

# Agenda 2030: Enhancing action

A2 - Joining forces: Urban adaptation through linking local action to global policy 26th June 2019 - 14:00 - 13.30 - Room: S01-02

ICLEI Resilient Cities 2019

10th Global Forum on Urban Resilience and Adaptation
Bonn

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@StephenPassmore





### Introduction to Resilience Brokers and the Trust

- UK group to speed up and scale up transformative urban/rural development;
- Operates in space between private, public, knowledge and civil society sectors;
- Leading experts foster integrated-systems thinking and collaborative approaches;
- Develop tools and demonstrators to support implementation of 2030 agenda in city regions;
- Open source, free-to-use tools "resilience.io" integrated-systems modelling platform
- Data-driven, social and natural science based.



### *Implementation*

Greater Accra, Ghana

accessibility

Hunter Valley, Australia

transition. institutional resilience

Union Canal, Scotland, UK

Anninghe, Sichuan, China









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#### resilience.io platform use cases

Water supply, sanitation and

Water infrastructure, energy

Water supply, sanitation and

accessibility

Integrated multi-hazard

modelling

Queen Elizabeth Olympic Park, Digital and social inclusion, London, UK

green space accessibility











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#### **Additional Resilience Brokers Projects**

Medellín, Colombia Air quality, public health,

transport, green space

Beirut, Lebanon Green space, urban health,

pedestrian and cycling routes

Western Cape, South Africa Water supply, energy transition

Norfolk & Suffolk, UK Net positive energy buildings &

public health





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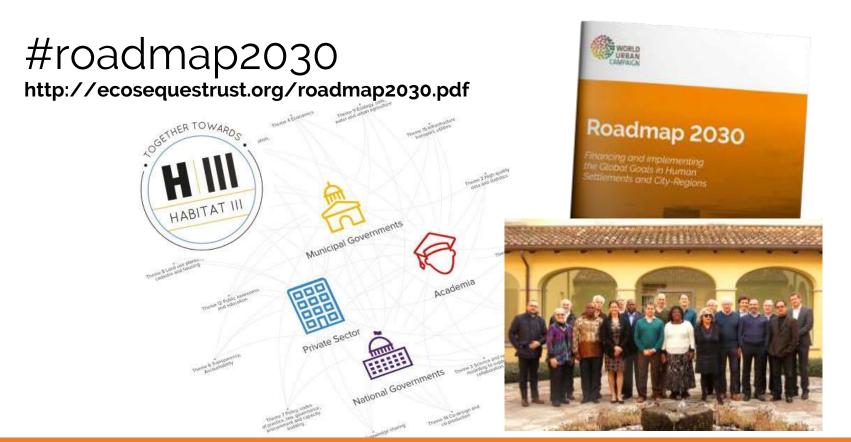






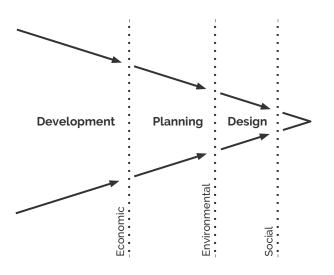




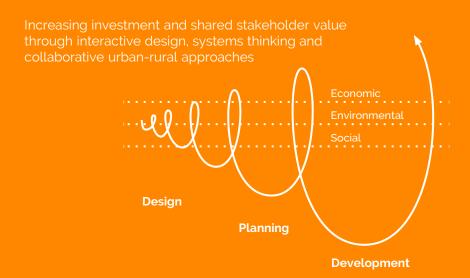


- Enabling environment to create smart partnerships between national and municipal government, civil society, academia, faiths and the private sector
- How to implement the urban agenda
- Addresses 16 cross-cutting themes in an integrated approach

# **Current** approach



# CHEER systems health approach



# Increased value through performance / Outcomes focus





## #ACTonNBS

infrastructure, lower flood risk, lower greenhouse gas emissions





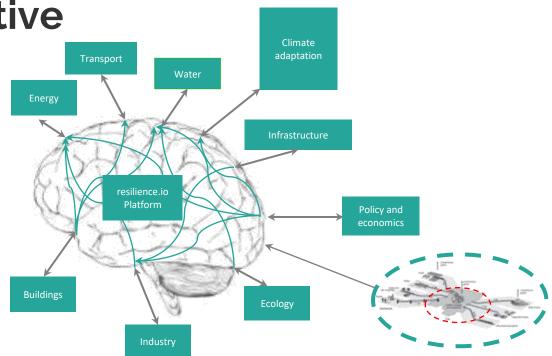






Regional Collective Intelligence

Decision making around value



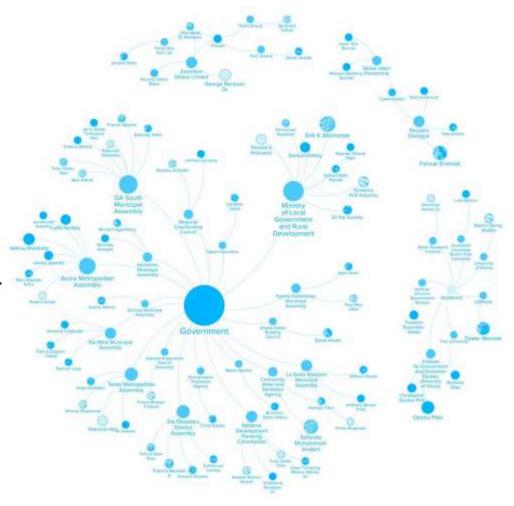
## Regional pilot: Accra

# **Collaborative Laboratory**

Collaboratory + Data & modelling + Evidenced investments + MoF & NDPC

200 wash datasets: africaopendata.org

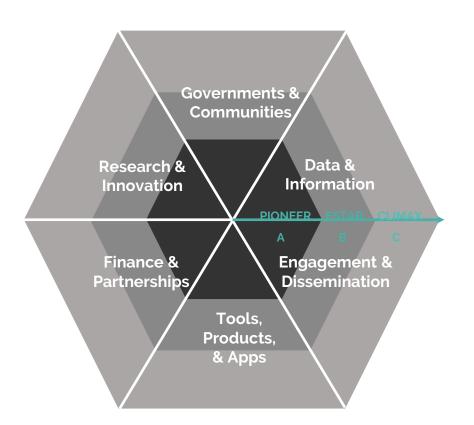




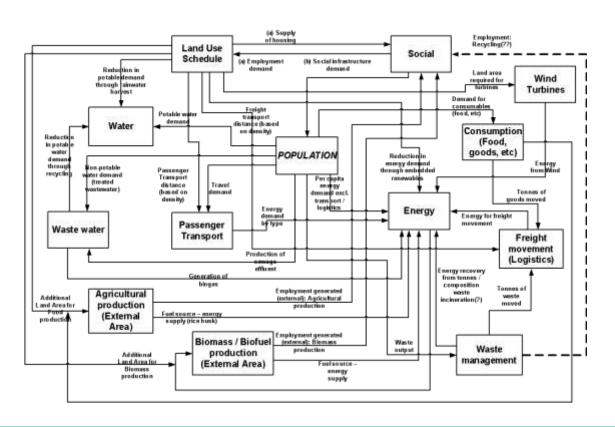
### *Implementation*

#### **Collaboratory maturity**

- X sector champions
- Data audit and integration methodology
- Co-development
- Capacity building
- Evolve and embed



## The system of community life



## S resilience brokers

## Data brokering approach - a change in paradigm

#### Interoperability through mediation -

System of systems integration, linking complex and heterogeneous systems by building bridges between existing network platforms and systems infrastructures.

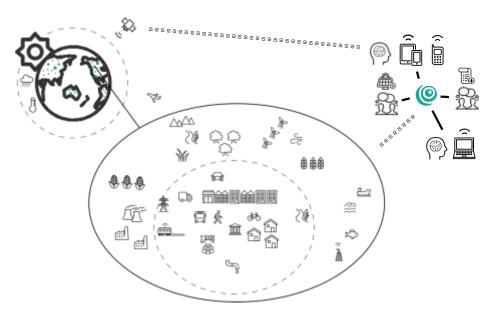
#### Geo-locate flows, infrastructure - ML

Data-brokering infrastructure enables access to and interoperability with a wide variety of data sources:

- geo-locational data and from Earth observations;
- open datasets across scales (e.g., local, regional);
- proprietary data sets;
- ground-based sensors;
- crowdsourced data.







# 8 resilience brokers

#### **Decisions - Investment in infrastructure**

- Energy, Water, Transport, Housing, ...
- Local, foreign, government, private, ...

#### **Decisions - Market Policies and planning**

- Taxation, tariffs, quota, subsidies, ...
- Land use plans, regulations, ...

#### Indicator outcome range (5-20 years)

- Sector resource and energy flows
- Effects on imports & exports
- Wastes & Emissions (CO<sub>2</sub>, CH<sub>4</sub>,...)
- Employment, income, in(equality)
- Human well-being indicators
- Sector economic activity / GDP
- Access to service / %





- Technology options
- Proposed locations
- Market rules and regulation

Key performance



Policy & Investment Decisions

## https://icebreakerone.org/

Contributing to targets across at least eight Sustainable Development Goals

Icebreaker One could enable data sharing at web-scale to inform investment decisions



































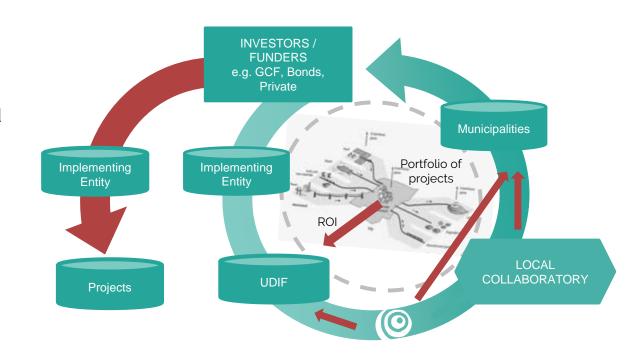




# Urban Development Investment Funds

Smart selection of projects and improved design, planning and maintenance can reduce finance demand by 40%

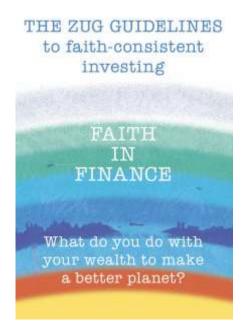
This is the Resilience Dividend that resilience.io can unlock the value in design led, collaborative decision making!





# Bringing forward the Roadmap 2030 CHEER approach to establish regional collaborative laboratories in sacred cities to rapidly scale up FaithInvest







#### Smart. Green. Innovative.



#### resilience.io platform use cases

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accessibility

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### Helping cities on their learning journey of transformational change





Demonstrating solutions to region-specific challenges. Embedding learnings and building momentum



#### **EMBEDDING**

Systems thinking to support planning and investment decisions. Scaling the approach to maximise value creation and accelerate sustainable performance

- →Up to 40% saving in total infrastructure investment
- →Multi-hazard risk reduction
- → Regional shift towards sustainable & resilient performance
- →Support the delivery of the Global Goals



#### **ONBOARDING**

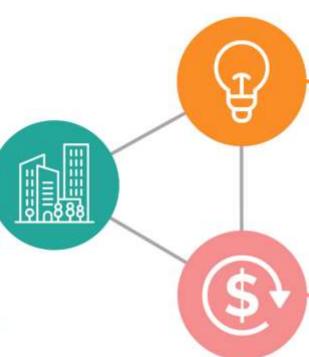
Exploring topics and securing buy-in with key stakeholders

#### Resilience Brokers Network

Connecting global and local expertise, effective solutions and sources of funding to deliver systems solutions to region-specific challenges

Working with cities to embed systems thinking into policy, urban planning and design processes

- Urban planning & design practitioners
- Sustainability champions
- Policy makers
- Utilities



Brokering technology and innovations to scale up solutions that can have systemic impact

- Effective technologies
- Innovative solutions and transformational business models

Connecting investors with a growing pipeline of risk-assessed, investable infrastructure projects

- Project finance
- Social impact
- Climate and green bonds