SUSTAINABLE CITIES INTEGRATED PROGRAMME CITY OF JOHANNESBURG





BACKGROUND



- GEF 6 Integrated Sustainable Cities Programme (SC-IAP)
- Implementing agencies: DBSA UNEP
- Executing Agency City of Johannesburg (CoJ)

Urbanization and Climate Change Increased Demand for resources (Housing, Energy, Goods, & services, Infrastructure)

Aim: To foster city-level resilience, enhance resource efficiency, reduce greenhouse gas emissions, and provide co-benefits through pilot demonstrations in specific areas, systems analysis, and improved integrated planning.

PROJECT COMPONENTS



Component 1: Component 2: **Component 5:** Component 3: **Component 4: Waste Management Eco-District Social Housing Policy Making Urban Framing** Enhance the city's capabilities Construction of a biogas plant, establishing Test eco-Implement Develop and adopt genderin evidence-based a waste separation at source and district sustainable sensitive and resourcepolicymaking developing a biodegradable waste strategy prototypes to urban farming efficient guidelines for determine the social housing best for COJ

THEMATIC AREAS

Urban Planning, land use, and spatial form: Components 1,4 and 5 Decarbonisation and a resilient built environment: Components 2 and 4 Circular Economy: Components 2, 3 and 4



KEY PROJECT INTERVENTIONS





Eco-Districts

- Developing and piloting an eco-district model in one of COJ Precincts (Orange Grove).
- Developing designs, baseline assessments and recording lessons for replication

Social Housing

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- Developing and adopted gender-sensitive and resource-efficient guidelines (piloted JOSHCO).
- Piloting waste separation at source, water efficiency, energy efficiency
- Capacity building of SHIs and integration of green building standards

Urban Farming and Food Security

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- Supporting emerging farmers, over 60% women, through COJ's Food Resilience Programme.
- Piloting peri-urban agriculture and organic farming techniques in underserved regions.

Biodegradable Waste Management

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- Constructing a **pilot biogas plant.**
- Piloting separation at the Source.
- Developing a city-wide integrated waste strategy and conducting prefeasibility studies.

Evidence-Based

- Enhancing COJ's GIS
 and indicator systems
 to support integrated
 planning (linked to GDS
 2040).
- Creating training protocols and a populated spatial database to guide policy



Cross-Sector Integration

Eco-Districts	Social Housing	Urban Farming	Waste Management
Connects urban planning, multi- sector efficiency, and public space design.	Combines housing policy, gender equity, and resource- efficient building standards.	Links agriculture, community development, and food security.	Bridges environmental protection, renewable energy (biogas), and urban infrastructure.
Stakeholders: Department of Agriculture, Land Reform and Rural Development.	Stakeholders: Dept of Human Settlements, Department of Social Welfare, SHRA, GBCSA, DMRE, DWS, DFFE	Stakeholders: Department of Agriculture, Land Reform and Rural Development (DALRRD), DSD (Department of Social Development), Department of Cooperative Governance and Traditional Affairs (COGTA), DFFE, ARC	Stakeholders: (DFFE, DMRE, PIKIUP, Private sector, Eskom
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KEY ENABLERS OF PROJECT SUCCESS



Strategic Partnerships

Partnered with strong subexecuting agencies and secured active support from multiple government departments, agencies, and technical stakeholders, enhancing coordination and implementation capacity and to leverage Co-Financing

> Collaboration with private sector is key!!!

Leveraging the City's Vision and Leadership

Capitalized on the **City's forward-looking strategies**, robust technical expertise, and sustained commitment and **political buy-in**, critical to maintaining momentum during the COVID-19 pandemic and navigating financial constraints.

Adaptive Management

Demonstrated agility by pivoting in response to emerging challenges, refining approaches based on real-time feedback, and adjusting priorities as needed to remain effective and relevant. It is important to adjust to political and economic changes. Allow for flexibility in project design to adapt to changing local circumstances.

Long-Term Sustainability

Design projects with long-term sustainability in mind. However, ensure that projects are not just top-down but incorporate local needs and perspectives. This will help maintain relevance in the face of changing political and economic landscape



KEY ENABLERS OF PROJECT SUCCESS



Unified Oversight and Governance

Strong City oversight ensured cohesion across all project components, stakeholders, and partners—anchoring a shared vision and driving collective accountability.

Monitoring and Evaluation	Feedback Mechanis
Implement robust M&E mechanisms to track progress and facilitate learning, and to measure long-term impact and sustainability.	Implement feedback mechanisms to continuously learn from experiences and improve project outcomes.

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CHALLENGES



Procurement

Procurement Hurdles: Delays primarily due to lengthy internal processes, sequential dependencies and difficulty reaching suitably qualified candidates in the market



Split components into smaller work packages

Pandemic Impact

Pandemic Impact: Project delays, currency depreciation, Inflation and escalated construction costs.

Financial Constraints

Financial Constraints:

Financial constraints lead to **budget reshuffles** and new priorities. Municipalities need to balance immediate social needs with long-term environmental goals. This balancing act can strain budgets, especially when immediate social or economic issues take precedence over longer-term environmental sustainability projects.

Restructure plant

COJ Increased co-

design

financing

Staff Turnover

Staff Turnover: Turnover of key project staff, including the Project Manager and Outcome leads, has posed risks to project continuity and knowledge retention, impacting the project's efficiency and strategic direction.



Misalignment in Component

Misalignment in Component Implementation Progress: Components progress at different paces. Some are more advanced than other.

Lack of Synergy

Lack of Synergy: The project outcomes operated more as separate entities than as parts of a cohesive whole. This fragmentation impacts the potential for cross-learning and comprehensive, city-wide environmental improvements.



LESSON LEARNT





Project preparation is critical for implementation. While there could be changes along the way, it lays a solid foundation for the project to succeed. Adaptive management practices are critical for successful implementation. Cities operate in dynamic environments – Political changes, Economic cycles, Budget constraints, Staff turnover Project must align with long-term goals of the city to maintain prioritization, while component outcomes and deliverables align with short term priorities and realities Incorporate robust social, especially gender, elements at the planning phase for equitable, effective and sustainable outcomes and to maintain community support

Build in cost Contingency

Two Agencies co-implementing -Synchronisation

Private sector collaboration key for Efficiency Contract duration that is longer than project tenor

TRANSITION FROM GEF 6 TO GEF 8



- COJ serves as a lighthouse that inspired other secondary cities to adopt sustainability pathways
- Building on GFE 6 lessons and achievement, COJ aims to scale their efforts toward sustainable transformation and has joined the GEF 8 SCIP with the aim to promote climate resilience along with other secondary cities in SA
- GEF 8 project aims to enhance climate resilience, biodiversity conservation and sustainable urban development in SA cities through sustainable planning, decarbonization strategies and capacity building initiatives

Component 1	Component 2	
Enhancement of	Development of	
municipal urban	financing mechanisms	
planning frameworks by	and policies that attract	
embedding climate,	private sector	
environmental, and	investment to support	
biodiversity	climate-positive	
considerations into	projects ready for	
municipal governance	climate financing and	

structures and plans

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implementation.

Component 3

Adoption of renewable energy technologies and resourceefficient urban services that reduce carbon emissions and enhance biodiversity conservation.

While the two projects have distinct objectives, they are interlinked in their focus on promoting sustainable urban development and climate resilience within South Africa's cities. Together, they create a continuum of efforts aimed at addressing urban environmental and social challenges.



GEF 6 AND GEF 8 COMPLEMENTARITY



- The eco-district prototypes and social housing retrofits in GEF-6 offer replicable models for sustainable urban planning under the GEF 8 project.
- The biodegradable waste management strategies piloted in the GEF 6 project provide valuable lessons for integrating circular economy principles into urban infrastructure planning under the GEF 8 project.
- The adaptive management strategies and stakeholder engagement practices refined during the GEF 6 project help inform the GEF 8 project's approach to procurement, capacity building and governance reforms.

Both projects create a cohesive strategy for sustainable urban development in South Africa. The GEF8 project broadens the geographical and thematic scope of the GEF6 project, applying its successes and lessons to multiple cities while integrating additional goals of decarbonization and biodiversity conservation. By linking these initiatives, South Africa can ensure that its cities are not only more resilient to climate change but also serve as models for integrated, sustainable urban development on a global scale.





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KEY PROJECT INTERVENTIONS



Integrated Urban Planning

- Embeds resilience and low-carbon principles into the city's Growth and Development Strategy (GDS) 2040, IDP, and Spatial Development Frameworks.
- Strengthens policy coherence across housing, transport, energy, waste, and food systems.

Scalable Pilot Models

• Eco-Districts, green social housing, and biogas pilots provide replicable, cost-effective models for sustainable urban infrastructure.

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• Lessons from these pilots inform citywide policy and private sector uptake.

Institutional Capacity and

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Data Systems

- Builds long-term capacity in evidencebased planning, GIS, and performance tracking.
- Enhances institutional resilience and M&E through robust indicator systems and knowledge tools.

Inclusive and Green Economy Foundations

- Enables inclusive urban transformation by supporting marginalized groups (e.g. women farmers, low-income tenants).
- Supports emerging green markets in organic food, green construction, and renewable energy.

Environmental Benefits

- Contributes to significant
 GHG emissions reductions
 (4.4 Mt CO₂e) through energy-efficient housing, transport, and biogas.
- Improves waste management, reduces landfill pressure, and restores urban ecosystems.