



Piloting innovative financing for climate adaptation technologies in medium-sized cities

Part I: Project Information

GEF ID

Project Type

MSP

Type of Trust Fund

MTF

CBIT/NGI

CBIT

NGI

Project Title

Piloting innovative financing for climate adaptation technologies in medium-sized cities

Countries

Global

Agency(ies)

UNIDO

Other Executing Partner(s)

Network Members and/or Consortium Partners of the Climate Technology Centre and Network (CTCN)

Executing Partner Type

Others

GEF Focal Area

Climate Change

Taxonomy

Focal Areas, Climate Change, Climate Change Adaptation, Climate finance, Influencing models, Demonstrate innovative approach, Stakeholders, Beneficiaries, Gender Equality, Gender Mainstreaming, Sex-disaggregated indicators, Capacity, Knowledge and Research, Innovation

Rio Markers**Climate Change Mitigation**

Climate Change Mitigation 0

Climate Change Adaptation

Climate Change Adaptation 2

Duration

36 In Months

Agency Fee(\$)

64,315

Submission Date

11/11/2019

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
CCA-1	SCCF-A	451,333	1,566,667
CCA-1	LDCF	225,667	733,333
	Total Project Cost (\$)	677,000	2,300,000

B. Indicative Project description summary

Project Objective

To increase the resilience of the cities by adopting climate change adaption solutions through improved capital expenditure planning and innovative private financing mechanisms.

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
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Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
Component 1: Municipal financing toolkit for climate change adaptation (CCA)	Technical Assistance	Outcome 1.1: A financing toolkit for CCA to increase the planning capacities of policymakers from medium-size cities	<p>Output 1.1.1: The financing toolkit for medium-size cities is developed and disseminated. It includes tools to assess CCA technologies in urban planning and innovative financing</p> <p>Output 1.1.2: 60 municipal planners from 3 cities (20/ per city) are trained in the municipal financing toolkit and climate finance</p> <p>Output 1.1.3: A set of high potential climate adaptation and resilience financing solutions are mapped out and prioritized based on their ability to support investment.</p> <p>Output 1.1.4: Communication material for knowledge management are developed and disseminated among NDEs</p>	SCCF -A	233,663	333,337

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
Component 1: Municipal financing toolkit for climate change adaptation (CCA)	Technical Assistance	Outcome 1.1: A financing toolkit for CCA to increase the planning capacities of policymakers from medium-size cities	<p>Output 1.1.1: The financing toolkit for medium-size cities is developed and disseminated. It includes tools to assess CCA technologies in urban planning and innovative financing</p> <p>Output 1.1.2: 60 municipal planners from 3 cities (20/ per city) are trained in the municipal financing toolkit and climate finance</p> <p>Output 1.1.3: A set of high potential climate adaptation and resilience financing solutions are mapped out and prioritized based on their ability to support investment.</p> <p>Output 1.1.4: Communication material for knowledge management are developed and disseminated among NDEs</p>	LDC F	117,000	166,666

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
Component 2: Piloting of the toolkit developed in Component 1	Technical Assistance	Outcome 2.1: Selected climate adaptation and resilience financing methods are prioritized and adapted in three selected medium-sized cities	<p>Output 2.1.1: Adaptation technology financing plans for medium-sized cities are developed</p> <p>Output 2.1.2: Investment projects are prioritized based on their adaptation impact, attractiveness to private sector and their financing options</p> <p>Output 2.1.3: Adaptation technology financing plans are presented to selected members of the financial community</p>	SCCF -A	140,000	1,000,000

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
Component 2: Piloting of the toolkit developed in Component 1	Technical Assistance	Outcome 2.1: Selected climate adaptation and resilience financing methods are prioritized and adapted in three selected medium-sized cities	Output 2.1.1: Adaptation technology financing plans for medium-sized cities are developed Output 2.1.2: Investment projects are prioritized based on their adaptation impact, attractiveness to private sector and their financing options Output 2.1.3: Adaptation technology financing plans are presented to selected members of the financial community	LDC F	70,000	500,000
Component 3: Project monitoring and learning	Technical Assistance	Outcome 3.1 Regular project monitoring and documentation for learning and knowledge sharing	Output 3.1.1: The project monitoring plan is designed and executed Output 3.1.2: Knowledge materials and documentation on best-practices developed and widely disseminated	SCCF -A	24,000	33,300

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
Component 4: Project evaluation	Technical Assistance	Outcome 4.1 Project Evaluation	Output 4.1.1: Terminal independent project evaluation is conducted and follow up actions and recommendations are determined for long term project sustainability	SCCF -A	13,000	66,730
Component 3: Project monitoring and learning	Technical Assistance	Outcome 3.1 Regular project monitoring and documentation for learning and knowledge sharing	Output 3.1.1: The project monitoring plan is designed and executed Output 3.1.2: Knowledge materials and documentation on best-practices developed and widely disseminated	LDC F	12,000	16,667
Component 4 Project evaluation	Technical Assistance	Outcome 4.1 Project Evaluation	Output 4.1.1: Terminal independent project evaluation is conducted and follow up actions and recommendations are determined for long term project sustainability	LDC F	6,667	16,667
Sub Total (\$)					616,330	2,133,367

Project Management Cost (PMC)

Project Management Cost (PMC)

	SCCF-A	40,670	133,300
	LDCF	20,000	33,333
	Sub Total(\$)	60,670	166,633
	Total Project Cost(\$)	677,000	2,300,000

C. Indicative sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
GEF Agency	UNIDO	Grant	Investment mobilized	80,000
GEF Agency	UNIDO	In-kind	Recurrent expenditures	200,000
Government	City 1 Asia	Grant	Investment mobilized	350,000
Government	City 1 Asia	In-kind	Recurrent expenditures	150,000
Government	City 2 Africa	Grant	Investment mobilized	350,000
Government	City 2 Africa	In-kind	Recurrent expenditures	150,000
Government	City 3 LAC	Grant	Investment mobilized	350,000
Government	City 3 LAC	In-kind	Recurrent expenditures	150,000
Others	CTCN	In-kind	Recurrent expenditures	300,000
Others	UNEP FI	In-kind	Recurrent expenditures	220,000
Others	UN-Habitat	In-kind	Recurrent expenditures	
			Total Project Cost(\$)	2,300,000

Describe how any "Investment Mobilized" was identified

Investment shall be mobilized from relevant stakeholders at the country level, once the cities are identified during the PPG phase

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNIDO	SCCF-A	Global	Climate Change	NA	451,333	42,877	494,210
UNIDO	LDCF	Global	Climate Change	NA	225,667	21,438	247,105
Total GEF Resources(\$)					677,000	64,315	741,315

E. Project Preparation Grant (PPG)

PPG Amount (\$)

50,000

PPG Agency Fee (\$)

4,750

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNIDO	SCCF-A	Global	Climate Change	NA	33,333	3,167	36,500
UNIDO	LDCF	Global	Climate Change	NA	16,667	1,583	18,250
Total Project Costs(\$)					50,000	4,750	54,750

Core Indicators

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female				
Male				
Total	0	0	0	0

Part II. Project Justification

1a. Project Description

a. The global environmental and/or adaptation problems, root causes and barriers that need to be addressed

According to the United Nations Department for Economic and Social Affairs, the global annual average cost of climatic disasters increased from US\$ 196 billion during 1985-1994 to US\$ 270 billion in 2005-2014. Adaptation costs will range from US\$70 billion to US\$100 billion per year by 2050 within developing countries alone. With increasing frequency and intensity of events, coupled with increasing changes in seasonality and extremes in climate variables, developing countries are even more challenged to take necessary action, such as investing in climate resilient pathways (IPCC, 2014).

It is estimated that two thirds of the world's population will live in cities by 2050. Given that cities face some of the highest levels of economic loss from climate impacts, the pressure to act is strong. The incentive is also significant. If every city in the world increases its resilience level to 'very high' the Lloyd's City Risk Index calculates that more than \$ 73 billion would reduce global risk.

While, both public and private infrastructure investment funds, such as the UK Sustainable Infrastructure Program and the Asia Infrastructure Investment Bank, are mobilizing billions of dollars in financing that can contribute to increased resilience in urban areas, the Cities Climate Finance Leadership Alliance (CCFLA) mapping report (2017) noted that there remains a \$ 1 trillion per year investment gap for urban investments. At the same time, evidence shows that national and international financiers interested in sustainable investments are not allocating the entirety of the funds at their disposal for lack of bankable proposals^[1].

In order to close this financing gap, urban areas require technical assistance in prioritizing their adaptation needs, integrating them within overall urban planning and management, and in formulating the projects and proposals necessary for leveraging funds to go beyond planning to adaptation action.

Despite the recognition of these significant challenges, medium-size cities are often underserved by the international community due in part to: the lack of municipal level climate action plans, the inability to access international finance, over-burdened infrastructure needs which reduces the prioritization of climate action and lack of visibility in the international climate arena.

At the same time, work in the United States of America and the United Kingdom have demonstrated that medium size cities present some of the greatest potential for shifts towards improved sustainability because of strong business ecosystems, high levels of agility, and the ability to focus change through smaller investments.

^[1]

Threats and Root Causes

Reduction of risk and vulnerability to climate change can be achieved by building resilient infrastructure systems such as those related to water supply, electricity or emergency response. Cities in low and middle-income countries have experienced a rapid urbanization that has not taken adaptation to climate change into consideration and rarely have adaptation plans or strategies in place.

While large urban areas often have teams dedicated to climate action, as well as regular access to public funding and established mechanisms to access loans and other private finance, few medium-sized cities have climate knowledge nor credit ratings sufficient to access private financing coupled with a lack of recognized planning documents which limits grant opportunities.

Medium-sized cities have not yet benefited from the financing mechanisms and contracting modalities available to larger urban areas. Therefore, the methodological approach for this size of city will be developed and piloted in three cities in the regions of Africa, Asia and Latin America and the Caribbean.

Barriers

The main barriers for medium sized cities to adopt climate resilient infrastructure include:

- Limited expertise and technological capabilities on climate change adaptation technologies.
- Poor mainstreaming of climate change adaptation across municipal business units.
- Lack of suitable financial and business models.
- Insufficient support for research and learning in relation to the importance of municipal governments in increasing resilience to climate change.
- Lack of private sector involvement in adaptation technologies related businesses.

b. The baseline scenario or any associated baseline Programs

Baseline Scenario:

Climate change impacts in cities, especially in developing countries, are likely to affect water and sanitation, energy systems, food security, transportation networks, communication systems, human health and security and emergency response. Climate change also threatens key economic sectors, livelihoods, etc. that are key for the economy of cities (IPCC, 2014). However, raising and allocating resources for the implementation of adaptation measures presents severe constraints.

The main funding sources and financial instruments in urban areas for climate change adaptation are summarized in TABLE 1. However, not all of these options apply for middle-sized cities in developing countries, especially local public funding sources, as economies and administrative capacity are not strong (IPCC, 2014).

Table 1. Main funding sources and financial instruments in urban areas for climate change adaptation (IPCC, 2014)

Sources of funding	Types	Instruments	What can be funded (with some examples of funds)	Urban capacity required to access funding
Local: public	Local revenue raising policies: taxes, fees, and charges or use of local bond markets	<ul style="list-style-type: none"> Local taxes (e.g., on property, land value capture, sales, businesses, personal income, vehicles...) User charges (e.g., for water, sewers, public transport, refuse collection) Other charges or fees (e.g., parking, licenses) 	<ul style="list-style-type: none"> Urban infrastructure and services Urban adaptation programs and planning processes Urban capacity building 	Cities with well-functioning administrative and institutional capacity and adequate funding from local revenue generation and intergovernmental transfers
Local: public-private	Public-Private Partnerships (PPP) contracts and concessions	<ul style="list-style-type: none"> Concessions and private finance initiatives to build, operate, and/or maintain key infrastructure Energy performance contracting 	Medium to large-scale infrastructure with strong private goods (to allow rents for private sector)	Cities with strong capacity for legal oversight and management
Local or national: private or public	National or local financial markets	<ul style="list-style-type: none"> Commercial loans Private bonds Municipal bonds 	Basic physical infrastructure (need for collateral)	Well-functioning local or national financial markets that city governments can access
National: public	National (or state/provincial) revenue transfers or incentive mechanisms	<ul style="list-style-type: none"> Revenue transfers from central or regional government Payment for ecosystem services or other incentive measures 	<ul style="list-style-type: none"> Urban payment for environmental services in Brazil Sweden's KLIMP climate investment program 	Cities with good relations with national governments, strong administrative capacity to design and implement policies and plans
International: private	Market-based investment	<ul style="list-style-type: none"> Foreign direct investment, joint ventures 	<ul style="list-style-type: none"> Industrial infrastructure Power generation infrastructure 	Cities with strong national enabling conditions and policies for investment
International sources	Grants, concessional financing (e.g., Adaptation Fund)	<ul style="list-style-type: none"> Grants, concessional loans, and loan guarantees through bilateral and multilateral development assistance Philanthropic grants 	<ul style="list-style-type: none"> Urban capacity building Urban infrastructure adaptation planning 	Typically requires strong multi-level governance—cities with good relations with national governments. Cities with low levels of administrative and financial market capacity.

Although the above table presents the range of financing options, few cities have access to all mechanisms and many are mutually exclusive. An example of this exclusion is the city of Cape Town in South Africa, which has strict fiduciary controls in place, which allows it to access market-based investments. However, the same controls make it very difficult for Cape Town to access grants and concessionary financing.

Baseline Projects:

In urban processes, large cities tend to attract the lion share of public and private financing. Medium-sized cities tend to be relegated due to lower capacities to develop comprehensive planning documents or capital expenditure plans. In addition, medium-sized cities have lower capacities to assess climate change dimensions, especially the need

to consider their vulnerability and resilience to climate change adaptation as they are often excluded from model and scenario runs due to the need to prioritize limited climate change adaptation resources.

Climate actions, especially about adaptation measures, are poorly covered by private finance due to factors such as long return on investment periods, and perceptions of investment risk. Leveraging private sector investments in such areas will require a stronger investment ecosystem including first loss guarantees, blended financing, and improved loss modelling. These instruments shall be also well communicated to private investors presenting whenever possible also, mitigation co-benefits in order to increase their interest in the investment.

In the Asia-Pacific region, climate change poses a risk especially to LDCs and SIDSs. The Asian Development Bank developed a project on “Strengthening disaster and climate risk resilience in urban development in the Pacific” in the islands of Fiji, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu. It was based on the development and use by city planners of integrated tools for mainstreaming disaster and climate risks into urban and sector planning. Some of the climate risks in this region are increased flood exposure, cyclones, storm surges and sea incursion, causing damage to roads and water supply and sewerage systems. Poorly planned development activities increase their exposure.

More specifically, UN-Habitat has recently started developing a city development and action plan integrating climate change in Fiji. Other projects in the region include a UNIDO project in Melaka City (Malaysia) based on integrating climate risks in urban planning and management, or a project being developed by the Land Bank of The Philippines consisting of building resilience of Philippine communities to climate change through innovative approaches and technologies.

In the Latin America and the Caribbean region, SIDSs are the most vulnerable areas, which are affected by hurricanes, increased flood exposure, coastal flooding, extreme precipitation, etc. This will cause damage to roads, water supply and sewerage systems, and affectation to human health, among others. UNDP is implementing a project in Cuba based on the reduction of vulnerability to coastal flooding through ecosystem-based adaptation in the south of Artemisia and Mayabeque provinces, increasing the adaptive capacity of coastal communities to climate change. The CTCN implemented a technical assistance on a community based early warning system in Santo Domingo in the Dominican Republic and is currently supporting Bahamas to develop a more resilient electric grid through Readiness financing of GCF also in light of the aftermath of the latest cyclone.

Africa is one of the most vulnerable regions to the effects of climate change, including most of the LDCs, which includes increasing temperatures, droughts, sea and river flooding, etc. As mentioned by Filho et al. (2018), the focus on climate change adaptation in African cities is scarce as “local climate change challenges, vulnerabilities, priorities and intensities are diverse, varying across countries”. Some of the experiences gathered from this study refer to the need to increase the implementation of more technical assistances at a city level rather than at a country level, with more city and local engagement. An example is the project that UN-Habitat is developing on building urban climate resilience in south-eastern Africa, including Madagascar, Malawi, Mozambique and Union of Comoros. The project “Scaling up local adaptation and climate-risk informed planning for resilient livelihoods” in Mozambique to be developed by UNDP is pending for approval.

c. The proposed alternative scenario with a brief description of expected outcomes and components of the Program

This project aims to assist urban planners in building their capacity to produce and fund climate resilient infrastructure plans. In particular, the project will build an understanding of possible financial tools and mechanisms for climate change adaptation technologies and will build relationships between medium-size cities, their private sector, and national and international financial markets and infrastructure funds. In doing so, the project will also increase the awareness of climate change adaptation actions among international financiers.

The adoption of a CCA planning methodology would also concretely contribute to enable the environment that can support the strengthening of the creditworthiness of the selected cities and, as a result, the availability of financing options for future projects. For example, cities can increase their credit worthiness by improving their budgeting and planning capacities.

The lessons learned from the engagement of the initial three cities, along with the global tools developed and relationships built with global, regional and national financiers, will allow for the development of a model for financing that can be scaled-up and replicated in other medium-sized cities.

City selection

The proposed project will support three cities, with the final choice of cities identified during the PPG phase.

The criteria utilized for the pre-selection of cities for the short list are:

- Medium-sized cities, meaning less than 500,000 inhabitants but dependent on country size and its context;
- Cities in which an initial assessment of adaptation needs has been conducted;
- Cities that have high climate risk and/or high vulnerability; and
- Cities in LDCs and SIDS.

In addition to the city government approval, in line with the CTCN process, the National Designated Entities (NDE) jointly with GEF Operational Focal Points will be engaged during the project preparation grant phase to ensure alignment with national and institutional priorities.

The method for identifying the cities during the PPG phase will include the following steps:

- engaging key stakeholders in all 9 countries to present the project proposal and gather specific information of needs and willingness to participate in a screening process;
- gathering data to assess each city against the selection criteria (see below);
- pre-selecting cities with the best fit to the criteria;

- guaranteeing alignment of NDEs and GEF OFPs; and
- receiving CTCN request and endorsement letters.

The selection criteria for the PPG phase consists of:

- Cities that have high exposure to climate risk and for which adaptation is a planning priority, especially in SIDS and LDCs;
- Priority will be given to LDCs, with a focus on identifying 2 out of the 3 pilot in a LDCs country; with a minimum threshold of selecting at least 1 out of the 3 cities in a LDC;
- Cities that already have a baseline of development in terms of their understanding of adaptation needs and municipal financing planning;
- Cities in which co-financing can be mobilized;
- Endorsement from both NDEs and GEF OFPs.

In order to deliver on the above objective the project will:

- 1) Generate a comprehensive toolkit as a methodological resource for the assessment of CCA technologies in urban infrastructure planning and financing. The toolkit will take stock of existing methodologies for adaptation planning as the basis for the selection of infrastructure technologies. In the context of this project, the climate change adaptation technologies will also encompass financial innovations^[2]. In order to allow cities to arrive at a point at which they are able to select the most appropriate innovative financing mechanism, the mapping of technology options will be supported including with regards to assessing the costs and returns of different options as a key precondition to accessing finance. The prioritization will be based on existing tools and methods with cities being provided technical support to apply such tools. UN-Habitat will support the execution of these aspects.
- 2) Improve local capacities by raising awareness among decisions makers on financing options. The toolkit will be utilized to train the policymakers of the selected 3 cities. The goal is to develop a modular instrument that can be offered to mid-size cities globally to help their access to adaptation finance. Ultimately, the proposed project will generate a proven technical assistance programmatic approach that the medium-sized can adopt through engagement with the cities participating in this project, with their NDEs and the CTC Network.
- 3) Provide cities with a systematic method to prioritize their adaptation projects based on their adaptation impact and the viability of the financing options. The output of using the toolkit should be a detailed capital expenditure plan for resilient urban infrastructure. The prioritization process will identify innovative financing solutions that target CCA as opposed to conventional financing.

- 4) Establishing a mechanism for partnering cities and financiers. Among the identified financiers, the project will engage with UNEP Finance Initiative (UNEP-FI), the Cities Climate Finance Leadership Alliance (CCFLA), and the Private Finance Advisory Network (PFAN). Regional and national financiers will be identified during the project preparation grant.
- 5) Testing the methodologies to ensure alignment with developing country needs. The technology and resilience particular needs of a given city will drive the financial planning and instruments enabling to access finance and, as such, the menu of instruments provides an appropriate starting point for sustained and expanded engagement in a high number of cities. It should be emphasized that in a longer-term vision is that cities will be able to support each other as the number of cities applying the developed financial instrument increases.
- 6) Disseminating the toolkit to a wide range of stakeholder including NDEs, GEF Focal Points, participating and pre-selected cities, and other programmes working on CCA or sustainable cities (Covenant of Mayors, C40, GEF Sustainable Cities, etc.)

The description of the planned activities required to achieve the project outputs is summarized in the following table:

Component	Outputs	Activities
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Component	Outputs	Activities
<p>Component 1: Municipal financing toolkit for climate change adaptation (CCA)</p>	<p>Output 1.1.1: The financing toolkit for medium-size cities is developed and disseminated. It includes tools to assess CCA technologies in urban planning and innovative financing</p> <p>Output 1.1.2: 60 municipal planners from 3 cities (20/ per city) are trained in the municipal financing toolkit and climate finance</p> <p>Output 1.1.3: A set of high potential climate adaptation and resilience financing solutions are mapped out and prioritized based on their ability to support investment.</p> <p>Output 1.1.4: Communication material for knowledge management are developed and disseminated amongst NDEs.</p>	<p>Development of all the tools for the toolkit</p> <ol style="list-style-type: none"> 1) presentation of tools and methods to assess CCA technologies for medium-size cities; 2) an analysis of common obstacles to accessing finance; 3) development of a climate-smart capital expenditure tool to integrate CCA technologies in municipal budgets; 4) a roadmap for identifying and accessing other innovative sources of financing; 5) case studies and additional resources for innovative CCA financial instruments based on successful global experiences <p>Development of training packages for city planners including online learning.</p> <p>Convening of short training workshops at the margins of relevant meetings.</p> <p>Mapping of international, regional and domestic financing mechanisms and funds.</p> <p>Engagement with domestic and regional stakeholders including national focal points to global funds.</p> <p>Engagement with global programmes to support private sector investment.</p> <p>Training packages and the toolkit are converted into dissemination material.</p>

Component	Outputs	Activities
Component 2: Piloting of the toolkit developed in Component 1	<p>Output 2.1.1: Adaptation technology financing plans for medium-sized cities are developed</p> <p>Output 2.1.2: Investment projects are prioritized based on their adaptation impact, attractiveness to private sector and their financing options</p> <p>Output 2.1.3: Adaptation technology financing plans revised based on technical guidance and support from selected members of the financial community</p>	<p>Trained policymakers utilize the toolkit to develop investment plans which are climate smart, incorporating CCA technologies.</p> <p>Criteria for prioritization of investment are selected and validated with the city governments.</p> <p>Expert technical advice from finance specialists is provided to finalize the adaptation investment plan.</p> <p>Prioritized project are put forward to the financing community for their consideration.</p> <p>Experiences from the piloting are captured and shared including through South-South cooperation amongst the cities.</p>
Component 3: Project monitoring and learning	<p>Output 3.1.1: The project monitoring plan is designed and executed</p> <p>Output 3.2.1: Knowledge materials and documentation on best-practices developed and disseminated widely</p>	<p>Regular monitoring exercises are conducted, PIRs prepared; tracking tools prepared according to CTCN, UNIDO and GEF requirements (LDCF Core Indicators).</p> <p>Training packages are distribute through the NDE and GEF Focal Point network.</p>
Component 4: Project Evaluation	<p>Output 4.1.1: Terminal independent project evaluation is conducted and follow up actions and recommendations are determined for long term project sustainability</p>	<p>Terminal independent project evaluation is conducted.</p>

d. alignment with GEF Focal Area and/or Impact Program Strategies

The proposed project aligns with the GEF Focal Area Climate Change Adaptation (CCA-1), specifically on initiatives to reduce the impacts of climate change in cities in developing countries. The main objective is to increase resilience of cities by adopting appropriate climate change adaptation technology solutions through improved capital expenditure planning and innovative public and private financing mechanisms. The project will target three medium-sized cities in Africa, Asia and Latin America and the Caribbean although global knowledge products will be made widely available, including through South-South cooperation.

The proposed project has been prioritized under the Challenge Program for Adaptation Innovation, which seeks to identify, test and highlight innovative adaptation approaches with potential to be replicated and scaled up.

The proposed project is aligned with two of the priority themes of the Challenge Fund, namely “c. strategic multi-stakeholder partnerships, alliances, and incubators as catalyzers of larger scale financing and market developers”, and “g. innovative business models and investment approaches, seed funding and venture capital approaches to improve access to finance for private sector”.

e. Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, CBIT and co-financing

The GEF resources will enable the countries to develop a new model for piloting innovative financing for CCA in medium-sized cities, as the main outcome of component 1. In the mid-term, the CTCN will be able to offer this service to many other cities through its network, by leveraging funds from its donors. Ultimately, this model could be scaled-up to other cities in the piloted countries and their regions.

Given the nature of the pre-selected countries, all of which are vulnerable to CCA, the project is in line with the objectives of the SCCF and the LDCF. Without the SCCF and the LDCF funding, the deployment of technologies and innovative solutions for reducing climate-related risks to improve adaptation to climate change will be largely limited in the cities, due to the presence of main constraining barriers such as limited knowledge, technical know-how and managerial skills, and current opportunities remain untapped. The project will address the main barriers for achieving adaptation targets.

In addition this project will mobilize additional co-financing from national and regional stakeholders including: Government ministries line, baseline projects funded by Regional Development Bank, Private Sector entities and National Financial institutions to match grant allocations, and African Enterprise Challenge Fund, and directly through UNIDO, UNEP, the CTCN, and its hosted programmes including the Private Financing Advisory Network.

The calculation of incremental costs reasoning shall be done during the PPG phase, following the city selection.

f. global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

Climate change multiplies other vulnerabilities faced by urban populations and affects almost every business unit within municipal governments. In light of growing urban populations and continuing gaps in funding to build or maintain critical infrastructure, the vulnerability of medium-size city dwellers is increasing.

The adaptation benefits of the proposed project are in line with the strategic objectives of the LDCF and SCCF, by reducing vulnerability and increase resilience through innovation and technology transfer for climate change adaptation.

By working with three pilot cities, with average populations of between 100,000 – 300,000 it is expected that the proposal will contribute to enhanced resilience for 600,000 people in developing countries. Gender disaggregation and targets will be fully assessed during the project preparation phase; however, they are currently reflected as averages in the CCA results framework. Similarly, figures for an average of land managed are given but will be revised at the CEO EF stage.

g. Innovation, sustainability and potential for scaling up

Innovation

The proposed project offers medium-sized cities with an innovative approach to financing adaptation actions, thereby increasing overall resources available for adaptation and reducing future costs associated with climate change. The project will build the capacity of urban planners and decision makers to apply innovative financing approaches to address adaptation needs in terms of technology and marketability and will generate knowledge, experiences and best practices that will be shared, including through South-South cooperation.

By engaging with the members of the global financing community, the project will also build awareness of financing options among national and international financiers and mobilize technical expertise that cities may be lacking.

Sustainability

The toolkit developed in component 1 will allow cities to produce and update their climate smart investment plans on a yearly basis. By adopting a systematic approach, urban planners in the selected cities will be able to prioritize on their infrastructure needs, identify key investment projects; and match them with private financiers. Sustainability analysis will focus on environmental, social and financial aspects of urban resilience plans based on adaptation technologies.

By generating communication material specifically for the financial sector, the project will also create sustained awareness of opportunities and challenges in working with medium-size cities.

Following the piloting of the toolkit and the prioritization of investment opportunities, the project shall ensure that urban planners are trained to continuously update their municipal financing plans.

Potential for scaling up

The tested methodology that will be developed will be available to all countries. By utilizing the CTCN network and data management system, which is considered the global largest repository for climate change technology data, a global dissemination may occur. In addition to making the toolkit publicly available on the CTCN website, through its annual regional forums, its network of NDEs and its network of organizations worldwide (500+), the CTCN will be able to promote this approach at national or regional levels.

Specific activities that the CTCN will carry out to support the scaling up of project outcomes include:

1. Holding a webinar on climate adaptation finance for medium-size cities (expected reach of 500 participants);
2. Featuring the project in the CTCN newsletter;
3. Presenting lessons learned and good practices at the margins of UNFCCC meetings (expected reach of 200);
4. Presenting lessons learned and good practices during the private sector match-making initiatives organized in the regions.

[1] Compare for instance the discussion on resilience finance gap at regional ECLAC conference:

<http://conferencias.cepal.org/ciudades2017/Lunes%202/Audio%20editado/21%20Cristian%20Salas.mp3>

[2] In line with the UNFCCC definition of climate change adaptation technologies that includes both “hard” and “soft” technologies

1b. Project Map and Coordinates

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

The maps and coordinates will be completed following the selection process.

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities

Civil Society Organizations Yes

Private Sector Entities Yes

If none of the above, please explain why:

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.

This proposed project will result in the cooperation with Government and non-government institutions, private sector entities, and civil society organizations, financing institutions at the local and international level. Engagement will consider gender balance and appropriate representation.

Local consultations will be lead in each of the three cities during the Project Preparation Grant (PPG) phase, to ensure that need and capacities are adequately assessed. Finally, a joint validation workshop will be organized by the CTCN.

Key stakeholders of the proposed project

Stakeholders	Roles and responsibility
CTCN	Execution entity that shall execute the project through its network members
City Governments	Direct beneficiaries who will receive the technical assistance
National public and private financing institutions	May provide financing to climate-smart investment plans, and will receive training on climate financing
National Designated Entities in the countries of 3 selected cities	National Focal point for the CTCN who will support the stakeholder engagement and serve as focal points at country level
GEF Operational Focal Points in the countries of 3 selected cities	National Focal point for the GEF
Private sector and municipal financing initiatives such as UNEP FI, CCFLA and PFAN	They will support the technical support to the execution of Components 1 and 2
UNEP	Host agency to the CTCN that will provide advisory support to the execution of Component 1
UNIDO	Host agency to the CTCN and GEF Implementing Agency for the proposed project

3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

UNIDO recognizes that gender equality and the empowerment of women have a significant positive impact on sustained economic growth and inclusive and sustainable industrial development (ISID), which are drivers of poverty reduction, social integration and environmental sustainability. Therefore, the project will mainstream gender dimensions across all project activities, in order to address the importance and high gender differentiated roles in the targeted sectors.

During the PPG phase, a number of activities will be undertaken to ensure that gender concerns are efficiently taken into account as part of the project design. This will include, but are not limited to, the consideration of (i) the institutional capacity of national counterparts for gender mainstreaming; (ii) stakeholder mapping; (iii) the application of gender elements in the project design and implementation; (iv) undertaking a project gender analysis; (v) measures to be taken to minimize/mitigate adverse gender impacts; (vi) integration of gender sensitive activities; (vii) collection of sex-disaggregated data in baseline; (viii) monitoring and evaluation of gender mainstreaming progress; and (ix) inclusion of a gender specialist to help identify gaps and change.

In defining the gender mainstreaming strategy of the project, the UNIDO Energy Department's Guide on Gender Mainstreaming Energy and Climate Change and the GEF requirements (GEF Gender Implementation Strategy (GEF/C.54/06 Policy on Gender Equality (GEF/C.53/04)) would be taken into account.

The importance of gender considerations in climate innovation and technology is included in the CTCN's mission as well as in numerous COP decisions referring to the CTCN and its Advisory Board. To address these considerations, a gender coordinator was established within the CTCN Secretariat. Gender considerations have been incorporated internally via staff trainings on gender, as well as through CTCN services, through technical assistance, knowledge sharing, capacity building and outreach activities. The CTCN gender tool will be applied. A description of the gender tool can be found at this link: <https://www.ctcn.org/technologies/ctcn-gender-mainstreaming-tool-response-plan-development>

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

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

improving women's participation and decision-making; and/or Yes

generating socio-economic benefits or services for women.

Will the project's results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

The proposed project is designed in line with the GEF policy on Stakeholder Engagement that sets out the core principles and mandatory requirements for stakeholders. While developing the toolkit to inform the preparation of city plans, the private sector will be considered as a main player to benefit from the promotion of the investment plans. A project co-benefit would be to incentivize private sector companies to invest, thrive and strengthen the resilience of mid-size cities while doing business. Private sector financiers will be engaged through existing initiatives such as UNEP-FI, the Cities Climate Finance Leadership Alliance and the Private Advisory Financing Network, in order to make them aware of emerging investment opportunities in medium-size cities. For many of the undersubscribed investment funds, this will allow for the development of new investment portfolios. Furthermore, through exploring de-risking options, the project will reduce the investment risk currently borne by private sector financiers when investing in adaptation.

5. Risks

Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)

Identified Risks	Risk rating	Mitigation Measures
Development risk due to insufficient synergy of action between project partners	Medium	Ensuring that the project is designed and implemented in a participatory and inclusive manner, regular stakeholder consultation and involvement will be done to strengthen awareness capacity and to ensure ownership.
Political and Security Risk	Low/Medium,	Coordination of security information with the United Nations System This risk will be reassessed as the city selection is completed.
Institutional risk due to weak capacities and coordination in providing effective solutions	Medium	CTCN, UNIDO and UNEP will closely work with their focal points in countries' institutions to make sure to counterbalance potential lack of capacities and coordination as needed. This risk will be reassessed as the city selection is completed.
Climate change risk	Medium	<ul style="list-style-type: none">· Exposure to climate change related risks will be assessed for each capital investment project with the goal of increasing resilience of each of the selected cities.· The proposed project will include selected cities that are exposed to climate risks and in need of taking adaptation actions. A key aspect of the project is supporting cities in developing climate proof investment plans, thus, reducing their overall climate risk

Environmental and Social Risk	Low	The project will take into consideration UNIDO policies and process to assess environmental and social impacts. This risk will be reassessed as the city selection is completed.
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6. Coordination

Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

UNIDO and UN Environment are the host agencies of the CTCN. UNIDO, as the submitting GEF implementing agency, will lead the process of project preparation and development with the participation of key stakeholders and the private sector.

All operations under this grant will be conducted in accordance with UN governance structure and management procedures, as well as UN standards for accountability, transparency, and ethical integrity.

The Executing Entity for this project will be the Network Members/ Consortium Partners of the Climate Technology Centre and Network (CTCN) which is a body of the UNFCCC with the stated mission to stimulate technology cooperation and to enhance the development and transfer of technologies and to assist developing country Parties at their request, consistent with their respective capabilities and national circumstances and priorities, “to build or strengthen their capacity to identify technology needs, to facilitate the preparation and implementation of technology projects and strategies taking into account gender considerations to support action on mitigation and adaptation and enhance low emissions and climate-resilient development”.

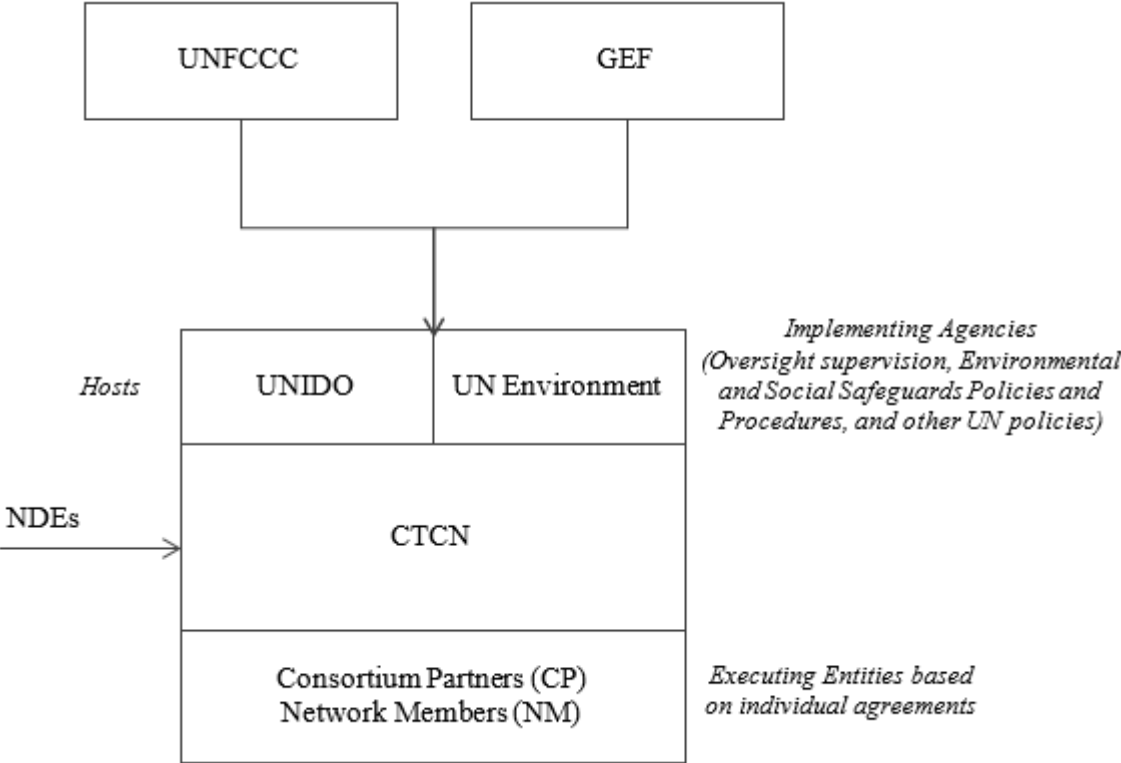
The functions of the CTCN will comprise:

- the preparation of work plans;
- preparation and operation of budgets and budget revisions;
- logistical support;
- financial and progress reporting;
- coordination with national focal points and project proponents,
- project monitoring and learning

The specific project execution will be undertaken through multiple individual contractual arrangements between UNIDO and the selected Consortium partners or Network Members as described in the COP decisions (1/CP.16, 2/CP.17, and 14/CP.18).

The selection of the institution from the Network of CTCN – bidders are required to become a Network Member - for the execution of the technical assistance will be conducted through a competitive procurement process as per UNIDO Rules and Regulations, in line with CTCN procedures and with UN Rules and Regulations. The CTCN nurtures a Network of more than 500 expert organizations in the field of low-carbon and climate resilient technologies.

The figure below shows the implementation modality of the CTCN with respect to the GEF, UNFCCC, implementing agencies, executing entities and the NDEs.



The Project Steering Committee will include UNIDO, CTC, the NDEs from the selected countries.

7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions

Yes

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

- UNFCCC National Determined Contribution
- UNFCCC Technology Needs Assessment
- National Adaptation Programme of Action Update
- Others such as city master plans

The proposed project will be aligned to the government priorities for each of the cities, and each case will be analyzed during the PPG phase. By having the endorsement of the NDEs, national circumstances and priorities in each country will be reflected. NDEs also ensure that support provided by the CTCN is well coordinated at the national level with other processes that address climate change.

National adaptation plans have been taken into consideration for the pre-selection of the 9 cities.

8. Knowledge Management

Outline the Knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

The project knowledge management will be structured around the CTCN's Knowledge Management System (KMS), which comprises three components:

- 1) The public web portal (www.ctc-n.org);
- 2) an intranet which facilitates management and monitoring of CTCN operations; and
- 3) the CTCN virtual office, which provides online document, task and calendar management for CTCN staff and partners working in various locations.

The site currently offers over 14,600 information resources, which include CTCN-created technical assistance information, publications, technology descriptions and on-demand webinars as well as technology reports, publications, and case studies provided by partner organizations and countries. Information is searchable by content type, country,

technology sector, region, etc. As a baseline for capacity building, the CTCN carries out a number of in-country and international training events as well as frequent webinars attended by participants all across the world.

The information and results generated by the proposed project would be disseminated to NDEs, and made to the general public through the site.

Part III: Approval/Endorsement By GEF Operational Focal Point(S) And Gef Agency(ies)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).

Name	Position	Ministry	Date
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ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place