

GEF-8 REQUEST FOR CEO CHILD ENDORSEMENT/APPROVAL

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General Child Project Information

Child Project Title

The South African Sustainable Cities Planning and Decarbonisation Integrated Programme

Region	GEF Project ID
Africa	11294
Country(ies)	Type of Project
South Africa	FSP
GEF Agency(ies)	GEF Agency Project ID
DBSA	
Project Executing Entity(s)	Project Executing Type
City of Johannesburg	Government
ICLEI Africa	CSO
GEF Focal Area (s)	Submission Date
Multi Focal Area	6/20/2025
Type of Trust Fund	Project Duration (Months)
GET	60
GEF Project Grant: (a)	Agency Fee(s) Grant: (b)
7,138,841.00	642,492.00
PPG Amount: (c)	PPG Agency Fee(s): (d)
200,000.00	18,000.00
Total GEF Financing: (a+b+c+d)	Total Co-financing
7999333	125,528,000.00

Project Sector (CCM Only)

Mixed & Others

Rio Markers

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Principal Objective 2	Significant Objective 1	Significant Objective 1	No Contribution 0

Project Summary

Provide a brief summary description of the project, to offer a snapshot of what is being proposed. The summary should include: (i) what is the problem and issues to be addressed? ii) as a child project under a program, explain how the description fits in the broader context of the specific program; (iii) what are the project objectives, and if the project is intended to be transformative,

how will this be achieved? and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. (max. 250 words, approximately 1/2 page)

Municipalities in the eastern part of South Africa, including Gauteng (City of Johannesburg), Mpumalanga (Gert Sibande), Limpopo (Vhembe), and the Eastern Cape (Joe Gqabi), face intersecting challenges of high greenhouse gas (GHG) emissions, biodiversity loss, and increasing climate risks. These areas are characterised by energy-intensive industries, such as coal-fired power and petrochemical facilities, sprawling urban growth with high transport emissions, and continued dependence on fossil fuels. At the same time, urban expansion threatens ecologically sensitive areas like grasslands and wetlands. Climate change is compounding these pressures, intensifying heatwaves, flooding, droughts, and erratic rainfall patterns.

This project aims to embed climate and biodiversity considerations into municipal planning processes in selected cities, enabling a shift toward low-carbon, nature-positive, and climate-resilient development pathways. It is part of the Sustainable Cities IP and will build on learnings from the GEF-6 SC-IAP project in South Africa which aims to build a resilient and resource-efficient city of Johannesburg by increasing access to urban services, improving quality of life, and promoting sustainable urban development. The primary goals for the GEF-6 SC-IAP project are to enhance climate resilience, reduce GHG emissions, and foster sustainable resource use through area-based pilot demonstrations, systems analysis (especially for food security), and improved integrated urban planning. This aligns well with the current GEF 8 project whose approach is to combine GHG emissions modelling, climate and biodiversity risk data, sustainable infrastructure planning, and inclusive service delivery frameworks. The key interventions (supported under components 1 and 2) of this project will include i) improving governance and institutional support for the improved delivery of municipal mandates, by tackling climate change and biodiversity loss and ii) knowledge strengthening and capacity building for improved planning, for the inclusion of climate change and biodiversity considerations into core municipal policies and plans.

In component 4 of this project, a flagship pilot in the City of Johannesburg will demonstrate the deployment of rooftop solar photovoltaic (PV) systems on city-owned buildings to reduce GHG emissions, improve energy security, and model green building practices. The outcomes will inform replicable models for wider municipal adoption, while planning work in intermediary municipalities in components 1 and 2 will set the stage for similar investments to ensure knowledge transfer and scaling-up. Expected results include the reduction of 6,471,923 tons CO₂ of GHG emissions, and improved management of 418,795 hectares for biodiversity and ecosystem services. Approximately 8,849,246 (48% males, 52% females) people will benefit directly through improved water quality, cleaner energy, restored ecosystems, and strengthened local economies.

The project will generate replicable models for South African municipalities that inform policy and unlock further investments, supporting long-term sustainability beyond the project's lifespan. It aligns with national climate and biodiversity strategies and supports South Africa's commitments under the UNFCCC and the Convention on Biological Diversity.

Child Project Description Overview

Project Objective

Reduce GHG emissions and increase biodiversity in South African municipalities through capacity building, policy revisions and pilot interventions

Project Components

Component 1: Governance and institutional support for the improved delivery of municipal mandates, by tackling climate change and biodiversity loss.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
2,369,748.00	8,000,000.00

Outcome:

1.1: Climate change and biodiversity considerations are integrated into municipal development and land use planning frameworks

Output:

1.1.1.: Climate and biodiversity gap assessments conducted for municipal plans

1.1.2.: Revised municipal IDPs SDPs and/or infrastructure master plans with climate and nature-based interventions

Component 2: Knowledge strengthening and capacity building for improved planning, by mainstreaming climate change and biodiversity considerations into core municipal policies and plans.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
900,000.00	

Outcome:

2.1: Institutional capacities strengthened for cross-sectoral, inclusive planning and governance

Output:

2.1.1 : Municipal climate-smart planning guidelines and/or toolkits developed

2.1.2. Municipal staff trained on climate smart and biodiversity planning

2.1.3.: Peer learning exchanges among participating municipalities facilitated

Component 3: Financial and technical advisory services to aid the utilisation of existing resources and unlock new resources for the implementation of climate smart and nature positive municipal plans.

Component Type	Trust Fund
Investment	GET
GEF Project Financing (\$)	Co-financing (\$)
330,000.00	

Outcome:

Outcome 3.1: Increased access to finance at municipal level that enables climate smart and nature positive implementation.

Output:

Output 3.1.1: Municipal financial mechanism analysis reports developed.

Output 3.1.2: Financial mechanisms deployed at municipal level.

Output 3.1.3: Climate smart and nature positive financing and implementation guide developed.

Component 4: Implementation to demonstrate municipal-led action.

Component Type	Trust Fund
Investment	GET
GEF Project Financing (\$)	Co-financing (\$)
3,000,000.00	111,000,000.00

Outcome:

Outcome 4.1: Reduction in greenhouse gas emissions due to municipal-led action.

Output:

Output 4.1.1: Renewable energy and energy efficiency interventions implemented

M&E

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
200,000.00	404,000.00

Outcome:

Effective project monitoring and evaluation system established to ensure adaptive management, accountability, and learning.

Output:

- Periodic progress reports and annual implementation reviews (PIRs) prepared and submitted.
- Independent Mid-Term Evaluation conducted to assess progress, identify lessons, and inform course correction.
- Independent Terminal Evaluation undertaken at project completion to assess achievement of outcomes, sustainability, and lessons learned for replication.

Component Balances

Project Components	GEF Project Financing (\$)	Co-financing (\$)
Component 1: Governance and institutional support for the improved delivery of municipal mandates, by tackling climate change and biodiversity loss.	2,369,748.00	8,000,000.00
Component 2: Knowledge strengthening and capacity building for improved planning, by mainstreaming climate change and biodiversity considerations into core municipal policies and plans.	900,000.00	
Component 3: Financial and technical advisory services to aid the utilisation of existing resources and unlock new resources for the implementation of climate smart and nature positive municipal plans.	330,000.00	
Component 4: Implementation to demonstrate municipal-led action.	3,000,000.00	111,000,000.00
M&E	200,000.00	404,000.00
Subtotal	6,799,748.00	119,404,000.00
Project Management Cost	339,093.00	6,124,000.00
Total Project Cost (\$)	7,138,841.00	125,528,000.00

Please provide Justification

CHILD PROJECT OUTLINE

A. PROJECT RATIONALE

Describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Since this is a child project under a program, please include an explanation of how the context fits within the specific program agenda. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

The government of South Africa has acknowledged the urgent need to contribute to global efforts in reducing GHG emissions, particularly given the country's status as one of the highest emitters in Africa. South Africa's emissions profile is heavily shaped by its dependence on coal for electricity generation, as well as energy-intensive urban sectors such as transport, industry, and waste. Cities are significant contributors to national emissions due to their dense populations, infrastructure demands, and economic activities. Without substantial intervention, urban emissions are projected to rise, undermining both national and global climate goals. In response, South Africa updated its Nationally Determined Contribution (NDC) in 2021, setting ambitious emissions reduction targets of 350–420 MtCO₂e by 2030. Achieving this target will require transformative action at the municipal level, where much of the mitigation potential lies. South Africa's Climate Change Act (2024) is a significant legal framework guiding South Africa's transition to a low-carbon, climate-resilient economy. The Act provides mechanisms for both mitigation and adaptation, defining roles for government departments, including at a municipal level, to coordinate climate actions. Municipalities carry the responsibility of implementing new frameworks while providing fundamental services and maintaining critical infrastructure, which is becoming more challenging under the impacts of climate change. Increasingly, municipalities are required to respond to these challenges for expanding populations while resources become more limited.

Municipalities are reliant on coal-fired electricity derived from the national grid that can be subjected to interruptions in supply due to nationwide load shedding that is implemented when the grid is constrained. This creates pressure on municipalities to consider decentralised and greener alternative sources of energy to address both issues of energy insecurity and GHG emissions. As South Africa transitions to a more market-driven

energy landscape, municipalities will be directly impacted by the evolving energy trading market. To effectively navigate this shift, municipalities must adapt their existing infrastructure and regulatory frameworks to accommodate energy trading. This requires careful planning and significant investment in technology, systems, and capacity building through training. In addition to energy insecurity and unsustainability, local municipalities in South Africa are faced with competing infrastructure challenges such as water scarcity, inadequate waste management and poor road infrastructure which are intensified by the growing impacts of climate change. Rising temperatures, prolonged droughts, and more frequent extreme weather events such as urban floods are placing additional stress on already fragile urban infrastructure. Energy systems face disruptions from heatwaves, water scarcity is intensifying due to declining rainfall and increased evaporation, and waste and transport infrastructure are more vulnerable to damage. These climate pressures make it even more urgent to decarbonise urban systems and build adaptive capacity at the local level.

In parallel, biodiversity loss remains a growing concern in South Africa's urban areas. Urban expansion and infrastructure development have frequently neglected ecological planning, resulting in the degradation and fragmentation of natural habitats. This loss of biodiversity not only threatens ecosystem services but also exacerbates the impacts of climate change (e.g. through reduced urban cooling, loss of stormwater buffering capacity, and diminished resilience to environmental shocks). Integrating biodiversity conservation into urban planning is essential for building sustainable, livable cities and aligning climate action with nature-based solutions. GEF funding is therefore critical to support rapidly growing cities transition to climate-resilient, low-emission pathways through investments in clean energy, sustainable transport, green buildings, and efficient waste systems. This project directly addresses the climate and biodiversity challenges faced by many municipalities, designed to be scalable, implementable in urban areas, and adaptive to the changing climate context. It aligns with existing GEF and DBSA-funded initiatives and other ongoing efforts such as the GEF-6 SCIP and Partner a District (PAD). The proposed project directly builds on the legacy of the GEF-6 SCIP, implemented in the City of Johannesburg titled "Building a resilient and resource-efficient Johannesburg: increased access to urban services and improved quality of life." The GEF-6 project piloted an eco-district model as an innovative approach to spatial transformation, environmental sustainability, and inclusive service delivery. It provided an entry point for embedding sustainability at the local level and demonstrated how data-informed planning could further urban development integration. Through the eco-district pilots, GEF-6 introduced a systems thinking approach that linked spatial planning, infrastructure investment, climate mitigation, and resilience outcomes. Importantly, the project spurred cross-departmental collaboration within the CoJ and fostered a shift from siloed planning to integrated, outcome-based development pathways. The current GEF-8 proposal under SCIP builds on this foundation by transitioning from project-scale pilots to systems-wide mainstreaming. By focusing on the key areas of renewable energy and biodiversity conservation, the project aligns with national and local climate mitigation and biodiversity priorities while offering significant co-benefits in terms of local adaptation, economic development, and improved public health. It also aligns with South Africa's national climate response plans, including the National Adaptation Strategy, the Climate Change Act (2024) and the NDCs under the Paris Agreement, which emphasise renewable energy, waste management, and water conservation.

The objective of this project is to reduce GHG emissions and increase biodiversity in South African municipalities through capacity building, policy revisions and pilot interventions, and ensuring that climate smart and nature positive approaches are embedded in their municipal plans. The rationale behind this project is rooted in the need to address the following core objectives: i) Reduction of GHG emissions through the adoption of renewable energy technologies, contributing to climate change mitigation, and ii) biodiversity conservation through sustainable land management planning.

In the absence of this project, municipal plans will fail to integrate considerations of climate change and biodiversity across multiple sectors. Without transformation of urban planning and governance, residents of these municipalities will not benefit from improved service delivery, low-emission and climate-resilient infrastructure, and healthier ecosystems achieved through reduced environmental degradation and better land-use planning. Women, children, the elderly, the disabled and those living in poverty, who are already the most vulnerable to these impacts, will endure a significantly larger burden of these impacts if the transformation of urban planning and governance in municipal plans does not take their unique circumstances into account. Furthermore, if CoJ fail to implement energy efficiency measures and solar PV systems in its facilities, there will be increased energy costs, strain on the power grid, continued reliance on fossil fuels and inefficient energy use which will lead to more pollution, which affects public health and a loss of investment opportunities and economic growth tied to the rapidly expanding green energy sector.

The project is expected to achieve the following outcomes: Outcome 1.1: Municipalities equipped to harness existing institutional and policy environment to improve the mainstreaming of climate smart and nature positive development; Outcome 1.2: Improved integration of climate smart and nature positive development enabled in municipal institutional and governance structures and procedures; Outcome 2.1: More ambitious municipal contributions to climate change abatement and reduction of biodiversity loss; Outcome 3.1: Increased access to finance at municipal level that enables climate smart and nature positive implementation; and Outcome 4.1: Reduction in greenhouse gas emissions due to municipal-led action. The project will also facilitate intra- and inter-municipality knowledge and best practice generation and sharing, as well as provide a basis for replication scaling at the national level. The project will also unlock future investments through the transformational change of urban planning and governance and development municipal capacity for harnessing innovative finance mechanisms.

Extensive consultations with municipal stakeholders were undertaken during project preparation to unpack and validate desktop review findings and to ensure the project design reflects local priorities, capacities and needs. Feedback from these engagements directly informed the project's focus on inclusive municipal governance, integration of climate-smart and nature-positive planning, and the creation of tangible community benefits such as green jobs and improved urban services.

The envisaged key barriers to the project include limited technical capacity within the municipalities, lack of political will, limited public awareness and buy-in from the local communities, fragmented or outdated plans and insufficient financial mechanisms. The key enablers are i) financial support from the GEF-Child Project Fund, ii) alignment with other national frameworks, iii) partnerships with academic, private sector actors and relevant technical agencies with strong relationship with the project municipalities such as ICLEI Africa, iv) existing planning cycles that foster scheduled updates of some of the municipal plans and v) lessons learned from similar initiatives across South Africa and other developing countries

To ensure success of this project, relevant stakeholders will be engaged. These will include:

i) local government and district municipal authorities, of-which the district will play a central role in coordinating activities, providing local expertise, and ensuring that the project aligns with the district and provincial planning and strategies,

ii) consultations with the community groups and civil society organizations (CSO's) in raising awareness, promoting adoption of low-emission and climate-resilient technologies by building trust, addressing misconceptions, and supporting community-driven involvement in the project, and in ensuring that the interventions are tailored to the needs of local populations, providing feedback loops to the project team and ensuring that the project remains responsive to the evolving local needs.

iii) private sector companies such as those providing recycling infrastructure, renewable energy technologies (such as solar PV), energy efficiency technologies, recycling infrastructure, s to provide technical expertise and innovation to implement large-scale infrastructure projects, and in the maintenance and operations thereof.

iv) financial Institutions and donors to fund the feasibility studies and implementation of these proposed projects in the municipal plans post the GEF funding.

Table 1: Relevant stakeholders, private sector, and local actors

Intervention	Key stakeholders	Role
Energy Efficiency	City of Johannesburg	The City of Johannesburg plays a central role in setting local energy policies
	Department of Electricity and Energy	Plays a central role in setting National energy policies
	City Power (Power (energy entity for COJ)	Implementing entity of energy project for the city
	Contractors and Builders	Contractors are involved in the physical installation of energy efficiency technologies.
	Equipment Suppliers and Manufacturers	Supplying Energy-Efficient Technologies
	South African Bureau of Standards (SABS)	responsible for establishing and enforcing national standards related to energy efficiency in buildings
	Energy Service Companies (ESCOs)	detailed energy audits of municipal buildings to assess current energy usage and identify areas for improvement.
	Municipal Staff	Buy-in
		Need to be trained and educated on the energy efficiency measures being implemented in municipal buildings

		monitoring the effectiveness of energy efficiency measures,
	Consultants and Advisors	provide technical expertise and help design the energy efficiency measures that will be implemented
Solar PV	City of Johannesburg	The City of Johannesburg plays a central role in setting local energy policies
	City Power (energy entity for COJ)	Implementing entity of energy project for the city
		responsible for approving permits for the installation of rooftop solar PV systems.
		ensure that solar-generated electricity can be efficiently integrated into the local grid.
	Consultants and Advisors	Feasibility Studies and Design, They analyze roof space, energy usage patterns, and financing options, and then provide design recommendations
	Solar Equipment Manufacturers and Suppliers	Providing Solar Panels and Inverters:
	South African Renewable Energy Technology Centre (SARETEC)	Certification and Standards
	National Energy Regulator of South Africa (NERSA)	Regulation of Energy Sector:
		Setting Tariffs and Pricing Models:
Billing System integration	Software Developers	Responsible for creating the platform that integrates various energy data sources
	Advisory Services	Consulting firms with expertise in energy systems, grid management, and billing solutions assist in the design and implementation of the integrated billing system.
Nature and climate risk assessments	Consultants and Advisors	Scientific studies to determine the opportunities to integrate nature and climate considerations into municipal plans.
	Community members	The updated municipal plans need to align to the needs of the people living in the municipalities, including women.

Key data providers, future system users, and participants will be included in awareness and training activities. These will include the Private Sector (Engineering, Tech Providers), NGOs & Academia: Support research, community engagement, and capacity-building components and v) National Government (DWS, DFFE): Policy alignment and enabling regulatory environment.

This project builds upon and complements national and district-level initiatives including: i) The District Development Model promoting localised sustainable development, ii) The Presidential Climate Change Coordinating Commission's priorities on adaptation and resilience and it also leverages insights from GEF and non-GEF funded projects on water efficiency and climate adaptation in other regions. By identifying enabling conditions and gaps before implementation, the project ensures efficient use of resources and a higher likelihood of long-term success. It directly supports South Africa's national goals for climate change mitigation, adaptation, biodiversity and water conservation, and inclusive development.

Recognizing that climate change and biodiversity loss affect people differently, the gender analysis conducted during the preparation of this proposal highlights the distinct roles, needs, and vulnerabilities of women, men, youth, and persons with disabilities across the target municipalities of Joe Gqabi, Vhembe, Gert Sibande, and the City of Johannesburg. In rural and peri-urban areas, women are disproportionately impacted by unreliable electricity supply and often depend on wood or paraffin for household energy. They remain underrepresented in formal employment within the solar energy sector and are further excluded from municipal infrastructure planning and decision-making processes. Barriers, such as limited access to technical information, leadership platforms, and financial resources, constrain women's and other marginalized groups' participation in urban planning and governance. At the same time, the analysis identifies opportunities to strengthen their leadership, employment, and entrepreneurship in climate-resilient and nature-positive sectors. These findings from the gender analysis have directly informed the project design, Theory of Change (ToC), and to ensure interventions are inclusive, equitable, and responsive to diverse community needs. Gender-responsive measures will therefore be integrated across project components, including capacity development, policy reforms, and pilot interventions.

B. CHILD PROJECT DESCRIPTION

This section asks for a theory of change as part of a joined-up description of the project as a whole, including how it addresses priorities related to the specific program, and how it will benefit from the coordination platform. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the guidance document. (Approximately 3-5 pages) see guidance here

The project will drive transformation of urban planning and governance by mainstreaming climate change, biodiversity conservation and management, and environmental considerations into municipal plans, impacting across all sectors. This transformation will be supported by the promotion of capacity building, and knowledge capture and sharing within the municipalities, ensuring that the municipalities can carry the process beyond the project lifespan and that the transformational impacts reach neighbouring municipalities. This transformation is key to unlocking investments in sustainable, nature positive, and climate smart actions as well as decarbonised infrastructure, as municipalities do not currently have sufficient resources to address these needs. The activities of this project have catalytic potential to open innovative funding avenues by providing a basis for project upscaling. The challenges municipalities face are compounded by climate change, thus the need for additional resources grows, and unlocking additional resources is critical for long-term sustainability of municipal functioning. Through demonstrative implementation the project will highlight the key role municipalities play in contributing to global benefits such as greenhouse gas emissions reduction and provide a model for project scaling and replication. The core activities of the project are summarized below into four (4) main components, outlining the types of support to be provided to the targeted municipalities. Components 1 to 3 will be primarily implemented in the Joe Gqabi, Vhembe, and Gert Sibande District Municipalities, while Component 4 will focus on implementation within the City of Johannesburg.

Component 1: Governance and institutional support for the improved delivery of municipal mandates, by tackling climate change and biodiversity loss.

This component strengthens municipal governance systems and institutional capacities to mainstream climate resilience and biodiversity conservation into core planning processes. South African municipalities often lack adequate resources, technical expertise, and integrated planning mechanisms to embed climate and nature considerations into statutory instruments such as Integrated Development Plans (IDPs), Spatial Development Plans (SDPs), and infrastructure master plans. As a result, climate risks, ecosystem degradation, and biodiversity loss are not consistently addressed in municipal decision-making, undermining long-term service delivery and resilience.

The project provides targeted technical assistance to overcome these systemic barriers and enables municipalities to incorporate climate adaptation, mitigation, ecosystem protection, and nature-based solutions into the design and implementation of development and land-use planning frameworks. Through climate and biodiversity gap assessments, spatial vulnerability mapping, and institutional capacity strengthening, the project will generate the evidence and tools necessary for municipalities to integrate climate risks, ecological infrastructure, and ecosystem services into their planning cycles. Tailored support for municipal officials—including planners, environmental managers, infrastructure departments, and finance units—will ensure that revised municipal plans are climate-smart, nature-positive, and designed around local environmental conditions, socio-economic realities, and service delivery priorities.

A central focus of the component is to strengthen cross-departmental collaboration and overcome the fragmented governance structures that have historically hindered effective integration of environmental priorities. The project will facilitate structured interdepartmental planning workshops and harmonisation of policies to align urban growth management, land-use regulations, biodiversity protection, and climate resilience objectives. This includes reviewing and aligning policies related to zoning, land-use, water management, disaster risk management, and ecological infrastructure maintenance. These processes will be aligned with national frameworks such as the District Development Model (DDM), the Climate Change Act, the National Biodiversity Strategy and Action Plan (NBSAP), and municipal planning legislation, ensuring long-term institutionalisation of integrated planning approaches.

The component also prioritises the inclusion of vulnerable and marginalised groups in planning processes to ensure that municipal plans respond to lived realities and advance social equity. Gender mainstreaming will be embedded throughout all planning activities, recognising the differentiated roles, vulnerabilities, and capacities of women in climate resilience and biodiversity stewardship. Special attention will be given to youth, elderly persons, people living with disabilities, and communities residing in informal settlements who are disproportionately affected by climate impacts and dependent on natural resources for their livelihoods. Drawing on local knowledge systems and community-based environmental practices will strengthen the relevance and ownership of revised municipal plans and support the adoption of nature-based and ecosystem-based adaptation practices.

By embedding climate change adaptation, low-carbon development priorities, ecological infrastructure management, and biodiversity conservation into municipal planning tools and governance processes, this component will lay the foundation for climate-resilient, nature-positive, and inclusive urban development. Ultimately, the component creates an enabling environment for municipalities to deliver their mandates more effectively while reducing climate vulnerabilities, enhancing ecosystem health, and promoting sustainable land-use management across the participating districts.

- **Outcome 1.1: Climate change and biodiversity considerations are integrated into municipal development and land-use planning frameworks.** This outcome ensures that municipalities systematically incorporate climate risks, ecosystem services, and biodiversity priorities into their development and land-use planning processes. By embedding climate and nature considerations into statutory planning instruments, municipalities are better equipped to make informed decisions, reduce vulnerabilities, and guide sustainable urban growth.
 - **Output 1.1.1: Climate and biodiversity gap assessments conducted for municipal plans** This output entails conducting comprehensive assessments to identify gaps, risks, and opportunities in existing municipal plans related to climate resilience and biodiversity management. The assessments benchmark current planning practices, highlight areas requiring improvement, and provide evidence-based recommendations to support integration of climate and nature into municipal planning frameworks.

Activities:

- i) i) Undertake a Baseline Review of Existing Municipal Plans
 - Review IDPs, SDFs/SDPs, infrastructure master plans, precinct plans, and sector strategies (water, transport, waste, energy).
 - Compile an inventory of relevant climate, biodiversity, and land-use documents at municipal, provincial, and national levels.
- ii) ii) Conduct Climate Risk and Vulnerability Assessments (CRVAs)
 - Map climate hazards (heat, floods, drought, wildfires) and exposure of people, infrastructure, and ecosystems.
 - Identify climate hotspots, vulnerable populations, and critical infrastructure at risk.
- iii) iii) Assess Biodiversity Condition and Ecosystem Service Dependencies
 - Map critical biodiversity areas (CBAs), ecological support areas (ESAs), protected areas, and threatened ecosystems.
 - Analyse municipal reliance on ecosystem services (water provision, flood attenuation, soil protection, carbon sequestration).
- iv) iv) Perform Municipal Gap and Needs Analysis
 - Identify gaps in existing municipal plans (policy, regulatory, data, institutional capacity, coordination).
 - Assess enabling environment barriers (governance, information systems, skills, financial resources).
- v) v) Conduct Stakeholder Consultations and Validation Workshops
 - Hold multi-stakeholder dialogues with municipal departments, catchment management agencies, provincial planning units, SANBI, DFFE, communities, private sector, and academia.
 - Validate preliminary findings and incorporate local knowledge.

vi) vi) Develop Gap Assessment Reports for Each Municipality

- Consolidate climate and biodiversity gaps, risks, opportunities, and priority intervention areas.
- Provide actionable recommendations for integrating climate and biodiversity into municipal planning frameworks..
- o **Output 1.1.2: Revised municipal IDPs, SDPs and/or infrastructure master plans with climate and nature-based interventions.** Municipalities will be supported to update and strengthen their Integrated Development Plans (IDPs), Spatial Development Plans (SDPs), and infrastructure master plans by incorporating climate-smart, biodiversity-sensitive, and nature-based interventions. The revisions ensure that municipal development priorities, spatial strategies, and capital investment programmes align with climate resilience objectives and ecosystem protection imperatives.

A Activities:

i) Co-Design Integration Roadmaps with Municipal Planning Teams

- Define steps, timelines, and responsibilities for integrating climate and biodiversity into IDPs, SDPs and master plans.
- Align with municipal planning cycles and legislative requirements

ii) ii) Develop Climate- and Nature-Responsive Planning Guidelines

- Prepare technical guidance on climate-smart development, NbS, ecological infrastructure investment, and low-carbon pathways.
- Provide templates, case studies, and decision-support tools.

iii) iii) Facilitate Inter-Departmental Planning Sessions

- Bring together municipal units (planning, housing, water, transport, energy, environment, finance) to embed cross-sectoral integration.
- Ensure alignment with provincial spatial development frameworks and national directives (NDCs, NBSAP, Climate Act).

iv) iv) Integrate Climate and Biodiversity Interventions into IDPs & SDPs

- Update strategic objectives, development priorities, and capital programmes.
- Embed considerations on climate risk reductions, ecosystem restoration, circular economy initiatives, and green infrastructure investments.

v) v) Revise Infrastructure Master Plans

- Incorporate climate-resilient infrastructure standards (flood-resistant roads, heat-resilient buildings, water-sensitive design).
- Add nature-based solutions such as wetland rehabilitation, riparian buffers, green corridors, stormwater NbS, and urban greening.

vi) vi) Support Preparation of Project Pipelines and Pre-Feasibility Settings

- Identify opportunities for bankable climate-resilient and nature-positive infrastructure projects.

vii) Conduct Public Participation and Council Approval Processes

- Facilitate mandated public consultations, including vulnerable groups and traditional authorities.
- Support municipalities to take documents through Council processes.

viii) Produce Final Revised Planning Documents

- Finalise the revised IDPs, SDPs and master plans incorporating climate and nature interventions.
- Prepare summary briefs for municipal leadership and stakeholders.

Component 2: Knowledge strengthening and capacity building for improved planning, by mainstreaming climate change, biodiversity and gender considerations into core municipal policies and plans.

The focus of this component is to build both a knowledge base for improved planning, as well as the capacity of local government officials, to continuously mainstream climate change and biodiversity considerations into municipal functions. The knowledge base is essential for capturing

lessons that will inform improved future efforts within the municipalities, as well as for generating knowledge products and platforms for knowledge exchange for all other municipalities in South Africa. Municipal officials and implementing partners will receive training on gender-sensitive planning to build institutional capacity for inclusive decision-making. The knowledge products developed through the project will capture and disseminate lessons learned in advancing gender equality and women's empowerment, particularly in the context of climate-resilient urban planning, biodiversity conservation, and municipal governance. These lessons will inform future policy development and guide replication of gender-responsive approaches across other municipalities and national programmes.

This will ensure an evidence-based process with ownership of the process held by the municipalities, with knowledge feeding to broader platforms rather than a top-down approach. This will empower the cities, encouraging citizen participation and gaining the ability to pass legislation relating to greenhouse gas emission mitigation, biodiversity conservation and management as well as adaptation strategies that are relevant to their context. This will be accompanied with capacity building within the municipalities to ensure that the officials are able to sustain the mainstreaming efforts carried out in **Component 1** into the future without the need for intervention. Embedding critical skills, knowledge and work systems will enable these officials to build on their current expertise for streamlined approaches. This capacity building will also equip the officials to capture knowledge, share it and utilise it to guide future decision-making, both during the project lifespan and in the future. The knowledge base and capacity building will include coordination with urban forums to promote city-to-city learning and share the best practices experiences on the various environmental sector priorities for municipalities, academia and CSO. Attending global workshops and events (e.g., Conference of the Parties, World Urban Forum) to exchange both knowledge and experience will also be a key. The knowledge base and enhanced capacity are also key for ensuring that new knowledge generated through the project processes is incorporated into the GEF Sustainable Cities Integrated Program (SCIP) and participation in global networks such as the Global Platform for Sustainable Cities (GPSC), will allow the cities to collaborate and expand their capacity to handle and address climate change issues. Funds have been earmarked to ensure municipal representatives attend these sessions and apply the learnings to local planning and decision-making. The involvement of the South African Local Government Association (SALGA), the main municipality network in the country, assists its members and represents local interests countrywide will be engaged to ensure that local governments receive institutional support.

- **Outcome 2.1: Improved municipal contributions to climate change abatement and reduction of biodiversity loss and ecosystem.** This outcome ensures that municipal officials, technical specialists, and local governance structures have the knowledge, tools, and institutional capabilities required to plan and implement climate-resilient and biodiversity-positive development. Strengthened capacities will enable municipalities to conduct integrated, cross-sectoral planning that bridges traditional silos—linking environmental management, spatial planning, infrastructure development, disaster risk reduction, water and sanitation, housing, and finance functions.

To further reinforce institutional learning, the project allocates a dedicated budget to support the participation of municipal officials and project team members from DBSA and ICLEI in **Global Platform for Sustainable Cities (GPSC)** activities, **UrbanShift regional and global engagements**, and other relevant national, regional, and international capacity-building events. This will expose municipalities to cutting-edge global practice, peer learning platforms, innovative tools, and insights on climate resilience, nature-based solutions, sustainable urban development, and integrated planning.

Through these combined efforts, the outcome will cultivate a community of practice among participating municipalities and embed long-term institutional capacity for climate-smart, inclusive, and nature-positive governance.

- **Output 2.1.1: Capacity of municipal officials built for mainstreaming climate change and biodiversity.** Development of practical, user-friendly, and context-specific climate-smart and biodiversity-sensitive planning guidelines and toolkits for municipalities. The materials will provide standardised methodologies, templates, checklists, spatial analysis guidance, and/or model planning clauses that support the integration of climate resilience, biodiversity conservation, ecological infrastructure, and nature-based solutions into core municipal planning instruments. The guidelines will align with national legislation and policies while also embedding global good practice from other international platforms. These resources will serve as foundational technical references for municipal officials and enable consistent application of climate-smart and nature-positive planning approaches across departments.

Activities:

- i) Develop climate-smart and biodiversity-sensitive planning toolkits

- Produce guidelines covering climate risk assessment, biodiversity mapping, ecological infrastructure integration, and NbS planning.
- Create templates, checklists, decision-support tools, spatial analysis methodologies, and model municipal planning clauses.

- ii) Develop climate-smart and biodiversity-sensitive planning toolkits

- Produce guidelines covering climate risk assessment, biodiversity mapping, ecological infrastructure integration, and NbS planning.
- Create templates, checklists, decision-support tools, spatial analysis methodologies, and model municipal planning clauses.

- iii) Develop an online hub for resources

- Upload all guidelines, tools, case studies, and templates onto a digital knowledge platform accessible to municipalities.

- **Output 2.1.2: Municipal staff trained on climate-resilient and biodiversity planning.** Strengthening of the technical skills and institutional capacity of municipal officials across planning, environment, infrastructure, water, housing, finance, and disaster risk management departments. The training programme will equip at least 400 officials with the competencies required to incorporate climate risks, ecosystem services, nature-based solutions, ecological infrastructure, and biodiversity priorities into municipal planning and investment processes. Training will combine in-person workshops, , virtual modules, and on-the-job support to ensure practical application. The programme will also leverage opportunities for participation in global and regional learning platforms such as GPSC and UrbanShift, ensuring exposure to cutting-edge approaches and international best practice.

Activities:

- i) Conduct a capacity needs assessment
 - Identify knowledge gaps, training priorities, institutional barriers, and departmental needs in each municipality.
- iii) Develop a comprehensive training curriculum
 - Covers climate risk assessment, biodiversity-sensitive land-use planning, NbS, ecological infrastructure, climate-responsive infrastructure design, and mainstreaming into IDPs/SDPs/Master Plans.
- iv) Provide technical support
 - Support municipal teams during the preparation or revision of IDPs, SDPs and master plans.
 - Offer support on applying tools, templates, and climate/biodiversity datasets.

- **Output 2.1.3: Peer learning exchanges among participating municipalities facilitated.** The project will establish structured peer-learning mechanisms that foster collaboration, knowledge exchange, and replication of best practices across all participating municipalities. Peer learning will be facilitated through Global Platform for Sustainable Cities (GPSC) workshops, UrbanShift regional and global workshops, and other relevant learning events recommended by GPSC, ensuring that municipalities benefit from exposure to global knowledge networks and cutting-edge urban sustainability practices. In addition to these international platforms, the project will support municipal-to-municipal mentoring, study tours, thematic dialogues, and communities of practice to ensure that lessons learned in one municipality can be transferred effectively. DBSA will lead and implement this output, serving as the central coordinating entity for all peer-learning activities across the project. ICLEI Africa executes the component relating to intermediary municipalities, while the City of Johannesburg (CoJ) executes its dedicated component.

Activities:

- i) Facilitate participation in GPSC and UrbanShift workshops
 - Support municipal officials to attend GPSC global workshops, technical clinics, and peer-exchange forums.
 - Facilitate participation in UrbanShift regional exchanges, global convenings, and thematic sessions
 - Capture and disseminate insights from these events across all municipalities through debrief sessions, briefing notes, and knowledge-sharing webinars.
- ii) Facilitate international exchanges and participation in additional GPSC-recommended learning events
 - Enable selected municipalities to attend international conferences, exhibitions, and technical workshops endorsed or recommended by GPSC or UrbanShift, such as:
 - * Cities & Climate Finance Leadership Alliance (CCFLA) events
 - * UNFCCC COP side sessions related to urban resilience

Component 3: Financial and technical advisory services to aid the utilisation of existing resources and unlock new resources for the implementation of climate smart and nature positive municipal plans.

Municipalities in South Africa are servicing expanding populations with increasingly limited resources, and climate change continues to drive the cost of effective biodiversity conservation and climate change mitigation higher, thus unlocking innovative financing is crucial. For the project interventions to be transformational, they must unlock future investments in sustainable, innovative, nature positive and climate smart, decarbonised infrastructure. This component aims to catalyse this process by building municipal capacity to harness different financial mechanisms, and drawing upon the demonstrated impacts delivered in **Component 4**, to open innovative funding avenues. Establishing capacity

and an evidence base to unlock additional resources is critical to ensuring long-term sustainability of municipal functioning. Stakeholder engagement will be key in guiding this, as local challenges are often met with innovative solutions that can be upscaled and replicated. Development of financial mechanisms will also be a key opportunity to ensure that women and girls' empowerment considerations are integrated. The upliftment of women-led business and the unique interactions of women with biodiversity will be taken into account within these mechanisms. Municipal plans will be made fully climate smart or nature positive by ensuring they are accompanied by robust and sustainable financial mechanisms. DBSA will lead the implementation of this component, leveraging its strong institutional capacity in designing and operationalizing financial mechanisms.

- **Outcome 3.1: Increased access to finance at municipal level that enables climate smart and nature positive implementation.** Accessing finance will enable the municipalities to implement the actions aligned with the climate smart and nature positive plans developed in **Component 2** and developing innovative funding mechanisms will ensure these efforts are sustained.
 - **Output 3.1.1: Municipal financial mechanism analysis reports developed.** An analysis report will be developed for each municipality that explores aspects such as the potential financial mechanisms, financing options, ownership models available to the municipality based on financial, socio-economic and governance criteria and the local context. Identifying the most viable and sustainable mechanism for each municipality and for the different aspects of the climate smart and nature positive plans will be key, guided by technical expertise as well as the officials and stakeholders.

Activities:

- i) *Stakeholder engagement to gather information on financial mechanisms, financing options, ownership models at the municipal level.*
- ii) *Desktop exploration of financial mechanisms, financing options, ownership models at the municipal level.*
- iii) *Draft municipal financial mechanism analysis reports developed for each municipality, including a municipal taxonomy and tool that allows grouping of municipalities in terms of financial instruments.*
- iv) *Draft municipal financial mechanism analysis reports validated and finalised.*
- v) *Financial mechanisms deployed at municipal level.*

The DBSA supports the South African Government in addressing infrastructure backlogs in water, sanitation, roads, and electricity through a combination of planning, project preparation, lending, and capacity-building support. By integrating environmental sustainability, climate resilience, and social inclusion into municipal projects, DBSA contributes directly to national outcomes on efficient infrastructure networks, sustainable human settlements, effective local governance, and environmental protection. In response to municipal requests, DBSA is assisting with the development of sectoral master plans—including Water Services, Roads and Stormwater, Waste Management, and Electricity Master Plans—valued at USD 5.5 million across implemented, ongoing, and completed projects. These initiatives enhance municipalities' ability to prioritize and deliver climate-resilient services while mobilizing investments from DFIs, MDBs, and the private sector. The component will further establish actionable roadmaps and governance systems to enable sustainable municipal energy and infrastructure finance, fostering bankable, nature-positive, and gender-responsive projects such as solar, waste-to-energy, and battery storage solutions.

Activities:

- i) *Stakeholder engagement to explore utilisation of identified viable financial mechanisms*
- ii) *Roadmap developed for each municipality to guide deployment of a viable financial mechanism in ways most relevant to their individual contexts.*
- iii) *Viable financial support deployed within each municipality with technical support.*
- iv) *Assessment of financial mechanism deployment within each municipality to capture lessons.*
- v) *Technical guidance and support to refine financial mechanism roadmaps based on lessons.*
- vi) *Assessment of refined financial mechanism deployment within each municipality to capture terminal lessons for Roadmaps.*
- **Output 3.1.3: Capacity of municipal officials built for financial mechanism deployment.** Capacity building activities will be carried out with at least 200 municipal officials, enhancing their ability to identify relevant financial mechanisms that can be deployed to implement climate resilient and nature positive plans. This will also ensure that they are equipped to oversee the governance of innovative financial mechanisms and work collaboratively with stakeholders such as the private sector, CSOs and the communities to sustain the mechanisms. The capacity development will also ensure the officials are able to manage and govern the mechanisms dynamically, responding to climate and environmental changes as well as changes in socio-economic dynamics.

Activities:

- i) *Stakeholder engagement to assess capacity needs for financial mechanism deployment.*
- ii) *Development of capacity building tools and materials for financial mechanism deployment.*
- iii) *Delivery of capacity building workshops for municipal officials in each municipality for financial mechanism deployment*
- **Output 3.1.4: Climate smart and nature positive financing and implementation guide developed.** A comprehensive guide will be developed and delivered in an appropriate format (an online course and/ or tool) that utilises lessons captured in Output 3.1.1 and 3.1.2, overlaid with South Africa-wide knowledge, to guide all tiers of government in enabling a transformation of the sub-national climate and nature finance landscape in South Africa

Activities

- i) *Desktop synthesis of lessons and knowledge from the financial mechanism deployment and capacity building process into a draft climate smart and nature positive financing and implementation guide.*
- ii) *Draft climate smart and nature positive financing and implementation guide validated and finalised.*

Component 4: Implementation to demonstrate municipal-led action.

This component focuses on enabling the critical role of municipalities in driving climate smart and nature positive efforts to be demonstrated through direct implementation. This will empower municipalities to utilise capacity developed through the project in **Component 2** to implement the climate smart plans developed in **Component 1** and will be key in unlocking and being the basis for the financial mechanisms developed in **Component 3**. The combination of these components will guide development and implementation of innovative renewable energy and energy efficiency interventions in the City of Johannesburg. The city is South Africa's economic hub and is heavily dependent on energy from the national grid which is predominantly coal-fired, thus implementation of energy efficiency and solar photovoltaic (PV) systems is key to reducing contributions to global greenhouse gas emissions. Energy-efficient technologies such as LED lighting, efficient HVAC systems, and low-energy appliances, will allow the city to reduce overall electricity demand, thereby lowering emissions and its carbon footprint. Johannesburg also benefits from abundant solar radiation, making it well-suited for solar PV adoption. Solar systems produce no emissions during operation, thus also contributing to improved air quality and energy-efficient buildings help reduce long-term operational costs. By 2030, the City of Johannesburg aims for all new buildings to operate at net-zero energy consumption to generate 35% of its electricity from renewable energy sources. Successful implementation of these goals could result in long-term benefits such as cheaper alternatives to grid electricity as well as revenue generation, though the financial models supporting this will be developed in **Component 3** with consideration of revenue generated from energy sales, which currently contributes significantly to municipal revenue. To support this transition, the City of Johannesburg is developing a billing system to enable net metering and feed-in tariffs (FITs), encouraging households and businesses to contribute excess energy to the grid. This creates financial incentives for private sector participation in renewable energy. Comprehensive feasibility studies are also underway to identify optimal sites for rooftop and ground-mounted solar installations, ensuring minimal environmental disruption while maximizing energy generation. A supportive regulatory framework is key to scaling up these efforts. Policies that provide tax incentives, grants, and streamlined connection processes will foster investment and integration of renewable systems. This will diversify Johannesburg's energy mix, reduce reliance on coal, and support the city's sustainable development goals. Through energy efficiency, solar adoption, and strategic regulation, Johannesburg can drive a resilient, low-carbon future. Furthermore, recent amendments to the Electricity Regulation Act (ERA) empower municipalities to generate electricity and procure supply from independent power producers. This project seeks to build the institutional and technical capabilities of municipalities, positioning them to actively engage in and benefit from South Africa's transitioning energy sector. With this, the city intends to facilitate private sector participation in this initiative through an Independent Power Producers (IPP) program. This will allow private entities to invest in, develop, and operate solar PV farms, thereby boosting the city's capacity to generate clean, renewable energy. These steps aim to build a resilient, low-carbon energy future while positioning Johannesburg as a national leader in urban sustainability. In efforts to reduce its reliance on fossil fuel-based energy sources the city is considering the implementation of energy efficiency in buildings, the implementation of rooftop solar PV installations for various municipal owned buildings within the city. The first step is a 370kW pilot plant at the CoJ's Martindale facility. The success of which will result in a roll out across the city which is to install rooftop solar photovoltaic (PV) systems across municipal urban buildings to foster a resilient, sustainable, and livable urban environment. The CoJ has identified the potential to generate up to 200 MW's of solar PV from roof top installations across 19 identified sites and 100 MW's of battery energy storage potential to reduce the city's reliance on fossil fuel-based energy sources. It is further envisaged that training programs on solar PV technologies will be developed and implemented, with a focus on targeting women participants. In addition, the project will support women-led SMMEs in solar system maintenance, helping to promote women's participation in the green economy.

- **Outcome 4.1: Reduction in greenhouse gas emissions due to municipal-led action.** The installation of solar PV installations and introduction of energy efficiency systems through the municipality's climate smart plans and strategies will directly reduce greenhouse gas emissions in the City of Johannesburg.
 - **Output 4.1.1: Renewable energy and energy efficiency interventions implemented.** The core implementation will deploy 2.370 kVA of solar PV energy through rooftop installations, complemented by battery storage and energy efficiency installations. This will support three major focus areas: improving energy efficiency, integrating embedded generation, and expanding renewable energy systems across city-owned infrastructure. The pilot project will be installed at the Johannesburg Metropolitan Police Department Headquarters in Martindale.

Activities:

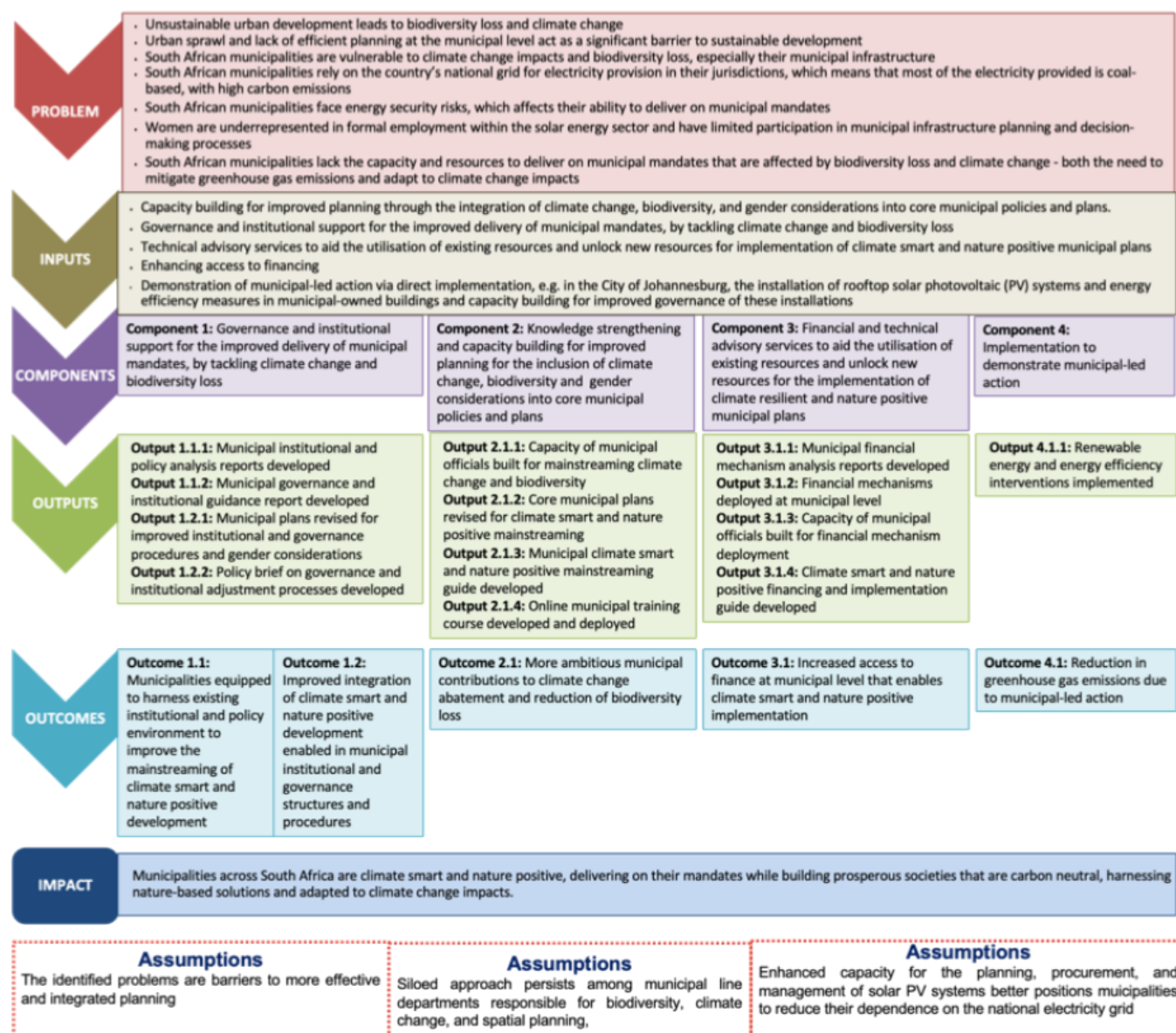
- i) *Conduct feasibility study on increasing embedded generation in the city through solar PV and energy efficiency installations*
- ii) *Procurement and fitting of renewable energy and energy efficiency installations.*
- iii) *Assessment of renewable energy and energy efficiency installation performance to capture lessons.*
- iv) *Support women-led SMMEs in solar system maintenance, helping to promote women's participation in the green economy.*

These municipalities participating in this project represent a mix of urban and rural contexts, each with varying degrees of socio-economic and environmental vulnerability. This diversity makes them well-suited as test cases for developing inclusive, climate and biodiversity responsive infrastructure planning approaches that can be replicated across the country. The individuals living in these municipalities stand to benefit in several important ways.

First, improved service delivery, particularly in energy, waste, transport, and water systems, will contribute to better quality of life, especially in under-served communities. Climate-resilient infrastructure will reduce exposure to climate-related risks such as flooding, extreme heat, and drought, thereby protecting livelihoods, housing, and public assets.

In addition, healthier ecosystems, achieved through reduced land degradation, improved land-use planning, and the integration of green infrastructure, will support both environmental and public health. Cleaner air and water, increased green spaces, and the restoration of natural systems such as wetlands and catchments will contribute to lower pollution levels, greater urban cooling, and enhanced community well-being. Residents will also benefit from safer and more reliable infrastructure systems, including energy supply which are essential for everyday functioning and economic activity. The incorporation of nature-based solutions, such as urban greening, catchment protection, and ecosystem restoration, offers additional co-benefits, such as job creation in green sectors, increased recreational opportunities, and improved mental and physical health. Moreover, by fostering participatory and inclusive planning processes, this project can help empower local communities, ensure that development responds to local needs, and promote social equity. Over time, these outcomes can contribute to poverty reduction, enhanced climate resilience, and more sustainable economic development at both the household and municipal levels.

The project Theory of Change (ToC) is shown in Figure 1, and outlines the expected pathways of transformation, from primary activities to outcomes and impacts.



Where GEF-6 laid the groundwork for integrated neighbourhood-level action, this project aims to embed climate and biodiversity considerations into the strategic planning instruments of municipalities to institutionalise nature-positive, climate-resilient development pathways. By anchoring biodiversity and climate resilience within mainstream development planning processes, this proposed GEF-8 project aims to ensure lasting systemic transformation, scaling up the innovation and integration initiated in GEF-6 and enabling South African municipalities to respond more effectively to intersecting climate, biodiversity, and urban development challenges.

Key assumptions underlying this theory of change include the recognition that the identified problems contribute directly to the challenges faced by municipalities and act as barriers to more effective and integrated planning. It is also assumed that a siloed approach persists among municipal line departments responsible for biodiversity, climate change, and spatial planning, and that improved mainstreaming and coordination across these departments is essential to overcoming these challenges. It is further assumed that if municipalities are better capacitated in the planning, procurement, and management of solar PV systems, they will be better positioned to reduce their dependence on the national electricity grid.

It is envisaged that this project will benefit from existing knowledge in the following ways:

- The project will leverage existing research, case studies, and data on energy efficiency techniques and solar installation to inform its design and implementation.

- The project can utilise existing knowledge of the latest energy-efficient and solar technologies to make well-informed decisions about which technologies to adopt.
- The project will benefit from established regulatory knowledge and industry standards related to solar energy and energy efficiency, ensuring that all installations comply with local laws and safety requirements.

New knowledge will be generated through this project in the following ways:

- The project will generate new knowledge about the specific performance of solar installations in Johannesburg, e.g. solar power interactions with local climate, infrastructure, and consumption patterns.
- Through the ongoing monitoring and optimisation of energy systems, the project will uncover new insights into how best to integrate solar systems with energy-efficient buildings
- By tracking energy usage reductions over time, the project will contribute to building a knowledge base about energy efficiency's long-term impact on cost savings, carbon emissions reduction, and grid stability.
- Learnings from CoJ will provide valuable learnings for other municipalities.

Institutional Arrangement and Coordination with Ongoing Initiatives and Project.

Please describe the Institutional Arrangements for the execution of this child project, including framework and mechanisms for coordination, governance, financial management and procurement. This should include consideration for linking with other relevant initiatives at country-level (if a country child project) or regional/global level (for coordination platform child project). If possible, please summarize the flow of funds (diagram), accountabilities for project management and financial reporting (organogram), including audit, and staffing plans. (max. 500 words, approximately 1 page)

The Development Bank of South Africa (DBSA), is the GEF Implementing Agency (IA) of this project and will thus be responsible for the overall implementation of the project and the monitoring, evaluation and reporting thereof. The Project will be implemented over a 5-year period and ICLEI Africa and the City of Johannesburg will play the role of the Executing Agency. In this role, ICLEI Africa and the City of Johannesburg will be responsible for the coordination, management and day-to-day administration of the project.

The key responsibilities of the Executing Agency will include:

- Coordination of annual work plans (drafting, sharing, finalising) with project partners
- Management of the implementation of project activities
- Coordination of reports and stakeholder consultations

ICLEI Africa will take the lead in executing Components 1, 2 and 3 of this project by providing support to the intermediary municipalities in the execution of the project. The City of Johannesburg has a GEF desk that oversaw the previous GEF 6 program, and the budget for that program was managed through this desk. A similar approach would be used by the City of Johannesburg to execute Component 4 of this project, in order to leverage the lessons learnt and best practice that was established for the GEF 6 program. The City of Johannesburg's on-going collaborations with organisations in implementing the GEF 6 program will also be drawn upon for this project in order to ensure alignment and avoid any potential duplication of efforts

The Executing Agency will be responsible for compiling monitoring and evaluation reports and managing project execution arrangements. The Executing Agency will serve as the main point of contact for the project, provide technical oversight and guidance for the Project Steering Committee (PSC) in alignment with the GEF requirements, support the participating municipalities by implementing project activities, and oversee the management of sub-contracts. Responsibilities also include coordinating the project team as well as any required consultants and subcontractors, as well as engaging with the technical working groups. The Executing Agency will further provide regular updates to the DBSA and report to them in writing if any modifications are needed to the approved implementation plan or budget. The Executing Agency will address and resolve any issues or inconsistencies raised, support the compilation and submission of progress, financial, and audit reports to the Implementation Agency, and prepare the Final Project Report.

The municipalities implementing the project activities in collaboration with the Executing Agency will be responsible and accountable for managing their own respective inputs to the project and managing the funding provided through GEF resources.

A Project Steering Committee (PSC) will provide oversight of the project progress and implementation of outputs, facilitate cooperation with key government stakeholders of the project, ensure synergies with Government initiatives, and provide overall guidance and strategic direction. The

PSC will include the Executing Agency, a Gender Focal Point (GFP), as well as members that are nominated from key ministries like the Department of Cooperative Governance and Traditional Affairs (COGTA), Department of Electricity, Department of Forestry, Fisheries and Environment (DFFE), the Department of Human Settlements (DHS), Treasury, think tanks like the Council for Scientific and Industrial Research (CSIR), The South African Local Government Association (SALGA), and invited members from non-government stakeholders (Representative of Private sector and Civil Society) and other special invitees. It is expected that all the intermediary municipalities will also participate as part of the PSC and the technical working groups.

PSC will ensure all the existing and planned initiatives/projects by the participating stakeholders are in alignment with each other and there is no duplication of efforts and resources. The PSC will meet twice a year and consider the progress of the project and provide guidance.

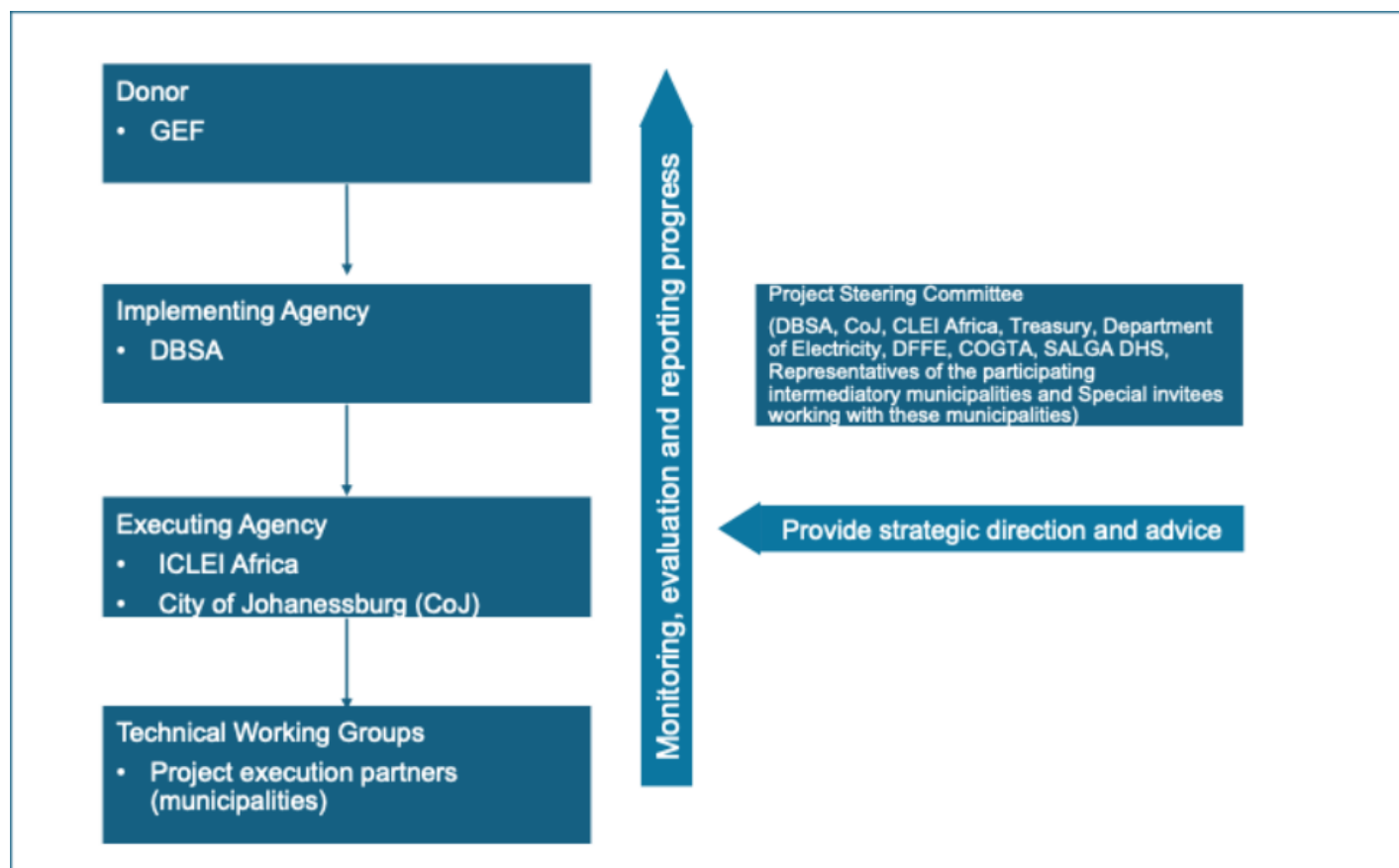


Figure 2: Proposed institutional arrangements

By focusing on incorporating climate and nature considerations into the municipal plans, this project will build on the national led initiatives that include the Let's Respond Toolkit, Greenbook and the Municipal Capability & Partnership Programme. It further aligns well with the DBSA initiative, Partner a District Programme (PAD) in the selected intermediary municipalities. The City of Johannesburg has benefited from the GEF 6 funding and intends drawing on the skills and support from the team that worked on the GEF 6 and will also draw lessons from Joshco Tshedzani.

Additionally, through this a project Knowledge Repositories will be developed to serve as a comprehensive and user-friendly resource, consolidating project data, reports, performance analyses, case studies, technical documentation, and other valuable materials. These repositories will be open access to ensure that the knowledge generated is freely available to stakeholders, particularly other municipalities.

The CoJ is an active member of ICLEI Africa and C40, city networks tackling sustainability and climate change challenges with their member cities. As part of this project, the CoJ intends to share the knowledge generated with other cities through ICLEI Africa and C40 established channels. These channels include webinars, workshops, and conferences, which provide opportunities for knowledge exchange, discussion, and collaboration with international counterparts. The

project will built off work between the CoJ and ICLEI Africa that led to the development of the city's [https://africa.iclei.org/project/city-of-johannesburg-water-security-strategy/Water Security Strategy](https://africa.iclei.org/project/city-of-johannesburg-water-security-strategy/Water_Security_Strategy) (2022), which provides a roadmap to achieve water security by 2040, and the successful [https://africa.iclei.org/project/city-of-johannesburg/review and alignment](https://africa.iclei.org/project/city-of-johannesburg/review_and_alignment) of Johannesburg's Local Biodiversity Strategy and Action Plan with national frameworks.

Will the GEF Agency play an execution role on this child project? No

If so, please describe that role here and the justification.

Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing (max. 500 words, approximately 1 page)

The DBSA is supporting the South African Government in addressing infrastructure backlogs in water, sanitation, roads, and electricity through comprehensive planning, project preparation, lending, and capacity - building interventions. By embedding environmental sustainability, climate resilience, and social inclusion in municipal operations, DBSA contributes directly to national outcomes focused on efficient infrastructure networks, sustainable human settlements, effective local governance, and enhanced environmental protection. In response to municipal needs, DBSA is assisting with the preparation of sectoral master plans — including Water Services, Waste Management, Roads and Stormwater, and Electricity Master Plans — amounting to USD 5.5 million in implemented, ongoing, and completed projects. These initiatives strengthen municipalities' ability to plan, prioritise, and implement climate-resilient and sustainable service delivery while catalysing investment from DFIs, MDBs, and private partners.

The component further aims to develop actionable roadmaps and governance systems that create an enabling environment for municipal energy finance and investment, translating into bankable, nature-positive, and gender-responsive projects such as solar, waste-to-energy, gas, and battery storage solutions. This builds on DBSA's strong track record of integrating climate and sustainability considerations into municipal infrastructure planning through its role as implementing partner of the GEF-6 "Cities-IAP: Building a Resilient and Resource-Efficient Johannesburg" Project. That initiative, executed with United Nations Environment Programme (UNEP) in collaboration with the City of Johannesburg, focused on pilot area-based demonstrations, resource-efficiency, integrated planning, and service-delivery improvements in an urban context. The lessons and institutional partnerships emerging from that project provide a strong foundation for scaling similar approaches under this new initiative.

In addition to the Johannesburg case, other municipal-level interventions in South Africa provide relevant precedents. For example, the "Just Municipal Embedded Generation (JMEG)" activity supports intermediate municipalities to develop solar embedded generation project applications via DBSA's Project Preparation Facility. Another useful reference is the embedded generation case study published under the SAMSET Embedded Generation Case Study which examined the technical, regulatory and financial constraints for municipal adoption of solar-PV systems. These references illustrate how municipalities are already engaging with energy transition trajectories, and provide lessons about capacity, governance, revenue-models and regulatory issues that this new project can draw upon.

Beyond energy, the broader planning and investment-readiness work mirrors efforts such as urban waste-to-energy and resilience interventions (e.g., the Johannesburg project described above) and ecosystem-based adaptation examples such as the Buffelsdraai Landfill Site Community Reforestation Project in eThekweni which restored indigenous forest ecosystems in a municipal context and integrated livelihood and resilience elements.

As noted, the new initiative will also cooperate closely with ongoing and complementary programmes, including the Sustainable Cities Integrated Programme (SCIP) (GEF-8) which supports the City of Johannesburg in implementing embedded-generation and energy-efficiency initiatives to decarbonise its infrastructure portfolio. Additionally, the Vhembe District Municipality, Gert Sibande District Municipality and Joe Qabi District Municipality will benefit from enhanced municipal plans that integrate climate and nature elements for the future development of resilient infrastructure. Collaboration will be pursued through co-location of activities, joint capacity-building, shared technical expertise and cross-programme staffing arrangements to ensure operational efficiency, knowledge exchange and coherence in advancing climate- and biodiversity-aligned municipal planning and investment across the targeted regions.

Table On Core Indicators

Core Indicators

Indicate expected results in each relevant indicator using methodologies indicated in the GEF-8 Results Measurement Framework Guidelines. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
363260	418795	0	0

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
363,260.00	418,795.00		

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.4 Area of High Conservation Value or other forest loss avoided

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.5 Terrestrial OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Documents (Document(s) that justifies the HCVF)

Title

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO₂e (direct)	8646996	6471923	0	0
Expected metric tons of CO₂e (indirect)	5000000	0	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO₂e (direct)	8,646,996	6,471,923		
Expected metric tons of CO₂e (indirect)	5,000,000			
Anticipated start year of accounting	2024	2026		
Duration of accounting	20	20		

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO₂e (direct)				
Expected metric tons of CO₂e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female		4,601,608		
Male		4,247,638		
Total	0	8,849,246	0	0

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

The area of landscapes under improved practices identified for Core Indicator 4 was calculated as the sum of a proportion of the total municipal land area across all project municipalities (see Table 2). This proportion was used as a conservative estimate of the available natural landscapes that will undergo improved practices through the climate smart and nature positive municipal plans developed through the project. The City of Johannesburg is a highly urbanised area, with the City's 2019-2030 Local Biodiversity Strategy and Action Plan indicating that land cover patterns are characterised by very high levels of transformation and urbanisation with only 35% of the extent in a natural state and 61% transformed. Given the extent of agriculture and mining operations, as well as informal settlements contributing to urban sprawl, a conservative target of 2% of the land area was chosen. For the other municipalities, the extent of urbanisation and land transformation is less severe, and so a target of 5% of the municipal land area was chosen. The improved management of natural land and urban green and blue spaces will support local biodiversity through improved environmental health and habitat preservation, supporting local flora and fauna and through this the conservation of natural capital and ecosystem services. Urban green and blue spaces often provide critical nesting sites for birdlife and support urban biodiversity. Detailed assessments at project inception can more accurately determine the extent of the natural landscapes and green and blue spaces within each municipality, along with identification of key biodiversity contributors such as biodiversity hotspots, endemic species, and ranges of IUCN Red List species that fall within the municipal boundaries, and thus under the mandate of the municipal plans.

Table 2: Municipal land area proportions:

Municipality	Total land area (km2)	Proportion of land targeted (%)	Proportional land area (km2)
City of Johannesburg	1,645.002	32.90	
Gert Sibande	31,841.00	5	1,592.05
Vhembe	25,597.00	5	1,279.85
Joe Gqabi	25,663.00	5	1,283.15
Total:	4,187.95		

Conversion: 4,187.95 km2 = 418,795ha

For indicator 11, the beneficiaries have been defined as individuals who directly or indirectly benefit from GEF-financed interventions as per the GEF-8 framework. These benefits can be environmental, economic, social, or health related. From the updating of the municipal plans through this project, the direct beneficiaries will include a diverse group of individuals living and working within the chosen municipalities (approximately 8,849,246 people, the total population across all four municipalities). These municipalities represent a mix of urban and rural contexts with varying socio-economic and environmental vulnerabilities, making them ideal test grounds for inclusive, climate and biodiversity-responsive infrastructure planning. The individuals in these municipalities will benefit from improved service delivery, climate-resilient infrastructure, and healthier ecosystems through reduced degradation and better land-use planning. These individuals will also benefit from safer, more reliable infrastructure systems, reduced pollution, and co-benefits from nature-based solutions such as urban greening, and catchment protection and restoration efforts. Through lessons learnt from this project, the indirect beneficiaries will be the country's population. For the solar PV implementation proposed for the City of Johannesburg the direct beneficiaries will include the CoJ staff within the municipal buildings functioning on solar power, as well as the municipality who will reduce reliance on grid electricity. Indirect beneficiaries will include the wider community reliant on ESKOM power, as extra electricity produced will feed back into the grid and reduce impacts such as stage 1 load shedding for communities. In addition, CoJ has millions of undocumented immigrants that will also benefit from this project).

Methodology for Estimating Avoided Greenhouse Gas Emissions

This section outlines the methodology used to estimate the greenhouse gas (GHG) emissions avoided through the implementation of the proposed 200 MW solar photovoltaic (PV) facility. All underlying annual calculations are provided in the accompanying emissions calculation spreadsheet.

1. Capacity Factor Assumptions

The analysis is based on an initial capacity factor of 5%, which increases by 5% per annum over the first four years of operation reaching a maximum capacity of 21% from year 5 onwards. The capacity factor progression is therefore as follows:

Year 1: 5%

Year 2: 10%

Year 3: 15%

Year 4: 20%

Year 5: 21%

A maximum capacity factor of 21% is achieved in Year 5. From Year 5 onwards, and for the remainder of the plant's operational life, the capacity factor is assumed to remain constant at 21%, reflecting a conservative yet realistic performance benchmark for South African solar conditions.

2. Installed Capacity

Total Installed Capacity: 200 MW

3. Annual Energy Generation

Annual energy generation is calculated using the standard formula for estimating PV plant output:

"Annual Energy Generation" = "Installed Capacity (MW)" × 8,760 "hours/year" × "Capacity Factor"

= 200 "MW" × 8,760 × 0.45 = 367,920 "MWh/year"

4. Emission Factor Assumptions

Avoided emissions are estimated using the 2022 National Grid Generation Emission Factor (NGGEF) of:

0.957 "tCO₂/MWh"

This factor represents the average CO₂ emissions associated with electricity supplied by the national grid.

5. Annual Avoided Emissions (Post-Year 5)

The annual direct GHG emissions avoided through displacement of grid-supplied electricity from Year 5 onwards are calculated as:

367,920 "MWh/year" × 0.957 "tCO₂/MWh" = 352,099.44 "tCO₂/year"

6. Total Avoided Emissions Over the 20-Year Plant Life

Cumulative emissions avoided over the full 20-year operational period—incorporating variable capacity factors in Years 1–4 and the stabilised output from Year 5 onward—are estimated at:

6,471,923.04 tCO₂

This figure represents the total direct emissions avoided as a result of the solar PV plant's contribution to avoiding grid electricity generation.

Any excess energy produced would be fed back into the national grid, and in doing so reduce the need for additional coal burning in power stations. In this way, the project has the potential to reduce GHG emissions indirectly.

The project thus has the potential to also contribute to significant indirect GHG emissions reductions through excess energy generation and energy efficiency measures. This reduction will be further assessed during implementation, and reflected in the PIRs once specific interventions are identified and supported by the project.

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Low	Climate variability could impact long-term potential of the implementation of proposed nature and climate solutions. The project incorporates flexibility in the selection of measures that are selected due their accepted longevity in the face of a changing climate.
Environmental and Social	Moderate	Potential social concerns regarding acceptance and cultural perceptions on the proposed interventions. Mitigated through early stakeholder engagement, public education, and alignment with environmental and health standards. Safeguards screening will guide risk management.
Political and Governance	Substantial	Risk of policy shifts or delays in local government support. Mitigation includes alignment with national and provincial priorities and early involvement of local authorities.
INNOVATION		
Institutional and Policy	Moderate	Lack of clear local policy. Project includes policy review and recommendations to support legal frameworks.
Technological	Low	Technologies proposed are well-established and low-risk. Pilot testing and technical guidance from the GEF Agency and DBSA will ensure appropriate solutions are selected.
Financial and Business Model	Low	Sustainability of proposed interventions post-project is uncertain. Risk is mitigated by developing a cost-benefit analysis and exploring local incentives or subsidies for adoption.
EXECUTION		
Capacity	Substantial	Limited local experience with integrating nature and climate into plans. Capacity building, training, and knowledge exchange workshops are planned to ensure adequate implementation.

Fiduciary	Moderate	Robust financial oversight by the Project Steering Committee, GEF Agency and DBSA will ensure transparent use of funds.
Stakeholder	Moderate	Possible resistance from community members unfamiliar with opportunities to include nature and climate into planning. Risk is mitigated through participatory planning, education campaigns, and early community buy-in.
Other	Low	No other major risks identified at this stage.
Overall Risk Rating	Moderate	While the project involves moderate innovation and social engagement risks, these are manageable with planned mitigation actions. Strong institutional support and technical oversight reduce the residual risk.

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Explain how the proposed interventions are aligned with GEF- 8 programming strategies, including the specific integrated program priorities, and country and regional priorities, Describe how these country strategies and plans relate to the multilateral environmental agreements, such as through NDCs, NBSAPs, etc.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how.

(max. 500 words, approximately 1 page)

The proposed project to upgrade municipal plans to integrate climate change and biodiversity conservation aligns closely with (GEF-8); in particular, the project aims to integrate biodiversity safeguards into infrastructure design to halt ecosystem degradation, restore natural habitats, and promote nature-based solutions. This project will also ensure that infrastructure planning and design incorporate climate resilience and mitigate any climate risks to strengthen local adaptive capacity and reduce future vulnerabilities. Lastly, this project will incorporate capacity building for municipal officials for future climate planning at the local and district municipal levels.

The project reinforces the GEF-8 Integrated Program on Sustainable Cities, contributes to systemic transformation at the urban level, and supports GEF's goal of fostering inclusive, resilient, and nature-positive urban development pathways. By integrating these cross-cutting elements, the project ensures a transformational impact that addresses multiple environmental challenges simultaneously, thereby maximising its strategic relevance and long-term sustainability. With these plans in place, intermediary municipalities will have a roadmap to a climate-smart and nature-positive future.

At the country level, the proposed project generates significant cross-cutting benefits by addressing interconnected challenges of climate change, biodiversity conservation, sustainable land management, and renewable energy integration. In doing so, it aligns with South Africa's National Climate Change Adaptation Strategy (NCCAS), the Nationally Determined Contributions (NDCs), the Sustainable Land Management Strategy, and the National Biodiversity Strategy and Action Plan (NBSAP) by integrating climate change into local planning, safeguarding ecosystems that provide essential services, and incorporating biodiversity considerations into sectoral policies, including infrastructure development.

The project further supports the objectives of the National Development Plan (NDP), the District Development Model (DDM), the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), and the Integrated Resource Plan (IRP 2019) by incorporating decentralized renewable energy solutions, such as solar-powered energy systems for public infrastructure, which emphasize the importance of environmental sustainability and climate-resilient infrastructure for inclusive growth.

South Africa is in the process of revising its National Biodiversity Strategy and Action Plan (NBSAP) and national targets are aligned with GEF biodiversity target accordingly:

- *By 2030, ensure that: (1) 100% of Spatial Development Frameworks (SDFs), Marine Spatial Planning (MSP) and Estuarine Management Plans incorporate systematic biodiversity plans; (2) National, provincial and municipal spatial plans adequately incorporate biodiversity considerations.* The main policy measures or actions that will be taken to achieve this national target include '*Biodiversity plans informing spatial plans are current i.e. 100% of plans are less than 10 years old*'. Limited municipal budget is listed as an implementation barrier; and the '*Regular review of Spatial Development Frameworks*' as the means for implementation. The global indicator for this target is '*Percentage of land and seas covered by biodiversity-inclusive spatial plans*'

- *By 2030, sector-wide climate change adaptation strategies and plans are implemented to enhance South Africa's ecosystems, land and seascapes and species' responses that are most vulnerable to climate change and ocean acidification impacts while enhancing resilience and disaster risk reduction.* Considerations for implementation include 'whole of government approach' which indicates this national target will apply at the municipal level.
- *By 2030, nature's contributions to people is integrated into sectoral strategies through nature-based solutions and/or ecosystem-based approaches.* Considerations for implementation include 'whole of government approach' which indicates this national target will apply at the municipal level.
- *By 2030, blue and green open spaces advance biodiversity inclusive planning for the provision of ecosystem services that halt and reverse biodiversity loss.* The main policy measures that will be used to achieve this national targets are (1) National Framework for Open Spaces Management of South Africa is implemented to enhance the mainstreaming of biodiversity conservation; and (2) Open Spaces Management is used to facilitate inclusivity and sustainable use in urban planning to improve connection to nature thereby the improving human health and well-being; and strengthening capacity towards the management of these areas. Global headline indicators include 'Average share of the built-up area of cities that is green or blue space for public use for all' and 'Services provided by ecosystems'. Considerations for implementation include 'whole of government approach' which indicates this national target will apply at the municipal level. Financial resources, capacity-building, transfer of technology are listed as implementation barriers and additional means of implementation are needed but not specified in the national target description.

At the regional and global level, the project contributes to the SADC Climate Change Strategy and Action Plan, and the SADC Biodiversity Strategy, promoting ecosystem restoration and nature-positive development pathways. Globally, the project operationalises South Africa's commitments under the Convention on Biological Diversity (CBD), the United Nations Framework Convention on Climate Change (UNFCCC), and the Convention to Combat Desertification (UNCCD), at the district and local level, where implementation gaps often exist. The proposed project directly supports several targets of the Kunming-Montreal Global Biodiversity Framework (GBF), particularly those focused on integrating biodiversity into urban and infrastructure planning processes. These include Target 1 (biodiversity-inclusive spatial planning), Target 8 (climate adaptation through nature-based solutions), Target 10 (sustainable urban planning), and Target 14 (mainstreaming biodiversity into policy and development processes). Additionally, the project aligns with Target 12 on increasing urban green and blue spaces, Target 20 on capacity-building and knowledge sharing, and Target 22 on inclusive and participatory planning involving women, youth, and persons with disabilities.

- **Target 1 – Biodiversity-inclusive spatial planning:**

The project will strengthen municipal governance and planning frameworks by integrating biodiversity considerations into Spatial Development Frameworks (SDFs), land-use plans, and environmental management tools. Technical support and training will ensure that biodiversity priorities are reflected in spatial planning decisions across the Joe Gqabi, Vhembe, and Gert Sibande District Municipalities.

- **Target 8 – Climate adaptation through nature-based solutions:**

The project will promote the adoption of nature-based solutions, such as ecosystem restoration, wetland protection, and sustainable watershed management, to build climate resilience. Pilot interventions will demonstrate how these approaches can reduce vulnerability to climate impacts while improving ecosystem services.

- **Target 10 – Sustainable urban planning:**

By embedding sustainability principles into municipal development processes, the project will support the design of urban growth strategies that balance social, economic, and environmental needs. This includes promoting compact, resource-efficient, and climate-resilient urban forms.

- **Target 12 – Increasing urban green and blue spaces:**

The project will identify and support initiatives that expand urban green and blue infrastructure, including parks, riparian corridors, and community-managed open spaces, contributing to improved ecosystem connectivity and urban liveability.

- **Target 14 – Mainstreaming biodiversity into policy and development processes:**

Policy guidance and technical assistance will be provided to municipalities to integrate biodiversity and ecosystem services into their Integrated Development Plans (IDPs), environmental policies, and sectoral strategies, ensuring these considerations are institutionalized across planning systems.

- **Target 20 – Capacity building and knowledge sharing:**

The project will enhance institutional capacity through training programmes, peer learning, and knowledge exchange platforms that enable municipalities to implement biodiversity and climate-sensitive planning effectively and to share best practices with neighbouring municipalities.

- **Target 22 – Inclusive and participatory planning:**

The project will promote inclusive governance by ensuring that women, youth, and persons with disabilities actively participate in urban and environmental planning processes. This will be achieved through participatory workshops, community dialogues, and targeted support to ensure equitable representation in decision-making.

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed during Project Preparation as per GEF Policy and are clearly articulated in the child Project Description (Section B).

Yes

1) Does the project expect to include any gender-responsive-measures to address gender gaps or promote gender equality and women's empowerment?

Yes

If the child project expects to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment, please indicate in which results area(s) the project is expected to contribute to gender equality:

Closing gender gaps in access to and control over natural resources;

Yes

Improving women's participation and decision-making; and/or

Yes

Generating socio-economic benefits or services for women.

Yes

2) Does the child project's results framework or logical framework include gender-sensitive indicators?

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during Project Preparation as required per GEF policy, their relevant roles to project outcomes has been clearly articulated in the Child Project Description (Section B) and that a Stakeholder Engagement Plan has been developed before CEO endorsement.

Yes

Select what role civil society will play in the Project:

Consulted only; Yes

Member of Advisory Body; Contractor;

Co-financier;

Member of project steering committee or equivalent decision-making body ;

Executor or co-executor;

Other (Please explain)

Private Sector

Will there be private sector engagement in the Child project?

Yes

And if so, has its role been described and justified in section B "Child project description"?

Yes

Environmental and Social Safeguards

We confirm that we have provided information regarding Environmental and Social risks associated with the proposed child project or program, including risk screenings/ assessments and, if applicable, management plans or other measures to address identified risks and impacts (this information should be presented in Annex E).

Yes

Please provide overall Project/Program Risk Classification

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
	Medium/Moderate		

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described during Project Preparation in the Project Description and that these activities have been budgeted and an anticipated timeline for delivery of relevant outputs has been provided. This includes budget for linking with and participation in knowledge exchange activities organized through the coordination platform.

Yes

Socio-economic Benefits

We confirm that the child project design has considered socio-economic benefits to be delivered by the project and these have been clearly described in the Project Description and will be monitored and reported on during project implementation (at MTR and TER).

The SCIP GEF-8 child project integrates socio-economic benefits throughout its design, with clear articulation in the Project Description and plans for monitoring at the Mid-Term Review (MTR) and Terminal Evaluation (TER). Key benefits include job creation, improved municipal service delivery, enhanced infrastructure efficiency, and strengthened local governance and capacity. The project also promotes inclusion by targeting vulnerable groups such as women, youth, and persons with disabilities. These outcomes are embedded across all project components and will be tracked through the Results Framework to ensure delivery and adaptive management.

ANNEX A: FINANCING TABLES

GEF Financing Table

Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non- Grant	GEF Project Grant(\$)	Agency Fee(\$)	Total GEF Financing (\$)
DBSA	GET	South Africa	Climate Change	CC STAR Allocation: IPs	Grant	3,594,496.00	323,504.00	3,918,000.00
DBSA	GET	South Africa	Biodiversity	BD STAR Allocation: IPs	Grant	1,759,634.00	158,366.00	1,918,000.00
DBSA	GET	South Africa	Climate Change	CC IP Matching Incentives	Grant	1,198,166.00	107,834.00	1,306,000.00
DBSA	GET	South Africa	Biodiversity	BD IP Matching Incentives	Grant	586,545.00	52,788.00	639,333.00
Total GEF Resources (\$)						7,138,841.00	642,492.00	7,781,333.00

Project Preparation Grant (PPG)

Was a Project Preparation Grant requested? true

PPG Amount (\$) 200000

PPG Agency Fee (\$) 18000

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	PPG(\$)	Agency Fee(\$)	Total PPG Funding(\$)
DBSA	GET	South Africa	Biodiversity	BD STAR Allocation: IPs	75,000.00	7,000.00	82,000.00
DBSA	GET	South Africa	Climate Change	CC STAR Allocation: IPs	75,000.00	7,000.00	82,000.00
DBSA	GET	South Africa	Climate Change	CC IP Matching Incentives	25,000.00	2,000.00	27,000.00
DBSA	GET	South Africa	Biodiversity	BD IP Matching Incentives	25,000.00	2,000.00	27,000.00

Total PPG Amount (\$)	200,000.00	18,000.00	218,000.00
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Please provide Justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total(\$)
DBSA	GET	South Africa	Biodiversity	BD STAR Allocation	2,000,000.00
DBSA	GET	South Africa	Climate Change	CC STAR Allocation	4,000,000.00
Total GEF Resources					6,000,000.00

Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
Cities IP	GET	7,138,841.00	125528000
Total Project Cost		7,138,841.00	125,528,000.00

Confirmed Co-financing for the project, by name and type

Please include evidence for each co-financing source for this project in the tab of the portal

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
GEF Agency	DBSA	Grant	Investment mobilized	13888000
Civil Society Organization	ICLEI Africa	In-kind	Recurrent expenditures	40000
GEF Agency	DBSA	In-kind	Recurrent expenditures	600000
GEF Agency	DBSA	Loans	Investment mobilized	111000000
Total Co-financing				125,528,000.00

Please describe the investment mobilized portion of the co-financing

A total of USD 125,528,000 will be mobilized from the Development Bank of Southern Africa (DBSA) and ICLEI Africa to support the integration of climate and biodiversity considerations into municipal planning and infrastructure development. This includes USD 13.89 million in grants and USD 111 million in loans from DBSA aimed at mobilizing sustainable infrastructure investments, complemented by USD 600,000 in in-kind contributions from DBSA covering staff time, institutional resources, and project-related travel. Additionally, ICLEI Africa will provide USD 40,000 in in-kind support through technical assistance and knowledge-sharing to

strengthen municipal capacity for climate-smart and biodiversity-aligned urban planning. Together, these contributions will catalyze investment in resilient, nature-positive infrastructure and reinforce institutional capabilities for sustainable urban development.

ANNEX B: ENDORSEMENT

GEF Agency(ies) Certification

GEF Agency Coordinator	Date	Project Contact Person	Telephone	Email
GEF Agency Coordinator	6/20/2025	Mookho Mathaba DBSA	0027113133911	mookhom@dbsa.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Please attach the Operational Focal Point endorsement letter(s) with this template.

Name of GEF OFP	Position	Ministry	Date (MM/DD/YYYY)
Stuart Mangold	GEF Operational Focal Point	Department of Fisheries, Forestry and Environment	6/20/2025

ANNEX C: PROJECT RESULTS FRAMEWORK

Please indicate the page number in the Project Document where the project results and M&E frameworks can be found. Please also paste below the Project Results Framework from the Agency document. For the Integrated Programs' global/regional coordination child project, please include the program-wide results framework, inclusive of results specific to the coordination child project. For any country child project, please ensure that relevant program level indicators are included.

Output	Outcome	Indicator number	Indicator description	Baseline	Mid-term target	End of project target	Sources of information	Risks and Assumptions
Component 1: Supporting integrated and inclusive urban planning, strategies, and policy development Outcome 1: Local and/or national governments have strengthened and developed integrated and coherent policy and increased the scope and depth of their integrated		Indicator 1	Number of cities that have used the various tools to support integrated urban strategic planning process	0	2	4	Submission of reports	We assume that project municipalities will openly share information related to the municipality's institutional and governance structures, as well as core municipal plans and policies. Low risk due to DBSA's long-standing relationship

planning.

						with the selected municipalities, who have also indicated interest in this project.
Indicator 2	Number of major policies, regulations and strategies developed to support urban sustainability	0	1	1	Submission of report	We assume that all tiers of the South African government will openly share information related to how governance structures can enhance municipal action to tackle climate change and biodiversity loss. Low risk due to DBSA's long-standing relationships with all tiers of government in South Africa, as well as interest expressed in this project.
Indicator 3	Number of non-GEF-8 countries and cities engaged through domestic and global knowledge platforms	0	1	2	Submission of reports	We assume that the non-GEF-8 countries and cities that participate in the domestic and global knowledge platforms are open to engagement. Low risk due to DBSA's and project partners previous experience in engagement in international and domestic knowledge exchange platforms.

	Indicator 4	Number of women participating in consultations (by component, municipality)	0	100	200	Stakeholder engagement event attendance registers	Low Risk. South African legislation and culture has made strides in ensuring promotion of gender and employment equity in government institutions.
Component 2: Promoting investments in sustainable, nature-positive, and resilient urban development and adopting innovative financing mechanisms Outcome 2: Local and national governments have increased and innovative investment flows to nature-positive and resilient urban development New and innovative project pipelines have been developed	Indicator 5	Number of USD equivalent of nature positive, low carbon, land restoration demonstration s and/or investments leveraged through the project activities, and % from private financing	0	2	4	Evidence of financial mechanism deployed. Examples include: project concept note; pre-feasibility study; feasibility study; existing finance flow deployed/ bolstered to contribute to climate change and biodiversity goals and targets (e.g. green procurement , green budget tagging, planned infrastructure project greened); national urban finance mechanisms established; interest shown by PPF, MDB, DFI &/ or private investor to finance the development	We assume that all project municipalities are open to harnessing existing financial flows and/ or accessing additional finance via the development of municipal-led projects, to ensure implementation of climate change and biodiversity actions. Low risk due to DBSA's long-standing relationship with the selected municipalities, who have also indicated interest in this project. Additionally, South African national and sub-national policies mandate municipalities to pursue climate change

						of a municipal-led project; municipal-led project enters a DFI's PPF; municipal-led project enters due diligence stage of DFI PPF	and biodiversity goals. Furthermore, municipalities are focused on delivering impact via implementation , and thus this component of work is of particular importance to the project municipalities.
	Indicator 6	# of cities that have initiated innovative financial mechanisms and/or business models for sustainable urban investment	0	2	4	Submission of municipal finance mechanism reports that analyse which financial mechanisms/ options/ ownership models are available to each municipality based on financial, socio-economic and governance criteria, as well as per sector	We assume that all project municipalities are open to exploring relevant financial mechanisms to unlock finance for implementation of climate change and biodiversity actions. Low risk due to DBSA's long-standing relationship with the selected municipalities, who have also indicated interest in this project. Additionally, South African national and sub-national policies mandate municipalities to pursue

								climate change and
		Indicator 7	# of cities identified that can be part of a pipeline for future investments for GEF and other initiatives	0	2	4	Submission of reports on cities identified	We assume that all identified municipalities are open to participating as part of the pipeline. Low risk due to DBSA’s long-standing relationship and on-going work with municipalities.
		Indicator 8	Number of women trained in project sectors (By age, location)	0	100	200	Capacity building event attendance registers	We assume that there are female government officials employed in relevant positions within each municipality who can be trained and participate in project events.
		Indicator 9	Number of knowledge products developed that include lessons learned in advancing gender equality and women’s empowerment	0	1	2	Submission of reports	We assume that all project municipalities are open to ensure implementation of gender actions and sharing lessons on the successes.
Component 3: Strengthenin g knowledge-sharing and capacity-building	Outcome 3: Policy making and action are influenced at local and national levels to promote	Indicator 10	# of cities participated in knowledge exchanges, capacity development, and networking	0	2	4	Submission of reports on training events attended	We assume that there will be interest from the cities that participate in the knowledge exchanges and networking activities.

	sustainable and inclusive cities through strengthened partnerships and enhanced knowledge and technical capacity. In addition, ensuring participation of women at all levels to have a balanced view on gender		activities conducted by the Global Platform					Low risk due to DBSA's long-standing relationship and on-going work with municipalities.
		Indicator 11	# of national knowledge exchanges and trainings held	0	2	4	Submission of reports on national knowledge exchanges and trainings held	We assume that there will be interest within the country to engage in the knowledge exchanges and trainings.
		Indicator 12	# of partnerships engaged at the global level through the Global Platform and at the national level through the country project implementation	0	1	2	Submission of report on partnerships	We assume that there will be interest to engage in partnerships.
								Low risk due to DBSA's long-standing relationships with all tiers of government in South Africa, as well as interest expressed in this project.
								Low risk due to DBSA's long-standing relationships with all tiers of government in South Africa, as well as interest expressed in this project.
Gender Action Plan	Gender mainstreaming in project design and delivery	Indicator 13	Proportion of gender targets met (% aggregated)	0	50%	100%	Quarterly or bi-annual internal progress reports tracking each gender activity and indicator.	Active commitment from project partners and stakeholders to integrate gender considerations in all components.

GEF Core Indicators

Indicator	Baseline	Mid-year target	End of project target	Evidence	Risks and assumptions
Area of land under improved practices (hectares)	0	200,000	418,795 ha	Amount of municipal land managed in accordance with revised municipal plans	We assume all project municipalities would be open to revising municipal plans for stronger/ more ambitious inclusion of climate change and biodiversity measures. We assume there will be sufficient natural land and green spaces managed within the mandate of each municipality to reflect the benefits of the revised plans. Low risk due to DBSA's long-standing relationship with the selected municipalities, who have also indicated interest in this project. Additionally, South African national and sub-national policies mandate municipalities to pursue climate change and biodiversity goals.
Greenhouse Gas Emissions Mitigated (metric ton of CO ₂ e)	0	301799,52 tons CO ₂	754498.8 tons CO ₂	Tracked electricity generated through solar PV installations and calculated energy saved by efficiency installations	We assume that there will be sufficient area on municipal buildings, exposed to suitable levels of solar radiation to support the solar PV installations. Low risk as solar PV and energy efficient systems are

					well-supported technologies with continuously improving efficiency.
People benefiting from GEF-financed investments disaggregated by sex (count)	0	4000000	~8,849,246 	Reports submitted	We assume that people will benefit both directly and indirectly from the adoption of the solar PV. Low risk as the deployment of solar PV and energy efficiency systems is well-documented to deliver positive outcomes in a variety of community settings.

Gender indicators

Outcome	Output	Indicator	Baseline	Mid-term target	End of project target	Source of information/tracking	Risks and assumptions
Gender	Training of women through project activities	Number of women trained in project sectors (By age, location)	0	100	200	Capacity building event attendance registers	We assume that there are female government officials employed in relevant positions within each municipality who can be trained and participate in project events.
	Gender empowerment through implementation	Proportion of women beneficiaries of solar systems (% of female headed households)	0	10%	30%	Assessment of City of Johannesburg demographic data with solar PV amounts	
	Accounting for gender considerations through project	Number of women participating in consultations (by	0	100	200	Stakeholder engagement event	We assume that the Solar PV installations will impact

implementation processes	component, municipality)				attendance registers	evenly across a spread of the population that represents a proportional amount of female-headed households (~37%).
Gender mainstreaming in project design and delivery	Proportion of gender targets met (% aggregated)	0	50%	100%		Low Risk. South African legislation and culture has made strides in ensuring promotion of gender and employment equity in government institutions.

M&E plan

Type of monitoring and evaluation activity	Responsible parties	Budget excl. project team staff time	Timeframe
Inception workshop and report	M&E Specialist, ICLEI Africa and CoJ	USD 8 360.33 (held under workshop & travel budget)	Within first two months of project start up with full team on board
Develop and implement a monitoring and evaluation system that supports project impact assessment, including Measurement of Means of Verification of project results.	M&E Specialist, led by Project manager	None: Will just require staff time. Will build on existing M&E systems used by the Executing Agencies (DBSA and CoJ)	Within first 6 months of project start
Measurement of means of verification of project results	M&E Specialist, led by Project Manager	None: Will just require staff time. Will build on existing M&E systems used by the Executing Agencies (DBSA and CoJ)	Start, mid and end of project (during evaluation cycle) and annually when required

Measurement of means of verification for project progress on output and implementation	M&E Specialist, led by Project Manager	None: Will just require staff time. Will build on existing M&E systems used by the Executing Agencies (DBSA and CoJ)	Annually prior to ARR/PIR and to the definition of annual work plans
Annual Project Review/Project Implementation Reports (APR/PIR)	M&E Specialist, led by Project Manager	None	Annually
Periodic status/ progress reports	M&E Specialist, led by Project Manager	None	Quarterly
Mid-term Review	ICLEI Africa, CoJ (led by Project Manager), external consultants	USD 200 000 set aside for MTR and TE	At the mid-point of project implementation
Terminal Evaluation	ICLEI Africa, CoJ (led by Project Manager), external consultants	USD 200 000 set aside for MTR and TE	At least three months before the end of project implementation
Audit	DBSA	Comes from agency fee. Total in budget = USD 860,492.00	Annually
Site visits	DBSA	Comes from agency fee. Total in budget = USD 860,492.00	As required
TOTAL indicative COST (excluding staff) & DBSA cost			USD 8 360.33

ANNEX D: STATUS OF UTILIZATION OF PROJECT PREPARATION GRANT (PPG)

Provide detailed funding amount of the PPG activities financing status in the table below:

Project Preparation Activities Implemented	GETF/LDCF/SCCF Amount (\$)		
	Budgeted Amount	Amount Spent To date	Amount Committed
Service provider assist with CEO ER project documents	75,000.00	75,000.00	
GEF 8 SCIP Workshops - Urban shift and GPSC project preparation workshops	125,000.00	105,000.00	20,000.00

Total	200,000.00	180,000.00	20,000.00
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ANNEX E: PROJECT MAP AND COORDINATES

Please provide geo-referenced information and map where the project interventions will take place

Location Name	Latitude	Longitude	GeoName ID
City of Johannesburg	-26.1908	28.0397	8,347,354

Location Description:

City of Johannesburg is South Africa's economic hub located within the Gauteng province.

Activity Description:

Piloting energy efficiency in municipal buildings and the deployment of rooftop solar photovoltaic (PV) systems

Location Name	Latitude	Longitude	GeoName ID
Vhembe District	-22.9683	30.4575	8,347,374

Location Description:

The Municipal seat is in Thohoyandou, it Includes Thulamela, Collins Chabane, Makhado and Musina local municipalities

Activity Description:

Incorporating climate and nature considerations into infrastructure plans.

Location Name	Latitude	Longitude	GeoName ID
Gert Sibande District	-26.5230	29.9722	8,347,371

Location Description:

The seat is in Ermelo, the district constitutes of Chief Albert Luthuli, Govan Mbeki, Msukaligwa, Dipaleseng, Lekwa, Mkhondo and Dr Pixley Ka Isaka Seme local municipalities.

Activity Description:

Incorporating climate and nature considerations into infrastructure plans.

Location Name	Latitude	Longitude	GeoName ID
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Joe Gqabi District	-30.9674	27.5944	8,347,357
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Location Description:

The seat is in Barkly East, the district constitutes of Walter Sisulu, Senqu and Elundini local municipalities

Activity Description:

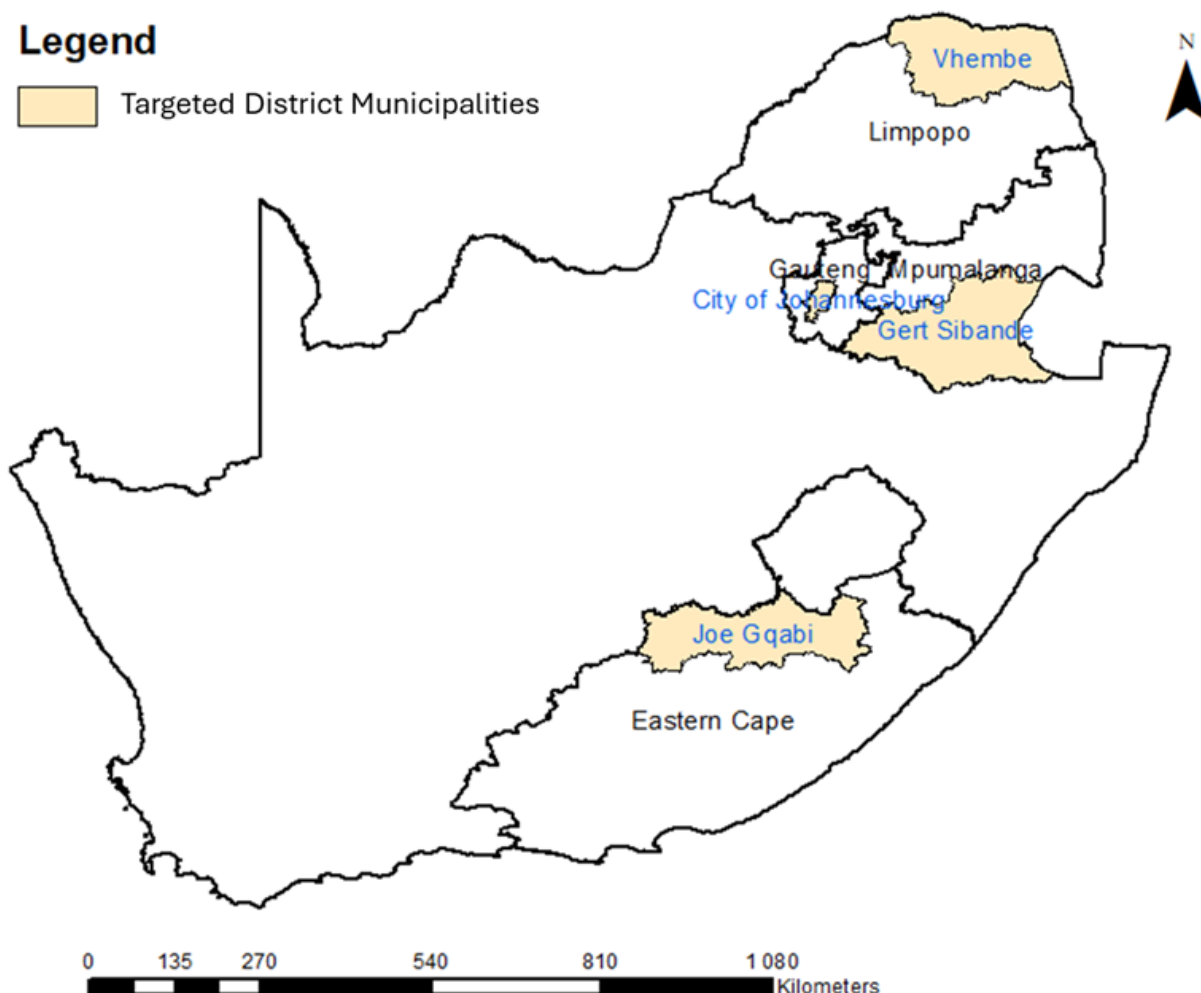
Incorporating climate and nature considerations into infrastructure plans.

Please provide any further geo-referenced information and map where project interventions are taking place as appropriate.

Legend



Targeted District Municipalities



Geo Name ID	Location Name <i>Required field</i>	Latitude <i>Required field</i>	Longitude <i>Required field</i>	Location Description <i>Optional text field</i>	Activity Description <i>Optional text field</i>
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Required field if the location is not an exact site					
8347354	City of Johannesburg	-26.1908	28.0397	City of Johannesburg is South Africa's economic hub located within the Gauteng province.	Piloting energy efficiency in municipal buildings and the deployment of rooftop solar photovoltaic (PV) systems
8347374	Vhembe District	-22.9683	30.4575	The Municipal seat is in Thohoyandou, it Includes Thulamela, Collins Chabane, Makhado and Musina local municipalities	Incorporating climate and nature considerations into infrastructure plans.
8347371	Gert Sibande District	-26.5230	29.9722	The seat is in Ermelo, the district constitutes of Chief Albert Luthuli, Govan Mbeki, Msukaligwa, Dipaleseng, Lekwa, Mkhondo and Dr Pixley Ka Isaka Seme local municipalites.	Incorporating climate and nature considerations into infrastructure plans.
8347357	Joe Gqabi District	-30.9674	27.5944	The seat is in Barkly East, the district constitutes of Walter Sisulu, Senqu and Elundini local municipalities	Incorporating climate and nature considerations into infrastructure plans.

ANNEX F: ENVIRONMENTAL AND SOCIAL SAFEGUARDS DOCUMENTS INCLUDING RATING

Attach agency safeguard datasheet/assessment report(s), including ratings of risk types and overall project/program risk classification as well as any management plans or measures to address identified risks and impacts (as applicable).

Title

GEF-8_SA SCIP CEO Endorsement_Doc FINAL FINAL

Project Results & M&E Frameworks_20Nov2025

GEF-8_Stakeholders engagement plan_20Nov25 v2

GEF-8_Environmental and Social Management Framework v20Nov2025

GEF-8_Project Grievance Mechanism v20Nov2025

GEF-8_Social and Env Safeguards_Plan 20Nov2025

GEF_Gender Action Plan v20Nov2025

GEF-8 Emissions Calculations_updated

TERMS OF REFERENCE - PMU

GEF_Theory of Change_12 Nov25

ANNEX G: BUDGET TABLE

Please upload the budget table here.

Expen diture Cate gory	Detailed Descriptio n	Component (USDeq.)							Total (USD eq.)	Respon sible Entity
		Comp onent 1	Comp onent 2	Comp onent 3	Comp onent 4	Sub- Total	M& E	PM C		ftn1
		Outco me 1	Outco me 2	Outco me 3	Outco me 4					
Contra ctual Servic es - Comp any	Review IDPs, SDFs/SDP s, infrastructu re master plans, precinct plans, and sector strategies (water, transport, waste, energy). A multi- disciplinary team of engineers, town planners and other profession s will be contracted to assess various	400,00 0				400,0 00			400,0 00	ICLEI Africa

	municipalities									
Contractual Services - Individual	Compile an inventory of relevant climate, biodiversity, and land-use documents at municipal, provincial, and national levels.	150,000				150,000			150,000	ICLEI Africa
Contractual Services - Individual	Conduct climate risk and vulnerability assessments. Map climate hazards (heat, floods, drought, wildfires) and exposure of people, infrastructure, and ecosystems. Identify climate hotspots, vulnerable populations and critical infrastructure at risk	270,000				270,000			270,000	ICLEI Africa
Contractual Services -	Analyse municipal reliance on ecosystem services	80,000				80,000			80,000	ICLEI Africa

Individual	(water provision, flood attenuation, soil protection, carbon sequestration).									
Contractual Services - Individual	Perform Municipal Gap and Needs Analysis. Ensure alignment with provincial spatial development frameworks and national directives (NDCs, NBSAPs, Climate Act).	250,000				250,000			250,000	ICLEI Africa
Contractual Services - Individual	Develop Gap Assessment Reports for Each Municipality	60,000				60,000			60,000	ICLEI Africa
Contractual Services - Company	Co-Design Integration Roadmaps with Municipal Planning Teams. Define steps, timelines and responsibilities for integrating climate	150,000				150,000			150,000	ICLEI Africa

	and biodiversity into IDPs, SDPs and masterplans.									
Contra ctual Servic es - Individ ual	Develop Climate- and Nature-Responsive Planning Guidelines. Prepare technical guidance on climate-smart developments, NbS, ecological infrastructure investment and low carbon pathways. Develop templates, case studies and / or decision - support tools where applicable	120,000				120,000			120,000	ICLEI Africa
Contra ctual Servic es - Comp any	Integrate Climate and Biodiversity Interventions into IDPs & SDPs. Update strategic objectives, development	350,000				350,000			350,000	ICLEI Africa

	priorities, and capital programmes and embed considerations on climate risk reductions, ecosystem restoration, circular economy initiatives, and green infrastructure investments in the IDPs and SDPs.									
Contractual Services - Company	Revise Infrastructure Master Plans and incorporate climate-resilient infrastructure standards (flood-resistant roads, heat-resilient buildings, water-sensitive design) and nature-based solutions such as wetland rehabilitation, riparian buffers, green corridors,	149,748				149,748			149,748	ICLEI Africa

	stormwater NbS, and urban greening.									
Contra ctual Servic es - Individ ual	Support Preparation of Project Pipelines and Pre-Feasibility Settings. Identify opportunities for bankable climate-resilient and nature-positive infrastructure projects.	200,000				200,000			200,000	ICLEI Africa
Contra ctual Servic es - Individ ual	Conduct Public Participation and Council Approval Processes. Facilitate mandated public consultations, including vulnerable groups and traditional authorities and support municipalities to take documents through Council processes.	10,000				10,000			10,000	ICLEI Africa
Contra ctual Servic es -	Finalise the revised IDPs, SDPs and	10,000				10,000			10,000	ICLEI Africa

Comp any	master plans incorporating climate and nature interventions and prepare summary briefs for municipal leadership and stakeholders.									
Contra ctual Servic es - Comp any	Develop climate-smart and biodiversity-sensitive planning toolkits. Produce guidelines covering climate risk assessment, biodiversity mapping, ecological infrastructure integration, and NbS planning. Create templates, checklists, decision-support tools, spatial analysis methodologies, and model municipal planning clauses.		120,000			120,000			120,000	ICLEI Africa

Contra ctual Servic es - Comp any	Develop an online hub for resources. Upload all guidelines, tools, case studies, and templates onto a digital knowledge platform accessible to municipalities.		30,000			30,000			30,000	ICLEI Africa
Contra ctual Servic es - Comp any	Provide technical support to municipalities during the preparation and/or revision of IDPs, SDPs and master plans. Support municipalities on applying tools, templates and climate and biodiversity datasets		20,000			20,000			20,000	ICLEI Africa

Contractual Services - Company	Service provider to facilitate increased access to finance at municipal level that enables climate smart and nature positive implementation. This involves stakeholder engagement to gather information on financial mechanisms, financing options, ownership models at the municipal level, Desktop exploration of financial mechanisms, financing options, ownership models at the municipal level, Draft municipal financial mechanism analysis reports developed for each municipality			150,000		150,000			150,000	An Executing agency to be identified later in consultation with the GEF secretariat and with their approval for any amendment needed
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	y, including a municipal taxonomy and tool that allows grouping of municipalities in terms of financial instruments, development of municipal financial mechanism analysis reports and deployment of Financial mechanisms at municipal level.									
Contractual Services - Company	Deploy financial mechanisms at municipal level through Stakeholder engagement to assess gaps and to explore potential for utilisation of identified viable financial mechanisms. development of			60,000		60,000			60,000	An Executing agency to be identified later in consultation with the GEF secretariat and with their approval for any amendment needed

	Roadmaps for each municipality to guide deployment of a viable financial mechanism in ways most relevant to their individual contexts. Municipalities will be provided with viable financial and technical support. Assessment of refined financial mechanism deployment within each municipality to capture terminal lessons for Roadmaps.									
Contractual Services - Company	Develop capacity building tools and materials for financial mechanism deployment and Deliver			120,000		120,000			120,000	An Executing agency to be identified later in consultation with the GEF secretar

	capacity building workshops for municipal officials in each municipality for financial mechanism deployment									iat and with their approval for any amendment needed
Contractual Services - Individual	Conduct feasibility study on increasing embedded generation in the city through solar PV to 200MW and energy efficiency installations. Assessment of renewable energy and energy efficiency installation performance to capture lessons. Support women-led SMMEs in solar system maintenance, helping to promote women's participation in the				100,000	100,000			100,000	City of Johannesburg

	green economy.									
Contractual Services - Company	Procurement and fitting of renewable energy and energy efficiency installations.				2,600,000	2,600,000			2,600,000	City of Johannesburg
Contractual Services - Company	Monitoring, Evaluation and reporting activities - An independent auditor to evaluate project deliverables at mid-term and terminal stages.					-	200,000		200,000	DBSA
Salary and benefits / Staff costs	Project Manager					-		226,062	226,062	ICLEI Africa
	Project Assistant							113,031	113,031	ICLEI Africa
Trainings, Workshops, Meetings	Hold multi-stakeholder dialogues with municipal departments, catchment management agencies, provincial planning	50,000				50,000			50,000	ICLEI Africa

	units, SANBI, DFFE, communities, private sector, and academia.									
	Facilitate Inter-Departmental Planning Sessions	20,000				20,000			20,000	ICLEI Africa
	Training 400 municipal officials on integration of Biodiversity and Climate elements into municipal plans. Identify knowledge gaps, training priorities, institutional barriers, and departmental needs in each municipality. Develop a comprehensive training curriculum that covers climate risk assessment, biodiversity-sensitive land-use		69,748			69,748			69,748	ICLEI Africa

	planning, NbS, ecological infrastructure, climate-responsive infrastructure design, and mainstreaming into IDPs/SDPs /Master Plans. Support municipal teams during the preparation or revision of IDPs, SDPs and master plans and Offer support on applying tools, templates, and climate/bio diversity datasets.									
	Support municipal contributions to climate change abatement and reduction of biodiversity loss and ecosystem - Delivery of capacity building workshops for		150,000			150,000			150,000	ICLEI Africa

	municipal officials in each municipality for mainstreaming climate change and biodiversity . - Stakeholder engagement to assess needs related to mainstreaming climate change and nature positive actions.									
	Support municipal officials and the project team to attend GPSC and UrbanShift global workshops, technical clinics, and peer-exchange forums. Facilitate participation in UrbanShift regional exchanges , global convenings		480,252			480,252			480,252	An Executing agency to be identified later in consultation with the GEF secretariat and with their approval for any amendment needed

	, and thematic sessions. Capture and disseminate insights from these events across all municipalities through debrief sessions, briefing notes, and knowledge-sharing webinars. Facilitate international exchanges and participation in additional GPSC-recommended learning events. Enable selected municipalities to attend international conferences, exhibitions, and technical workshops endorsed or recommended by GPSC or UrbanShift,									
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	such as Cities & Climate Finance Leadership Alliance (CCFLA) events, UNFCCC COP side sessions related to urban resilience and others									
	Training on integrated RE and EE approaches				50,000	50,000			50,000	City of Johannesburg
Travel	Travel to other workshops and meetings such as - RISE Africa - Urban resilience forums - validation workshops	100,000	30,000		200,000	330,000			330,000	ICLEI Africa
Office Supplies	Office equipment				50,000	50,000			50,000	City of Johannesburg
Grand Total		2,369,748	900,000	330,000	3,000,000	6,599,748	200,000	339,093	7,138,841	

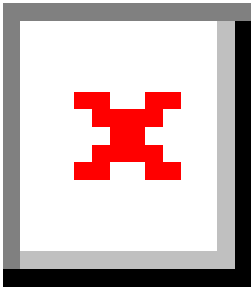
Please explain any aspects of the budget as needed here

ANNEX I: RESPONSES TO PROJECT REVIEWS

From GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF.

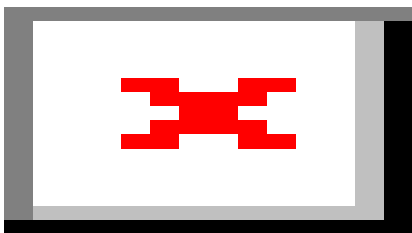
GEF SEC Comment	Response:
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c) Please include the outputs and outcomes for the M&E component.	The M&E component outputs and outcomes are included.
<u>Third review:</u> a)-b) Comment has not been addressed. The Theory of Change diagram (Figure 1) is still blurry and illegible. Please upload in the Portal again with better resolution. d)-e) Two previous comments still have not been addressed. Components 1-2: The support for urban planning and capacity building through this project is said to be delivered in a few core municipalities, and previously DBSA had communicated these other participating municipalities were Joe Gqabi, Vhembe and Gert Sibande. However, the project description still doesn't mention the names of these municipalities in the text. <u>Please make explicit reference to these three municipalities and what exactly the project will support in these municipalities.</u> This needs to be clearly described in the Project Description as well as the budget table. Component 3: The comment on Component 3 has not been addressed, no edits or updates seem to have been made, and there is no response given in the review sheet. Please address this comment: While the focus on financing is valuable, the proposed activities for output 3.1.2: Financial mechanisms deployed at the municipal level, are lacking. The current activities only aim to identify, map, and train institutions on various options. Under this component, DBSA should be more ambitious in linking with their own municipal financing work and leveraging their investments. <u>Please update the component description to respond to this comment.</u>	a)-b) The Theory of Change was edited to include the issues of unsustainable urban development urban sprawl and lack of efficient planning at the municipal level as challenges. Added sentences that describe the assumptions made for the ToC and these are included as blocks in the ToC. d)-e)Component 1: Activities that foster coordination between municipal departments have been added. We have also added that this project will also assess policy alignment and identify conflicting policies that may constrain biodiversity integration and propose harmonisation strategies. The separation between the two components has now been made clearer, the name of Component 2 now no longer mentions mainstreaming into policies and plans. Component 2: Included participation in the GPSC events and trainings, which may be envisioned under activity 2.1.3.3. Explicit reference to the three municipalities is made on Page 10 stating that Components 1 to 3 will be primarily implemented in the Joe Gqabi, Vhembe, and Gert Sibande

	District Municipalities, while Component 4 will focus on implementation within the City of Johannesburg. Component 3: Text has been added to indicate that this component will leverage DBSA's existing engagements and financing to catalyze concrete energy projects and mobilize funders.
1) The text still refers to DBSA and CoJ as the executing agencies. Please update this to reflect the current execution arrangements with CoJ and ICLEI as executing agencies. 	The figure on Page 22 has been updated to reflect as CoJ and ICLEI Africa as executing agencies. The supporting text has also been revised on Page 22 to indicate the role of ICLEI Africa as an executing agency, and we have removed the sentences indicating that the role of ICLEI Africa would still need to be refined.
i. For Core Indicator 6, some assumptions and calculations have been provided. In the review sheet, it is stated that "A spreadsheet that shows how the emissions were estimated has been included." However, we cannot find such a spreadsheet uploaded in the GEF Portal. <u>Please provide this spreadsheet during the next submission.</u> ii. In the methodology text, please keep the section referring to Regarding Core Indicator 4 and how the 418,795 ha is linked to the amount of municipal land in accordance with revised municipal plans. Please also provide the area per municipality used to come up with this total number.	i. The spreadsheet is uploaded to the portal. ii. Table 2 on page 24 of the CEO Endorsement Template provides the information on the area per municipality, with the text above this table on Page 23

iii. The target for Core Indicator 11 (Number of people benefitting) is missing. <u>Please include this number in the portal entry.</u> See screenshot here below:	providing further context. Essentially, Johannesburg is highly urbanised, with only 35% of its land remaining in a natural state. Due to extensive transformation from agriculture, mining, and informal settlements, a conservative land restoration target of 2% was set, while less urbanised municipalities adopted a 5% target. iii. The number is included on the portal.
6 C. Alignment with GEF-8 Programming Strategies and Country/Regional Priorities 6.1 a) Is the project adequately aligned with Focal Area objectives, and/or the LDCF/SCCF strategy? b) [If a child project under an integrated program] Is the project adequately aligned with the program objective in the GEF-8 programming directions? <u>Third review:</u> Comment not addressed: Some mention of GEF-8 Sustainable Cities IP and its priorities has been provided, please bring this upfront in this section. As this is an IP project and not a focal area project, the references to focal area objectives can be removed from this section.	The references to the focal area objectives have been removed and the text on the GEF-8 Sustainable Cities IP and its priorities has been moved up in the section and is now on page 28 of the CEO Endorsement template.
6.3 For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), does the project clearly identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and how it contributes to the identified target(s)? <u>Third review:</u> Comment not addressed: Reference to the Kunming-Montreal Global Biodiversity Framework are made, but please also include a brief description for each of the Targets mentioned on <u>HOW</u> the project will contribute this this. It can be just one sentence per Target mentioned (i.e. Targets 1, 8, 10, 12, 14, 20 and 22). Example:	For each of the targets a brief description of how the project will contribute to the targets is now provided. Please see page 30 of the CEO endorsement template.

<i>“The project will contribute to Target 1 (biodiversity-inclusive spatial planning) by improving governance and institutional support at the municipal level, which will increase their capacity to carry out spatial planning that considers biodiversity and nature-positive development.”</i>	
<u>Third review:</u> Gender Analysis has not been provided. See previous comment here below: Additional comment from GEF’s Operations and Policy team: A gender analysis is missing. This has to be done and its findings integrated into the project document - description, ToC, project components. The Gender Action Plan does not specify the actions/activities that will be taken to address gender inequality and empower women as part of the project. The Gender Action Plan has to be aligned with the project components and outputs. The Results Framework should also include gender indicators aligned with indicators included in the project Gender Action Plan. Please revise the Gender Action Plan accordingly. Please ensure also that knowledge products developed include lessons learned in advancing gender equality and women’s empowerment in the project. On M&E, please ensure the regular monitoring and reporting of gender-specific results, including the implementation of the Gender Action Plan.	• A gender analysis is discussed in detail in Section 2 of the Gender Action Plan. This section details the approach to the analysis, the sources of information used the key findings. A summary of these findings have also been included in the CEO endorsement template at the end of page 9. • Section 3 of the Gender Action provides information on the activities for components 1, 2 and 4 of the project. These are also mentioned within the CEO endorsement template under each component. For Component 1 on page 10/11 and is captured in Output 1.2.1; For Component 2 the title was rephrased to include gender considerations, and this is also captured in outcome 2.1 and on Page 13 clarifies that the knowledge products developed through the project will capture and disseminate lessons learned in advancing gender equality and women’s

	empowerment. For Component 4, on page 17 text has been added to speak to promoting the integration and empowerment of women in the solar energy space and is also captured under Activity 4.1.1.4. These additions are summarised are appropriate in the ToC. • M&E includes the gender specific results and outcomes from the Gender Action Plan.
<u>Third review:</u> There has been no response to the previous comment, and no updated Stakeholder Engagement Plan has been provided. Please provide this, and indicate in the review sheet how the comment has been addressed. A more detailed stakeholder engagement plan including engagement with local communities, informal sectors and vulnerable groups during project implementation needs to be provided.	The stakeholder engagement plan has been updated to indicate the stakeholders consulted. An expanded plan for the implementation plan has also been included in Section 4 of the stakeholder engagement plan.
The table on Status of Utilization of Project Preparation Grant (PPG) needs to provide more detailed information on the type on consultants to be funded by PPG, if this is still part of the budget. You cannot just say “consultants”. Please see screenshot below, and update the row where it only says “Consultants”. 	Updated
<u>Third review:</u>	

Yes, the outstanding DBSA co-financing letter has been uploaded in the portal:	
<u>Third review:</u> Comment not addressed: In Annex E on Project Map and Coordinates, please insert the geographic coordinates of the sites <u>directly under the dedicated data entry field in the portal</u>. They are already in a table format, so please just also insert them into the latitude and longitude fields.	Co-ordinates have been inserted into the portal.
Annex F: Environmental and Social Safeguards Documentation and Rating 8.8 Have the relevant safeguard documents been uploaded to the GEF Portal? Has the safeguards rating been provided and filled out in the ER field below the risk table? <u>Third review:</u> No response or update given in the review sheet. Please ensure that this previous comment has been addressed: We note that DBSA attached the GEF Safeguard Report and stakeholder engagement plan, and an overall ESS risk is classified as Moderate. However, Environmental and Social risk in the Key Risk table mentioned “Low” risk. i. Please make the Environmental and Social risk in the Key Risk table consistent as the GEF Safeguard Report, Moderate. Also, “Explanation of risk and mitigation measures” in the Environmental and Social risk in the Key Risk table is not consistent with the risks identified in the GEF Safeguard Report. Please make this description in the table consistent with the GEF Safeguard Report. ii. A site-specific Environmental and Social Management Framework for City of Johannesburg needs to be completed by CEO Endorsement stage together with detailed consultations with key stakeholders including local communities. iii. Please also explain how the results of consultations with local communities are integrated into the project design. iv. The project grievance mechanisms should be established by the CEO Endorsement stage.	i. This rating has been changed to moderate. The table has been made consistent with the Safeguard Report. ii. A project Environment and Social Safeguards document has been produced. iii. Text has been added to the endorsement template to indicate how the stakeholder engagement carried out during the proposal development stage informed the project design. Specifically, on page 6 of the CEO endorsement template, text has been added to explain how the engagements with stakeholders was used to validate the findings of the desktop analysis, and to ensure that the project design was responsive to local priorities and needs.

	iv. The project grievance mechanisms annex has been produced and is referred to in the Safeguard Report.
<u>Third review:</u> The correct budget format has now been used. The GEF's Operations and Policy team may provide additional input.	Provided