

Planning for Resilience



Arup

Multi-disciplinary firm of designers, engineers, architects, planners, and technical specialists working in every aspect of the built environment. Founded in 1946, independent organisation owned in trust by its employees.

We bring expertise in research and innovation and technical excellence, channelled towards a social purpose.



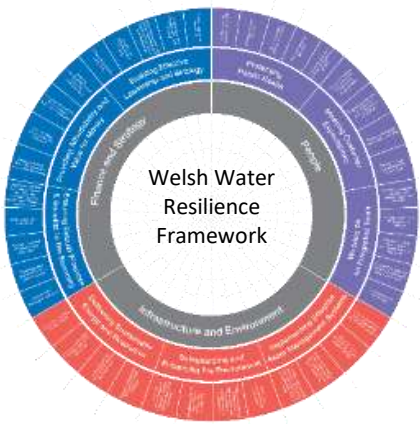
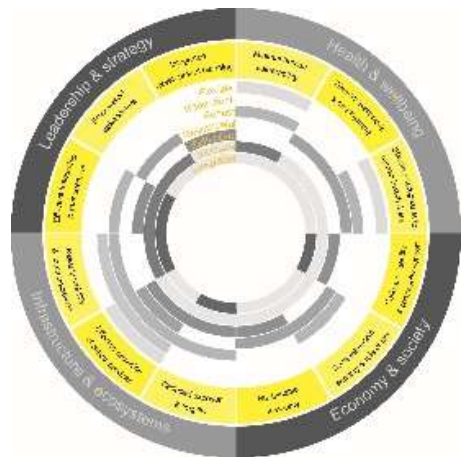
Arup International Development

By partnering with development and humanitarian organisations, we aim to shape a better built environment in emerging economies and fragile contexts, where the impacts of today's global challenges are felt most acutely.



Building Resilience

2012 2013 2014 2015 2016 2017 2018 2019



What is Urban Resilience?

Mitigation	Adaptation	Disaster Risk Reduction (DRR)	Sustainable development	Urban Resilience
Acting to avoid or reduce the severity of something negative like pollution from the emission of greenhouse gases	Modifying current practices or assets to limit the impact of climate hazards associated with climate change	Aims to reduce the damage caused by natural hazards like earthquakes, floods, droughts and cyclones, through an ethic of prevention.	Development that meets the needs of the present, without compromising the ability of future generations to meet their own needs.	Is the capacity of cities to function, so that the people living and working in cities – particularly the poor and vulnerable – survive and thrive in face of shocks and stresses.

Resilience Planning in Cape Town, South Africa

01 Urban Resilience Strategy

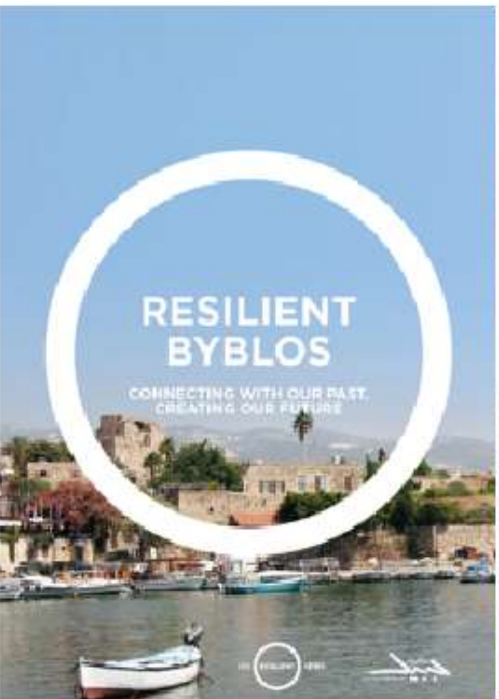
02 City Water Resilience

03 Design Guide for Early Childhood

100 Resilient Cities Programme



March 2016



April 2016



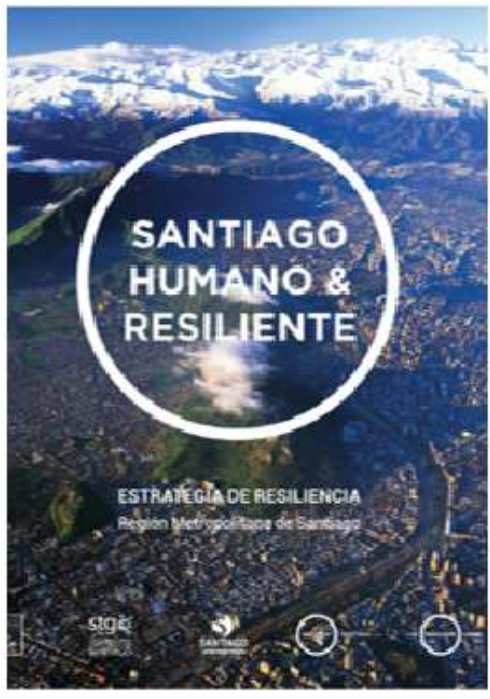
September 2016



November 2016



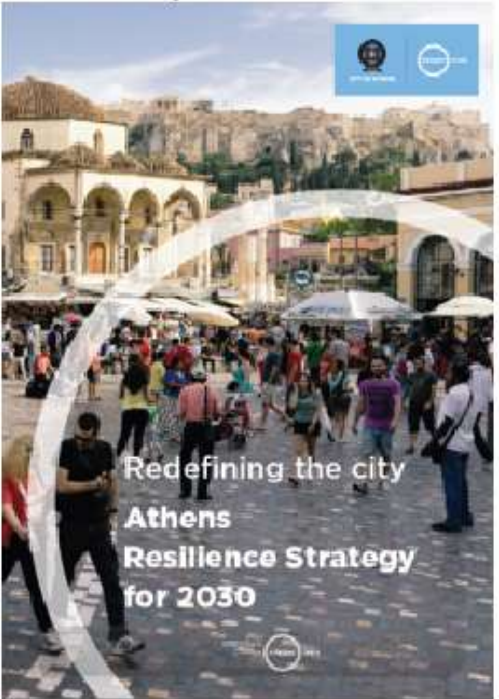
March 2017



March 2017



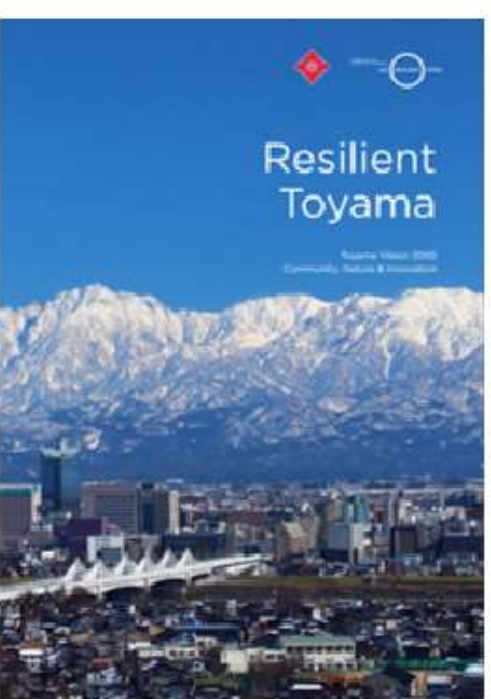
May 2017



June 2017



June 2017



July 2017



June 2018



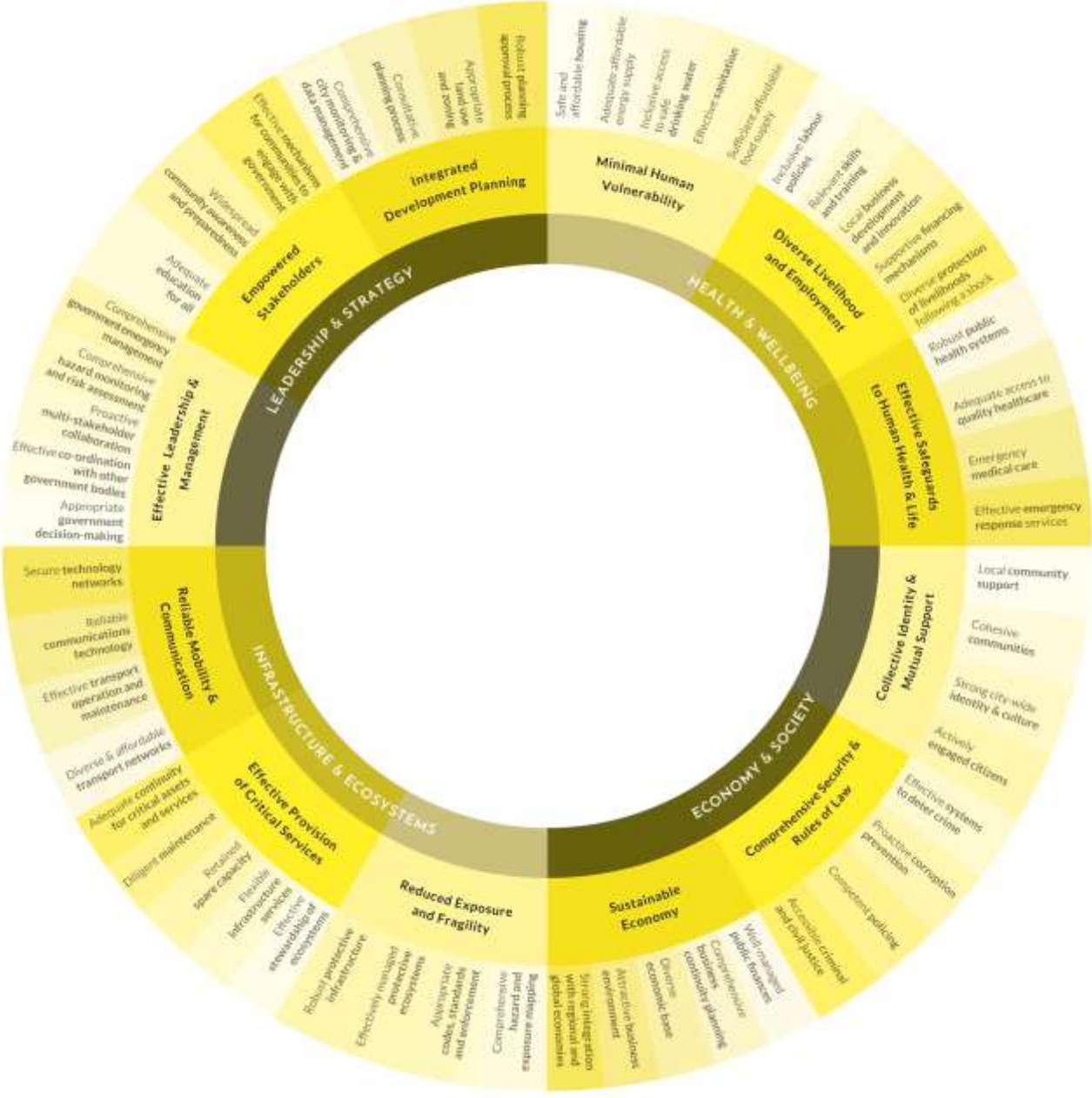
September 2018



September 2018

City Resilience Index (CRI)

Over 100 global cities have used the City Resilience Index (CRI) to assess and plan for resilience.



City Resilience Index

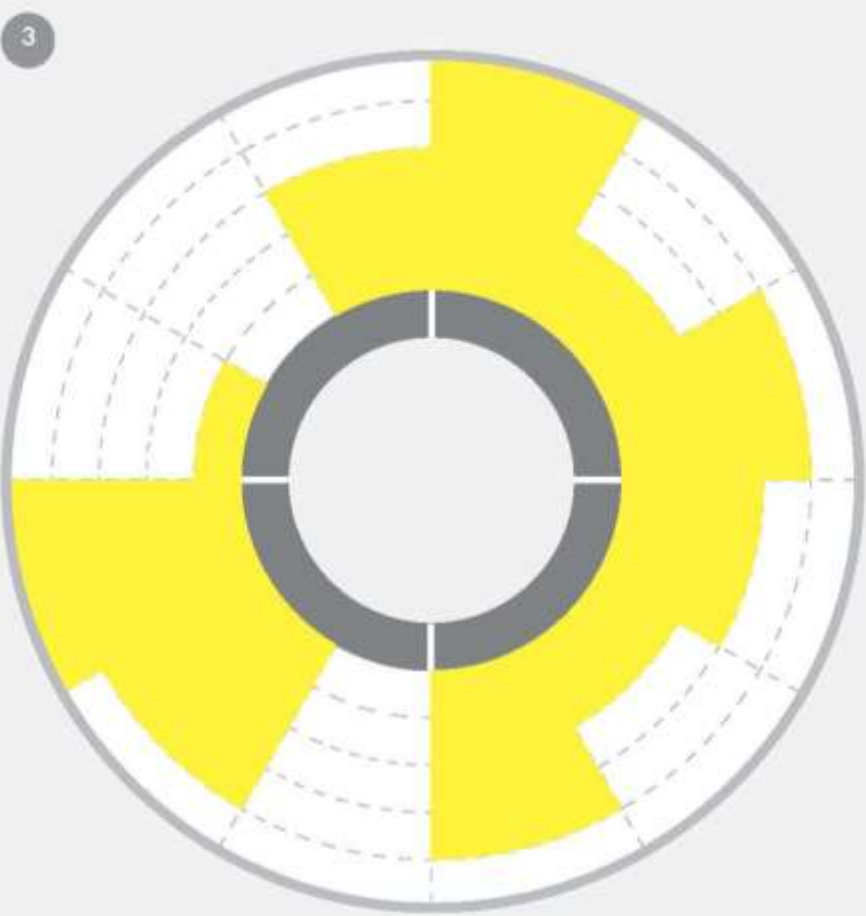
● Excellent ● Good ● Moderate ● Poor ● Very Poor



Qualitative Profile

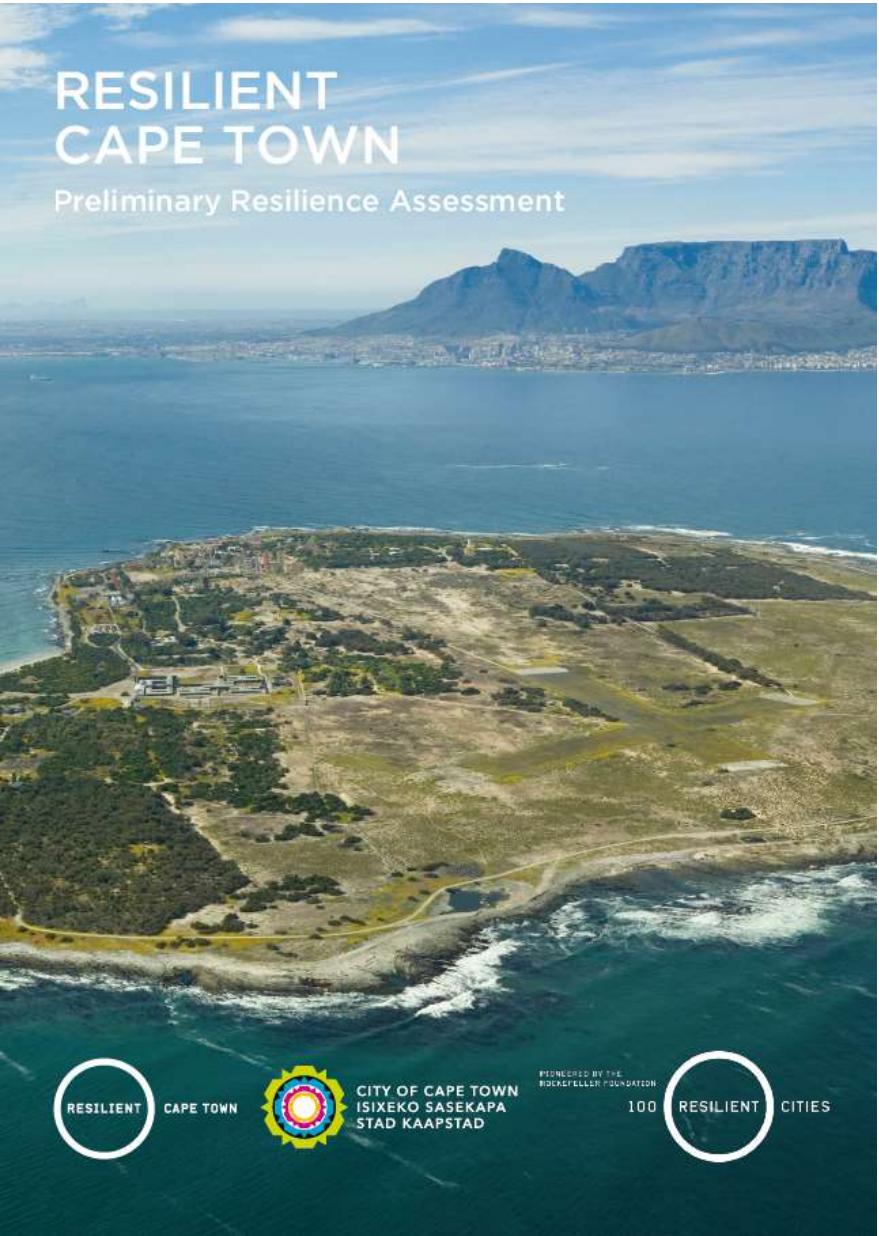
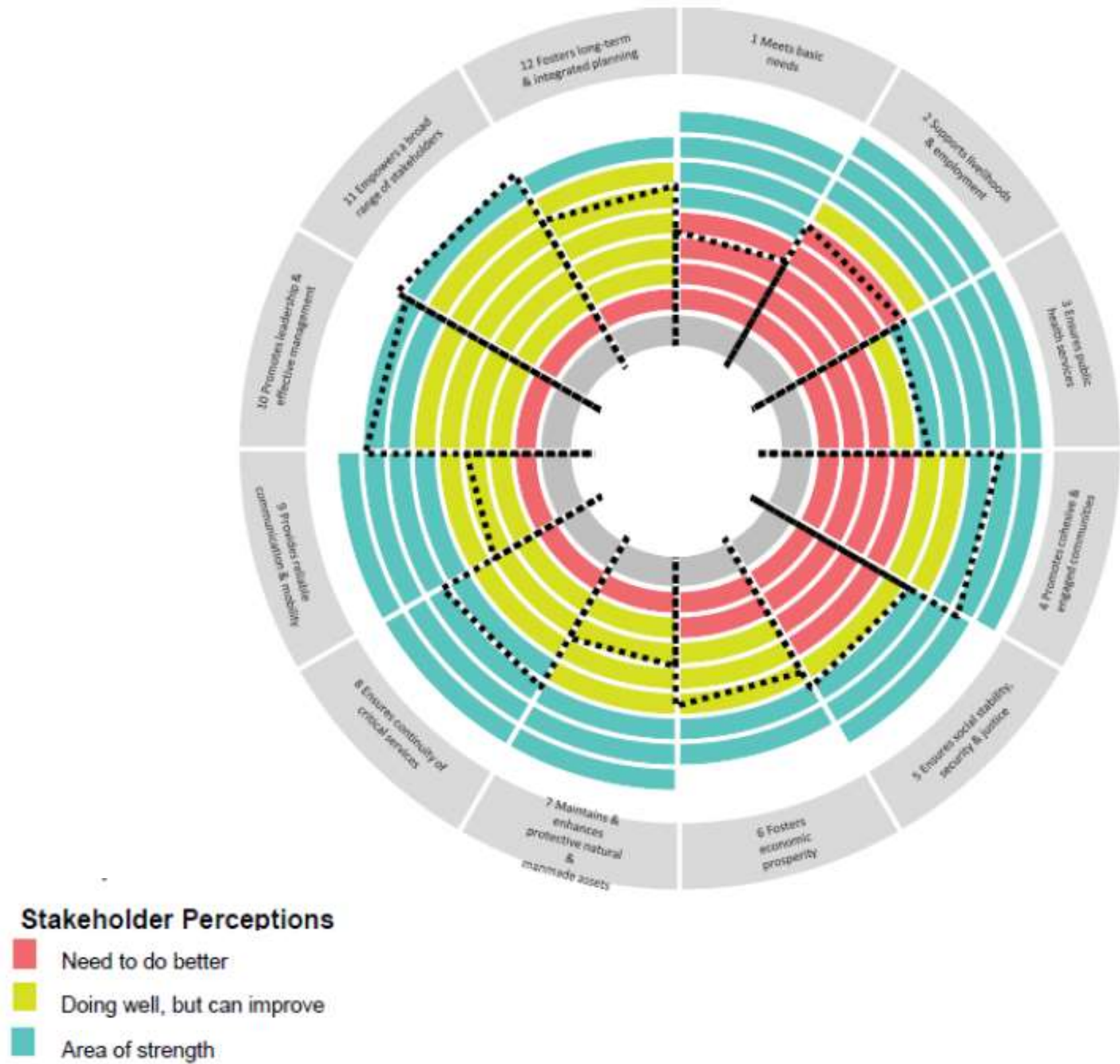


Quantitative Profile



Completedness Profile

Cape Town Resilience Strategy



Preliminary Resilience Assessment (2017-2018)
Draft Resilience Strategy (2019)

Resilience Planning in Cape Town, South Africa

01 Urban Resilience Strategy

02 City Water Resilience

03 Design Guide for Early Childhood



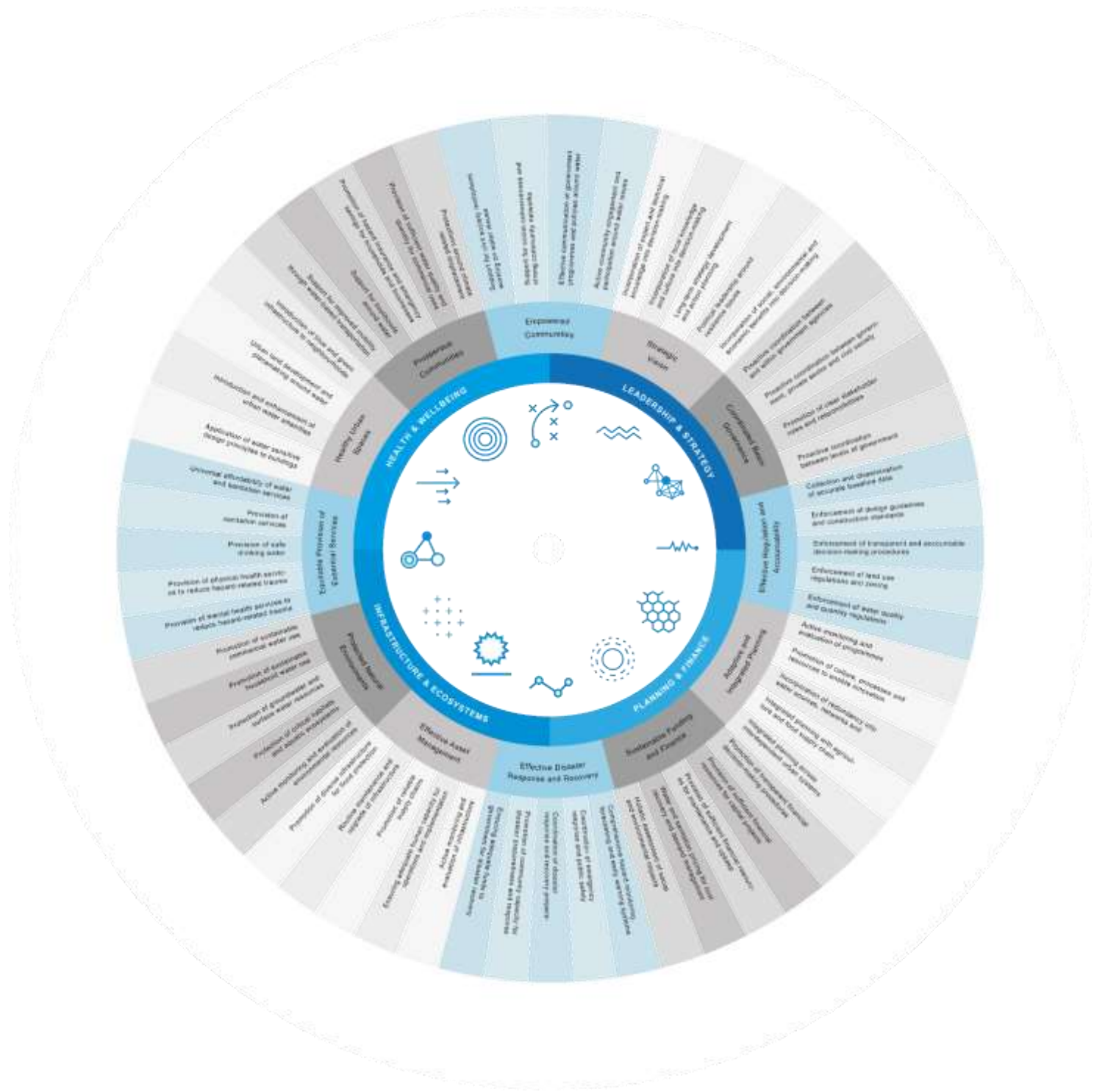
Cape Town Museum
V&A WATERFRONT
HISTORICAL WALKING TOUR

OUR DAM LEVELS WON'T RISE THIS EASILY.
PLEASE SAVE WATER.

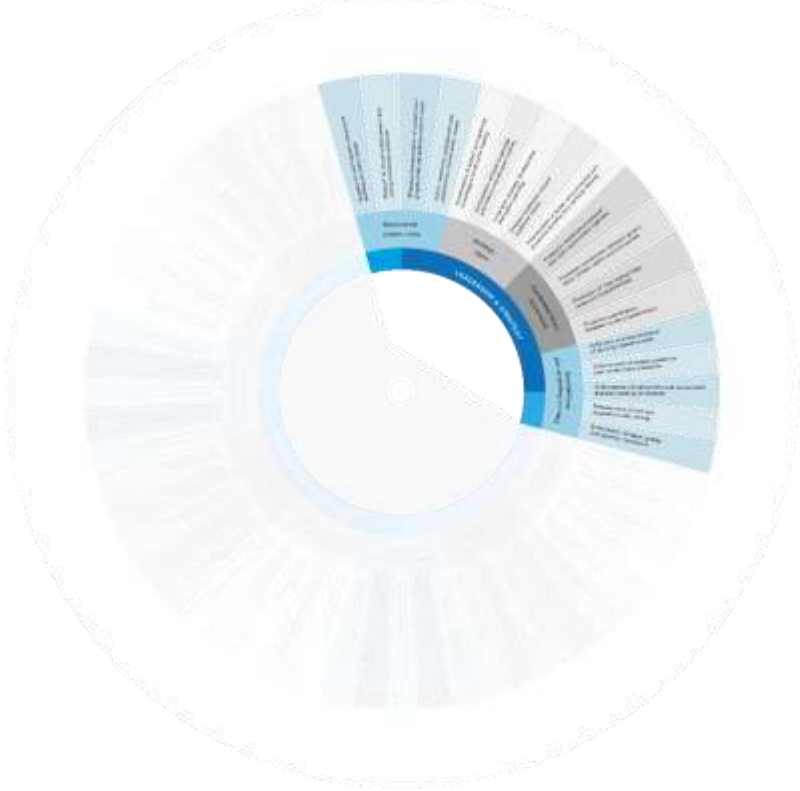
Global Water Risks



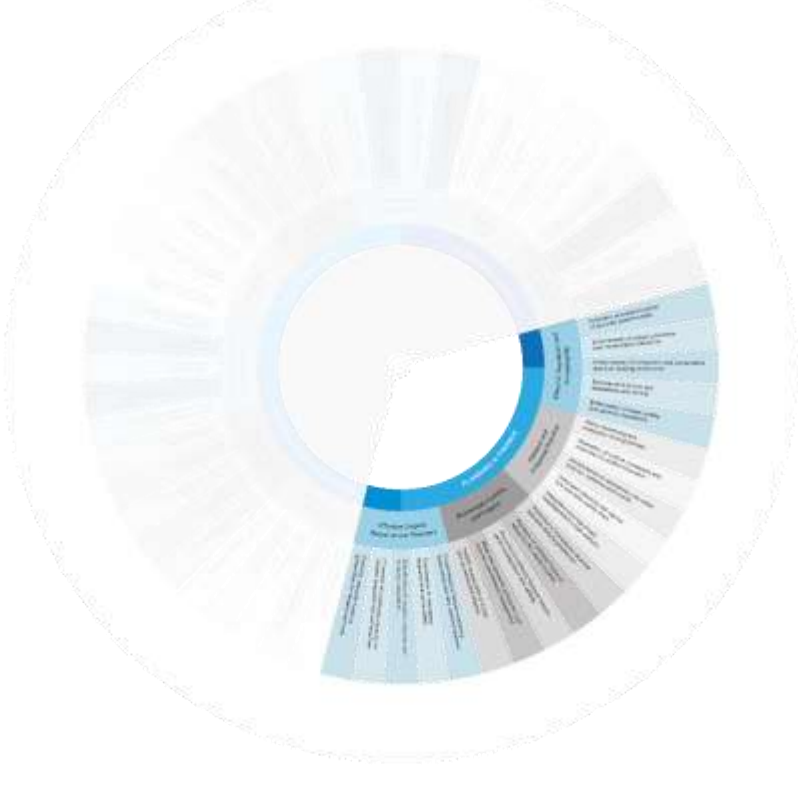
City Water Resilience Framework



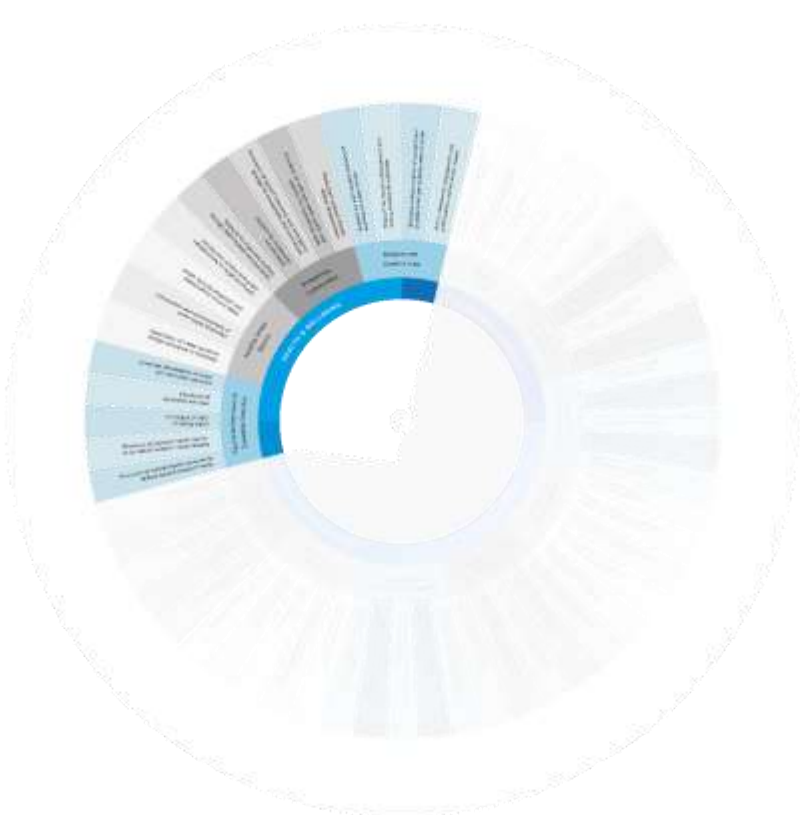
Leadership & Strategy



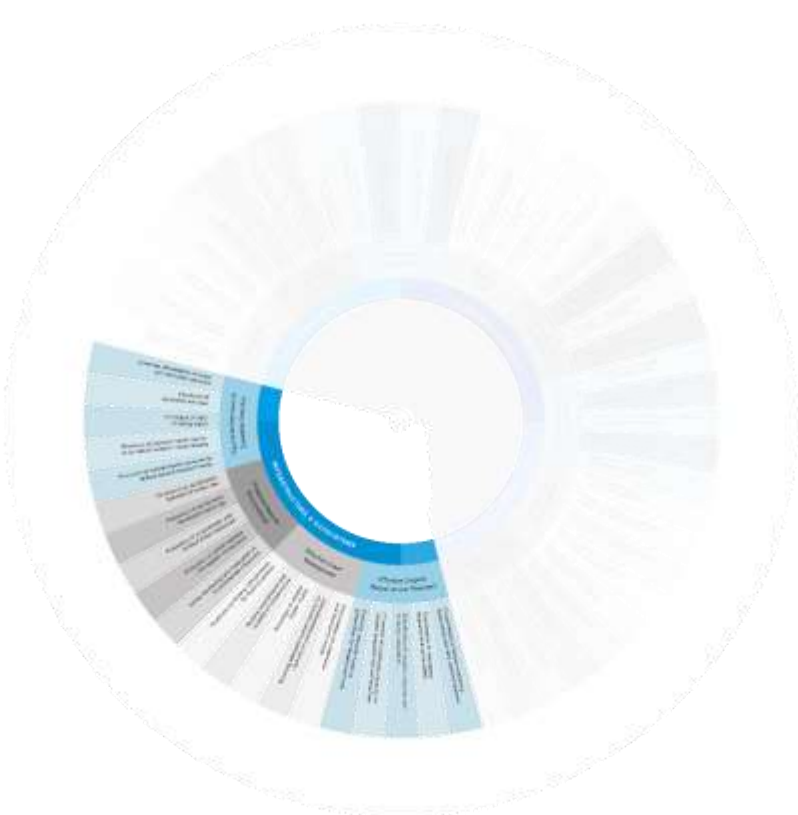
Planning & Finance



Infrastructure & Ecosystems



Health & Wellbeing



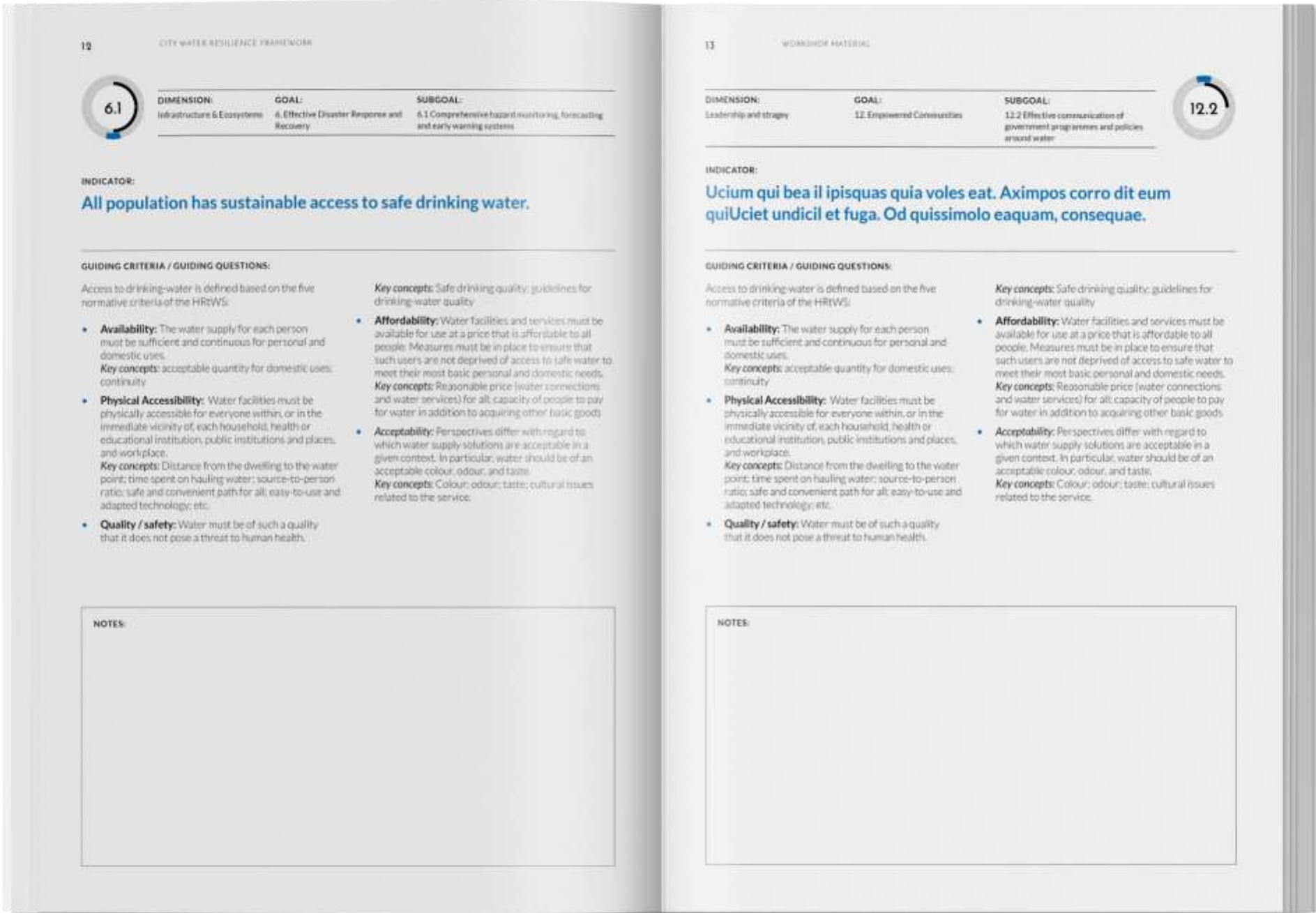
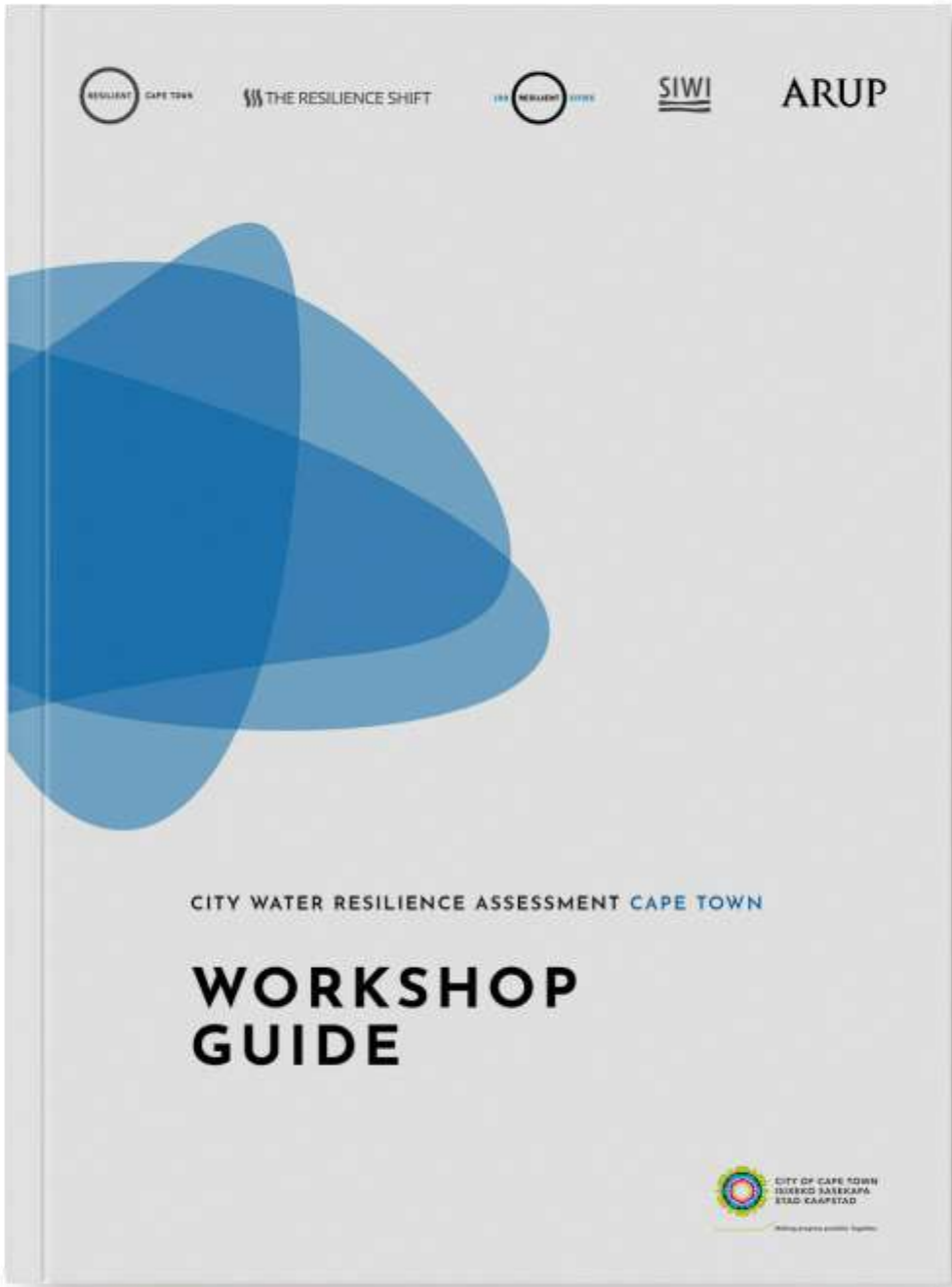
Cape Town

Water Resilience Assessment Workshops



Cape Town

Water Resilience Assessment Workshops






Resilience Planning in Cape Town, South Africa

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70%

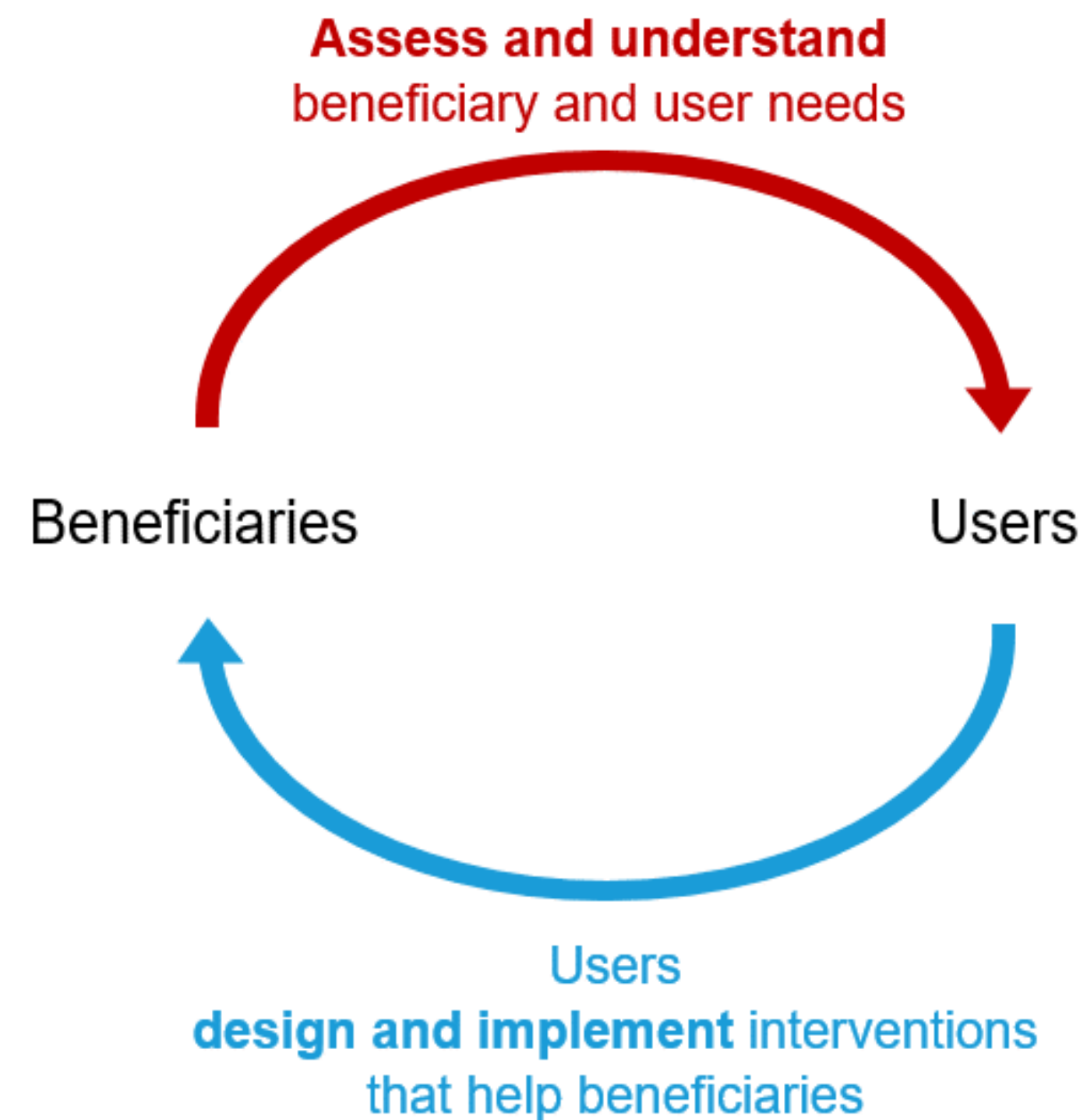
of world's children will live in cities by 2050

1 billion

People are estimated to live in slums. These include hundreds of million of children.

Design Guide for Early Childhood in Vulnerable Contexts

A guide to support practitioners, policy makers and development actors to design and implement better initiatives for young children and their caregivers in informal settlements and refugee contexts (South Africa, Kenya, Lebanon, Jordan, Brazil)



KOUNKUEY
DESIGN
INITIATIVE

+ CIVIC



URBAN95

Child Centred Urban Resilience Framework

Promote integration

... to influence the management and planning of resilient cities that are responsive to and inclusive of children, youth, girls and boys.

Make safe places

... in urban areas where children can live, play and grow.



Sustain life

... in urban communities where children and youth lack adequate care.

Mobilise the community

... to collectively ensure and value the protection and promotion of child and human rights.

Urban95 Virtual Reality

Experience the
future of
heights of a
city and the
world around it.



1.50

1.60

1.40

1.20

1.00

0

Key Lessons

understand baseline conditions

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- _engage diverse stakeholders**

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- _process builds capacity**

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- _understand baseline conditions**
- _engage diverse stakeholders**
- _process builds capacity**
- _embrace a technical/non-technical approach**

Thank you

For inquiries please contact:

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