team (RT) enables wider access to other knowledge platforms, promotes peer-to-peer learning opportunities (webinars, one-on-one meetings, workshops, study tours), and facilitates access to a diverse range of good practices and other cities with relevant experience. The following project components support the RT:

- **City Access Point to Resource Team Services**: Identification of peer-to-peer exchange and learning opportunities by the city networks which have presence and useful practical experiences in areas of work addressed by the child projects in the cities. This includes connecting cities to existing sources of technical knowledge, creating a space for them to engage with other organizations with relevant knowledge, and facilitating opportunities for knowledge sharing which feed into exchanges, learning activities, and online knowledge dissemination. The Resource Team also facilitates peer-to-peer exchanges between the SC-IAP cities and other cities in their respective networks.
- **Learning Events, Webinars and Linkages to Global Events**: Promotion of GPSC's work, including sharing its knowledge and experience in events of the network/partner organizations, as well as participation in GPSC global events. The Resource Team links its activities to other global initiatives to promote the platform and the Sustainable Cities IAP.
- **Knowledge Management and Documentation**: Supporting the GPSC web platform with knowledge and learning materials that link the SC-IAP cities with others. The Resource Team captures knowledge from their activities and lessons learned, addressing topics identified by the IAP cities, among the stakeholders to encourage sharing, also beyond the core group. This component includes developing processes to document peer-to-peer exchanges and translating key knowledge documents to different languages to widen the audience. The Resource Team's contributed materials are also shared on the GPSC website along with announcing events and networking opportunities.

CURRENT IMPLEMENTATION STATUS[8]

The RT has delivered a wide range of knowledge products, global events, capacity development activities, and knowledge translation and dissemination. A summary of these activities is found below. Information regarding the activities has also been uploaded to the GPSC website's Knowledge Resources and Events pages.

Based on the more in-depth trainings provided through the city academies or peer-to-peer exchanges, the RT has meaningfully and substantively engaged 20 IAP cities and 42 non-IAP cities on integrated approaches to sustainable urban planning and management. The paragraphs that follow describe the achievements component by component.

Component 1: Sustainability Survey and Capacity Development Plan for Peer-to-Peer Exchanges

The RT carried out a sustainability survey, known as the Sustainable Urban Development Assessment, in 23 IAP cities (the number of cities originally included in the initial program) and created a baseline on integrated planning in these cities through desk research and interviews. These assessments also took stock of what planning instruments IAP cities had been using to advance sustainability and is a useful diagnostic to set baselines and track progress amongst the 23 cities. Findings from this assessment will inform and be utilized by the GEF-7 Sustainable Cities Impact Program. The peer-to-peer exchanges provided knowledge and networking opportunities among cities. The RT organized nine peer exchanges that fostered participation from 54 cities, namely 14 IAP and 40 non-IAP cities around topics such as air quality, sustainability, innovation, urban finance, TOD, and low emissions zones. Over 175 participants benefitted from peer-to-peer exchanges. Asuncion, for example, through the peer-to-peer experience in Mexico City, learned necessary technical information about the type of air quality monitoring unit they should procure; while Lima, through its experience participating in the Washington, DC peer-to-peer exchange, was inspired by presentations about urban regeneration practices. The independent evaluation of the RT's work found that: "Peer exchanges were consistently highlighted in the individual city interviews, on a personal level, as the most memorable and valuable activity in the RT project."

Component 2: Learning Events, Webinars, and Linkages to Global Events

The largest learning events organized by the RT consisted of multi-day training opportunities in Singapore and Sao Paulo that focused on TOD and climate action planning, respectively, where cohorts of 10+ cities learned from experts, peers, and case studies. City officials completed exercises and drafted concrete action plans on how they would apply knowledge from the city academies in their cities. Over 17 cities and approximately 40 city officials engaged in the city academies. While the academies provided depth of knowledge for GPSC city officials, the webinars, hosted by the RT, engaged a wider audience and provided consistent, light-touch technical content on a variety of topics pertaining to integrated, sustainable urban development during the 30-month project period. In total, the RT organized 22 webinars and engaged 1,281 people from 75 countries and over 300 cities. Under this component, the RT also hosted three promotional and 11 side events at global forums to advance the sustainable urban agenda and build awareness around the importance of integrated, sustainable urban planning in delivering global environmental benefits.

Component 3: Knowledge Management and Documentation

The RT produced eight new knowledge products, 39 translations of existing knowledge products, and curated 170 existing knowledge products that were published on the GPSC web platform and disseminated widely. Of the eight new knowledge products, WRI produced four case studies on integrated planning at the metropolitan scale in the Global South, including Bangalore, Mexico City, Recife, and Shenzhen. ICLEI produced two

8 The Resource Team's medium-sized project has completed and was closed in October 2020.

knowledge products about the value of using notation keys in city scale and GHG accounting and a case study on Brasilia focused on successful local government fundraising and project pitching. While not initially planned as part of C40 deliverables, due to the impact of COVID-19 in the project implementation, C40 was able to reallocate some financial resources and produced two knowledge products. One focused on how to integrate climate adaptation using urban planning approaches and a second focused on how cities can prioritize climate action based on integrated set of criteria. In addition to the new knowledge products mentioned, the RT selected, organized, and translated existing information, such as frameworks, methodologies, safeguards assessment, reports, and working papers that were shared on the GPSC website.

EMERGING PROJECT DESIGN AND IMPLEMENTATION LESSONS LEARNED

Child projects and RT should assign city-level focal points for efficient implementation, consistent communication, and capacity development

The absence of a city- level contact familiar with the child project and RT activities, as well as with local conditions and the overall city sustainable development approach, provided many challenges for the RT related to project implementation. Coordination and consultation to interview appropriate city officials about sustainable urban planning and its relevance to the child project activities, as part of the SUDAs, was challenging. Identifying appropriate city decision makers to attend RT events (peer exchanges, side events, city academies, and webinars) resulted in substantial efforts just to track down potential attendees, which, in some cases, also required approval from the implementing agencies. While it may not always be possible, it is desirable to have a cohort of child project beneficiaries (focal points) who can provide reliable and timely communication and information, who can consistently participate in program's capacity building opportunities and events and allow the team to gather project updates which can shape trainings, while building more technical capacity within an individual and across a project team. On the other hand, having a clearly defined, unique focal point from the RT to coordinate activities with each of the cities (or groups of cities) can also help for smoother project implementation.

Ensure buy-in from implementing agencies and allocation of resources for city participation

One of the setbacks encountered by the RT was limited funding to send city-level beneficiaries to peer exchanges, city academies, and side or promotional events. Although the RT reassigned budget to cover participation from the child project cities, it was not always easy to identify relevant participants or the available resources did not always keep up with demand. To address this problem, child projects should earmark resources to participate in global platform capacity building activities and exchanges.

Early roll out of city needs assessments

It is expected that with the appointment of city focal points from the RT and child projects, the completion of the city needs assessments will take place at an earlier stage of the project. This will allow findings from the assessments to inform the RT project in several ways including targeted thematic focus for trainings; clustering of cities around identified needs, opportunities, and synergies; establishing key interventions at the national, regional, and local scales; and connecting child projects with appropriate external partnerships and available resources.

Dedicate sufficient resources for different language needs

Addressing different language needs was part of the original RT plan. Several knowledge products were translated, simultaneous interpretation was included in many of the RT events, and a few webinars were hosted in languages other than English, such as Spanish and French. Nonetheless, it was evident that the program could reach a greater audience if more resources were dedicated to translation of existing and new material into all of the child project local languages. This may have increased uptake of workshop and

training materials and online resources, and potentially improved general outreach and communication between the RT and project beneficiaries.

Expand the definition of client

Initial emphasis by the RT to engage city-level staff working on the child project met with several setbacks, as the child projects were often delayed, and project teams were not established. A planned peer exchange to cover waste management in India was cancelled after discussions with the implementing agency revealed the child project was significantly delayed. Taking a broader approach to define the client and intended audience for capacity building activities—considering the local governments as the client—allowed the RT to go ahead with key activities despite the implementation delays in child projects. Having technical staff from participating cities as the intended audience for the trainings also increases the sustainability of the project, as such staff tend to be more permanent than staff hired for child project implementation, leading to a more sustainable approach to embed knowledge in the local government.

Find the right balance between breadth and depth of capacity building engagements with cities

Providing multiple training opportunities, around a variety of topics to a large group of cities poses the risk of not being deep enough in the training approach and lacking resources to follow up. The RT's approach was to provide multiple opportunities to explore certain topics central to child projects (such as climate action planning, transit-oriented development, and finance), but without creating a full and cohesive program (a menu of trainings) for cities to choose from at the beginning of project implementation. Having a coherent and planned calendar of training opportunities and events would have allowed cities to plan their participation in advance.

Cluster capacity building activities regionally

Clustering opportunities for cities can be effective for knowledge exchange since regional languages are more streamlined and cities share a similar cultural context. The RT found that global and capacity building events were costly given the number of interpretation languages required. The higher the number of languages, the lower the chance of meaningful dialogue and knowledge exchange, as participants could not freely communicate between each other, and messages could be lost with interpretation. Alternatively, having regional exchanges, events, and webinars seems to be a good, cost-effective approach, in order to have deeper and more relevant conversations.

Integrate webinars with the rest of the capacity building offer

Webinars provide an excellent opportunity for training and experience exchange, and were intended to add value to the thematic breadth provided by the RT. Where trainings on a specific topic were not always an option, webinars filled some of the gaps. The RT leveraged this flexibility also using webinars to respond to city requests. On the other hand, offering webinars as part of a cohesive capacity building curriculum would connect that content with broader topics, and make these more meaningful while simultaneously providing opportunities to increase attendance. Thinking more strategically about the delivery of webinars based on time zone and language might also increase engagement of local officials.

Expand program through strategic global advocacy and connect with global frameworks

From the pilot, it became clear that the RT program should dedicate more efforts to focus on strategic global advocacy, instead of ad hoc promotion, to ensure strengthened messaging, to better utilize resources, and ultimately connect the GPSC and child projects with other global frameworks and partnerships, such as United Nations Framework Convention on Climate Change and United Nations Convention on Biodiversity. Under the Sustainable Cities Impact Program, the Resource Team will build out a robust advocacy plan that will target specific events to elevate and spotlight the multi- dimensional themes within the Impact Program and child projects, bringing the program to a broader audience.

BRAZIL

- ***Child project title:*** *Promoting Sustainable Cities in Brazil through Integrated Urban Planning and Innovative Technologies Investment*
- ***Cities:*** *Brasilia and Recife*
- ***GEF grant:*** *$25 million/ Co-financing $195 million*
- ***Implementing agency:*** *United Nations Environment Programme*
- ***Global Environmental Benefits***: Direct reduction of 3.8 million metric tons of CO_2 emissions

PROJECT FOCUS

Objective: Promote sustainability in Brazilian cities through integrated urban planning and innovative technologies.

Components: The project focuses on the integration of urban technologies with land use to foster sustainable development and build climate resilience. The project includes the following key components:

- **Develop a National Knowledge Platform** to help over 300 Brazilian cities build institutional capacity and ambition in addressing SDGs.
- **Promote integrated urban planning**, with an aim to reduce energy and water insecurity, build climate resilience, and institutionalize evidence-based climate change policies.
- **Demonstrate green technologies in pilot projects**, including testing the efficacy of filtering gardens in Recife, analyzing the financial and technical viability of solar-powered boats in Recife, and testing phytoremediation for soil remediation in Brasilia.

CURRENT IMPLEMENTATION STATUS

The project is almost at its halfway point of its four-year duration. Under the leadership of the Brazilian Ministry of Science, Technology, and Innovation, the four executing partners are advancing in project execution.

In Brasilia, the Government of the Federal District has made progress piloting innovative technologies to support the preservation of the Paranoá and Descoberto Basins, which provide water supply for more than 80 percent of the district's population. Other activities include: implementing mechanized agroforestry systems, which have benefited more than 30 family farmers, including 50 percent women; completing studies on soil and ground water contamination of the Estrutural rubbish dump (once the largest open rubbish dumps in Latin America) to inform the design of phyto-remediation pilots; and implementing the District Environmental Information System (SISDIA) to facilitate integrated urban planning for the city's sustainable development.

In Recife, the Recife Agency for Innovation and Strategy (the local executing partner) has undertaken extensive community consultations to identify the location of the solar boat pilot which will benefit local low-income communities by improving mobility while reducing GHG emissions. Consultations were also performed to inform the restoration of two stretches of the Capibaribe riverbank. Some works will pilot increased resilience, improved water quality, and enhanced city livability. Work to install the boat and the boat stations, and undertake the riverbank restoration will commence in early 2021. The agency has also progressed in its support of the city's development and refinement of its urban masterplan, and development of supporting planning platform.

In late 2019, the Sustainable Cities Program (PCS) and the Centre for Strategic Studies and Management launched the beta versions of the Sustainable City Innovation Observatory and Sustainable Cities

Platform. Both platforms support the replication and scale-up of sustainable urban development in Brazil. The observatory disseminates innovative urban solutions to Brazilian cities, solutions that are contextual to the national territory through typologies of city-regions. The sustainable cities platform helps Brazilian cities monitor their progress to achieve local urban sustainability goals, aligned with the United Nations sustainable development goals, and develop more ambitious goals over time. Currently, 214 Brazilian municipalities are signatories to the Sustainable Cities Program, 14 of which are considered large, with more than 500,000 inhabitants. Another 44 are medium-sized municipalities (100,000 to 500,000 residents), while 156 are small (up to 100,000 inhabitants).

Brazil has also played an important role in the GPSC by hosting its 3rd Global Meeting in September 2019. The event was organized by the World Bank, the Sustainable Cities Program, and the host city of Sao Paulo. Almost 1,000 people participated in the week-long event which consisted of a Mayors' Roundtable, topical plenaries, city academy training sessions, and site visits.

EMERGING CHILD PROJECT DESIGN AND IMPLEMENTATION LESSONS LEARNED

In a project of such size and scale, involving stakeholders at the national, state, and local levels, and of different identities (e.g. public sector, private sector, academia, and civil society), the following key lessons have been learned to date:

Consultation ensures success

While effective consultation takes time, it is worth the effort to consult broadly and deeply, as this will lead to the implementation of interventions that will make a positive environmental, social, and economic impact for the cities and their local communities. In Recife, this lesson was observed through the local consultations regarding the location of the solar boat, which helped to define the boat's location and design, ensuring that it would have a positive impact on the lives of local low-income citizens. In Brasilia, the participation of women has been a major motivation for community involvement in plantations. Such participation has generated new methods and strategies of how the project team can further incorporate gender priorities into projects, such as developing plantation processes that consider women's availability and time.

Coordination is fundamental

With many actors involved across multiple geographic locations, coordination is key. Various management mechanisms need to be put in place to ensure effective coordination and communication, such as utilizing virtual online meetings. As an example, coordination between the Sustainable Cities Program and the Centre for Strategic Studies and Management has been fundamental in ensuring that the designed online platform and observatory speak to each other and build synergies, with the aim of developing an interface that responds to the needs of Brazilian cities.

CHINA

- ***Child project title:*** GEF China Sustainable Cities Integrated Approach Pilot
- ***Cities:*** *Beijing, Guiyang, Nanchang, Ningbo, Shenzhen, Shijiazhuang, and Tianjin*
- ***GEF grant:*** *$36 million/ Co-financing $1,084 million*
- ***Implementing agency:*** *The World Bank*
- ***Global Environmental Benefits***: Reduction of 62 million metric tons of CO_2 emissions directly and indirectly.

PROJECT FOCUS

Objective: Promoting sustainability in Chinese cities through integrated transit infrastructure and urban development.

Components: The project focuses on integrating transit infrastructure with urban development, complementing China's ambitious infrastructure goals – specifically, achieving a total of 6,000 km of urban rail infrastructure and 4,000 metro stations. The project comprises various scales:

- **A National TOD Platform**, which will develop a Chinese TOD toolkit that cities can use to evaluate their implementation readiness, assist in the design of relevant strategies, and evaluate the impact of those strategies.
- **City-level TOD strategies**, which will help cities develop their own TOD strategies, which will be reflected in city master and sectoral plans, zoning regulations, and urban design schemes.
- **Application of TOD principles at subdistrict, corridor, and station levels**, which will implement lessons learned from technical assistance activities and develop guidelines for improving multimodal connectivity and compact development.

CURRENT IMPLEMENTATION STATUS

Overall the project is making progress towards achieving its development objectives. In the initial years of implementation, the project experienced some delays in setting up the implementation arrangements as China was rolling out a nationwide reform of its government structure. In addition, the procurement of big consulting contracts is technically complicated and time-consuming. As of December 2020, the National TOD platform is up and running under the Ministry of Housing and Urban-rural Development. All seven cities have signed their first contract and the selected consultants have started working on the TOD strategies. The preparation of Terms of Reference documents (TORs) for subdistrict, corridor, and station level applications have been on track.

In terms of knowledge dissemination, the project has created a quarterly newsletter to document project implementation progress, share the latest TOD practices in China with client cities to improve their comprehension of industrial trends, new policies, and regulations at the national and local levels, as well as to present selected case studies of good TOD practices. The project has also organized three TOD capacity building workshops (2017 Shenzhen, 2018 Shanghai, and 2019 Beijing) and provided financial management and procurement training, besides other technical support, to project stakeholders.

EMERGING CHILD PROJECT DESIGN AND IMPLEMENTATION LESSONS LEARNED

The following two key lessons have been learned from the ongoing project:

Project buy-in

Importance of building a strong sense of project ownership and obtaining support of the project's initiatives from senior government leaders.

Knowledge and learning

Encourage peer-to-peer visits and knowledge exchange among the cities in order to share ideas and generate knowledge amongst the stakeholders.

CITY	ACTIVITY	DRAFT TOR	TOR	BIDDING ANNOUNCEMENT	SHORTLIST REVIEW	BID EVALUATION	CONTRACT NEGOTIATION	CONTRACT SIGNING	INCEPTION REPORT	INTERMEDIARY OUTPUT	MID-TERM REPORT	DRAFT FINAL REPORT	FINAL REPORT
MoHURD	National TOD Platform												
Beijing	City-level TOD Strategy												
	Corridor and Station-level TOD Application												
	District-level TOD Application												
Tianjin	City-level TOD Strategy												
	Research on Private Sector Engagement in TOD Financing												
	District-level TOD Application												
Shijiazhuang	City-level TOD Strategy												
	Corridor-level TOD Application												
	District and Station-level TOD Application												
Nanchang	City-level TOD Strategy												
	Corridor-level TOD Application												
	Station-level TOD Application												
Ningbo	City-level TOD Strategy												
	District-level TOD Application												
	District-level TOD Application												
	Station-level TOD Application												
Guiyang	City-level TOD Strategy												
	Corridor-level TOD Application												
	Corridor-level TOD Application												
	Strategic Environmental Assessment for Corridor-level TOD Application												
Shenzhen	City-level TOD Strategy												
	District and Station-level TOD Application												

CÔTE D'IVOIRE

- ***Child project title:*** Abidjan Integrated Sustainable Urban Planning and Management
- ***Cities:*** *Abidjan*
- ***GEF grant:*** *$6 million/ Co-financing $33 million*
- ***Implementing agency:*** *African Development Bank (AfDB) and United Nations Industrial Development Organization (UNIDO)*
- ***Global Environmental Benefits***: Reduction of 0.9 million metric tons of CO_2 emissions, and persistent organic pollutant (POP) reduction of 0.5g toxic equivalents (TEQ) over the life of the project.

PROJECT FOCUS

Objective: To enhance local capacity to assess and respond to environmental degradation through the application of integrated sustainable urban planning and management methods while encouraging the update of innovative lower carbon technologies to reduce greenhouse gas (GHG) emissions and improve air quality in the city of Abidjan.

Components: The project complements the master plan for the Greater Abidjan Region (Schéma Directeur de Grand Abidjan 2030), with a focus on building capacities and systems to tackle environmental degradation, climate change, and industrial pollution.

- Component 1: Improving urban planning and management (AfDB implemented).
- Component 2: Assessing and improving air quality (UNIDO and AfDB jointly implemented).
- Component 3: Sustainable Infrastructure and tools (AfDB implemented).
- Component 4: Knowledge Management Monitoring and Evaluation (UNIDO and AfDB jointly implemented)

The implementation and execution organigram of this jointly implemented project, shown in respect to UNIDO's activities, is shown in Figure 6.

CURRENT IMPLEMENTATION STATUS

UNIDO's project component commenced implementation in March 2017 and completed its Mid-term Review in February 2020. The project component has hosted key meetings and training sessions, conducted a framework assessment to guide the project, and is now in the process of procuring key monitoring equipment and drafting policies and guidelines.

The project hosted a roundtable in January 2019 on air quality attended by key stakeholders from the Côte d'Ivoire government and academic sectors. A study was performed on the legal, institutional, technical, and socio-economic feasibility of measures for reducing air emissions from industrial sources, which was developed and approved by all project stakeholders. The study in October 2019 entailed (i) an assessment of the current regulatory and institutional framework, including key recommendations to strengthen the framework, and (ii) a socio-economic study on the impacts of CO_2, POPs, and mercury emissions in Côte d'Ivoire.

In terms of capacity development, a technical training session was organized in January 2020 for the Centre Ivoirian Antipollution (CIAPOL) on the use of semi-mobile stations for air quality monitoring. Another such training was organized in May 2019 for CIAPOL on monitoring POPs emissions by using Toolkit 2013 and on the implementation of Best Available Techniques and Best Environmental Practices (BAT/BEP) for key industrial sectors. Equipment

to strengthen the monitoring system of CIAPOL is currently being delivered and is expected to be completed in May 2020.

In total, five pilot projects have been selected to demonstrate the reduction of CO2 and POPs industrial emissions. Four of those projects are currently implementing their eco-technological upgrading plans, which are expected to be completed by June 2020, along with a strategy to replicate and scale-up the pilot projects.

In terms of informing policy development, the drafting of technical guidelines for BAT/BEP on reducing emissions from industrial sources is currently ongoing. The drafting of key regulatory measures to be integrated into a bill proposal on improving air quality is also in process.

Key Knowledge Activities

To augment the child project activities, Abidjan hosted GPSC's African Regional Workshop "*Integrated Urban Development in Africa: Challenges and Lessons Learnt*" in May 2018. The event was organized by the World Bank and AfDB, and was held at AfDB's headquarters in Abidjan. The workshop had approximately 130 attendees from across Africa and featured a mix of lectures and hands-on training. The topics included: developing an evidence-based approach to integrated urban planning; urban mobility and transit-oriented development; and municipal financial sustainability and financing a city's sustainability plans. The workshop enhanced the capacity of key stakeholders, including national and city government officials and policymakers, to strategically and effectively adopt integrated urban planning concepts into sustainable urban development plans.

EMERGING CHILD PROJECT DESIGN AND IMPLEMENTATION LESSONS LEARNED

The following two key lessons have been learned from the ongoing project:

Engagement for financing

Engaging the banking sector is challenging in Abidjan in order to implement financial mechanisms that would ease access to funding for industries and small and medium-sized enterprises (SMEs). More awareness raising should be done with the private banking sector to allow development agencies to implement guarantees, revolving funds, or other types of financial mechanisms.

Importance of knowledge

In cooperation with the Ministry of the Environment, UNIDO's representative office proposed implementing a National Platform for Sustainable Cities due to the importance of knowledge sharing and dissemination, which has been the focus of increased awareness during the project. This will foster greater synergies for sustainable urban planning in Abidjan. The focus themes for the platform being discussed include financial planning, circular economy, and knowledge management among all stakeholders, including civil society.

INDIA

- ***Child project title:*** *Sustainable Cities, Integrated Approach Pilot in India*
- ***Cities:*** *Bhopal, Guntur, Jaipur, Mysore, and Vijayawada*
- ***GEF grant:*** *$13 million/ Co-financing $114 million*
- ***Implementing agency:*** *UNIDO*
- ***Global Environmental Benefits***: reduction of 0.8 million metric tons of CO_2 emissions directly and 5 million metric tons of CO_2 emissions indirectly.

PROJECT FOCUS

Objective: The India program focuses on integrating sustainable strategies into urban planning and management to create a favorable environment for investment in low-carbon infrastructure and services, thus improving the resilience of pilot cities.

Components: There are three main inter-related and mutually reinforcing components for promoting sustainability in Indian cities through integrated urban planning and management. The project's key components include:

- **Develop strategies for sustainable and resilient urban planning and management** based on relevant international guidelines and standards.
- **Demonstrate low-carbon technology projects contributing to GHG reductions** by setting up municipal solid waste to energy and composting plants in Mysore and Bhopal and developing sewage treatment plants for electricity generation and biogas-based compressed natural gas production through methane capture in Vijayawada and Jaipur. In Guntur, new solutions in waste collection will be implemented with e-vehicles and solar power.
- **Support India's national urban development programs** through a strong network and partnership approach to promote sustainable cities and support ongoing efforts of the Government of India, such as Swachh Bharat Mission, Smart City Mission, Urban Transport, Atal Mission for Rejuvenation for Urban Transformation, and the Solar Cities Program.

Demonstrating the technical feasibility and commercial viability of the pilot projects will set an example at the city level that can be replicated within the city and elsewhere in India facing similar development challenges.

CURRENT IMPLEMENTATION STATUS

The project has established partnership with the UN-Habitat on sustainable city planning and management. Mapping of relevant stakeholders at the city and state level is being carried out and the approach is to bring different together communities and groups for inclusive decision-making processes for every activity in the city. Identification of relevant indicators based on national and international frameworks for developing sustainable and resilient strategies for pilot cities as well as develop city diagnostic reports detailing the current level of city performance against indicators relevant for sustainable city development.

For the technology demonstration project, confirmed Detailed Project Report scopes for composting plant. For the sewage treatment plant with potential usage of biogas generated for productive use in Vijayawada and Jaipur, the detail project report (DPR) is being reviewed for finalizing the scope of work and project elements that would be supported by UNIDO.

The partnership and knowledge management platform focuses on enabling IT services and capacity building. For the IT service, UNIDO has engaged with a private technology service provider to integrate existing web and mobile-based platforms as a result of several interventions of Swachh Bharat Mission. There's a need to encapsulate

all ICT component under one umbrella to strategically align and monitor them for achieving goals as well as optimize the financial resources. This platform will include GHG inventory and monitoring emission levels in various sectors through standardized online forms and measure city sustainability performance against service level benchmarks and compare various performance indicators with other cities. This is the first-ever national-level knowledge dissemination being carried out through UNIDO's technical and financial assistance.

Likewise, the capacity building program focuses on best available technologies in solid and liquid waste management, GHG accounting at a city level, fecal sludge and septage management, water harvesting, and air pollution. The National Institute of Urban Affairs has been identified and engaged for collaboration in delivering tailored training and capacity building for major stakeholders. This will enhance their existing governance system for successful implementation of pilot projects. The training also focuses on boosting financial systems of municipalities, which includes identifying their weakness in financial management and develop an action reform plan.

The project has several ongoing activities in 2020. Currently the demonstration projects in Mysore, Jaipur, and Bhopal are undergoing program development and procurement processes. In Vijayawada and Guntur the DPRs are under development and implementation phase will start in 2021. A stakeholder engagement dialogue for sustainable planning and financing is planned to be conducted in 2021. Capacity building and workshops would be based on the needs assessment of the stakeholders. The newly integrated and re-developed Indian Platform for Sustainable Cities was launched in mid-2020. Also, an assessment of Indian cities based on GPSC's Urban Sustainability Framework methodology will be performed (GPSC, World Bank 2018).

EMERGING CHILD PROJECT DESIGN AND IMPLEMENTATION LESSONS LEARNED

The following two key lessons have been learned from the ongoing project:

The importance of knowledge to achieve integrated approaches

Through a strong culture to collaborate and share knowledge, understanding of interrelated sustainability issues is likely to be achieved, which will provide a road map to adopt a tailored, sustainable, and resilient solution for each city.

Challenges to sustainability and resilience

The segmented approach of cities' political and operational structures results in inadequate coordination and insufficient flow of information or data exchange between different sectors. This leads to the poor integration of sustainability and resilience principles in development plans, which results in lower environmental performance. Therefore, coordinated sustainable development policies, land use, and transport planning efforts, combined with smart policies to promote efficiency in the built environment, can help cities promote low carbon development.

PPPs promoting operational sustainability

The PPP business model is not a new approach to Indian cities. However, its implementation has been a challenge. The demonstration projects in cities are strongly encouraged to adopt the PPP business model with the appropriate allocation of risk and financing schemes to maintain the operational sustainability of the project.

Importance of data for cities

Cities should understand and gain better insights on their current and future needs. Reliable and accessible data can strengthen urban planning perspectives.

Capacity development to improve low carbon initiatives

There's a strong need for training and capacity building of city leaders to develop and execute city-wide low carbon projects. As a result of enhanced capacities, cities will adopt performance frameworks for generating and monitoring environmental and socio-economic benefits that will integrate environmental sustainability in planning and management initiatives.

MALAYSIA

- ***Child project title:*** Sustainable City Development in Malaysia
- ***City:*** *Melaka*[9]
- ***GEF grant:*** *$3 million/ Co-financing $21 million*
- ***Implementing agency:*** *UNIDO*
- ***Global Environmental Benefits***: Reduction of 0.8 million metric tons of CO_2 emissions directly and 3.5 to 5.4 million metric tons of CO_2 emissions indirectly

PROJECT FOCUS

Objective: Promoting the sustainability of Melaka through integrated urban planning and innovative technologies.

Components: The project has two key components:

- **Integrate climate change considerations** into urban planning strategies and strengthen the national urban policy framework.
- **Implement a smart-grid urban energy system** in Melaka as a demonstration project for this technology. These activities further Melaka's vision of being a green city-state by 2020.

CURRENT IMPLEMENTATION STATUS

Prior to the COVID-19 pandemic, the project was on track to be completed in 2021. However, the project will likely require an extension based on delays to implementation brought on by the pandemic. Major outcomes to date include the completion of the Melaka Sustainability Outlook Diagnostic, a comprehensive assessment supporting Melaka State to take an integrated approach to urban sustainability based on multiple dimensions. Recommendations from the different reports are now being implemented, including enhancement of municipal finance measures in pursuit of improving Melaka's creditworthiness. Under the project, municipal finance training has been extended to other Malaysian municipalities with the aim of scaling up lessons that have been learned from Melaka.

The primary work still to be completed is the smart-grid urban energy system demonstration project. This will include several sub-components: demonstrating the smart application of energy storage systems, smart meters, solar farm, solar thermal system integration with the grid, and electric vehicle charging for scooters, cars, and buses.

EMERGING CHILD PROJECT DESIGN AND IMPLEMENTATION LESSONS LEARNED

The following lessons have been learned thus far:

Flexibility to Align with Evolving National Policies

The project's first component, focusing on integrating climate considerations into urban planning processes and strengthening the national urban policy framework, has evolved to reflect changes in the country's priorities and needs, as well as to align with emerging initiatives such as the Malaysia Smart Cities Framework. Active discussions are happening with the Executing Entity, the Malaysian Industry-Government Group for High Technology (MIGHT), on how to strengthen alignment with these initiatives to maximize the impact of the project's remaining funds and activities.

9 Melaka is a Malaysian state comprising three districts (Melaka Tengah, Alor Gajah, and Jasin) and four municipalities (Alor Gajah Municipal Council, Hang Tuah Jaya Municipal Council, Jasin District Council, and Melaka Historic City Council).

Procurement Complexity

A major lesson related to the implementation of a smart-grid urban energy system has been the complexity of completing the procurement contract for smart grid technologies with MIGHT. The smart-grid technology demonstration involves the application of a multitude of smart technologies with a variety of partners, contributing to the complexity of the procurement. Additional time would be budgeted for this process as part of future smart grid urban-energy system technology demonstrations.

MEXICO

- ***Child project title:*** GEF Program for the Implementation of Prioritized Emerging and Sustainable Cities Projects in Three Mexican Cities
- ***Cities:*** *Campeche, La Paz, and Xalapa*
- ***GEF grant:*** *$15 million/ Co-financing $98 million*
- ***Implementing agency:*** *Inter-American Development Bank (IDB)*
- ***Global Environmental Benefits***: Reduction of 29,000 metric tons of CO_2 emissions directly and 0.4 million metric tons of CO_2 emissions indirectly; generation of 46,000 MW of renewable energy over the life of the project.

PROJECT FOCUS

Objective: Promoting sustainability in Mexican cities through integrated approaches.

Components: The program complements the government's broader Emerging and Sustainable Cities (ESC) program and operates at multiple scales:

- **At the national level,** the program enhances understanding of the benefits of urban planning and implications of climate change for urban development.
- **At the city level**, it demonstrates climate-smart investment in clean energy, waste management, water, and sanitation.
- **At the global level**, it promotes engagement of Mexican cities in global policy discourses.
- **City-level projects** include: integrated planning for flood risk reduction, sanitation, and restoration of urban coastal areas in Campeche; solar power plants in public buildings in La Paz; construction of bio-digesters; and the establishment of an intermunicipal operator for solid waste management in Xalapa.

CURRENT IMPLEMENTATION STATUS

In 2020, the process of the first public bidding for the acquisition of photovoltaic plants was carried out and is expected to generate a contract worth approximately $1.25 million. The State Government of Baja California Sur is ready to deploy the procurement process of providing solar power plants to ten public buildings in La Paz. However, due to the emergency caused by COVID-19, the procurement process for the GEF child project is postponed until further notice. This decision is will preserve public health and guarantee the potential offers secure conditions for their participation, but it will also provide certainty of the time and conditions of the process. A State Government, cannot promote public meetings while asking to its citizens to self-quarantine. Also, there is a risk in the exchange parity that can affect the project in several ways due to the economic uncertainty of the moment.

In the case of Xalapa, the call for Expressions of Interest for the detailed engineering contract of the biodigester was published in the second week of March 2020 and has an estimated value of $374,000. Starting the bidding process for the construction of Xalapa's biodigester will be an important future step because that contract itself represents approximately 46 percent of the grant's value.

EMERGING CHILD PROJECT DESIGN AND IMPLEMENTATION LESSONS LEARNED

The following two key lessons have been learned from the ongoing project:

Effectiveness of increasing knowledge and standards

The project provided photovoltaic solar power plants to public buildings and schools in La Paz. Thanks to that component, the local government's knowledge on emerging solar technologies increased, which in turn resulted in a National Public Bidding document that takes into account cutting-edge technologies and seeks a better relationship between cost and efficiency in the short and medium terms. In addition, the local government team has learned about IDB procurement models, strengthening its administrative capacity.

Increasing institutional capacities and processes

Regarding the Xalapa biodigester, institutional capacities of the local authorities have improved through the decrease of bureaucracy between the different city departments involved, achieving greater efficiency and timely responsiveness for decision-making.

PARAGUAY

- ***Child project title:*** *Asunción Green City of the Americas – Pathways to Sustainability*
- ***City:*** *Asunción and 10 cities of its Metropolita**n** Area*
- ***GEF grant:*** *$8.3 million/ Co-**financing** $240 million*
- ***Implementing agency:*** *United Nations Development Programme*
- Global Environmental Benefits: Direct reduction of 1.2 million metric tons of CO2 emissions through transport oriented development and protection of urban green areas and reduction of 13.2g TEQ of POPs

PROJECT FOCUS

Objective: Improve the quality of life of the population of Asunción and its Metropolitan Area (AMA) and provide multiple benefits, integrating mobility and transport, solid waste management, and green urban areas.

Components: The project includes the following key components:

- **Enable a framework for a sustainable and resilient city** to enhance integrated urban planning of AMA.
- **Develop sustainable mobility and transport** in AMA to reduce GHG emissions from urban transport.
- **Improve chemical and waste management systems** to reduce GHG emissions and levels of toxic chemicals.
- **Manage urban green areas** to protect natural reserves and urban biodiversity and to increase GHG emissions sinks.

CURRENT IMPLEMENTATION STATUS

The project is in the fourth year of implementation and is on track to conclude by 2022. However, the Mid-term Review pointed out that due to the pandemic it may be necessary to extend the project for implementation phase by a few months. This is to be discussed and approved by the Project Board in 2021. There are ongoing activities on all the components according to the multiannual plan and each annual workplan. There have been minor delays in some processes, such as the cleaning pilot in the Reserve Banco San Miguel due to unusual floods of the Paraguay river during 2019 and the pandemic in 2020, which made it impossible to carry out some of the activities planned in the reserve. In these cases, the project team has put into place some risk management and adaptative management measures. To date, all activities have been resumed and are on track, including the activities of the cleaning brigade, the awareness raising activities, and the restoration of habitats for biodiversity.

In other cases, however, the project is aiming to exceed the targets. Such is the case of the proposed Autonomous Institute of Planning, which was initially conceived only for the city of Asunción and has now been expanded to comprise a metropolitan view of planning in the Asunción Metropolitan Area (AMA) as a result of a discussion and consensus process of the members of the Technical Committee of the project and other relevant stakeholders.

Regarding the transport component, steps that have already been taken include design and installation of 30 sustainable bus stops and designing a network of 600 km of bicycle lanes, including an executive project of 61 km, part of which will be constructed in 2021.

In terms of project governance, it is important to highlight that eight working groups made up of three to nine different institutions (between 5-16 persons per group, 60 percent women and 40 percent men) meet regularly to discuss: land use planning; municipal financing; institutional capacities; disaster risk management; platform on sustainable cities indicators; sustainable transport and mobility; chemical substance and solid waste management; and urban green and protected areas. So far, the project has produced the following documents in the series *Best Practices and*

Lessons Learned on the Pathways to Sustainability: "Co-design of a bicycle network for the AMA;" "Integrated Planning of Asunción´s Metropolitan Area;" "Land-value Capture for Sustainable Development;" "Banco San Miguel Reserve Cleaning Brigade;" and "Urban Park Rangers."

EMERGING CHILD PROJECT DESIGN AND IMPLEMENTATION LESSONS LEARNED

Regarding best practices and lessons learned thus far:

Integration of participatory processes

Participatory processes, where all key stakeholders share their points of view on a project, have the best chances of achieving successful results. In co-designing a network of 600 km of bicycle lanes, the municipalities, the central government, the private sector, and civil society were engaged through a series of workshops were all voices were taken into consideration. A similar process was used in the design of a National Plan for Hazardous Waste Management and a National Plan for Solid Waste Management. In the city of Ñemby, the project co-designed an urban park by facilitating workshops with the municipality and the citizens, including sessions specially designed for children, to achieve an inclusive design and the participation of different stakeholders and future users of the park. In the case of municipal finances, the mechanism of traffic impact study was chosen as the main land-value capture mechanism to be piloted in the AMA, after a participatory process in which national and local institutions participated, as well as civil society. Currently, training sessions and informative meetings are being carried out.

Planning an integral metropolitan approach

As mentioned before, through a participatory process there is now wider interest in creating urban integrated planning of Asunción's metropolitan area. The proposed format has shifted from being a planning instance for one city to being a platform that includes representatives from the central government and the municipalities of the AMA and promotes an integrated view of the metropolitan area. To date, meetings have been carried out as a first step towards the proposed Autonomous Institute of Planning for the AMA.

PERU

- ***Child project title:*** National Platform for Sustainable Cities and Climate Change
- ***City:*** *Lima*
- ***GEF grant:*** *$7.5 million/ Co-financing $300 million*
- ***Implementing agency:*** *IDB*
- Global Environmental Benefits: Reduction of 46,000 metric tons of CO_2 emissions directly and 1.6 million metric tons of CO_2 emissions indirectly

PROJECT FOCUS

Objective: Promoting sustainability in Peruvian cities through an integrated urban development approach.

Components: The project has the following key components:

- **Enhance integrated sustainable urban planning and management** through the development of a GHG inventory, an urban growth and vulnerability assessment, and climate change coastal adaptation plan.
- **Demonstrate urban water resource management** and assess the availability of hydric resources.
- **Monitor local and global biodiversity performance** frameworks.
- **Catalyze investments for urban accessibility** and low-carbon mobility.
- **Enhance partnerships for sustainable cities** at the local, national, and global levels.

CURRENT IMPLEMENTATION STATUS

Project implementation began in 2019 and continues with its operational instruments having been approved in 2020. The most recent progress is related to the formation of advisory committees from the national and local governments, civil society, and academia to provide guidance and technical support during the design and implementation of the different aspects of the project. There has been significant progress in the implementation of project Component 2, planning for urban water resource management, due to IDB's technical support, and stakeholders' engagement and appropriation in favor of the development of an information system for hydro-environmental management that will contribute to improving technical and political decision-making for the supply of drinking water in metropolitan Lima, in the context of climate change. The TOR for component 2 is expected to be completed in April 2020.

For other components, specialized consultants will accelerate the finalization of TORs in April 2020. These experts will also be involved during the implementation phase to ensure the product's quality.

DESIGN AND IMPLEMENTATION LESSONS LEARNED

The following two key lessons have been learned from the ongoing project:

Importance of stakeholder mapping and decision making

The project's complex governance model and multisectoral topics requires constant communication related to management processes (Ministry of Environment approvals, Metropolitan Government of Lima consultations, IDB approvals, etc.). In this context, it's important for all stakeholders to have clarity about the project's decision-making process, to avoid conflicting messages coming from the same agency at different stages of the project. Also, an effort should be made to identify possible "shortcuts" in certain processes, such as facilitating joint approvals. An alternative solution to be considered is the development of a digital management system that automates a project's administrative processes in order to facilitate the technical work.

Requirement for stakeholder participation

Another lesson learned is related to the project's involvement in the national climate change comprehensive management model. On 2 April 2018, Law N° 30754, the "Framework Law on Climate Change," came into effect. The law establishes requirement that all climate measures must participatory, inclusive, and transparent. As the Ministry of Environment of Peru is the National Authority on Climate Change, and the main beneficiary of this project, it is now required that when there could be a potential impact on stakeholders due to a new policy or regulation, participatory consultations must be carried out involving state and non-state actors. This obligation will be included in all future project components.

SENEGAL

- ***Child project Title:*** *Sustainable Cities Management Initiative*
- ***Cities:*** *Dakar, Diamniadio, and Saint-Louis*
- ***GEF grant:*** *$9.5 million/ Co-financing $52 million*
- ***Implementing agency:*** *The World Bank and UNIDO*
- ***Global Environmental Benefits***: Reduction of 27,000 metric tons of CO_2 emissions directly and 0.1 million to 0.7 million tons of CO_2 emissions indirectly

PROJECT FOCUS

Objective: Promoting sustainability in Senegalese cities through an integrated urban management approach.

Components: The project will complement the government's Plan for an Emerging Senegal, which is a reference framework for medium- and long-term economic and social policy to foster sustainable development. Its key components include the following:

- **Strengthen the national urban policy framework** to promote sustainability and climate resilience.
- **Support clean industrial production**, reduce industrial emissions, and demonstrate low-carbon energy technologies.
- **Integrate climate risks into urban planning** in Saint-Louis and Diamniadio.
- **Foster knowledge sharing and partnership development** on sustainable cities and resilience at multiple levels.

Senegal project is implemented by two agencies—World Bank and UNIDO. A steering committee chaired by the Directorate of Environment guides both projects.

WORLD BANK IMPLEMENTATION STATUS

The GEF-6 Sustainable Cities Initiative (SCI) implemented by the World Bank has supported the introduction of sustainable cities pilot activities and approaches to stormwater management and climate change adaptation through a $90.6 million funded International Development Association (IDA) project. The activities are co-funded by the GEF ($5.5 million), the Nordic Development Fund (NDF) ($9 million), and the Government of Senegal ($16.2 million). The GEF and IDA funding closed on 31 May 2020, while NDF has approved an extension of its funding up to June 2021 so that the results of this project component can be better consolidated.

The main objective is to "improve capacity to plan and implement sustainable city management practices, including climate resilience, in selected urban areas." Two months before the IDA/GEF project closing, the following results have been achieved through these four outcomes:

Improved planning and management capacities of participating pilot cities and central government for sustainable cities

The diagnostic studies and city action plans for city sustainability have been prepared and completed for Saint-Louis and Diamniado; a stakeholder capacity building plan has been implemented; preparation of GIS tools and urban development plans, including risks and climate aspects for Saint-Louis and Diamniado, as well as modelling and environmental monitoring of the Saint-Louis coastal zone, are ongoing with finalization expected by October 2020 with the NDF funding.

Investments in pilot cities generate local and global environmental benefits

Pilot investment projects on solid waste management for Saint-Louis and green city aspects for Diamniadio have been designed and fully implemented.

Increased knowledge and partnerships on sustainable cities and climate resilience at multiple levels

A knowledge sharing platform on sustainable cities and urban resilience has been put in place with academic support in Saint-Louis and Dakar; a capacity building program to strength urban and academic key stakeholders has been designed and fully implemented; an assessment report of the financial and environmental benefits of the project outcome and its linkage with the global environmental benefits has been prepared.

National urban policy framework strengthened to promote sustainable cities model

A study for urban policy gap analysis and an action plan for relevant reforms to strengthen urban sustainability, including climate resilience at the national level, has been completed; a study for priority urban policy reform to promote cities' sustainability, including climate resilience at national level, has been completed.

Thanks to several relevant studies prepared and high-level technical knowledge produced, the SCI was able to leverage the IDA project to address key climate and urban resilience challenges for Saint-Louis. The Saint-Louis Emergency Recovery and Resilience project was approved in June 2019 with $30 million in IDA funding. The project is currently preparing PROGEP 2 for an amount of US$155 million IDA and US$9 million Nordic Development Fund (NDF).

The design of the GEF component experienced almost two years of delay that negatively impacted the implementation of Senegal SCI. Since this component is linked to an existing IDA project with a fixed closing date, the WB component has been completed and disbursed in full as of April 2021.

An overall observation is that coordination between the two components of the child project, although with a common steering committee, has been a challenge and not effective in practice.

UNIDO IMPLEMENTATION STATUS

The Mid-term Review has been finalized and the project will achieve significant results by its planned closing in March 2022. So far, a combination of technical assistance, analyses for sustainable management and development of the industrial sector, and capacity development have been implemented or are in progress.

For technical assistance, support is being provided to conduct detailed feasibility studies and technological upgrading of selected pilot projects at the national level. Eleven pilot projects will benefit from investment from the project regarding waste recycling, recovery, and energy generation, renewable energy and energy efficiency applications, and Resource Efficient and Cleaner Production (RECP) measures in order to reduce dioxin and furan emissions, GHG emissions, and hazardous waste. Preliminary audits are underway for enterprises in the Diamniadio industrial zone. So far, four companies have been audited and one is currently being audited. Six additional companies are being selected for audit. Twelve more pilot projects will benefit from technical assistance and extensive environmental diagnostic to support their transition towards more environmentally-friendly processes and/or technologies.

In terms of sustainable management and development of the industrial sector, the "Senegal Industrial Environmental Assessment Toolkit" was developed to evaluate the environmental impact of industries applying to or already established in the Industrial Park of Diamniadio. The tool is being tested before rolling out at the national level. Two capacity-building workshops on the use of the toolkit were conducted for park management. Currently, work is underway to develop an integrated POPs and hazardous waste management strategy for Greater Dakar and Diamniadio Industrial Park Work is also underway for the development of an environmental and resilience mapping of existing industries in greater Dakar.

Furthermore, a strategy is currently being developed to guide the design, implementation, and management of sustainable industrial parks in Senegal and their integration into the urban context. In parallel, a GHG emission inventory and a Monitoring, Reporting and Verification Framework (MRV) for GHG emissions was conducted for Diamniadio Urban Pole. GHG emitting sources were identified and appropriate mitigation actions were defined under an action plan for climate-smart and resilient urban development. A Nationally Appropriate Mitigation Actions proposal was developed on the basis of that plan.

Regarding capacity development, a workshop with the national stakeholder group RECPnet (comprising Bureau de Mise à Niveau and the management of Diamniadio Industrial Park) was held in March 2019 on the POPs and the implementation of BAT/BEP. An assessment of training needs for governmental institutions took place on the integration of sustainable industrial parks in cities across the country and on supporting the adoption of renewable energy, resource efficiency, and chemical and waste management technologies in the industrial sector. Training material is being prepared accordingly for the four upcoming workshops. Workshops regarding the GHG emission inventory methodology (in Diamniadio) were conducted. A second workshop is in preparation.

Regarding knowledge sharing with other cities, besides stakeholders actively participating in GPSC events, they are also engaging in activities, such as BRIDGE for Cities and Expert Group Meetings. A National Platform for Sustainable Cities in Senegal has also been developed to involve various actors, including the private sector.

EMERGING CHILD PROJECT DESIGN AND IMPLEMENTATION LESSONS LEARNED

Provide new information to enable deeper knowledge of the territory

The project's preparatory studies for urban planning and management documents, the development of a geographic information system (GIS), and an

integrated territorial information system, and the production of maps were key inputs that all generated significant amounts of new knowledge on the peri-urban areas of Dakar, the Diamniadio Urban Pole and surroundings, and the Greater Saint-Louis area. This knowledge, which will be integrated into various national databases, allows for a clearer perspective on the current status and on developments in these areas and the climate risks they face.

Enable the creation of reference document for implementing integrated urban planning

The General Directorate for Urban Planning and Architecture (DGUA) worked together with ADM to supervise studies on the local plans for Pikine-Guediawaye and the Diamniadio Urban Pole, as well as the revision and extension of the Saint-Louis Urban Masterplan to the Greater Saint-Louis area. These studies adopted a participatory approach integrating climate risk, allowing the DGUA to familiarize itself with the particularities of such an exercise. The directorate is now equipped with a reference document and has built the necessary expertise to replicate the experience in the future in other territories.

Enable institutions with improved capacities for climate-risk management

The project provided institutional partners with tools and expertise to better play their roles in the integration of flood risk in urban planning and management and in the development of resilience and adaptation strategies. The project stakeholders benefited from an extensive training program and were also able learn about enriching international experiences through study tours organized to Singapore, Malaysia, and Brazil. Furthermore, they benefitted from significant logistical support in the form of computer equipment and software necessary for the execution of their mandate.

Equip local authorities with action plans to mobilize funding

The project's development of strategic plans and action plans facilitate concerted action between the government and its donor partners. The documents allow local authorities to better target funding aimed at implementing the structural sustainability measures that have been identified.

Boost Awareness of the Project to Increase Participation in Procurement

From the project's initial procurement exercises that have selected companies to implement certain pilot projects, it appears that local companies participate cautiously because they do not having a clear understanding of the project's objectives. The companies, for instance, are skeptical of the potential ramifications of the project singling-out pollutive industries to the public authorizes. Meetings explaining the economic and environmental benefits generated by the project's changes have quickly convinced the private sector of the benefits and eased their concerns. The key lesson is that before requesting Expressions of Interest from the private sector, an awareness campaign should be rolled out along with having direct meetings with potential candidate companies. Without this, the private sector's participation may not be fully optimized.

SOUTH AFRICA

- ***Child project title:*** *Building a Resilient and Resource Efficient Johannesburg: Increased Access to Urban Services and Improved Quality of Life.*
- ***City***: Johannesburg
- ***GEF grant:*** *$9 million/ Co-financing $124 million*
- ***Lead Implementing agency:*** *Development Bank of Southern Africa (DBSA)*
- ***Co-Implementing Agency:*** *United Nations Environment Programme (UNEP)*
- ***Global Environmental Benefits***: Reduction of 3.2 million metric tons of CO_2 emissions directly and 1.1 million metric tons of CO_2 emissions indirectly

PROJECT FOCUS

Objective: Fostering city-level resilience, resource efficiency, emissions reductions and other co-benefits through area-based pilot demonstrations, systems analysis (food), and improved integrated planning.

Components: The project aims to complement the city's long-term environmental and sustainability plan—the Growth and Development Strategy 2040 (GDS 2040)—and its Corridors for Freedom (CoF) vision of a socially and economically cohesive South Africa. The program will achieve its objectives through these steps:

- **Focus on low-energy zones** identified in GDS 2040, including those in the CoF area, with the goal of integrating traditional sectors such as sustainable housing, transport, and recycled materials.
- **Combine three priority areas** of (i) organic waste management and waste-to-energy, (ii) composting for food security, and (iii) clean fuels for public transport.
- **Develop an indicator framework** to support evidence-based decision making and planning.

CURRENT IMPLEMENTATION STATUS

The Grant Agreement was enacted by DBSA and the City of Johannesburg (CoJ) in March 2017 and the Project Cooperation Agreement was signed in March 2018. However, the project manager was not appointed until February 2019. As a result of the lag in time, the project documents (budget, workplan and results framework) had to be revised. Although some work had already been undertaken, the official implementation period was updated to July 2019 until June 2024 to allow for adjustments that were necessary in order for the project documents to better reflect the existing context of the city. The project is comprised of the following components:

Component 1 (Eco-districts)

The process of appointing a professional service provider for these activities has experienced some delay. Component 1 activities began in March 2020. The service provider is in the process of establishing databases, data sources, and working groups to support the development of the Eco-District model. One private sector project has been initiated, data has been exchanged, and a first conceptual design approach meeting has been completed with the private sector development team. Building efficiency engagements around the Turffontein Clinic design project (public sector health care), have begun and progressed to draft modelling of designs and recommendations for improvements. First input has been provided into the drafting of a new Green Building Policy document for the city.

Component 2 (Social housing)

the process of appointing a professional service provider for these activities has experienced significant delay. Component 2 activities began in November 2020 with the preparation of a Post Occupancy Evaluation and an assessment of JOSHCO's social housing delivery processes.

Component 3 (Urban farming)

The training of farmers in gardening, production and business skills started in late 2019. The project was able to train over 600 men and women emerging farmers and CoJ officials in using sustainable and/ or organic farming methods, within all the regions. COVID-19 has however impacted the continuation of trainings and in-person meetings during the second and third quarter of 2020.

Component 4 (Biodegradable waste)

The 50-ton-per-day biodigester project has now entered into the contractor procurement phase. Request for Proposals for the Engineering Procurement and Construction (EPC) is expected to go to the market during March 2021. The Department of Environmental Affairs has issued a record of decision for the Environmental Basic Assessments report for the plant. DBSA will conduct environmental due diligence on construction of the plant in line with the Environmental and Social Safeguards. Official sod-turning for commencement of construction of the facility is now planned for June 2021 and will be officiated by the mayor.

Component 5 (Evidence-based planning)

The procurement of the server infrastructure to ensure data collection for evidenced-based policy and strategy making is still under way. TORs were developed to create a framework for the Development Planning Department with the objective of 1) developing and designing a comprehensive marketing and communication strategy, and 2) sourcing a service provider to document lessons learned and knowledge generated from the project to be shared for replication. A survey was conducted with all CoJ internal departments and entities, various special interest groups and key departments in national and provincial government to determine the user-needs analysis, with the aim of gaining an understanding of the needs and data requirements of the future users of and data providers to the system. The summary report of the survey findings has been developed. Best Practice Case Studies have been undertaken where local governments (in this case-Auckland, Sydney, London, and Amsterdam) have implemented effective web-based spatial information/ GIS platforms. The case studies considered aspects of the online platform such as the platform used, the data included, system functionality, etc.

EMERGING CHILD PROJECT DESIGN AND IMPLEMENTATION LESSONS LEARNED

The project began implementation in July 2019 and has experience significant delay due to a lengthy procurement process, but also because South Africa has been highly affected by the COVID-19 pandemic. As such, it is still too early to derive lessons learned from implementation.

VIET NAM

- ***Child project title:*** *Integrated Approaches for Sustainable Cities in Viet Nam*
- ***Cities:*** *Ha Giang, Hue, Vinh Yen, and 6 other selected cities*
- ***GEF grant:*** *$9 million/ Co-financing $148 million*
- ***Implementing agency:*** *Asian Development Bank (ADB)*
- Global Environmental Benefits: An estimated reduction of 1.7 million metric tons of CO_2 emissions directly and 9.5 million metric tons of CO_2 emissions indirectly over the life of the project

PROJECT FOCUS

Objective: Promoting climate resilience in Vietnamese cities through an integrated approach.

Components: The project aims to increase climate resilience in urban settings. A key aspect of the project is its focus on secondary cities instead of primary cities. It has the following key components:

- **Mainstream green planning and design approaches** into the master plans of three pilot cities.
- **Demonstrate innovative technologies** for climate-resilient and low-carbon development in Vietnamese cities.
- **Build an enabling environment** to scale up integrated urban planning approaches to six more additional cities.
- **Develop sustainable cities indicators** to guide an integrated planning framework linked to financial mechanisms.

The GEF-6 Sustainable Cities child project grant is leveraged by two initiatives, the Secondary Green Cities Development Project (SGCDP) totaling $176.0 million (GEF-6 IAP grant contributes $2.0 million), and the Mainstreaming Climate Resilience and Environmental Protection for Secondary Green Cities Development technical assistance totaling $12.8m (GEF-6 IAP grant contributes approximately $6.2 million). This GEF-6 IAP component also works in tandem with the GEF Special Climate Change Fund (SCCF) project Promoting Climate Resilience in Vietnamese Cities Management. A diagram explaining the financial structure of the two initiatives led by ADB is shown in Table 4.

For some of the GEF-6 IAP activities and other related activities within the technical assistance initiative, ADB and the Ministry of Natural Resources and Environment of Viet Nam (MONRE), as an executing entity, agreed for the delegation of administration of Outputs 1 and 4 to MONRE ($7.8 million) and ADB is implementing Outputs 2 and 3 ($5.0 million). The Project Outline was approved by the Government of Viet Nam in September 2019, and the Project Document was approved by MONRE in January 2020. ADB is also responsible for the SGCDP Smart Lighting Ha Giang project, which is a GEF-6 IAP component ($2.0m).

CURRENT IMPLEMENTATION STATUS

The MONRE PMU was officially established on 26 June 2020. ADB has provided support to the PMU to prepare a workplan, procurement plan, and cost estimation for individual consultant selection. A half-day training was conducted at MONRE office by an ADB procurement expert to help the PMU properly understand ADB's procurement guidelines and procedures. The workplan agreed by ADB and the PMU was approved by MONRE in December 2020 while the procurement plan is still being finalized.

The first advance payment request was sent to ADB in December 2020. Several advance actions have been initiated by the PMU including office set up and

PMU staff consultant recruitment. TORs for consulting firms under Outputs 1 and 4 will be prepared as soon as these staff consultants are appointed.

As for the enhanced low impact and climate resilient city development, ADB has mobilized consultants for the enhancement of green design solutions under Output 2 to support three project cities to improve the Detailed Engineering Design (DED) of selected components. The consultants provided recommendations for green design and procurement for urban investments in project cities and shared reflections into the DED for the cities as well as commented upon the efficient lighting investment grant for Ha Giang. In addition, an international knowledge management specialist has been mobilized to produce knowledge products and communications materials to promote project activities. Two landscape architects (international and national) have also been appointed to support ongoing DED work in the project cities. The procurement of a large consulting firm contract under Output 2 was initiated and expressions of interest received, which are currently being shortlisted.

Under Output 3, a workshop was held in Hue on 4 December 2020 to present the results of disaster insurance modeling and study with the participation of representatives from central and local government agencies. The consulting firm will conduct a site survey in Hue to explore potential engineering measures to mitigate risks and damages caused by flooding and tropical cyclone in early 2021.

EMERGING CHILD PROJECT DESIGN AND IMPLEMENTATION LESSONS LEARNED

The following key lessons have been learned from the ongoing project:

Importance of project coordination

Coordination between the project's key outputs[10] is extremely important since they are all interconnected, and to ensure that all project activities contribute to the delivery of expected outcomes for the GEF grants. Activities are designed to increase the resilience and environmental sustainability of environmental protection through ADB's SGCDP loan component, and to identify several high priority demonstration projects in Ha Giang, Hue, and Vinh Yen. In addition to the SGCDP loan activities, the project is designed to replicate the green development approach to the city and provincial levels of six additional cities and scale up the sustainable and resilient city strategies to formulate a national regulatory framework.

Choosing the optimum financing mechanism

The GEF-6 Sustainable Cities IAP child project grant was initially to be implemented through a result-based lending modality linked to SGCDP. However, subsequent to the GEF CEO endorsement of the grant, ADB proposed to change the lending modality to a standard investment loan. This was done due to the limited experience in Viet Nam with results-based lending and concern that this may complicate implementation. Subsequently, the lending modality was revised based on agreement with the State Bank of Viet Nam, the project cities, as well as through consultation with GEF.

10 The four key outputs are: 1. Formulated National Regulatory Framework for Enabling Environment for Sustainable and Resilient Cities; 2. Demonstrated Sustainable and Resilient Development in Hue, Ha Giang, and Vinh Yen; 3. Prepared and Tested Innovative Climate Risk Financing in Hue, which is funded by Urban Climate Change Resilience Trust Fund; and 4. Enhanced and Replicated Integrated and Resilient Environmental Planning at the City and Province Level.

The Global Environment Facility (GEF) was established 30 years ago on the eve of the Rio Earth Summit to tackle our planet's most pressing environmental problems. Since then, it has provided more than **$21.5 billion** in grants and mobilized an additional **$117 billion** in co-financing for more than **5,000 projects** and programs. The GEF is the largest multilateral trust fund focused on enabling developing countries to invest in nature, and supports the implementation of major international environmental conventions including on biodiversity, climate change, chemicals, and desertification. It brings together 184 member governments in addition to civil society, international organization, and private sector partners. Through its Small Grants Programme, the GEF has provided support to more than 25,000 civil society and community initiatives in **135 countries**.

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