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AFRICA

The global cities network

www.iclei.org

*Connecting Leaders
Accelerating Action
Pioneering Solutions*

*Options available for
closing the pre-2020
mitigation gap in Africa: the
urban development sector*

*Africa Regional Workshop on
Carbon Finance, Marrakech 11-12
April 2015*

Who we are

- Connecting Leaders
- Accelerating Action
- Pioneering Solutions

12 *mega-cities*

100 *super-cities and
urban regions*

450 *large cities*

450 *small and medium-sized
cities and towns*

84 *countries*

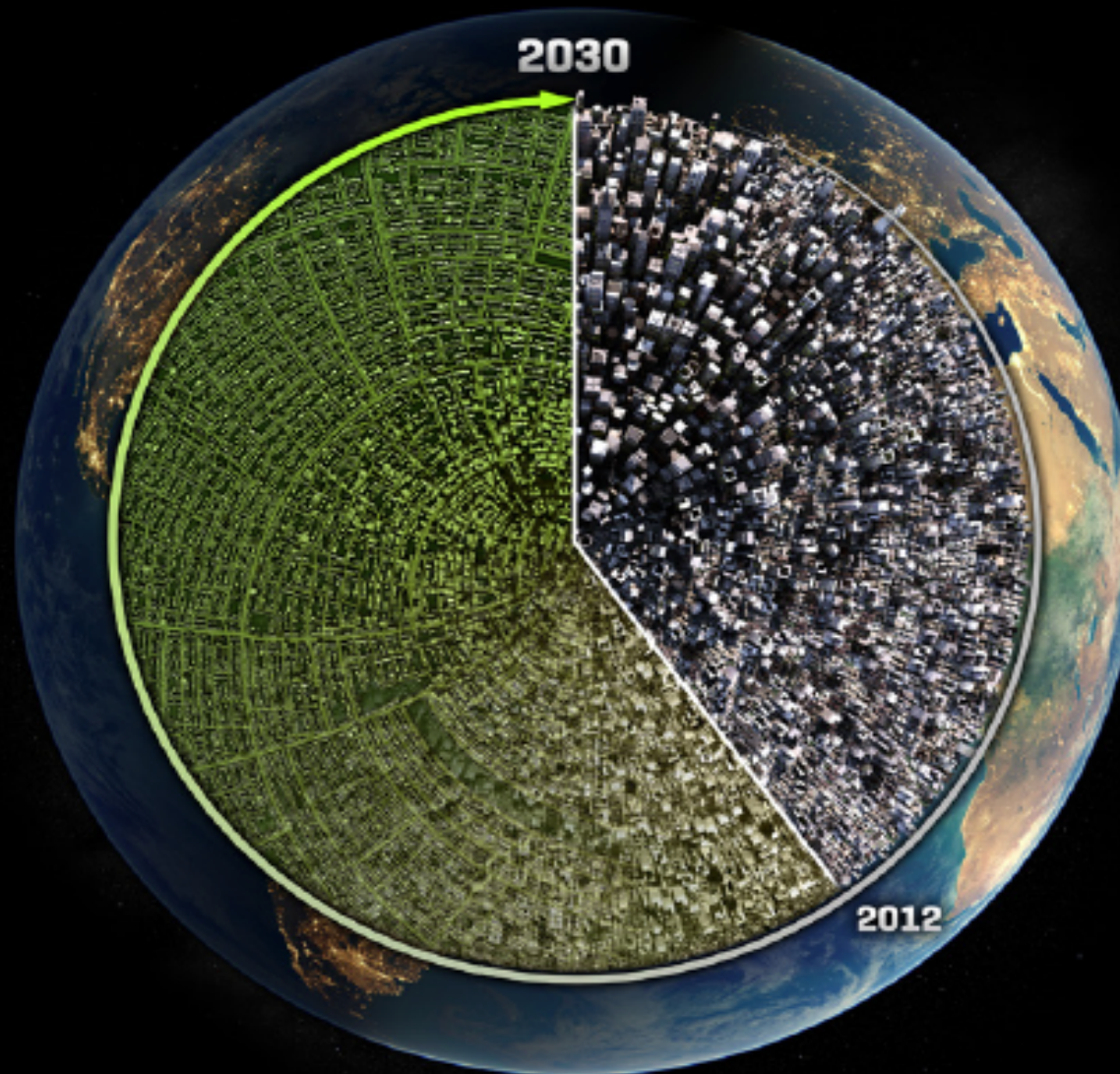
Why?

CHALLENGES & OPPORTUNITIES

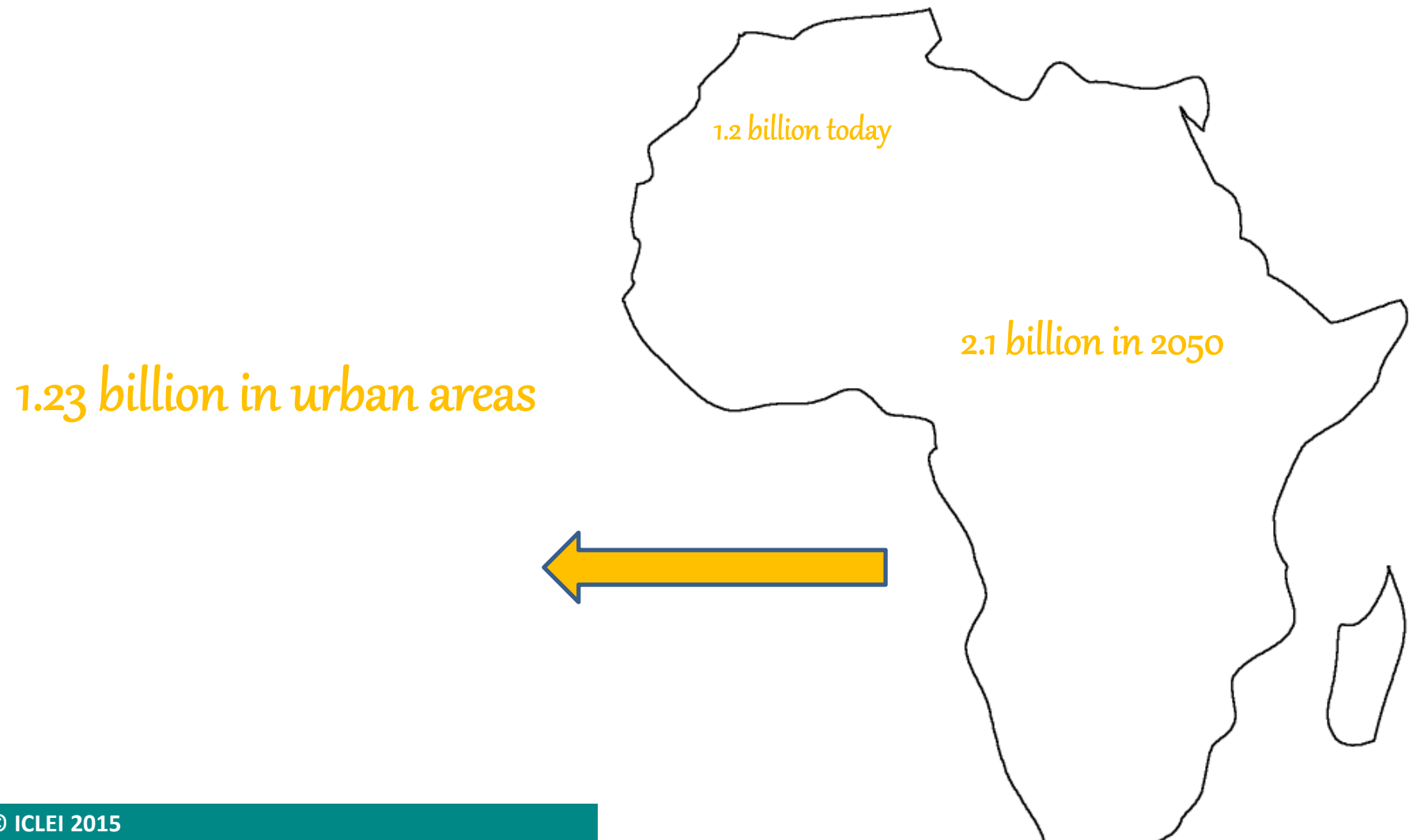
MORE THAN 60% OF THE AREA PROJECTED TO BE URBAN IN 2030

HAS YET TO BE BUILT

Cities
Biodiversity
Outlook
(CBD, SRC,
ICLEI)



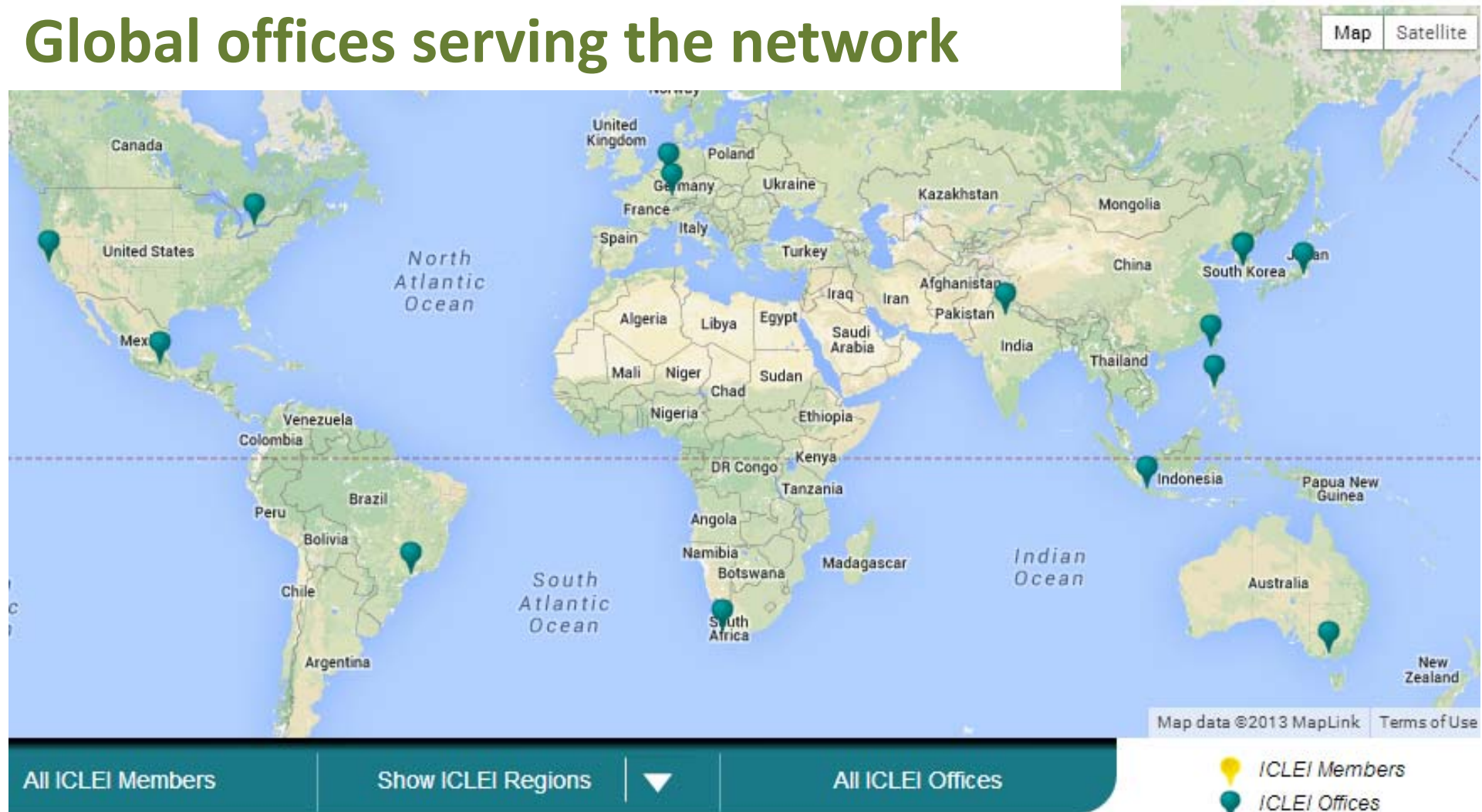
The largest migration in human history



Drawing on the **worlds largest network** of local governments working on Sustainability

15

Global offices serving the network



HOW We do it

ICLEI Africa is registered as an NPO, and all resources go back into servicing the network and ICLEI members.

The office is not supported by any particular city, funder or donor.

5% resourcing is from membership via cities of the network.

95% is raised via the regional office through:

- Successful applications to funders for project proposals
- Successful contracting by cities, LGs (Nat Gov etc) to provide professional services

All services are thus procured from ICLEI Africa on a professional servicing agreement.

HOW We do it



Membership to network

- Membership, nominal fee in Africa, covers only a membership staff member.

Projects and income streams have to serve to support, core funding for the network: advocacy, knowledge management, communications, networking etc.

Not for profit - projects

- Incubator for innovation and Laboratory
- Large scale projects (funded by EC, USAID, DIFD, IDRC etc.)
- Small scale projects (funded e.g. by small grants CDKN, FNF, GIZ etc.)

Projects service members and promising LGs

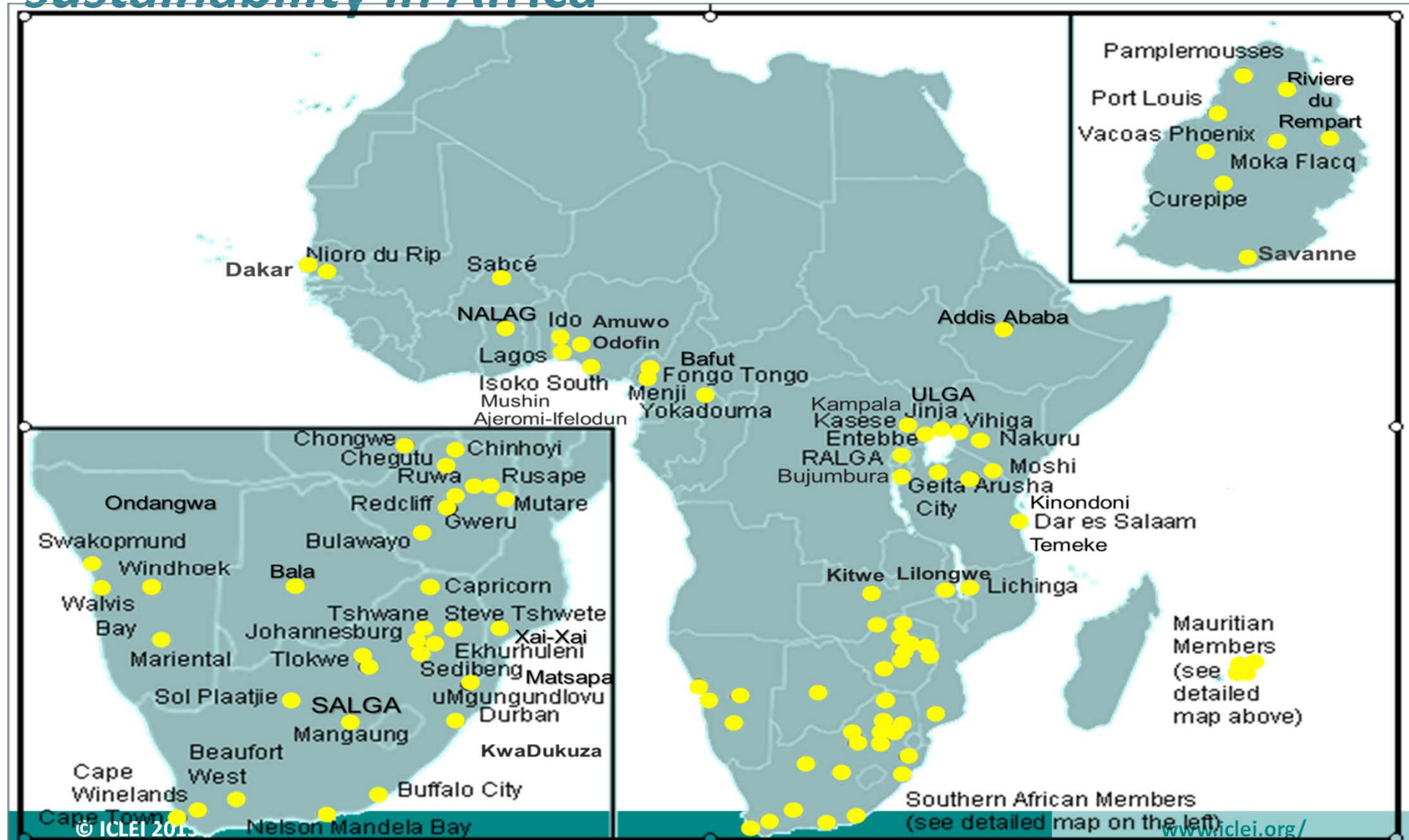
Consulting and income revenue streams

- Professional consulting packages to LGs
- Research inputs to other organisations & publications
- Advertising on web & communications
- Events

Income streams required to subsidise projects and the network.

ICLEI Members in Sub-Saharan Africa: Driving the agenda for cities & local sustainability in Africa

77



FOCUS In Africa

Threats & Opportunities

Urbanisation

Informality

Poverty

Resource Scarcity

Climate Change

Themes

WATER

SANITATION

ENERGY

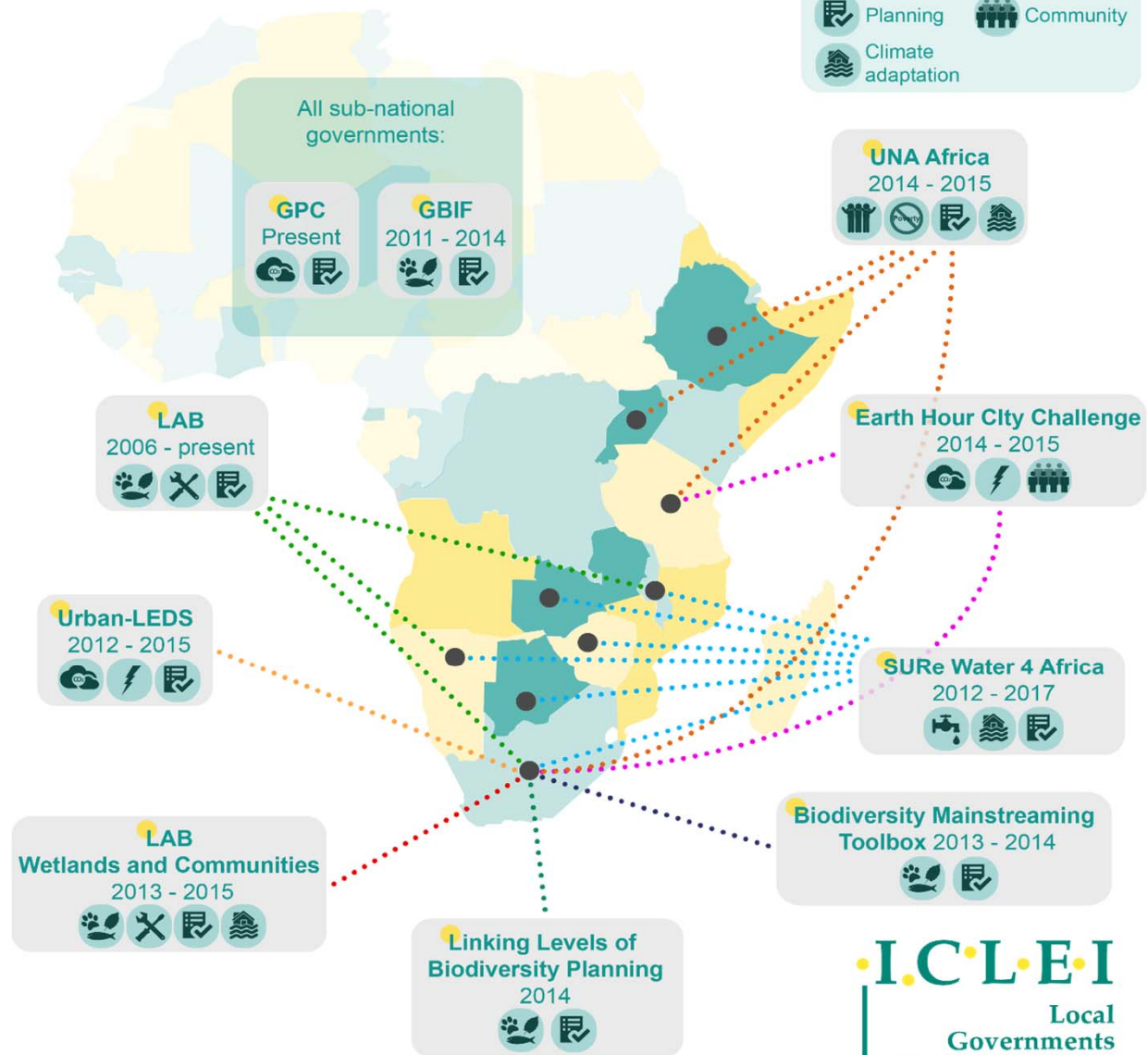
FOOD

WASTE

BIODIVERSITY

INTEGRATED
DEVELOPMENT

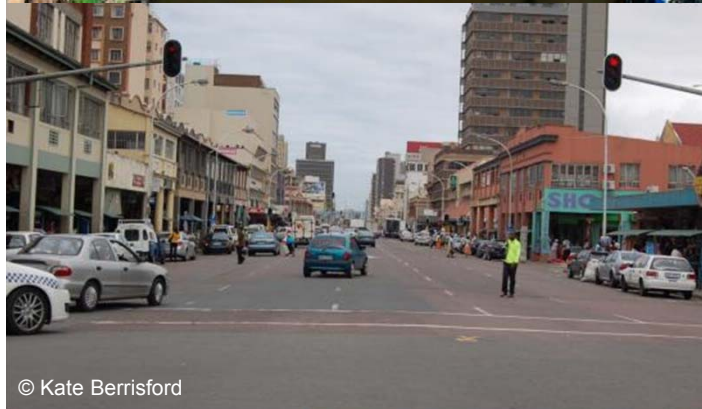
Current projects ICLEI Africa



ICLEI
Local
Governments
for Sustainability

GLOBAL CHANGESchanging communities

© Grace Stead, IcoLogic



© Kate Berrisford

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...New Solutions

24

Cities & local governments
in Africa currently engaged in
projects and programmes



© Chris Lomon



© Bruce Sutherland, City of Cape Town



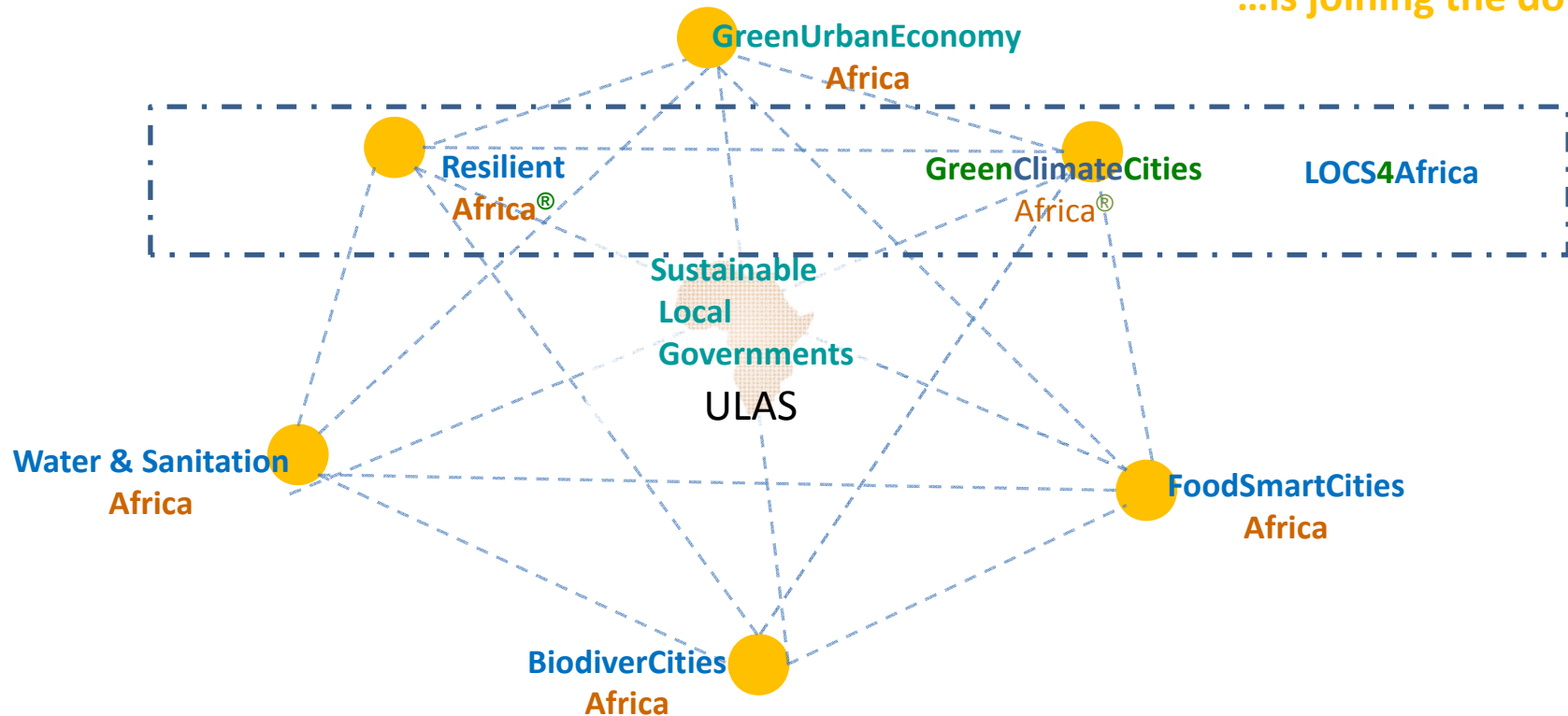
Overall fit into sustainability?

Integrated Sustainable Local Solutions



AFRICA

...is joining the dots



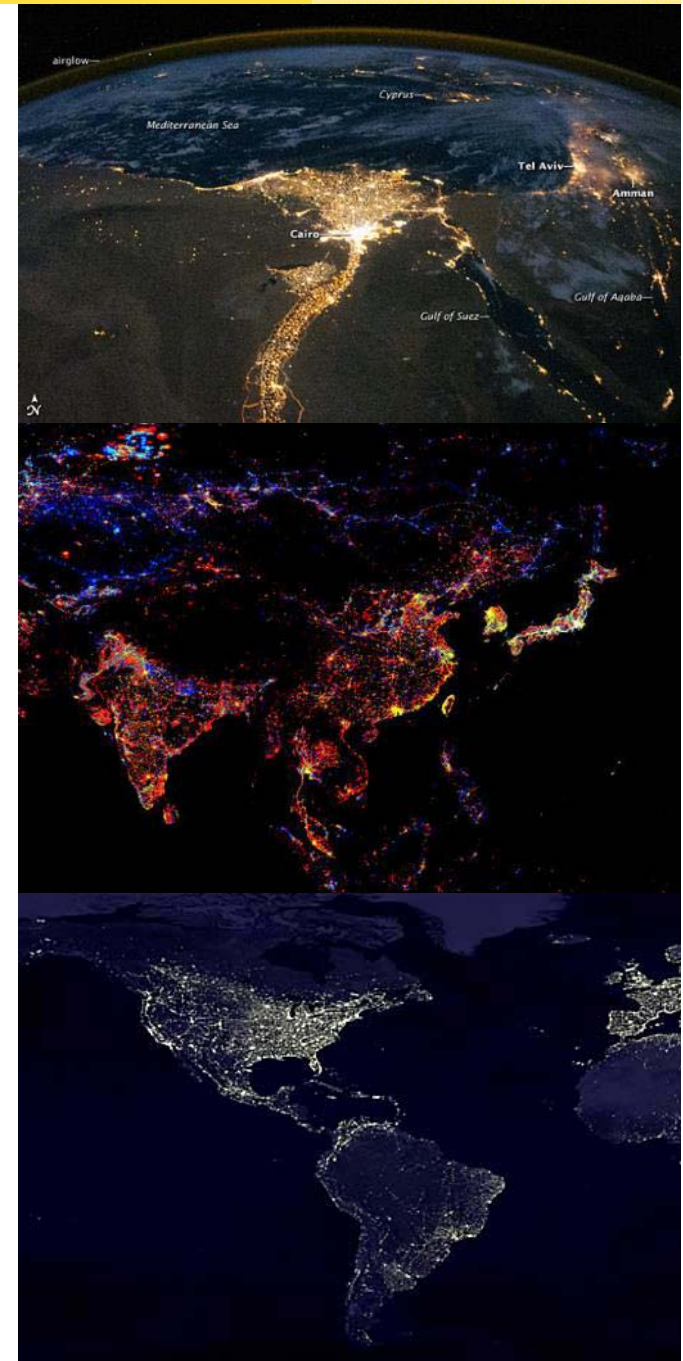
This model indicates 3 pivotal resources for cities: food, water and energy. Whilst Biodiversity underpins everything (i.e. is at the bottom); Climate change cuts across everything – hence Adaptation and Mitigation towards the top. GUE is a broad concept overarching. Whilst in the middle sits Sustainability – where they all meet each other.

Low Carbon Cities

➔ Low Emission Cities

➔ Carbon Neutral Cities

- Global Cities Covenant on Climate
- Host of the World Mayors Council for CC
- Bonn Centre for local climate action and reporting (operates carbonn *Climate Registry*)
- GreenClimateCities Programme
- Advocacy for local action, bottom-up finance mechanisms & access to finance
- LOCS (Local Climate Solutions for Africa)
- Local Renewables: S-S co-operation between India, Indonesia and South African Cities (REEP / ICLEI)



Drivers for an urban energy transition

- Reduce demand on intermittent grid
- Increase resilience (eg of people's livelihoods)
- Improve health/reduce air (esp. indoor) pollution
- Contribute to national targets
- Concentration/agglomeration of resources (financial, natural): waste that can be harnessed
- Local job creation
- Sub-Saharan cities well endowed: 6-8Kwh/m²/day

The unique African energy/urbanisation challenge?

Unbroken global trend

“By 2050, within 40 years, we must build once more the same urban capacity as we have built over the last 4000 years.”

- 40% electricity access in urban areas (intermittent-illegal?)
- The urbanisation of poverty? Goats in the city



Figure 3.1. Sheep in the heart of Awassa city, southern Ethiopia.

Whose responsibility?

National government	Local government
Grid electricity provision; with increasing mix of renewables	Purchasing green electricity?
Setting national building regulations for SWH adoption etc	Enforcing & setting own local byelaws/policies
Decentralisation (mandate/ of built environment functions)	Urban Planning policies which incorporate energy efficiency & renewable energy
National energy planning; rebates, FIT's etc	Local energy strategies and plans
National SWH programme	Local SWH programme
Installing medium-scale but decentralised renewables	Installing renewables for municipal operations
	Develop “energy services packages” for low-income households

What are NAMAs?

NAMAs

- Nationally Appropriate Mitigation Actions (NAMAs)
- Policies or actions of developing countries
 - to mitigate Greenhouse Gas emissions
 - to contribute to national mitigation targets

Vertical Integration

- Coordination and collaboration between different levels/spheres of government → National, Provinces, Municipalities

Local government action

- Handful of metro's have established histories of acting on climate change
- Increasing interest in fast-growing secondary municipalities
- All are dependent on electricity sales as major source of revenue
- Local focus is on service delivery; finances are stretched



Key messages to our municipalities

- “Low carbon development” is not just a “greening” or environmental issue- but is fundamental to sustainable urban development
- But it does:
 - Challenge traditional municipal structures & processes
 - Require out of the box thinking & partnerships



Cities Options to Contribute to Mitigation (1/2)

Mainstreaming of CC into development plans, developing stand-alone plans, and “decarbonising” other plans (spatial development, transport, economic development, etc.). Also **NAMA's**

Implementation of existing laws and creation of new ones. E.g. bye-laws, national regulations, guidelines, incentives

Internal action and **leadership showcasing** E.g. retrofits of municipal buildings, street lights fleet management, waste management (landfill gas and recycling), water and sanitation works (EE and RE opportunities)

Cities Options to Contribute to Mitigation (2/2)

Mainstreaming: eThekweni, Cape Town, and Urban-LEDS Cities
KwaDukuza and Steve Tshwete

Implementation

Tshwane: Green Building Bye-law

KwaDukuza & Steve Tshwete: Green Building Guidelines

Nelson Mandela Bay: Net-metering and Small Scale Embedded Generation

Cape Town: Kuyasa CDM project

Dar es Salaam & eThekweni CDM's: Waste Management, Methane recovery and landfill gas to energy

Urban Greening (Food and Trees for Africa)

Internal action

Many SA Cities: EEDSM program for municipal buildings and public lighting

Support for cities – towards MRV



carbonn Climate Registry

(cCR) - Global reporting platform for local and subnational governments



Reporting of climate commitments (targets) GHG developments, and actions



HEAT+ - GHG emissions quantification & monitoring tool



Conduct regular GHG inventories, GPC compliant



Global Protocol on Community-scale GHG Emissions Inventories (GPC)



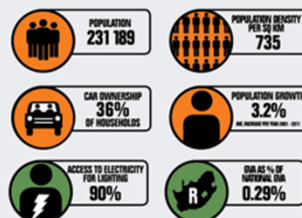
Towards a standard for all Local Governments

URBAN ENERGY PROFILE INFOGRAPHIC: KWADUKUZA LOCAL MUNICIPALITY 2012

A member of the Urban-LEDS project



GENERAL INDICATORS

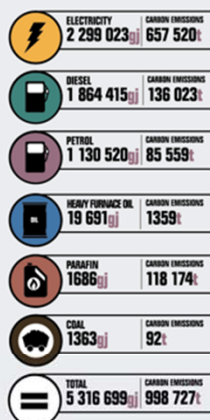


ENERGY USE & EMISSIONS BY TYPE

ENERGY gJ | TONNES

ENERGY USE %

EMISSIONS %



43.2%

35.1%

21.3%

0.4%

65.8%

13.6%

11.8%

8.6%

0.1%

1 Gigajoule = 1000 kWh
1000 kWh = 1000 x 3.6 MJ = 3600 MJ
3600 MJ = 3600 x 0.86 kWh = 3100 kWh
3100 kWh = 3100 x 0.001 GJ = 3.1 GJ
1 GJ = 1000 kWh



SCOPE 1 EMISSIONS
509 697 t

SCOPE 2 EMISSIONS
473 416 t

SCOPE 3 EMISSIONS
25 289 t

ENERGY USE & EMISSIONS BY SECTOR

ENERGY gJ | TONNES

ENERGY USE %

EMISSIONS %



56.1%

15.3%

10.9%

10.9%

4.9%

1.2%

0.8%

27%

22.2%

21.9%

15.7%

7.1%

2.5%

1.5%

1.1%

1%

TOTAL ENERGY USE & EMISSIONS

TOTAL
5 316 699 gJ | 1 008 402 t

4.36 t TONNES CO₂e | PER PERSON



Data from work conducted by ICLEI Africa 2013, StatsSA (2011).
Correct as of October 2013. For more information about the
Urban-LEDS project, please visit www.urban-leds.org or email
urban-leds@iciclei.org. This document has been produced with
the financial assistance of the European Union. The views expressed herein
can in no way be taken to reflect the official opinion of the European Union.

URBAN LEDS
URBAN LOW EMISSION DEVELOPMENT STRATEGIES

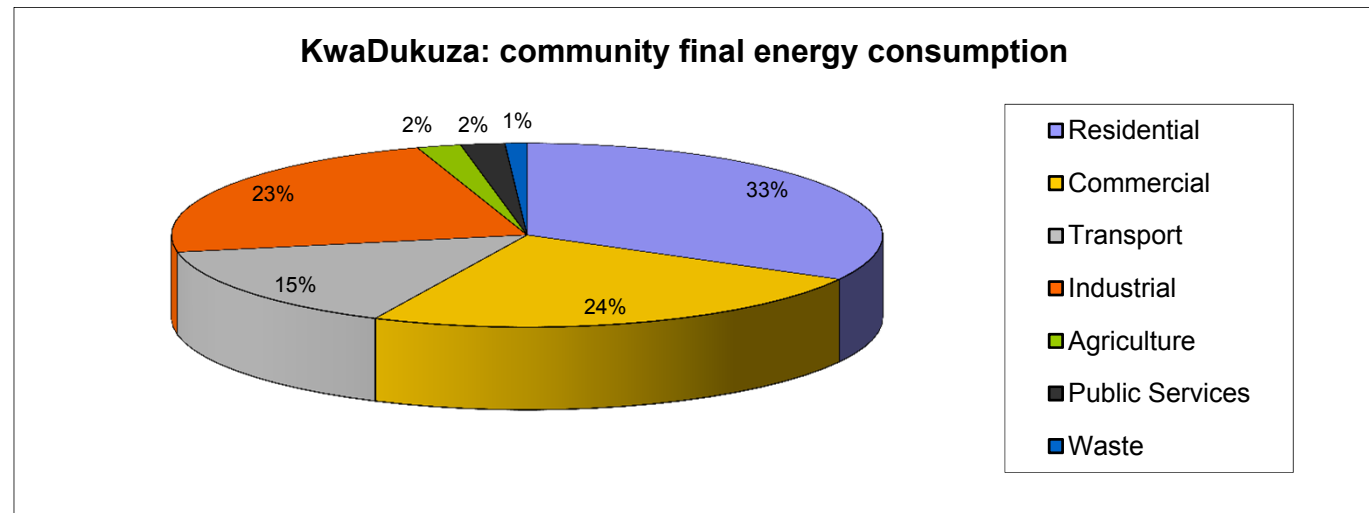
Implemented by:
ICLEI UN HABITAT
FOR A BETTER URBAN FUTURE
Local Governments
for Sustainability

Funded by:
EUROPEAN UNION

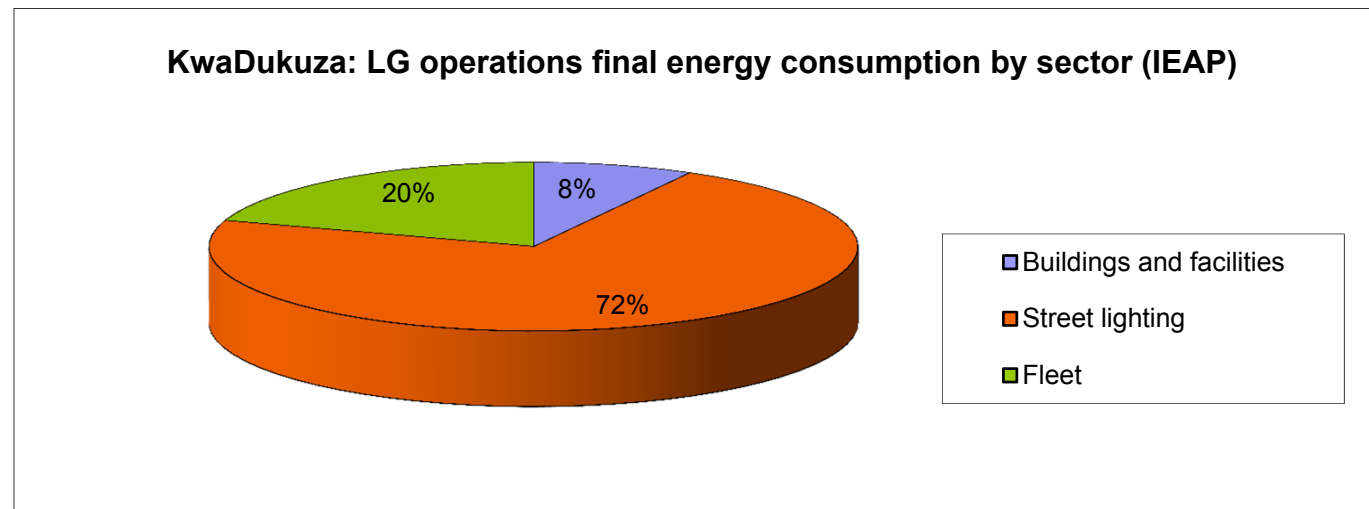
Designed by:
CHANGE AGENT

Final energy consumption

- Community



- Local government operations



Financing & Contribution to INDC's

- Targets for emission reductions are being set, but not by enough cities (yet) and not necessarily aligned with global targets
- Attempts are being made to fund from bottom-up e.g. Shared Savings (GIZ V-NAMA pilot)
- Still much effort required for MRV and baseline assessment
- Capacity to access carbon markets needs to be enhanced → CCFLA (Cities Climate Finance Leadership Alliance) launched in 2014 by ICLEI and its partners

The Cities Climate Finance Leadership Alliance (CCFLA)



CITIES
The Cities Climate Finance Leadership Alliance
Action Statement
Provisional copy



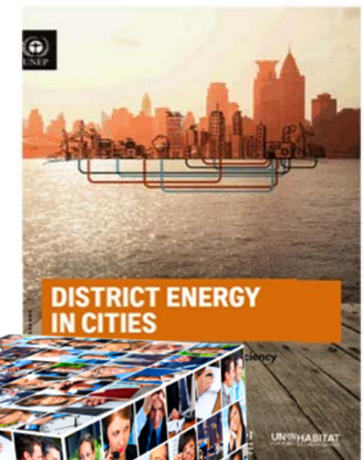
Launched during UN SG's New York Climate Summit 2014

Mission: "The Cities Climate Finance Leadership Alliance mission is to catalyze and accelerate additional capital flows to cities, maximize investment in low-carbon and climate-resilient infrastructure, and close the investment gap in urban areas over the next fifteen years"

ICLEI is a partner in the Alliance, representing cities.

Support available

- GreenClimateCities program - process support
- Solutions Gateway - online platform to guide local governments with Low Emission Development
- Pool of Experts
- Case studies
- Financing decision-making support tool



Solutions



Solution Packages



Case Studies

www.solutions-gateway.org



PARTNERSHIP

4 Africa Cities and LGs

We are all working towards a common goal, together we are stronger.

UCLG-A C40-A and ICLEI-A = The A team!
Powerful alliance!

Lead up to Paris 2015 and Post 2015 SDGs

- Combine forces and deliver Mega-report on Successes of LG action to date.
- Combine forces to deliver a message of commitment to action on the African continent.



URBAN LEDS

URBAN LOW EMISSION DEVELOPMENT STRATEGIES

Delivering low-emission development in 8 model cities in 4 emerging economies

- Strategy & action plan development

- Implementation of projects

- MRV of emissions

- Capacity building & training

- S-S-N Learning

- National & international advocacy

Promoting Low Emission Development (Urban-LEDS)

• International

• Funded by E

• Duration: M

• Main object

emerging eco

• Supported b

• Connecting

ies

in

ICLEI and partners are launching the:

TAP

**Transformative
Actions
Program**

TAP the potential of local and regional climate action!

A 10-year action program

Bridging the gap 2016-2020 / Contributing to post-2020 national & international ambitions

What is the TAP?



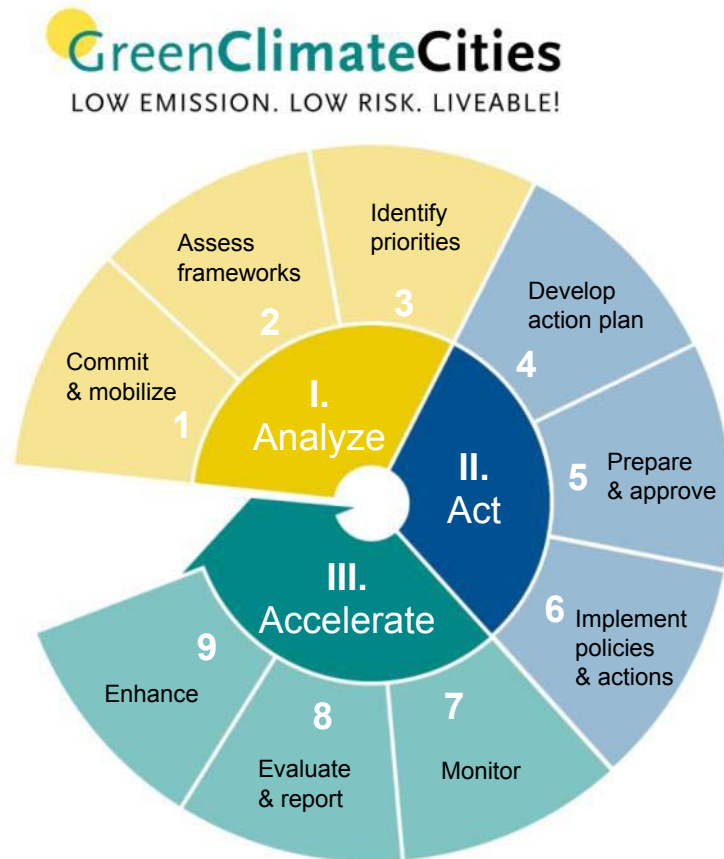
TAP aims to...

- improve access to existing capital flows
- catalyzing and accelerating additional capital flows
- maximizing investment in low-carbon and climate-resilient urban development
- mobilize cities to transform, reinvent their cities
- connect transformative projects and funders
- raise awareness at all levels about the potential of local climate action

A collaborative effort by...

- city and region networks, development agencies to help cities and regions accelerate climate action

ICLEI's process methodology



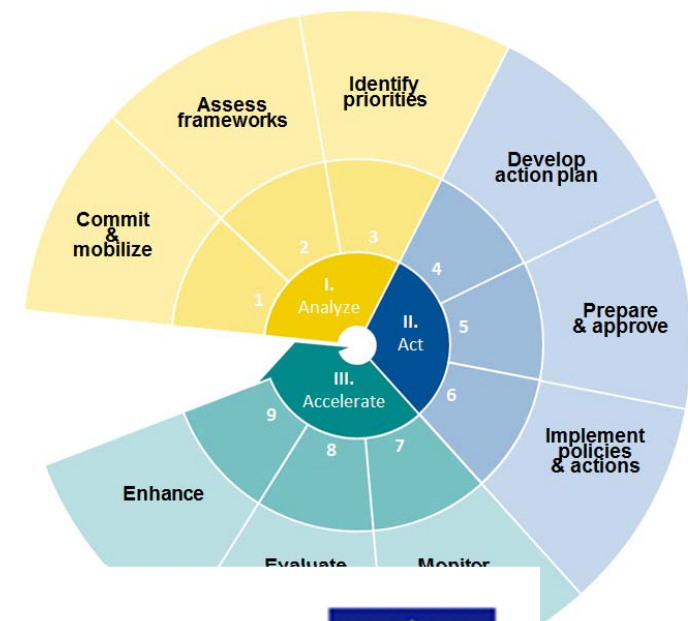
Used to help Local Governments **embed low emission development into their structure, systems and procedures.**

By creating an **institutional framework** the short to long-term impacts can be managed and monitored in the **Low Emission Development Strategy, Action Plan and local projects.**

What is an Urban-LEDS?

An **Urban Low Emission Development Strategy**, or low emission urban development strategy, defines a pathway to transition a community to a low-emission, green and inclusive urban economy, through its integration into city development plans and processes.

ICLEI's GreenClimate Cities methodology



Nelson Mandela Bay



Embedded Generation: Municipal

- Proved Small scale grid tie connection is technical feasibility
- Feed-in tariff needed but price decreasing rapidly

Embedded Generation: Consumers

- Experimenting with net metering

Purchasing green electricity

- Played role in pushing for grid wind energy development locally
- Developments = 20% of local demand



Doesn't have to be high-tech

Wonderbags (if used
2-3 times a week)
can save:

- 1.6l paraffin
- 1.3kWh electricity
- 500kg c02/year



**Efficiency is cheapest
form of energy!**



SEED award winners – ENERGY SECTOR

Kigali, Rwanda: BioGas

- Urban, domestic and industrial waste to pressurized biogas for cooking



Busia, Uganda: Eco-briquettes

- Women – processing solid waste into eco-briquettes for cooking



Lesson learned from experience

- Importance of:
 - Awareness & Info, Process and **Buy-in**
 - Innovative approaches
 - Internal municipal transformation and mind-set change
- Even small implementation projects take time
- Ensuring local relevance → What are the hooks and links to social and economic development?
- Importance of a **champion** AND institutionalisation



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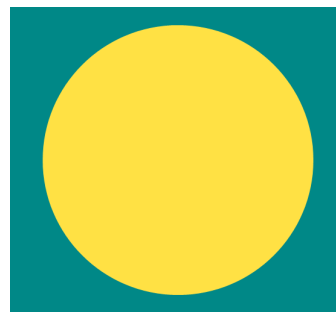
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News, events, projects, resources,
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information and much more

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www.solutions-gateway.org

