

### Regional Conference: Advancing Urban Transitions in Africa

WUF12 Congress 2024 Cairo, Egypt, November 7, 2024



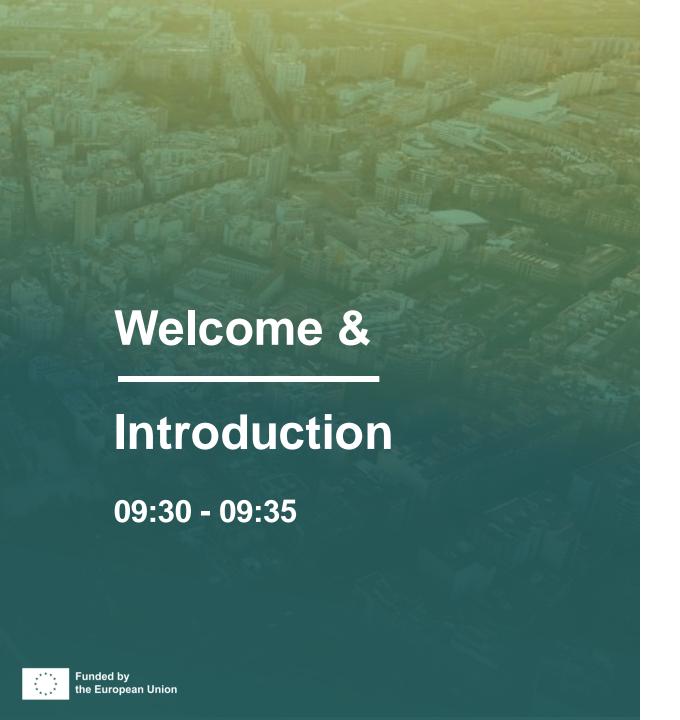
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the EU research & innovation framework programme – Horizon Europe. Neither the European Union nor the granting authority can be held responsible for them.

In support of:



Connected with:

**NET ZERO CITIES** 



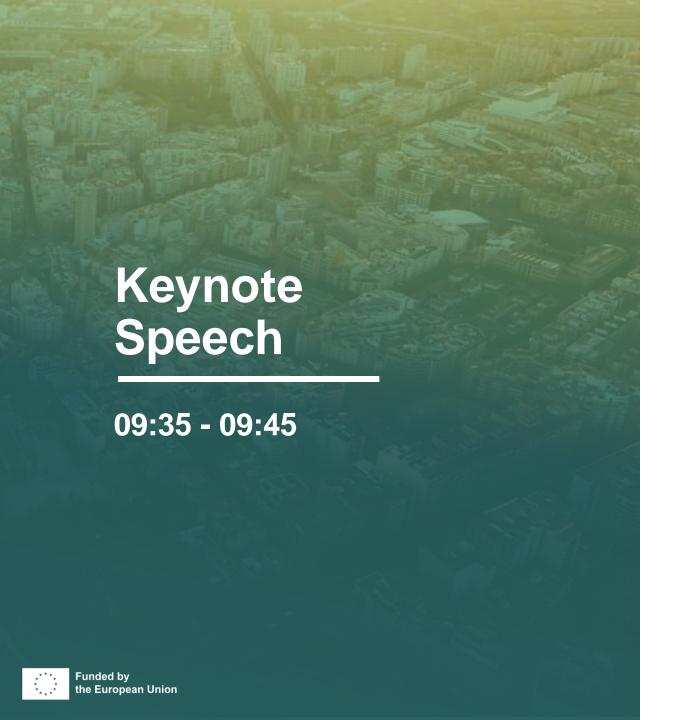




Karel Van Oordt UTMC partner, Project Coordinator Eurocities



Elli B. Tzatzanis-Stepanovic UTMC Project Coordinator, Senior Project Manager, FFG



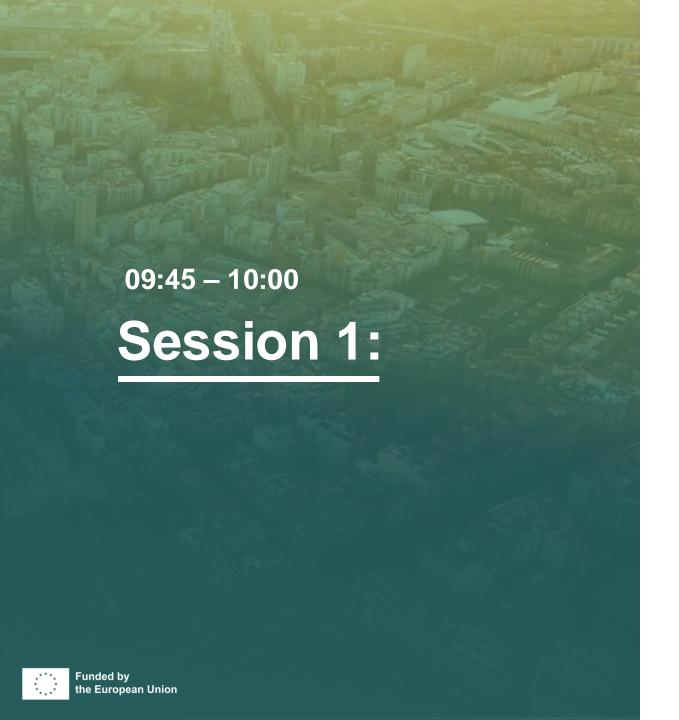




Laura Hetel
Climate-Neutral and Smart
Cities Mission, DG Research &
Innovation, EC



Ayman Ayad
Delegation of the European
Union to Egypt, EC





# Urban Transitions Mission (UTM) and UTMC community portal

# Urban Transitions Mission (UTM) and UTMC community portal





Andrada Barata
Head of Communication,
ENoLL



Elli B. Tzatzanis-Stepanovic UTMC Coordinator, Senior Project Manager, FFG



Gianni Nardone UTMC partner, LGI



# The UTM CENTRE

Your needs, your platform, our support!



Elli B. Tzatzanis-Stepanovic



Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the EU research & innovation framework programme - Horizon Europe. Neither the European Union nor the granting authority can be held responsible for them.

In support of:



**Connected with:** 

**NET ZERO CITIES** 

### The UTM Centre



A global platform providing funding sources, funding assistance, peer learning, and capacity building to accelerate climate neutrality in cities

In support of:



Connected with:







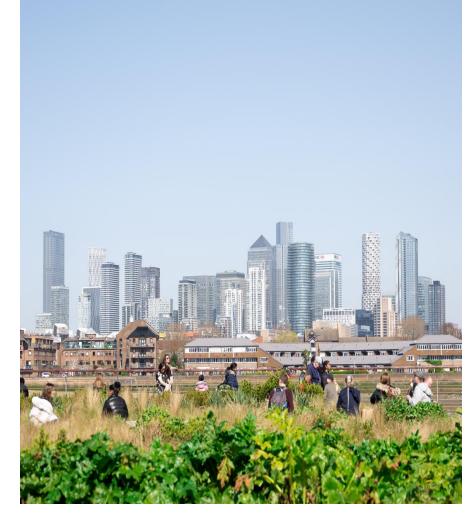












# Cities & Community



### 90 UTM Cities

To inspire other cities\*!

\*112 cities of the EU Mission for climate-neutral, and smart cities

### 850+ Platform Users

Accelerating local action!

### **Multilevel Government Ecosystems**

- -Mayors
- -City Staff
- -Experts
- -Academia & Researchers
- -Consultants
- -Companies, SMEs



### The Community Platform offers











### FUNDING ASSISTANCE

KNOWLEDGE REPOSITORY

CAPACITY BUILDING & EXCHANGE

DISSEMINATION & AWARENESS

- Global Funding Watch
- Finance Toolkit

- New Resources
- Existing databases
- Groups for exchange
- Moderated Learning
- News on CN & NZ
- Events on CN & NZ

# Explore the UTM Framework! (ME) CENTIL





A step-by-step Guide for cities with resources to improve their climate strategies and prioritize action

## **Funding Assistance**



# Finance & Funding Helpdesk

Guiding and answering financing routes

### **Global Funding Watch**

Mapping Funding Opportunities

# Finance Knowledge & Sessions

Assisting your journey through tailored resources



# **Knowledge Repository**



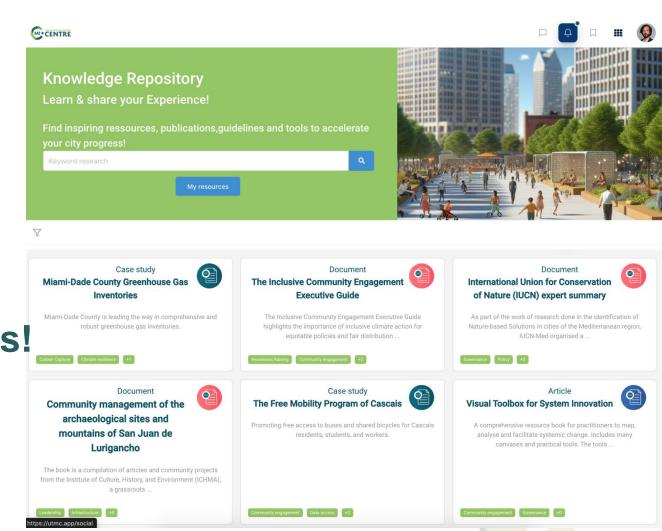
### **Variety of Resources**

- Case Studies from cities
- Tools
- Guides
- Reports
- Articles
- Event Recordings

### **Showcase your City Progress!**

Engage citizens, share with experts and bid for calls!

- Written Case Studies
- Promotional Videos
- Interviews



# Capacity Building&Exchange Centre



### Learn from a diverse offer

- Peer Exchanges
- **Trainings**
- Webinars
- Courses
- Virtual Coffees
- Conferences
- Platform Discovery Tours



# Capacity Building&Exchange



# Join the 7 UTM Clusters!

Exchange in groups and channels about the most relevant topics for your city



01 Finance



02 Governance



03
City Scale Data
& Scenarios



04 Transport & Mobility



05 Sustainable Energy



06 Nature Based Solutions



07 Water Management

### Dissemination&Awareness



- Newsletter
  News, opportunities, calls, etc.
- Events Calendar

  Engagement in global events & forums
- Partnerships
   Synergies with similar projects & allies



### Coming soon



 Community Platform Discovery Tour

Thursday, 14 November 14:00 CET (Online)

UTM Virtual Coffee – Governance

Wednesday, 20 November 14:00 CET (Online)

UTM Virtual Coffee – Data

Tuesday, 11 December 14:CET (Online)



Join us to discuss the progress of UTM cities on sustainable energy strategies!

Wednesday 30th October 14:00 -15:00 CET



### Sustainable Energy Strategies UTM Virtual Coffee



Aksinia Sinko
Project Manager, City
Development Agency,
Zhytomyr (Ukraine)



Jason Grant
Senior Energy Resilience
Program Manager,
Miami-Dade County
(USA)



Stefania Mascolo Energy Projects Expert, NEUTRALPATH Project, Eurocities

In support of:



Connected with:

# Join the Community Platform! CENTRE

- Register: <a href="https://www.utmc.app/">https://www.utmc.app/</a>
- Registration tutorials:
  - + Video "Register as City Officer" for city representatives, employees of a municipality, <a href="https://vimeo.com/834333395/09659e98a5?share=c">https://vimeo.com/834333395/09659e98a5?share=c</a>
- + Video "Register as Community of Practice or Local Partner" for anyone employed by a public or private organization, or city user that is not a municipality. <a href="https://vimeo.com/834333420/c93910600d?share=c">https://vimeo.com/834333420/c93910600d?share=c</a>





UTMC has received funding from the European Union's Horizon Europe programme under the Grant Agreement n°101095976 — Call: HORIZON-MISS-2021-CIT-02 — Project name: Global Knowledge Exchange Centre (GKEC) for Urban Climate Neutrality

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the EU research & innovation framework programme — Horizon Europe. Neither the European Union nor the granting authority can be held responsible for them.





Join the Community Platform!

https://www.utmc.app/



https://urbantransitionsmission.org/centre/



**@Urban Transitions Mission Centre** 



@UTMCproject







**Voices from cities** – City case studies of urban transitions in Africa

# Voices from cities: City case studies of urban transitions in Africa





**Kanak Gokarn**Sustainable Energy Policy
Officer, ICLEI World Secretariat



**Trevino Forbes**Mayor of Walvis Bay, Namibia



Fernand Yapi
Climate and SDG Expert,
Cocody, Abidjan, Ivory Coast



Mumuni Tijani Head of Physical Planning Department, Ablekuma Central Municipal Assembly, Accra, Ghana



Overview of Walvis Bay's focus on sustainable urban development and unique challenges faced.





**Trevino Forbes** Mayor of Walvis Bay, Namibia







### **WUF12 Congress 2024**



Cassava processing, improvement of the village living environment and the urbanization of Cocody









#### **Context**

The galloping urbanization of the commune of Cocody has led its ATCHAN coastal villages to change and coexist with the modernization it brings; namely its real estate operations marked by the presence of large buildings, asphalt roads with all the major works that accompany it. This is how during one of our forums that took place in the village of Blockhaus that the Association of Atchan Women of the 6 Villages of Cocody, spoke to us about the problems of this cohabitation and the socio-economic and environmental difficulties that they encounter with the production of Attiéké.

#### State of play

The production of Attiéké for more than 40 years by the indigenous population of the coastal villages of the commune of Cocody has considerably destroyed the living and environmental environment.

#### **Findings**

Problems of sanitation, waste management, air pollution and lagoon bays, malodorous nuisances... As part of the PAAEDC, a steering committee comprising all the socio-economic actors of the village and a council of elders headed by the village chief were set up to jointly address the aforementioned problems in order to review and improve the Attiéké manufacturing model. This will help facilitate the integrated urban and village planning programs driven by the municipal council.







This project aims to make the transformation of cassava into local food, namely Attiéké, more ecological, to create sustainable jobs for young people and women by preserving the environment while developing income-generating activities that boost the local economy.

This project contributes to achieving the objectives of resilience and reduction of greenhouse gas emissions of the municipality by 203,445.7 tCO2eq/year as part of the development and implementation of the Action Plan for Access to Sustainable Energy and Climate (PAAEDC) of the municipality; which is itself a strategic axis of our Local Development Plan

#### **Innovation**

Construction of a production unit with a manufacturing line made up of machines and equipment that are manufactured in Ivory Coast to replace all manual tasks carried out by women and responsible for polluting waste that is transformed into biogas by two (2) biodigesters.









#### **Expected results**

- Women and girls from village communities are organized into socio-economic structures and trained in the use of ecological production equipment and made aware of environmental concepts and the fight against global warming;
- Manufacture and installation of effective, efficient and environmentally friendly production tools such as the improved oven or hearth;
- Significant reduction in the use of firewood that emits a lot of CO2 thanks to the improvement of the cooking process;
- Reduction in the number of butane gas cylinders thanks to the improvement of the cooking process;
- Production of Biogas with the waste produced by the activity and reusable for cooking, thanks to the two Biodigesters;
- Cleanliness of the living environment, improvement of air quality, disappearance of smelly nuisances and use of living spaces and green spaces,





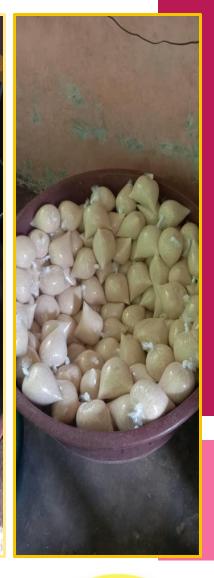




- An improvement of existing activities and the emergence of new sustainable jobs;
- A healthier and more beautiful living environment for the populations;
- On average, 200 women and girls from the beneficiary village are monitored and supervised by an NGO;
- Empowerment of women, poverty reduction, circular economy, respect and protection of the working environment, protection of the environment, biodiversity and ecosystems, improvement of health and good management of water and sanitation;
- Implementation of a local development model that is sustainable, respectful of the environment and emits less greenhouse gases;
- Replicate the project in the ten (10) coastal villages of the commune of Cocody.











#### On the technical level

The project allows the use of machines manufactured in Côte d'Ivoire which along the production chain promote effective, efficient, environmentally friendly production and facilitate a circular economy with the use of peelings and effluents for the production of biogas for its reuse in cooking.

#### On the social level

The living environment has become healthier and more pleasant with the production of more profitable Attiéké, offering more substantial income.

#### On the organizational level

The women and young girls producing Attiéké are organized into Economic Interest Groups (GIE), promoting the pooling of forces, goods and resources, thus giving them the legal personality to be able to benefit from or apply for bank loans,

#### Regarding the territorial scope

It is carried out in the village of BLOCKAUSS, it could extend to the 10 villages of Cocody, at the national, sub-regional and regional levels.

#### In terms of method and operating mode

Model replicable on a large scale

#### In terms of economy

This economically viable project with the creation of future production units.

#### In terms of governance

Project led by the Chiefdom and supported by the Cocody Town Hall with the participation of all stakeholders in the socio-economic fabric of the village.

#### The possible obstacles, limits, constraints (internal or external) to the development of the project

The difficulty for some women to attend meetings due to their many household tasks in addition to selling attiéké, The administrative burden, which delays the provision of funding from the Town Hall, the biodigesters which may not be efficient or powerful enough to produce biogas with real cooking potential.





#### SOME MACHINES FROM THE ATTIEKE ORGANIC PRODUCTION UNIT











**CRUSHER** 

**WRINGER** 

**EMOTOR** 

**SEEDING MACHINE** 

**GAS COOKER** 







### **WUF12 Congress 2024**



### **MERCI**

**YAPI Albert Fernand Okeke** 

Focal Point Covenant of Mayors for Sub-Saharan Africa / UTM

**CITY OF COCODY** 

+225 0707117605

yapifernand@gmail.com

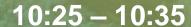
https://www.climate-chance.org/bonnepratique/cocody-cite-verte-puits-decarbone/











Presentation on Accra's planning strategies and the role of local governance in urban transition.





Mumuni Tijani Head of Physical Planning Department, Ablekuma Central Municipal Assembly, Accra, Ghana







# GHANA'S URBAN TRANSITION PROCESS



Presented by Mumuni Tijani Head Of Physical Planning Department Ablekuma Central Municipal Assemble Accra

### PRESENTATION OUTLINE

1 INTRODUCTION

CHALLENGES ASSOCIATED
WITH URBAN TRANSITION

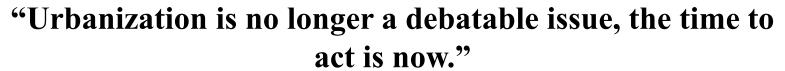
MAP OF GHANA SHOWING URBANIZED AREA

PHOTOS SHOWING
IMPLEMENTED PROJECTS

TRIGGERS OF URBAN TRANSITION

7 CONCLUSION

4 GHANA'S URBAN TRANSITION PROCESS





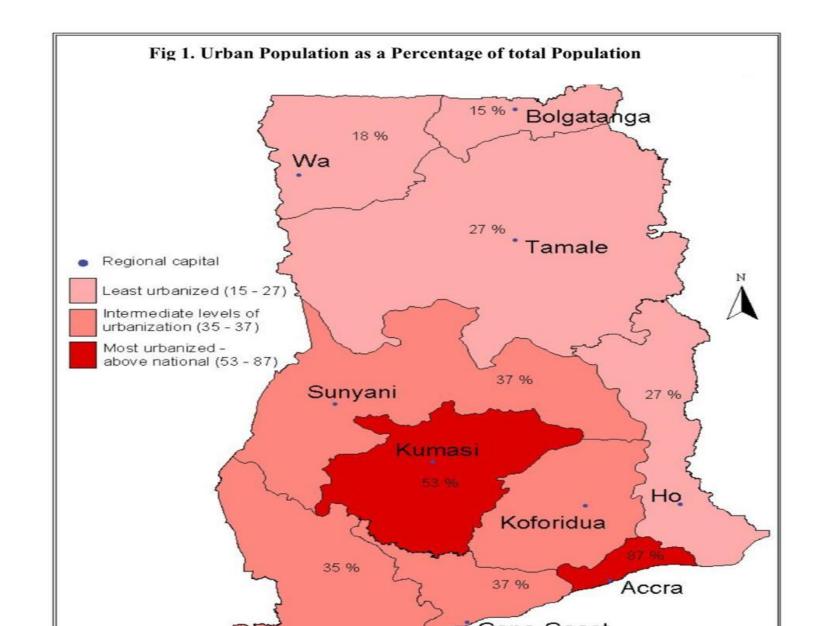
#### INTRODUCTION

The global population is expected to reach 5 billion by 2030, with 3.3 billion people living in urban areas for the first time in history (UN-HABITAT, 2008a).

Ghana is becoming increasingly urbanized, with close to 65% of the population expected to live in cities by 2050. Urbanization rate has surged from 23% in 1960 to over 56% by 2020, making it one of the most urbanized West African countries. Major cities like Accra, Kumasi, and Takoradi attract people for employment opportunities.

Admittedly, urbanization has contributed to Ghana's economic growth and modernization, it has also introduced challenges However, urbanization also presents challenges like infrastructure strains, informal settlements, urban sprawl, and environmental degradation. The government has implemented policies such as National Urban Policy Framework and Action Plan to manage sustainable growth.

November 6, 2024



#### TRIGGERS OF URBAN TRANSITIONS

- Ruaral-Urban Migration.
- Natural population growth
- Insufficient electricity power supply.
- Traffic Congestion in the urban areas.
- Environmental pollution ie solid waste, increased greenhouse emissions
- Urban sprawl.
- Environmental degradation

## GHANA'S URBAN TRANSITION PROCESS



- Urban planning Preparation of spatial plans and Revision of outdated plans
- Green policy initiative
- Protection of our urban forest coverage as a way of responding to climate change issues.

### **Transportation**

- Implementation of Bus Rapid Transport system
- Implementation of Electric Vehicle program which is aimed at reducing emissions
- Expansion of road infrastructure ie construction of interchange,
- Expansion of railway lines

### **Education**

- Implementation of Free Senior High School policy
- School feeding program
- Opening access to education ie School infrastructure development

### **Sanitation**

- Construction of new engineered sanitary landfill with gas capture
- Increase the coverage sanitation infrastructure

### CONTINUATION



- Industrial revolution ie One district, one factory initiatives
- Implementation of permit process system ie turn around time for issuance of permits are put in check to avoid delayance

### Works and housing

- Affordable housing project and densification for redevelopment
- Greater Accra Resilient and Integrated Development Project (GARID) – to improve flood risk and solid waste management within the Odaw River basin.
- The project seeks to integrate nature-based solutions to serve buffers

### Health

- Construction and Upgrading of hospital across the 16 regional capitals
- Implementation of agenda 111 hospitals
- Opening access to education ie putting up school infrastructure



- Land tenure system in Ghana
- Expensive to implement projects i.e Railway development, construction of interchange
- Inadequate funds







### ROAD INFRASTRUCTURE DEVELOPMENT











### RAILWAY DEVELOPMENT









### **INDUSTRIAL REVOLUTION**







### **CONCLUSION**

Ghana's urban transition highlights the challenges of rapid urbanization, requiring effective planning, sustainable infrastructure investment, and inclusive policies. By prioritizing resilient systems and equitable development, Ghana can serve as a sustainable development model for other African nations.



### THANK YOU



November 6, 2024 17

# Voices from cities: Panel discussion and Q&A





**Kanak Gokarn**Sustainable Energy Policy
Officer, ICLEI World Secretariat



**Trevino Forbes**Mayor of Walvis Bay, Namibia

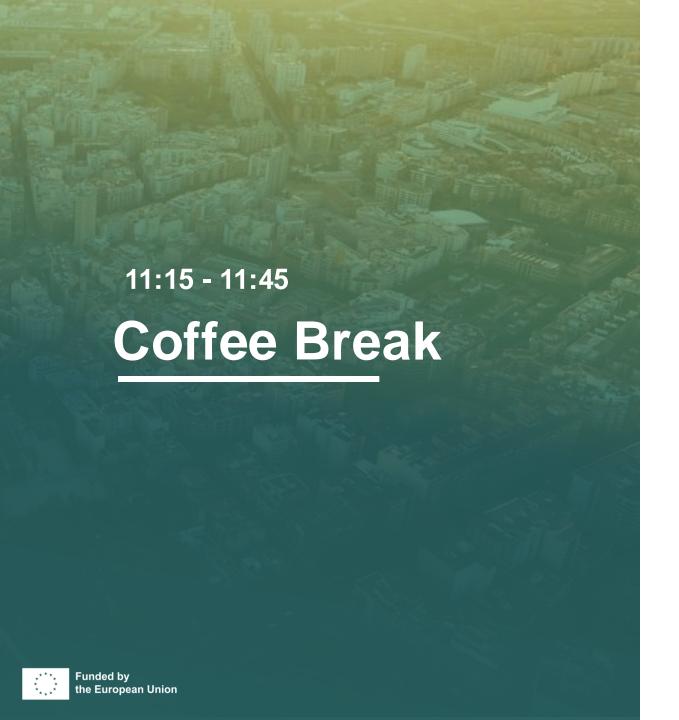


Speaker

Fernand Yapi Climate and SDG Expert, Cocody, Abidjan, Ivory Coast



Mumuni Tijani Head of Physical Planning Department, Ablekuma Central Municipal Assembly, Accra, Ghana





Next → Session 3: System innovation: A Funders'

Dialogue for Africa

The content of this presentation reflects only the author's view. The European Commission is not responsible for any use that may be made of the information it contains.





System innovation: A Funders'

Dialogue for Africa – Best practice
examples and case studies

The content of this presentation reflects only the author's view. The European Commission is not responsible for any use that may be made of the information it contains.

# Welcome & Opening Funders' Dialogue for Africa





Nicola Lezza
UTM F&F Helpdesk Manager,
GCoM



Karel Van Oordt
UTMC partner,
Project Coordinator Eurocities



### The Status of Urban Climate Finance & Funders perspective: a dialogue





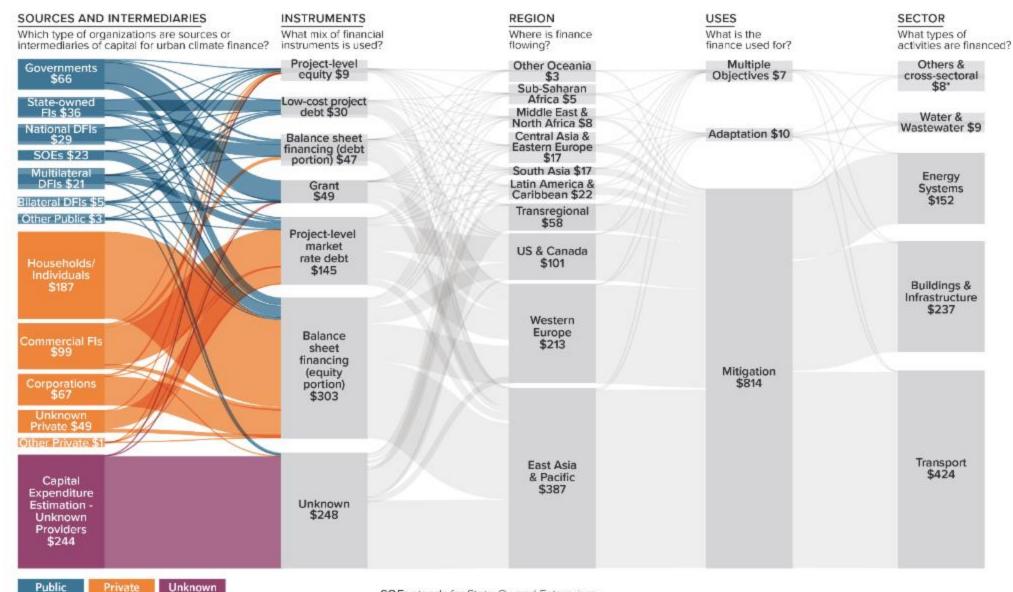
Nicola Lezza UTM F&F Helpdesk Manager, GCoM



Speaker

John Michael LaSalle, PPF Connector Manager, **CCFLA** 





<sup>&</sup>quot;Other Public" sources include export credit agencies (ECAs), multilateral climate funds, public funds and unknown public.

831

**ANNUAL** 

**AVERAGE** 

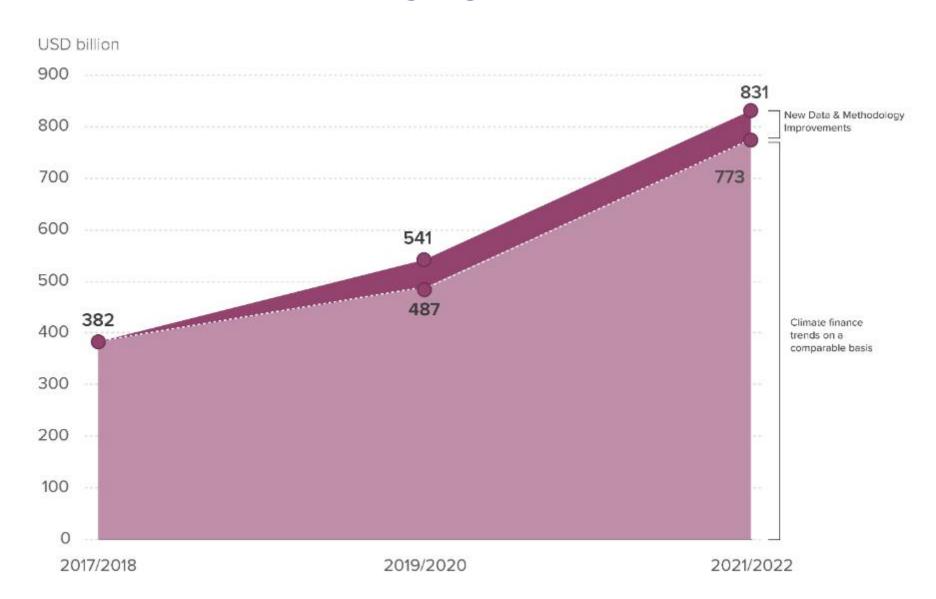
**BILLION USD** 

<sup>&</sup>quot;Other Private" sources include institutional investors and funds.

SOEs stands for State-Owned Enterprises.
Fls stands for Financial Institutions.
DFls stands for Development Finance Institutions.
Transregional refers to financing that was tracked for multiple regions.

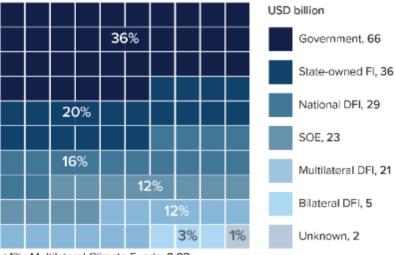
<sup>\*</sup> Includes waste, agriculture, forestry and other land use, information and communications technology, and industry

# Tracked urban climate finance has more than doubled since 2017/2018, yet a large gap remains



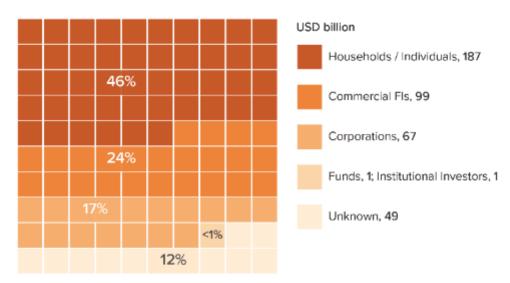
# Private and public actors accounted for 49% and 22% of total urban climate finance, respectively, in 2021/2022.

### Urban climate finance by public actors in 2021/2022

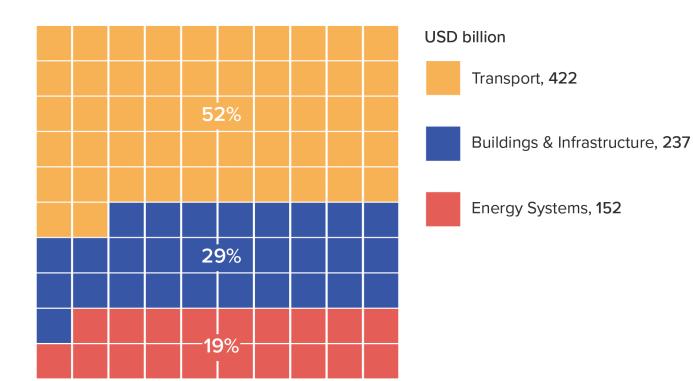


< 1%: Multilateral Climate Funds: 0.03; Export Credit Agency (ECA): 0.03

### Urban climate finance by private actor in 2021/2022

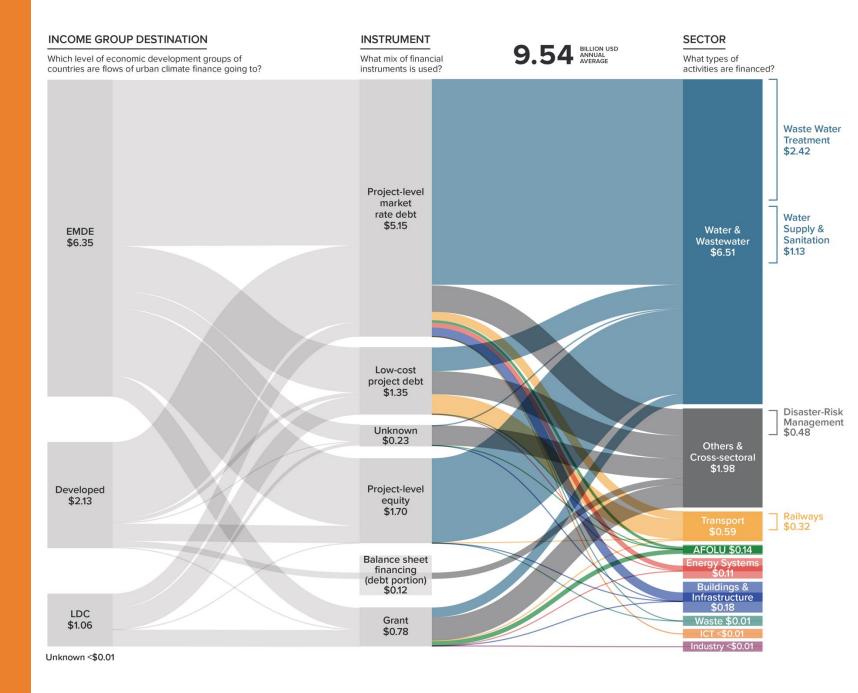


Mitigation finance more than doubled in 2021/2022. Transport represented 52% of total investments.

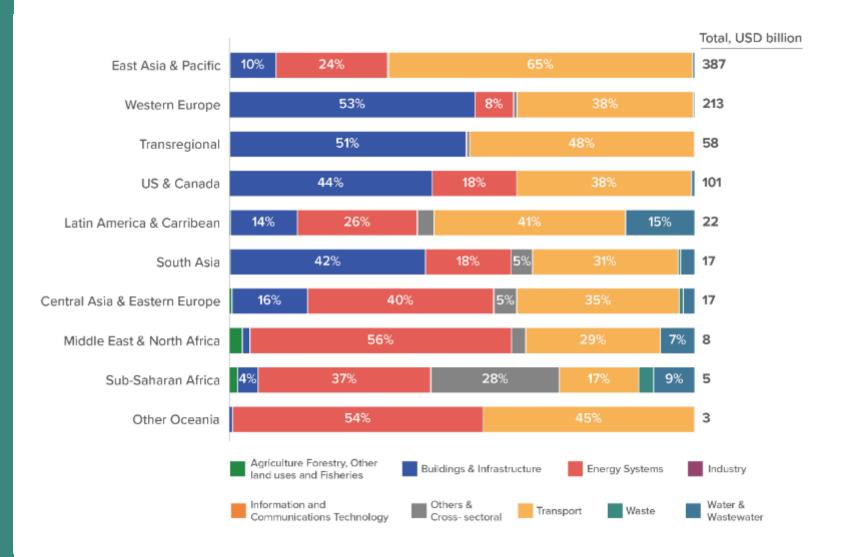


< 1% : Others & Cross-sectoral, Water & Wastewater, Waste, AFOLU, Information and Communications Technology

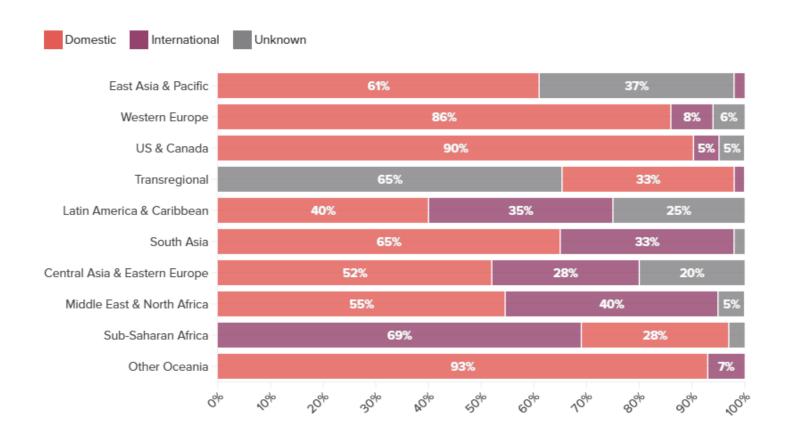
# Tracked urban adaptation finance remains low.



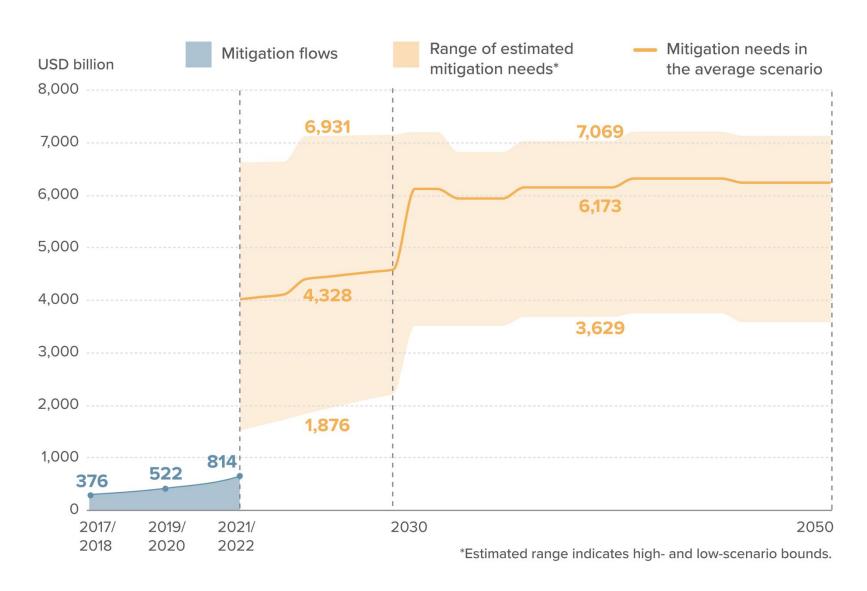
EMDEs and LDCs received only 11% and 1% of the total urban climate finance, respectively, in 2021/2022.



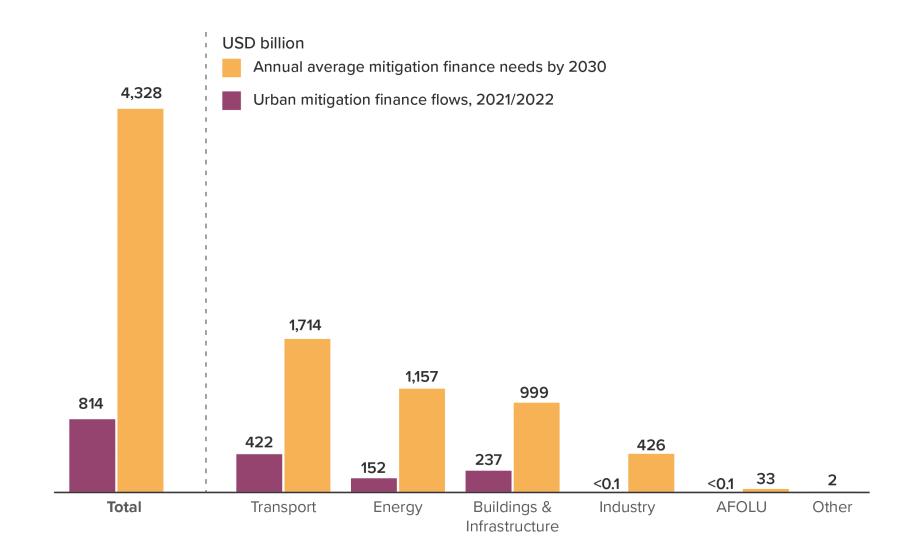
The majority of urban climate finance was sourced domestically except in Sub-Saharan Africa.



# Cities need USD 4.3 trillion per year by 2030 for mitigation alone and over USD 6 trillion by 2050



# Transport, energy, and buildings dominate cities' mitigation needs



# Urban Climate Finance in Africa

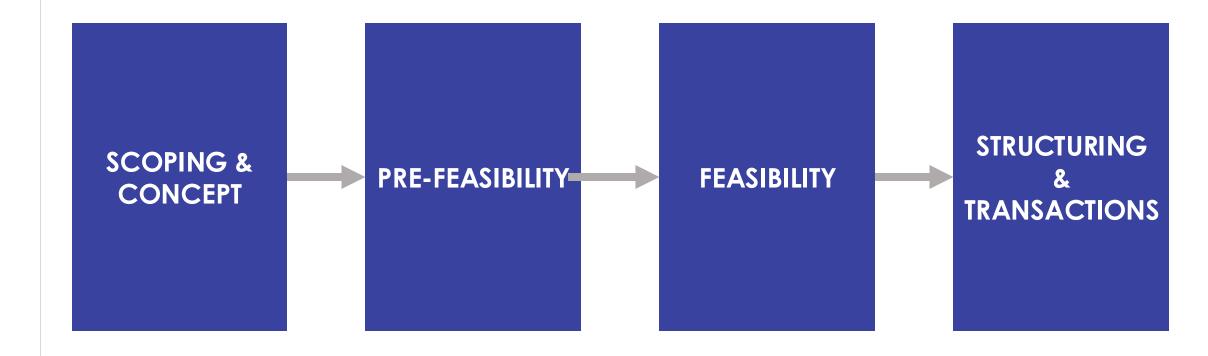
- Only **USD 14 billion** in urban climate finance in Africa in '21/'22, **USD 9 billion to North Africa** and USD 5 Billion to SSA.
- Tracked finance in SSA primarily went to energy systems (USD 2 billion), cross-sectoral projects (USD 2 billion), and transport (USD 1 billion).
- 69% international finance in SSA, in contrast to all other regions where the majority was domestic.
- Less than USD 1 billion per year of Adaptation finance is in Africa, despite cities having over 500 million in water projects alone





### **Project Preparation Facilities**

Facilities that supporting cities in developing bankable, investment-ready projects, from the project scoping stage up to the financial close.



# How do PPFs support cities?

85% of PPFs provide technical assistance

35% of PPFs provide grants

25% of PPFs also provide financing

# When do PPFs support cities?

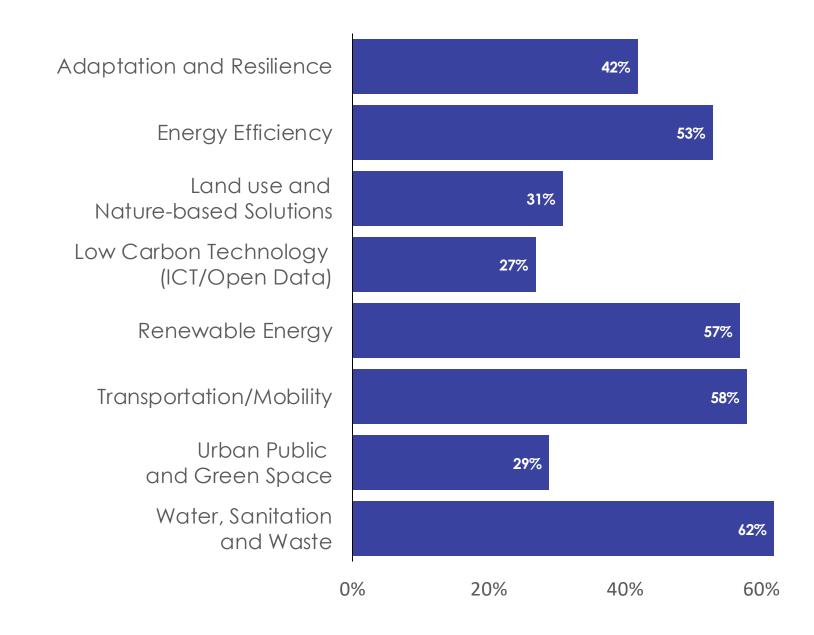
**42%** of PPFs support the **concept & scoping** stage

41% of PPFs support the pre-feasibility stage

**51%** of PPFs support the **feasibility** stage

39% support the structuring & transactions stage

# What Sectors do PPFs support?



### **Project Preparation Resource Directory**

An open, online, global directory of PPFs that help city networks and project sponsors find project preparation support

> View the **Project Preparation Resource Directory**

### **Project Preparation** Resource **Directory**

The Project Preparation Resource Directory helps subnational governments and stakeholders identify project preparation facilities that can support them in developing green and resilient infrastructure. including implementing more efficient heating and cooling systems, building renewable energy, setting up sustainable transit, or climateproofing resilient infrastructure.

> Associated Programme on Flood Management (APFM)

APFM supports countries in

the implementation of

Integrated Flood..

READ MORE >

African Water Facility



### Africa50 Project **Development** Africa50 is a infrastructure investment platform that focuses on medium to larg... READ MORE > (CFF) The C40 Cities Finance Facility (CFF) supports C40 READ MORE >

CDIA works closely with

READ MORE >

secondary cities in Asia and

the Pacific to address gaps ...

### The African Water Facility (AWF) is a multilateral fund that provides grants and... READ MORE > **C40 Cities Finance Facility** cities and selected non-C4... **Cities Development** Initiative for Asia (CDIA)

#### **CICLIA (Cities and Climate CDP Matchmaker** In Africa) CDP Matchmaker works with A project preparation facility cities to highlight projects in funded by the European flood control, waste... Union, SECO, and AFD with... READ MORE > READ MORE > City Climate Finance Gap **City Finance Lab** The City Finance Lab is a The City Climate Finance dedicated platform Gap Fund (Gap Fund) helps supporting the developmen... cities in developing and... READ MORE > READ MORE >

### Contact

citiesclimatefinance.org









### Thank you!

### Panel discussion: a funders' dialogue for African cities



**Trevino Forbes** Mayor of Walvis Bay, Namibia



**Bjorn Wallsten** Senior Research Officer at Formas, Transition Pathway Coordinator in the Driving Urban Transitions Partnership





Speaker

Lea Ranalder Associate Programme Management Officer, Human Settlements at **UN-Habitat** 



Marwa Alaa El-Din Research Programs Department Manager Science, Technology and Innovation Funding Authority, Egypt



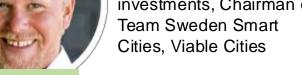
**Shaden Al Galalay** City Advisor for MENA, GCoM Gap Fund Support Team



Léonard Leveque LEAP-RE coordinator, LGI



Olle Dierks Head of large-scale investments, Chairman of Team Sweden Smart Cities, Viable Cities









November 5, 2024 | 13:00 - 14:30



# **Empowering Cities: Unlocking Climate Finance Potential**





#### **Vast Investment Opportunities**

- \$90 trillion in climate investments needed by 2030
- Creates \$4.5 trillion market for project preparation
- Translates to \$300 billion annually in preparation costs

(Source: Cities Climate Finance Leadership Alliance, 2021)

#### **Early-Stage Support: Key to Success**

- Project preparation typically 3-5% of total costs
- Rises to 10% in emerging markets, indicating growth potential
- Early-stage support crucial for project viability

(Source: World Bank, Urban Development Series, 2018)

# The City Climate Finance Gap Fund

























# The GCoM-Gap Fund Partnership

- Raising awareness about the Gap Fund opportunity for cities
- Direct assistance to help cities develop quality project proposals



Workshops, tools and knowledge sharing on emissions, resilience analysis

GCoM and the Gap Fund serve as a bridge between local governments and climate finance opportunities





# **Gap Fund Support Services**



The initiative provides pivotal support for cities to advance to later stages of project preparation.



Supports a range of activities from climate strategy development to pre-feasibility studies



Assessment of the climate potential of actions, plans, strategies, and investment programs



Supporting the prioritization of investments



Project concept design and definition



Supporting the appropriate financial structuring for your project-idea



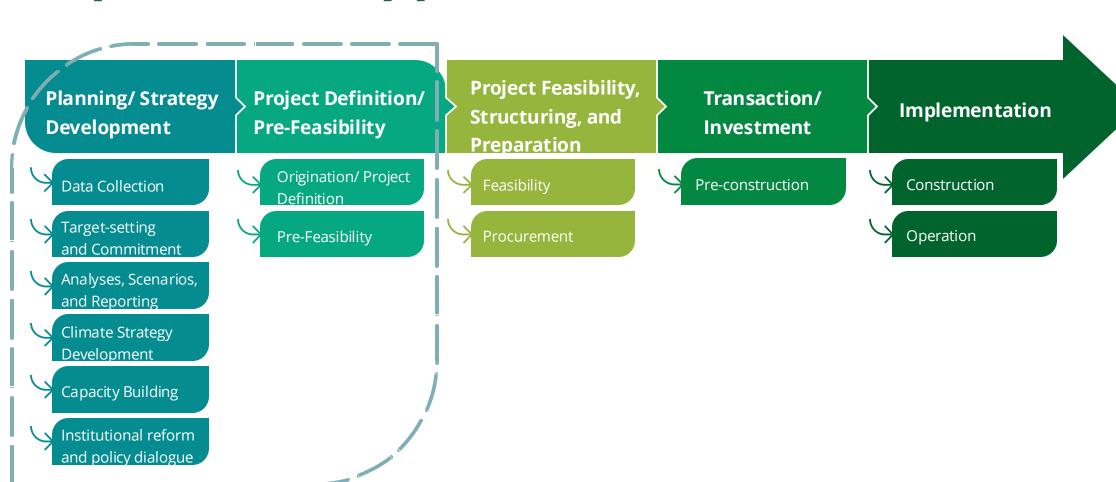
Guidance on financing mechanisms and investment facilitation



Connecting cities to additional technical/ financial support sources

# A Focus on Early-stage Project Preparation Support

EURO CITIES



# **Eligibility Criteria**

## **OECD Eligibility**

Projects must be from countries eligible for OECD development assistance.

## **Urban Focus**

Projects should be situated in urban areas. No constraints on city size, but should have sizable climate impact potential.

## **Ownership**

Proposals must demonstrate local government ownership and commitment. Local governments, municipal agencies, development banks for municipal investment can apply. Proposals can be submitted by entities representing groups of municipalities.

#### **Climate Focus**

Impact on lowering emissions or adaptation to climate change.





# **Eligible Sectors**



Sustainable urban mobility



Energy efficiency and renewables, retrofits, street lighting, district heating and cooling



Solid waste management and circular economy





Water and wastewater management



Greening of urban areas, NBS, blue/green infrastructure, ecosystem restoration



Infrastructure for adaptation and reducing climate risks and vulnerabilities



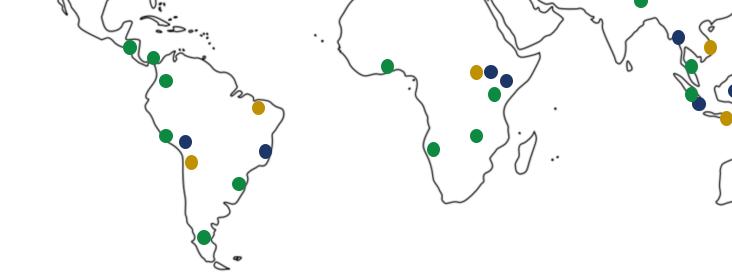
Multisector, area-based investment programs: transforming urban areas with a multisector approach

Overall, we are looking for transformational, cross-sectorial, high-impact projects.

# Between May and October 2024, GCoM-Gap Fund delivered

Awareness Raising events
reaching 1109 cities\* in 91
countries with 3705
participants

65 Hands on Workshops
engaging 729 cities\*, in 46 countries with 1765

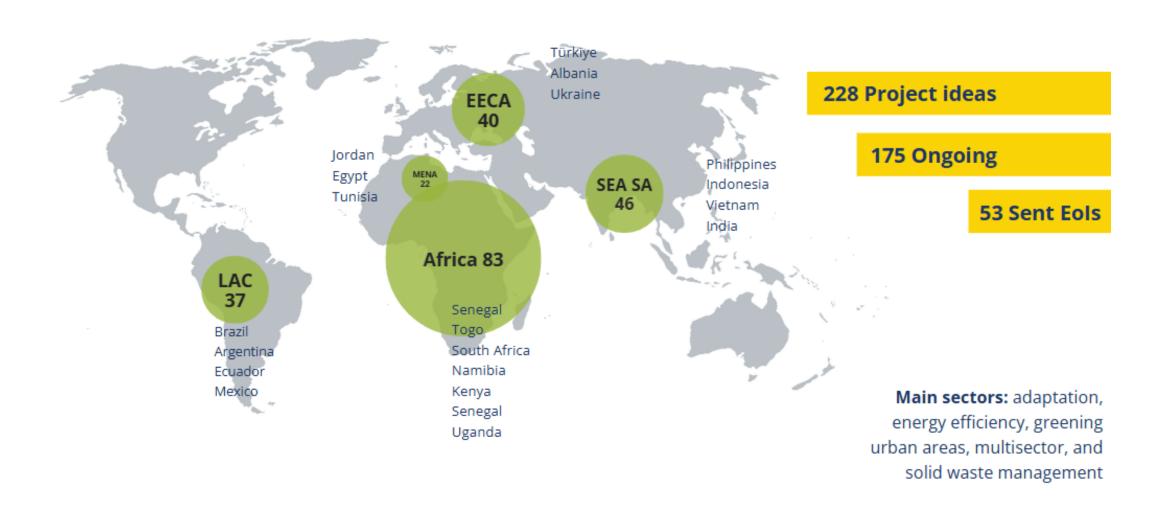




participants

<sup>\*</sup>This number accounts for all cities that have taken part in each event, meaning some cities may appear in multiple events.

## From project ideas to EoI Gap Fund

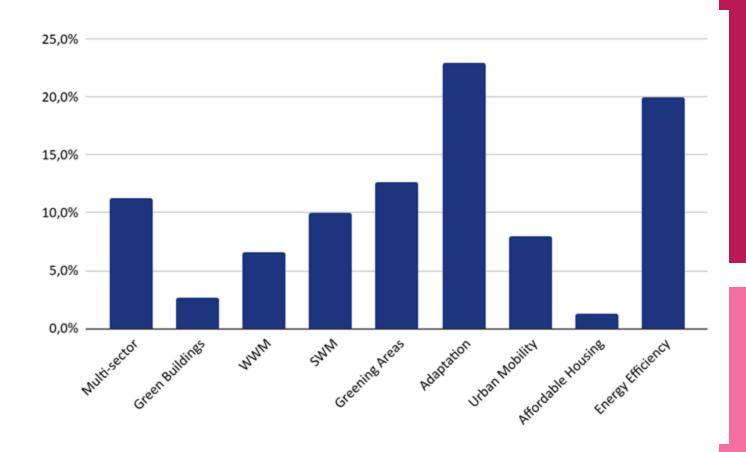


# Project ideas - sector approach: global overview

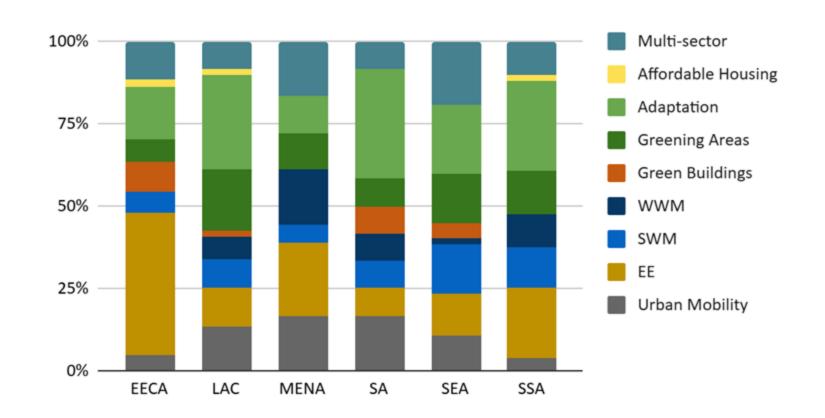


**36%** Adaptation - NbS - Greening of urban areas

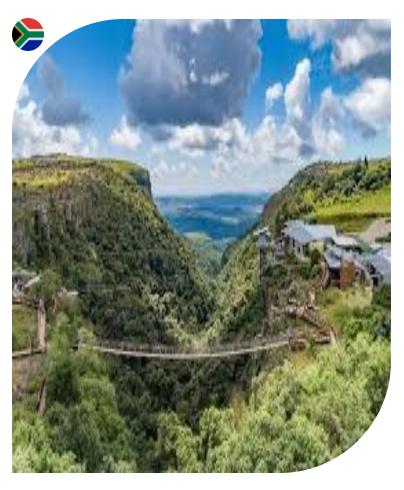
**24%** Energy efficiency - Green buildings - Affordable housing



# Project ideas - sector approach: regional overview



# Supporting the completion of the urban stormwater management plan in Mbombela, South Africa



#### Mbombela, South Africa

The city wants to enhance climate resilience by implementing a comprehensive stormwater management system, flood protection measures, and Nature-based Solutions (NbS), ultimately safeguarding water quality and availability while promoting sustainable urban development.

#### **Gap Fund support**

- Pre-feasibilitystudy forstormwater management
- Scaling up and integrating citywide riverine management and stormwater initiatives



Supported by WB SSA Region

# Integrating nature-based solutions in Abidjan's drainage Masterplan, Cote d'Ivoire





# Abidjan, Cote d'Ivoire Gap Fund support

- Integration of NBS into Abidjan drainage master plan and specific investments in urban drainage.
  - (i) the identification of NBS opportunities;
  - (ii) the provision of technical recommendations on the types of NBS to be prioritized, cobenefits of the different types of NBS, and
  - (iii) locations for implementation.

Furthermore, it supports the identification of potential NBS to deliver the activities mapped in the drainage masterplan and the development of prefeasibility studies for priority NBS interventions. Additionally, this grant enhances the capacity of city officials by providing training on integrating NBS into urban infrastructure and their maintenance.

[Supported by WB]

## Identification and prioritization of investments in naturebased solutions (NBS) in Kinshasa, DRC



#### Kinshasa, DRC

#### **Project Overview**

- Mapping of natural assets and identification of potential NbS locations in Kinshasa
- Selection, costing and prioritization of NbS interventions per potential location
- Development of a NbS strategy
- Piloting of NbS strategy recommendations at project scale for erosion control investment in Kin Elenda basin



EiB

# Sustainable Waste Management and Greening project in Uganda

#### **Project Overview**

- Conduct a comprehensive analysis of various municipal organic waste treatment methods, considering their technical, economic, financial, social, environmental, and climate impacts.
- Establish a collaborative framework for working together on organic waste recovery between Makindye-Ssabagabo, Nansana, Kira, and Entebbe municipalities
- Ensure informed and evidence-based decision-making

## **Project Impact**

- Increased knowledge for informed decision-making.
- Improved waste recovery practices.
- Enhanced collaboration and coordination.



#### **Next Steps**

- Conduct feasibility studies for selected treatment options.
- Engage with key stakeholder for input and involvement.

## **Application Process**



Simple application process. Submissions are accepted on a rolling basis.



The Expression of Interest (EOI) is submitted online at <a href="https://www.citygapfund.org/apply-for-support">www.citygapfund.org/apply-for-support</a>



Share your idea with the GCoM-Gap Fund team, we'll help you make it stronger. Describe the project idea focusing on the climate impact it would bring.



EOIs are evaluated based on climate benefits, replicability, alignment with goals, aggregation potential, handover potential, Alignment with National policies.

Clearly state the technical assistance that the project needs.

Explain what social, economic, and environmental impacts it will bring.

Also, consider if your project is replicable and aligned with local and national policies.

Would other cities be interested in joining your request? Who could bring investment or financing to implement this project?



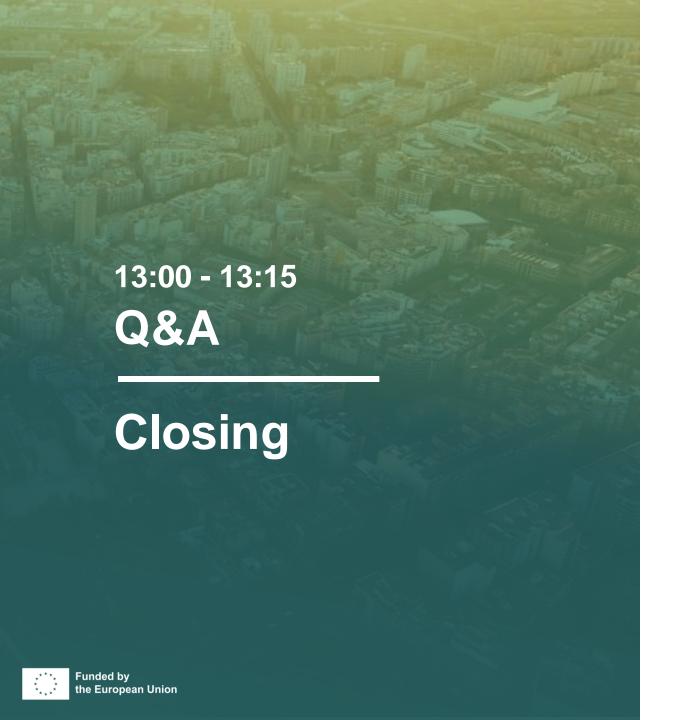
# Thank You!





info@gcomprojectsupport.org









Karel Van Oordt UTMC partner, Project Coordinator Eurocities

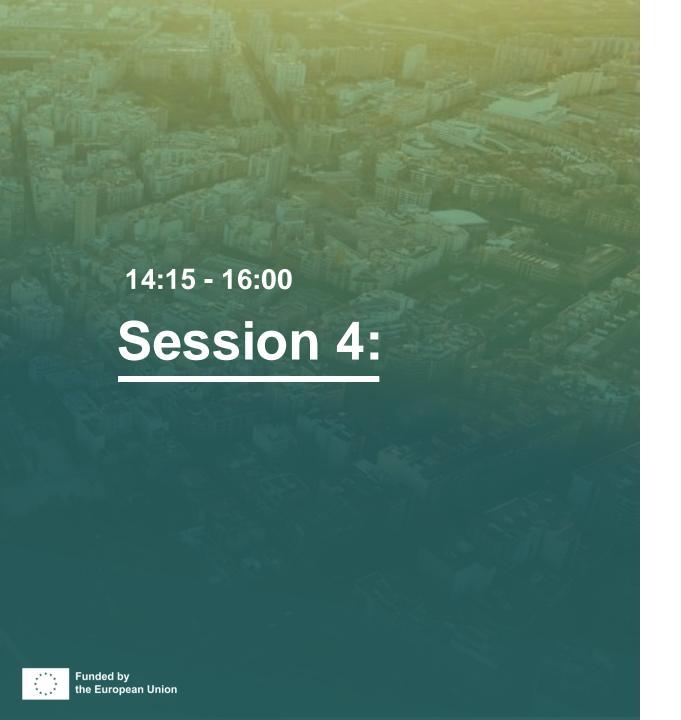


Elli B. Tzatzanis-Stepanovic UTMC Project Coordinator, Senior Project Manager, FFG





Next → Session 4: International collaboration: Exploring Strategic Urban Development Initiatives - Initiatives and contributions to sustainable African cities





International collaboration:

Exploring Strategic Urban

Development Initiatives - Initiatives

and contributions to sustainable

African cities

# International collaboration: Exploring Strategic Urban Development Initiatives - Initiatives and contributions to sustainable African cities





Amany El-Sharif Vice president Pan African University, Coordinator of the North African Regional Office of the Association of African Universities, AU



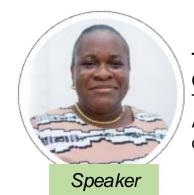
Kanak Gokarn Sustainable Energy Policy Officer, ICLEI World Secretariat



Artur Serra
Deputy Director
i2CAT, ENoLL



Dahlia Sabri
International Water
Resources Association,
IWRA International Water
Resources Association,
IWRA



Temitope Sogbanmu Consultant and Trainer, SDG Advocate, University of Lagos





# The Internet Research Centre

# Deploying living labs for a joint urban-rural transition in Senegal

Artur Serra,
Deputy Director, i2cat
ENoLL.





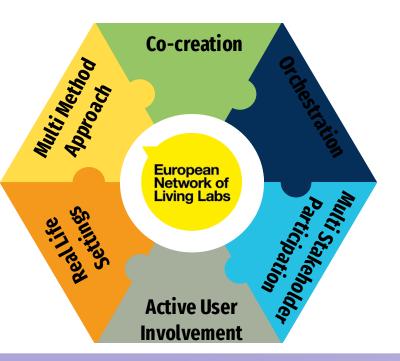
<u>UTMC Conference</u> at <u>World Urban Forum</u>. Cairo November 7<sup>th th</sup>, 2024.





# What are Living Labs?

Living Labs are open innovation ecosystems in real-life environments based on a systematic user co-creation approach that integrates research and innovation activities in communities, placing citizens at the centre of innovation



Living Labs operate as **intermediaries** among **citizens**, **research organisations**, **companies and government** agencies or levels for joint-value co-creation, rapid prototyping or to scale up innovation and businesses.

They are open innovation ecosystems in real-life environments using iterative feedback processes throughout the lifecycle approach of an innovation

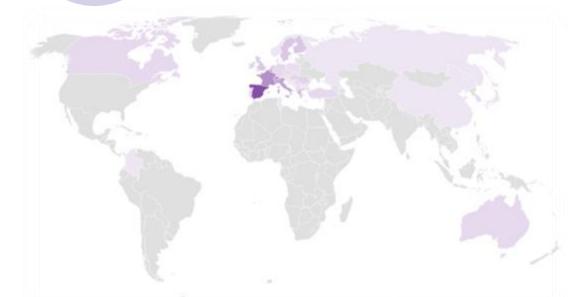


European Network of Living Labs

## **ENoLL**



- Founded in 2006 under the auspices of the Finnish European Presidency
- ENoLL focuses on facilitating knowledge exchange, joint actions and project partnerships among its members
- Its aim is to promote the Living Labs concept, support EU policies, enhance Living Labs and their sustainability and enable their implementation at a global level.
- ENoLL growing community includes members that operate by the main living lab principles such as multi-stakeholder co-creation, iterative active user involvement and real-life intervention.



continents 38 countries

~ 165 active
members (89%
in Europe)
and in
mainly in
urban areas

Active in 20+ EUfunded projects to support LL creation and strengthen the impact of LL

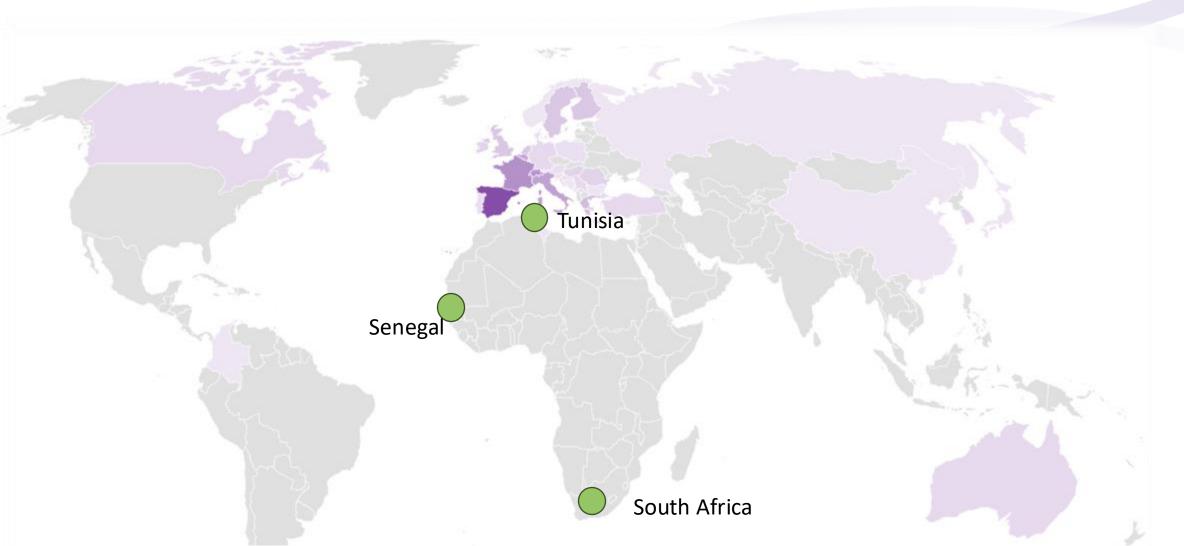




+500 historically certified living labs



## Living Labs in Africa: changing the approach







#### Attached to Senegalese Government Via the Ministry of **Digital Economy & Telecommunications**



2014

**Operational** and administrated by the regulator

Ndeye Fatou Ndiaye Diop-Blondin Fonds de Développement du Service Universel des **T**élécommunications **Coordonatrice FDSUT.** 

2019

**02** main axes

The Fund became

autonomous and has an operational unit further than its steering committee

> Our missions and organisation are defined by the decree n° 2019-593 of 2019/2/14 relating to universal Acces/Service

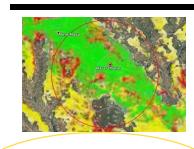
0,75% of operators sales

revenues contributes to **FDSUT** 









**Network cover** Universal Access



**Usages** development Universal Service

SLIDE 1 sur 5

## 04 LIVING LABS LAUNCHED FOR A PILOT PHASE OF 03 YEARS



03 GOALS



To achieve population digital inclusion

LL SN will be an open place with digital tools & basics training or sensibilisation sessions

To democratize the Innovation

LL SN methodology will be deployed and will create a **fertile ecosystem** with heterogeneous profiles

To catalyse local development

LL SN will create a place where all local actors can meet and identify synergies

## 1,6 M€

Planned for 3 years

LL installation & management

17% Training & sensibilisation

1% Scientific expertise



#### WHY LIVING LABS IN RURAL AREAS AND THE PRIMARY SECTOR?

#### A NATIONAL GOAL: FOOD SOVEREINGTY.

CANNOT BE ACHIEVED BY CITIES AND URBAN AREAS ALONE



THE NATION NEEDS AN ADVANCED AGROPASTORAL SYSTEM IN RURAL AREAS SUPPORTED BY ICT

FDSUT PROMOTES A COMMUNITY-BASED INNOVATION ECOSYSTEM BASED ON LLs.

#### DANGALMA LIVING LAB (REGION DIOURBEL)



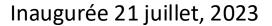


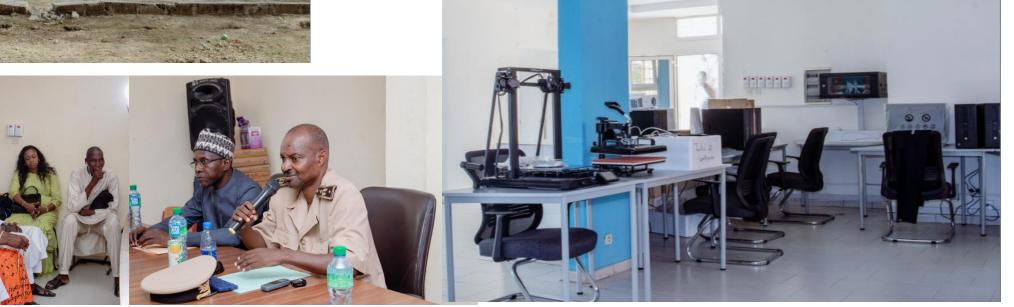
Agence Nationale d'Insertion et de Développement Agricole











DANGALMA
TRANSFORMATION
FRUITS, LÉGUMES,
CÉRÉALES
Soutenons les
femmes
transformatrices de
Dangalma, Diourbel,
Senegal
#entrepreneuriat
#transformation ...







## Fonds de Développement du Service universel des Télécommunications Tous connectés Unité de Coordination et de Gestion



#### Liste des projets sélectionnés au niveau des living lab de Dangalma et Kaolack

2.5te des projets serectionnes du invedu des nving lab de sanguina et Rabidek		
Structure	Projet	Descriptif
		Living lab <u>Dangalma</u>
	Plateforme web et mobile pour la commercialisation des produits agricoles	Elle permet de faciliter l'accès aux marchés pour les agriculteurs, réduire les intermédiaires et augmenter les revenus des agriculteurs et améliorer la transparence des prix et la qualité des produits. La plateforme est accessible aux agriculteurs et aux acheteurs pour la vente directe de produits agricoles, en s'appuyant sur les formations en Développement Web et Statistiques et Informatique décisionnelle.
	Application mobile pour la gestion du cheptel	L'application permet aux éleveurs de suivre la santé, la reproduction et la production de leurs animaux, en s'appuyant sur les formations en Développement Web et Développement durable, mais aussi en production animale (ISFAR). La plateforme permet d'améliorer la santé et la productivité du cheptel, réduire les pertes animales et améliorer la qualité des produits d'élevage et enfin promouvoir des pratiques d'élevage durables.
Université de Bambey (UADB)	Laboratoire mobile d'analyses des sols	Le laboratoire permet de vérifier la fertilité des sols et la productivité agricole afin de réduire l'utilisation des engrais chimiques et préserver l'environnement. L'objectif étant de fournir aux agriculteurs des conseils, d'améliorer la fertilité des sols et la productivité agricole, de réduire l'utilisation des engrais chimiques et préserver l'environnement.
	Plateforme de formation en ligne pour les agriculteurs	Elle propose des modules de formation aux agriculteurs sur des thématiques variées (techniques agricoles, gestion d'exploitation, marketing, etc.), en s'appuyant sur les formations en santé communautaire et développement durable. L'objectif étant de renforcer les capacités des agriculteurs et améliorer leurs connaissances techniques, favoriser l'adoption de pratiques agricoles durables et respectueuses de l'environnement et améliorer la santé et la sécurité des agriculteurs et des consommateurs.
	Système d'irrigation intelligent	Le système d'irrigation utilise des capteurs et des panneaux solaires pour optimiser l'utilisation de l'eau et de l'énergie, en s'appuyant sur les formations en maintenance réseaux et physique chimie. Il vise l'augmentation de la production agricole et la résilience au changement climatique en réduisant la consommation d'eau et d'énergie Améliorer la gestion des ressources naturelles.

#### **KAOLACK LIVING LAB.**





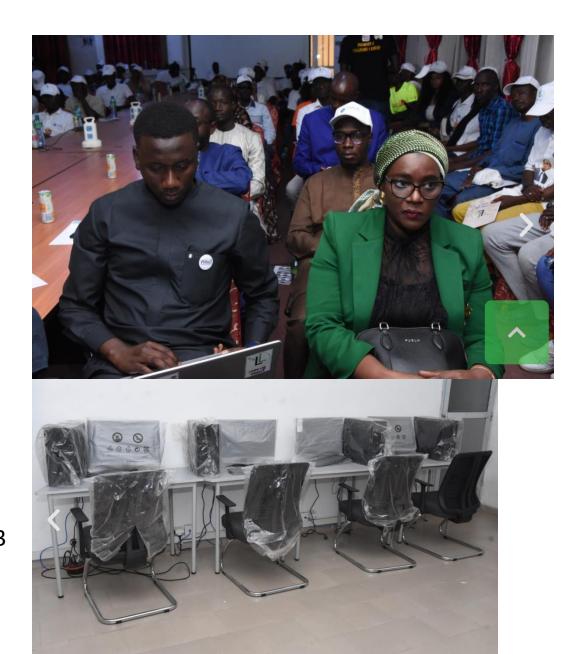








Inaugurée 30 abril 2023





# Fonds de Développement du Service universel des Télécommunications Tous connectés Unité de Coordination et de Gestion



Living lab Kaolack		
Université de Kaolack (USSEIN)	Agricole 2.0	Agricole 2.0 est une conception d'une serre low-cost avec des matériaux de récupération pour créer un environnement propice à la culture et la protection des plantes.  La gestion des serres obéie au étapes suivantes : Le projet consiste à faire l'installation de systèmes d'irrigation agricole automatisé avec plateforme de monitoring et d'administration, la création d'un système hydroponique ou hors-sol pour la récupération des terres, l'installation de matériel électronique pour le contrôle des paramètres agro climatiques de l'exploitation, le suivi des sols avec l'utilisation de l'Intelligence Artificielle.
	Fabrication de Compostage Liquide : Intrant Biologique et Écologique (IBÉ)	Il vise la fabrication d'un système embarqué composé d'un bac servant à la dégradation de la matière organique et d'un bras mécanique qui détecte les produits compostables grâce à une intelligence artificielle. Ce bras mécanique sera multifonctionnel avec la possibilité de détecter les attaques et les fruits mûrs tout en notifiant le cultivateur sur son smartphone.
	Smart Agricole pour Smart Diététique (SASD)	Le projet consiste à mettre à la disposition des consommateurs une application interactive d'aide à la diététique avec la conception d'un kit personnalisé en fonction de l'âge, des activités quotidiennes, des antécédents médicaux et de l'IMC. Le kit est constitué d'un ensemble de capteurs capables de détecter les nutriments (% Calcium, Potassium, Magnésium, Protéines), il est également muni d'un écran pour visualiser l'apport calorifique et le niveau d'équilibre alimentaire.
	Sen 'manioc	Le projet conste à instaurer la culture du manioc dans la région et la création d'une plateforme e-commerce pour faciliter la commercialisation de ces produits.  Sen `manioc dispose aussi d'une application mobile permettant à l'utilisateur de suivre l'évolution de la plante, de détecter des maladies et d'identifier des attaques.
Chambre de Commerce de Kaolack (CCAK)	Pole Agropastorale du Saloum	Le projet consiste à mettre en place une ferme intégrée dans les chaines de valeur agricoles (production, transformation et commercialisation) : agriculture, aviculture, aquaculture/aquaponie, embouches, élevage, transformation de produits locaux.

# Le projet FDSUT Living Lab comme nouvelle programme de recherche et innovation

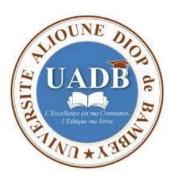
# FSUT-LL Scientific Committee







Research Centre









AFRICA AS A
LABORATORY
OF A
JOINT
URBAN-RURAL
TRANSITION.



In 2024 the 57% of its population live in rural zones.

In 2050, the 60% will live in urban areas.

What's next? Can ICT and living labs closing the gap?



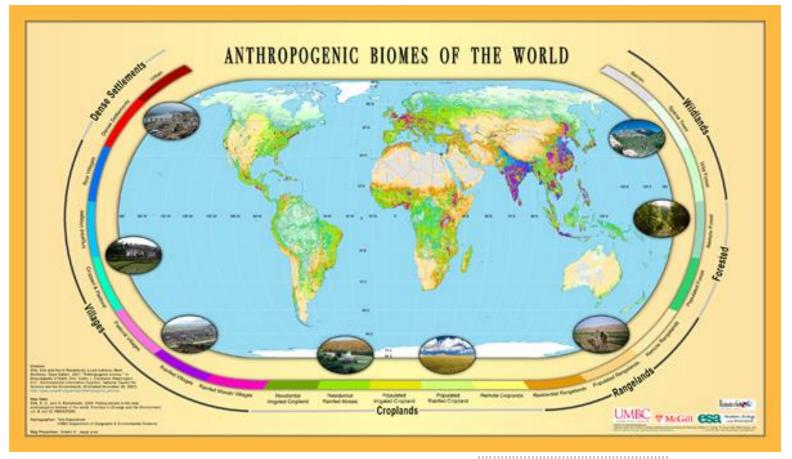


# Beyond the urban/rural dichotomy?

# Civilizations 10.000 BC Cultures 120.000 BC

#### One Habitat hypothesis:

Can urban-rural living labs and universal digital access closing the gap?







Thanks a lot!! artur.serra@i2cat.net









Karel Van Oordt UTMC partner, Project Coordinator Eurocities



# Thank you for joining us!



Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the EU research & innovation framework programme – Horizon Europe. Neither the European Union nor the granting authority can be held responsible for them.

In support of:



Connected with:

**NET ZERO CITIES** 

## **UTMC Partners**













